STATE OF NORTH CAROLINA
OFFICE OF THE GOVERNOR

ROY COOPER
GOVERNOR

October 31, 2023

The Hon. Xavier Becerra, Secretary
U.S. Department of Health and Human Services
200 Independence Avenue, S.W.
Washington, DC 20201

Dear Secretary Becerra:

On behalf of the people of North Carolina, I am pleased to submit to the U.S. Department of Health and Human Services (DHHS) a request to renew the North Carolina Medicaid Reform Section 1115 Demonstration Project (11-W00313/4).

North Carolina is seeking to renew this demonstration for another five-year period to continue to build a whole-person, well-coordinated system of care that addresses both medical and non-medical drivers of health and advances health access by reducing disparities for historically marginalized populations.

Through this renewal request, North Carolina asks for extensions of ongoing managed care authorities, an expansion of and refinements to the Healthy Opportunities Pilot program, and authority for four new initiatives in line with the State's overarching goals. These initiatives will streamline Medicaid enrollment for children and youth, improve care for justice-involved individuals, and invest in behavioral health.

Prior to submitting this demonstration extension request, North Carolina sought feedback from the public as well as the Eastern Band of Cherokee Indians, North Carolina's only federally recognized Tribe. A summary of the external engagement process as well as comments received is enclosed.

Thank you for considering this application. We greatly appreciate your continued partnership on North Carolina's 1115 demonstration as we work towards our shared goal of improving health and well-being for all North Carolinians.

With kind regards, I am

Very truly yours,

Roy Cooper

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North Carolina Medicaid Reform Section 1115 Demonstration Renewal Application

State of North Carolina

Department of Health and Human Services

Submitted on October 31, 2023

Contents

Section I – Program Objectives and Vision

Introduction

North Carolina Medicaid provides comprehensive health care coverage to over two million state residents. Since receiving federal approval for the North Carolina Medicaid Reform Demonstration[1] on October 19, 2018, North Carolina has undertaken significant efforts to transform its Medicaid program in line with its overarching goal of improving health and well-being for all North Carolinians through a whole-person, well-coordinated system of care that addresses both medical and non-medical drivers of health and advances health access by reducing disparities for historically marginalized populations. Specifically, North Carolina is in the midst of implementing a significant managed care transition, affecting the majority of Medicaid enrollees. Ultimately, eligible, non-dually enrolled individuals will be enrolled in managed care through three types of managed care plans, or Prepaid Health Plans (PHPs): Standard Plans (currently available), Behavioral Health and Intellectual/Developmental Disabilities (Tailored Plans), and a Children and Families Specialty Plan, all of which offer or will offer comprehensive physical health, behavioral health, LTSS, and pharmacy services, in addition to care management programs serving enrollees with the most intensive needs. Members of federally recognized tribes, including members of the Eastern Band of Cherokee Indians (EBCI), may voluntarily enroll in PHPs on an opt-in basis. Individuals who are not enrolled in PHPs will continue to receive services through NC Medicaid Direct or the EBCI Tribal Option. North Carolina also instituted reforms to strengthen its substance use disorder (SUD) delivery and launched the nation's first comprehensive Medicaid-funded non-medical drivers of health[2] pilot program, called the Healthy Opportunities Pilot.

During this demonstration period, North Carolina also learned important lessons as it navigated the COVID-19 Public Health Emergency (PHE), which significantly disrupted ongoing implementation efforts and diverted key agency resources towards emergency response, resulting in delays to the launch of all of the managed care reforms noted above. In addition to these notable transformation efforts, during this demonstration period, North Carolina also obtained initial legislative authorization in March 2023 to expand Medicaid eligibility to childless adults under the Affordable Care Act (ACA). Once implemented on December 1, 2023, this measure is expected to result in health coverage for over 600,000 North Carolinians.

North Carolina is now seeking to renew its Section 1115 demonstration for another five-

[1] North Carolina Demonstration Approval October, 19 2018 (**link**)

[2] Throughout the application, North Carolina uses the term "non-medical drivers of health" to reference what CMS terms "health-related social needs (HRSN)". Non-medical drivers of health initiatives are intended to align with CMS guidance on HRSN.

year period to continue the important work underway and pursue select new opportunities to advance the State's goal of improving health and well-being for all North Carolinians through a whole-person, well-coordinated system of care that addresses both medical and non-medical drivers of health and advances health access by reducing disparities for historically marginalized populations.

Historical Summary of the Medicaid Reform Demonstration: 2019-2024

On October 19, 2018, North Carolina received federal approval for the North Carolina Medicaid Reform Demonstration. The goals of this demonstration are to:

- Measurably improve health outcomes with the implementation of a new delivery system;
- Maximize high-value care to ensure sustainability of the Medicaid program; and
- Reduce substance use disorder (SUD).

Over the demonstration period, North Carolina has made significant strides towards achieving these goals by:

- **Launching Standard Plans:** On July 1, 2021, North Carolina transitioned most of its non-dually eligible Medicaid enrollees to fully capitated and integrated managed care plans called Standard Plans. Standard Plan members receive integrated physical health, behavioral health, long term services and supports (LTSS), and pharmacy services. As of July 2023, approximately 1.9 million Medicaid enrollees receive care across the five Standard Plans. North Carolina has also launched its Advanced Medical Home (AMH) program to provide community-based care management to higher need Standard Plan enrollees.
- **Preparing to Launch Behavioral Health and Intellectual / Developmental Disabilities (Tailored Plans):** North Carolina is planning to launch specialized managed care plans for approximately 160,000 individuals with intensive behavioral health conditions (including serious mental illness, serious emotional disturbance, and severe SUD), intellectual and developmental disabilities (I/DD), traumatic brain injury (TBI), called Tailored Plans.

  Tailored Plan members will have access to all Standard Plan services, in addition to specialized behavioral health and I/DD services to meet their needs, including, but not limited to, Innovations and TBI waiver and 1915(i) services. The specialized services will include Tailored Care Management, a health home benefit designed to address Tailored Plan members' whole-person needs across physical health, behavioral health, I/DD, TBI, pharmacy, LTSS, and unmet non-medical drivers of health.

- **Preparing to Launch the Children and Families Specialty Plan (CFSP):** North Carolina is preparing to launch the CFSP. The CFSP, formerly referred to as the "Specialized Foster Care Plan," will be a single statewide managed care plan that seeks to mitigate disruptions in care and coverage for children, youth, and families served by the child welfare system.

  Designed to meet the unique health care needs of this population and maintain treatment plans across placement changes, the CFSP will offer all benefits available in Standard Plan and nearly all benefits covered by Tailored Plans. The CFSP will include a robust, integrated care management model that helps coordinate a member's needed health and health-related services and support transitions between treatment settings or health plans to ensure continuity of care and transition planning, and serve as the central entity accountable for the care of these members.

- **Implementing the SUD Component of the Demonstration:** The current demonstration includes expenditure authority for the state to obtain Medicaid match for services provided to short-term residents of institutions for mental diseases (IMDs) who are obtaining SUD treatment. Concurrently, North Carolina is expanding its continuum of SUD services available and fully aligning with American Society of Addiction Medicine (ASAM) standards. Since beginning implementation on May 1, 2019, North Carolina has observed a 26 percent increase in the number of Medicaid enrollees with SUD who accessed medication for opioid use disorder.

  The original SUD expenditure authority expired on October 31, 2023; however, North Carolina received a temporary, 12-month extension of the waiver authority that aligned the expiration dates across demonstration components to October 31, 2024. North Carolina submitted a five-year extension request to CMS through a separate application.

- **Implementing Healthy Opportunities Pilot (HOP):** On March 15, 2022, North Carolina began delivering the first of a broad array of services intended to address unmet non-medical drivers of health. HOP is the nation's first comprehensive program under Medicaid to test and evaluate the impact of providing select evidence-based, non-medical interventions related to housing, food, transportation, and interpersonal safety and toxic stress. To date, North Carolina has built networks of community-based providers, enrolled over 13,000 enrollees, launched 28 services across three largely rural regions, and delivered over 123,000 services.[3]

[3] North Carolina Department of Health and Human Services. Healthy Opportunities Pilots at Work (**link**)

Vision and Goals for 1115 Demonstration Renewal

During the first demonstration period, North Carolina began its transition to managed care and invested in novel programs to better respond to the diverse needs of North Carolinians who are enrolled in Medicaid. North Carolina is now ready to build on early successes and lessons learned to continue this progress over the next five-year 1115 demonstration period, while also implementing select new targeted initiatives in line with the State's overall goal to improve health and well-being for all North Carolinians through a whole-person, well-coordinated system of care that addresses both medical and non-medical drivers of health and advances health access by reducing disparities for historically marginalized populations.

Section II – Continuing Demonstration Features and Changes Requested to the Demonstration

North Carolina's overarching goal for its 1115 demonstration renewal is to improve health and well-being for all North Carolinians through a whole-person, well-coordinated system of care that addresses both medical and non-medical drivers of health and advances health access by reducing disparities for historically marginalized populations.

The 1115 demonstration renewal will advance this goal through the following specific objectives and related initiatives:

Objective 1: Support a continued, smooth transition to managed care with a focus on improving care for enrollees with the most complex needs:

- **Initiative 1a.** Provide integrated whole-person, well-coordinated care for the majority of Medicaid enrollees through continued implementation of Standard Plans.
- **Initiative 1b.** Provide integrated care for individuals with serious mental illness, serious emotional disturbance, severe SUD, I/DD, and/or TBI, through the launch of Tailored Plans.
- **Initiative 1c.** Provide integrated care to address the complex needs of children and families served by the child welfare system and former foster youth through the implementation of the CFSP.

Objective 2: Strengthen access to a person-centered and well-coordinated system of care which addresses both medical and non-medical drivers of health:

- **Initiative 2a.** Build on HOP infrastructure investment and experience to expand non-medical drivers of health services to North Carolinians across the state.
- **Initiative 2b.** Promote continuity of care by offering continuous enrollment in Medicaid to children and former foster care youth.

- **Initiative 2c.** Improve health outcomes and support reentry into the community for justice-involved individuals by providing targeted pre-release Medicaid services.

Objective 3: Strengthen the behavioral health and I/DD delivery system:

- **Initiative 3a.** Provide Medicaid coverage for the full continuum of opioid use disorder (OUD)/SUD services.
- **Initiative 3b.** Improve the coordinated system of care for people with behavioral health and I/DD needs through targeted new investments in technology.
- **Initiative 3c.** Bolster the behavioral health and LTSS workforce.
- **Initiative 3d.** Expand access to critical supports offered under 1915(i) authority.

Objective 1: Ensure Smooth Transition to Managed Care

Objective 1: North Carolina seeks to ensure a continued, smooth transition to managed care, with a focus on improving care for Medicaid enrollees with the most complex needs through the following initiatives:

- **Initiative 1a.** Provide integrated whole-person, well-coordinated care for the majority of Medicaid enrollees through continued implementation of Standard Plans.
- **Initiative 1b.** Provide integrated care for individuals with serious mental illness, serious emotional disturbance, severe SUD, I/DD, and/or TBI, through the launch of Tailored Plans.
- **Initiative 1c.** Provide integrated care to address the complex needs of youth and families served by the child welfare system through the implementation of the CFSP.

North Carolina is broadly requesting continued authority across its managed care initiatives to (1) allow for phase-in of managed care programs as set forth in this application; (2) continue mandatory enrollment in managed care[4]; and (3) enable the State to vary the amount, duration, and scope of services offered to individuals in managed care under this demonstration, regardless of eligibility category. More information on the initiative-specific demonstration requests is outlined below.

Initiative 1a: Continued Implementation of Standard Plans

Background

In July 2021, North Carolina completed the first phase of managed care implementation with the launch of Standard Plans. This program provides integrated physical health,

[4] Enrollees have choice with respect to network providers once enrolled in a managed care plan.

behavioral health, long term services and supports, and pharmacy services for the majority of North Carolina's Medicaid enrollees.

Standard Plan Renewal Request

Under the next demonstration period, North Carolina requests to extend the authority to implement Standard Plans for the next five-year 1115 demonstration renewal period. The Standard Plans will continue to serve the majority of enrollees by providing integrated physical health, behavioral health, long term services and supports, and pharmacy services. See Section III for additional information on benefits, eligibility, delivery system changes, and cost sharing for Standard Plans.

Initiative 1b: Launch of Tailored Plans

Background

Due to the COVID-19 pandemic and other factors, including organizational consolidation among local management entity/managed care organizations (LME/MCO), North Carolina has yet to implement Tailored Plans, which were authorized during the initial demonstration period.

Tailored Plan Renewal Request

Under the next demonstration, North Carolina requests to extend the authority to launch and implement Tailored Plans for the next five-year 1115 demonstration renewal period. Managed care-eligible Medicaid enrollees with serious mental illness, serious emotional disturbance, severe SUD, I/DD, and/or TBI will be enrolled in Tailored Plans, which will be regional, specialized managed care products focused on the needs of these populations. The State is requesting to continue the ability to offer a set of specialized behavioral health and I/DD services in the Tailored Plans that are not offered in the Standard Plans; specifically Tailored Plans will offer Innovations and TBI waiver services, 1915(i) services, and North Carolina's Tailored Care Management Health Home benefit, in addition to the most intensive State Plan behavioral health and I/DD services. In addition to managing Medicaid services, Tailored Plans will be responsible for managing state-funded behavioral health, I/DD and TBI services.

North Carolina is requesting to continue its existing expenditure authority that permits the State to limit the choice to a single Tailored Plan in each county for individuals meeting one of the following criteria:

- Individuals who reside in an intermediate care facility for individuals with intellectual disabilities (ICF-IID)
- Individuals who participate in North Carolina's Transitions to Community Living
- Individuals who are enrolled in the Innovations or Traumatic Brain Injury 1915(c) waiver
- Individuals who receive services/supports in state-funded residential treatment (i.e., individuals receiving services to support them in their residence/house setting, including services provided in group homes or non-independent settings such as Group Living, Family Living, Supported Living, and Residential Supports).

See Section III for additional information on benefits, eligibility, delivery system changes, and cost sharing for Tailored Plans.

Initiative 1c: Launch of Children and Families Specialty Plan

Background

North Carolina has yet to implement the Children and Families Specialty Plan (CFSP) for which it previously obtained authority.

Children and Families Specialty Plan Renewal Request

Under the next demonstration period, North Carolina requests to extend the authority to launch and implement the CFSP for the five-year 1115 demonstration period. The CFSP, formerly referred to as the "Specialized Foster Care Plan," will be a single statewide managed care plan that seeks to mitigate disruptions in care and coverage for the following groups:

- Children in foster care;
- Children receiving adoption assistance;
- Former foster youth up to age 26;
- Parents and caretaker relatives of children/youth in foster care who are making reasonable efforts to comply with a court-ordered plan of reunification;
- Siblings of children/youth in foster care;
- Minor children and certain family members receiving Child Protective Services In-Home Services; and
- Minor children of children/youth in foster care, of children/youth receiving adoption assistance, or of former foster youth.

This plan is designed to meet the unique health care needs of this population and enable children, youth and families served by the child welfare system across the state to access a broad range of physical health, behavioral health, pharmacy, LTSS, and I/DD services and

resources to address unmet non-medical drivers of health and maintain treatment plans even if placement changes occur. The State is requesting to continue its authority to offer a specialized set of services for the CFSP in comparison to the Standard Plans. Specifically, the CFSP will offer all of the specialized behavioral health and I/DD State Plan benefits besides ICF-IID that will be available through Tailored Plans, in addition to 1915(i) services. The CFSP must meet a set of requirements ensuring robust care management and medication management specifically for this vulnerable population. See Section III for additional information on benefits, eligibility, delivery system changes, and cost sharing for CFSP.

Objective 2: Strengthen Access to Whole-Person, Coordinated Care

Objective 2: North Carolina seeks to strengthen access to a person-centered and well-coordinated system of care which addresses both medical and non-medical drivers of health through the following initiatives:

- **Initiative 2a.** Build on Healthy Opportunities Pilots (HOP) infrastructure investment and experience to expand non-medical drivers of health services to North Carolinians across the state.
- **Initiative 2b.** Promote continuity of care by offering continuous enrollment in Medicaid to children and former foster care youth.
- **Initiative 2c.** Improve health outcomes and support reentry into the community for justice-involved individuals by providing targeted pre-release Medicaid services.

Initiative 2a: Healthy Opportunities Pilot

Background

In October 2018, North Carolina received federal 1115 demonstration authority to implement the Healthy Opportunities Pilot (HOP). HOP is a comprehensive program to test and evaluate the impact of providing evidence-based, non-medical interventions that address housing instability, transportation insecurity, food insecurity, interpersonal violence (IPV) and toxic stress to qualifying Medicaid enrollees. Through HOP, North Carolina is dedicated to ensuring enrollees can access necessary non-medical drivers of health services in a way that meets their needs and improves their health. At the same time, HOP has strengthened community capacity to provide non-medical drivers of health services, enabled a diverse ecosystem of stakeholders to work together, and pursued the elimination of health disparities across the Pilot regions.

Today, Medicaid enrollees must live in one of the three regions where HOP operates and have at least one qualifying physical or behavioral health condition and one qualifying social risk factor to receive Pilot services.

Pilot services include 29 non-medical drivers of health services defined and priced in the

State's Pilot fee schedule. The fee schedule was originally approved by CMS in December 2019. These services were selected based on their potential to improve health outcomes and/or lower health care costs and address the needs of qualifying enrollees. To ensure system readiness, HOP was launched in March 2022 with a purposefully limited scope and scale, focusing first on food and nutrition services, before expanding to housing and transportation, toxic stress, and most recently, services targeted to address IPV. The phased approach allowed the Department to work closely with a wide range of partners, quickly address issues that arose and focus on emerging best practices—thereby ensuring a smooth launch. Despite the challenges associated with launching the program during the COVID-19 pandemic, HOP began delivering services in March 2022 and as of August 31, 2023, has provided over 123,000 services to over 13,000 enrollees across the three Pilot regions.

A diverse set of stakeholders across the health and human services continuum work together to implement and operate HOP. Key Pilot entities and respective responsibilities include:

- North Carolina Department of Health and Human Services (NCDHHS): North Carolina is responsible for designing, establishing and overseeing HOP, and is accountable to CMS for all aspects of the program.
- HOP Administrators[5]: HOP Administrators are responsible for approving which individuals qualify for HOP, and which services they receive. HOP Administrators also manage a capped allocation of funding to pay for Pilot services delivered by HSOs and other administrative expenses.
- Care Managers: Care Managers work with Medicaid enrollees on their full range of physical, behavioral and non-medical needs and work with the HOP Administrators to identify people who would benefit from and qualify for Pilot services. Care managers are responsible for proposing services that may benefit the individual, and coordinate, track and manage their Pilot services over time.
- Network Leads: Network Leads serve as a single point of accountability for HSOs and HOP Administrators, effectively bridging the gap between the healthcare and social services industries. Network Leads develop and manage a high-quality network of HSOs, provide technical assistance and distribute capacity-building funds to ensure HSOs are able to participate in HOP.
- Human Service Organizations (HSOs): HSOs, comprised of community-based organizations and social service agencies, contract with Network Leads to deliver high-quality Pilot services in a culturally-responsive manner to qualifying individuals. HSOs develop capabilities to participate in the health care delivery system, including

[5] HOP Administrators include Prepaid-Health Plans (PHP) and other non-PHP Managed Care Entities including Primary Care Case Management Entities (PCCM-Es), Primary Care Case Managers (PCCMs), Prepaid Inpatient Health Plans (PIHPs), and Prepaid Ambulatory Health Plans (PAHPs) as defined in the State's special terms and conditions.

tracking, reporting and invoicing for Pilot services delivered to Pilot enrollees.

Healthy Opportunities Pilot Renewal Request

Under the next demonstration period, North Carolina requests to renew all prior features of HOP, in addition to implementing new Pilot-related program changes during the demonstration period. Specifically, North Carolina is requesting $2.125 billion in total computable expenditure authority for HOP services, allowing the State to expand HOP statewide, broaden HOP eligibility, scale services, and make other program improvements over the course of the next demonstration. North Carolina is also requesting $375 million in total computable HOP capacity building funding to support expansion of these services across the State. North Carolina currently has the authority to operate HOP in select regions of the State, with one Network Lead per region. To support statewide HOP operations, the State intends to procure additional Network Leads who will in turn develop HSO networks statewide.

These requested changes build on the lessons learned and successes of HOP to date. Central to HOP is the Department's commitment to continuous improvement, transparency and learning. HOP is the first initiative of its kind, a large-scale undertaking reliant on partnerships between organizations with different cultures, missions and business practices that have not historically worked together. Continuous improvement is vital to promoting an environment of shared learning and evolution based on these organizations' experiences on-the-ground. The State intends to continue its practice of gathering and analyzing real time data about Pilot enrollment, service delivery and partnership development between organizations via Rapid Cycle Assessments (RCAs). North Carolina's recent RCA revealed that North Carolina has been successful in implementing Pilot infrastructure and establishing effective collaborations between the State, HOP Administrators, healthcare systems, and HSOs to enable the delivery of Pilot services in current Pilot regions. This includes development of a statewide technology platform that allows Pilot entities to leverage a single system for exchanging Pilot data and operationalizing HOP, implementation of required legal and regulatory systems, and effective relationship-building with stakeholders. The RCA preliminarily found that Pilot enrollees receiving services are reporting decreased needs in respective domains. While this data is based on a limited period of Pilot service delivery, these early findings highlight the potential for HOP to meaningfully address the non-medical drivers of health of enrollees. North Carolina is well positioned to scale these early successes from the first demonstration period to broaden the reach of HOP and impact population health. North Carolina remains committed to continuous improvement, transparency and learning as HOP expansion proceeds in the demonstration period.

<u>Eligibility</u>

Under the current waiver, to be eligible for and receive Pilot services, Medicaid enrollees must live in one of the three Pilot regions and have at least one qualifying physical or

behavioral health condition and one qualifying social risk factor, as defined in Attachment G of the existing demonstration. Based on experience to date, the State is seeking authority to expand the geographic reach of HOP statewide and expand Pilot eligibility criteria to allow additional high-need individuals to access Pilot services.

Requested changes to HOP eligibility that build on the state's existing criteria include:

- For adults 21+, presence of one or more chronic conditions
- Individuals "at risk of" a chronic condition across all eligibility categories
- All pregnant women enrolled in Medicaid
- All Tailored Plan enrollees and individuals eligible for Tailored Care Management in Prepaid Inpatient Health Plans (PIHPs)
- Individuals who are currently or have been impacted by natural disasters in the past 12 months
- Individuals who have prior experience with the justice system; for example, individuals who have been released from incarceration or who are pre-release, where appropriate
- Children/youth who receive adoption assistance

Services

North Carolina currently has authority to provide 29 Pilot services across four domains (housing, food, transportation and interpersonal violence/toxic stress) in Pilot regions. North Carolina will determine which services are scaled in new regions of the State based on service effectiveness, regional and population-based readiness to participate, and HSO capacity to provide select Pilot services. The State requests to continue offering and testing the efficacy of all existing services in current Pilot regions:

Housing

- Housing Navigation, Support and Sustaining Services
- Inspection for Housing Quality
- Housing Move-In Support
- Essential Utility Set-Up
- Home Remediation Services
- Home Accessibility and Safety Modifications
- Healthy Home Goods
- One-Time Payment for Security Deposit and First Month's Rent
- Short-Term Post Hospitalization Housing

Interpersonal Violence (IPV) and Toxic Stress

- IPV Case Management Services
- Violence Intervention Services

- Evidence-Based Parenting Curriculum
- Home Visiting Services
- Dyadic Therapy

Food

- Food and Nutrition Access Case Management Services
- Evidence-Based Group Nutrition Class
- Diabetes Prevention Program
- Fruit and Vegetable Prescription
- Healthy Food Box (For Pick-Up)
- Healthy Food Box (Delivered)
- Healthy Meal (For Pick-Up)
- Healthy Meal (Home Delivered)
- Medically Tailored Home Delivered Meals

Transportation

- Reimbursement for Health-Related Public Transportation
- Reimbursement for Health-Related Private Transportation
- Transportation PMPM Add-On for Case Management Services

Cross-Domain

- Holistic High Intensity Enhanced Case Management
- Medical Respite
- Linkages to Health-Related Legal Supports

The State is also seeking authority to modify and add to the list of HOP services as follows:

- Allow up to three meals per day for key Pilot services within the food domain, including Healthy Food Boxes, Healthy Meals and Medically Tailored Meals
- Adapt an existing HOP housing service to provide six months of rental or mortgage assistance (including payment of arrears) for high-needs enrollees
- Add a new "firearm safety" service that provides, at a minimum, locks and/or safes to support firearm safety
- Add a new targeted "childcare support" service to provide affordable childcare and related services to qualifying, high-needs children and families.

In addition, the State wishes to retain its existing ability to remove Pilot services as appropriate, based on experience, service effectiveness, and HSO capacity to provide services across the State.

<u>Other Program Improvements</u>

Central to the existing Pilot model is the essential role of the Network Lead as a bridge between health care (HOP Administrators and care management entities) and social

services (HSOs). Network Leads contract with HOP Administrators on behalf of their networks of HSOs, providing a level of standardization and consistency to both entities. Existing and new Network Leads will continue to play an essential role in Pilot administration. At the same time, the State wishes to foster innovation and flexibility with contracting relationships among HOP entities that are ready and prepared to do so. The State is seeking authority to allow HOP Administrators and HSOs to contract directly with one another where both parties have demonstrated readiness to do so.

Capacity Building Funds

North Carolina is requesting $375 million in total computable HOP capacity building funding to support expansion of the Pilot statewide. The State's first RCA indicated that access to capacity building funding was critical to developing the necessary systems, relationships and infrastructure to deliver Pilot services. Capacity building funds will build on the investments made during the prior demonstration by further building the necessary infrastructure to deliver Pilot services to eligible enrollees statewide. This funding will support HOP-related capacity building activities, including but not limited to: building the capabilities necessary to execute Pilot responsibilities, conducting stakeholder engagement and training/technical assistance, community engagement activities, hiring and training new staff, strengthening health information technology systems, essential overhead costs, and establishing operational workflow processes necessary participate in HOP.

Initiative 2b: Continuous Enrollment for Children

Background

Nationally, approximately four in ten children eligible for Medicaid/CHIP who are disenrolled, are re-enrolled within one year, also known as "churn."[6] In North Carolina, of youth who lose coverage, one in four regained coverage within the year.[7] This temporary loss in coverage can lead to gaps in care during critical periods of child development as well as administrative confusion and complexity.[8] Continuous enrollment can help reduce churn, prevent disruptions in care, and promote access to healthcare , while also reducing administrative burden for the state, counties, and families.

North Carolina currently offers a 12-month period of continuous enrollment for children ages 0 to 18.

Continuous Eligibility Renewal Request

Under the next demonstration, North Carolina is requesting authority to implement continuous enrollment for young children through age five and extend the continuous

[6] Medicaid and CHIP Payment and Access Commission. An Updated Look at Rates of Churn and Continuous Coverage in Medicaid and CHIP. 2021 (**link**)
[7] Duke University. Churn Patterns Among Youth Medicaid Beneficiaries in North Carolina: 2016-2018. 2021 (**link**)
[8] Kaiser Family Foundation. Medicaid Enrollment Churn and Implications for Continuous Coverage Policies. December 2021 (**link**)

enrollment period to 24 months for children and youth ages six through 18. North Carolina is also requesting to offer continuous enrollment to youth who aged out of foster care prior to January 1, 2023, until age 26, aligning eligibility determination practices for these former foster care youth with other former foster care youth who aged out of foster care after January 1, 2023.

For children and youth, these continuous enrollment changes will be a valuable tool to help ensure that individuals receive critical screenings, vaccinations, and preventative services early in life.[9] Moreover, providing continuous enrollment during vulnerable periods, such as when an individual ages out of the foster care system, can help promote access to much-needed services that address physical health, behavioral health, and non-medical drivers of health.[10] North Carolina expects that more than 140,000 children and youth will benefit from these continuous enrollment changes annually, once fully implemented.

Eligibility

Under the demonstration renewal, except for individuals eligible for Medicaid on the basis of 42 CFR 435.217, section 1902(a)(10)(C) of the Act and 42 CFR 435.301, or individuals eligible for Medicaid under the non-MAGI or aged, blind, and disabled categories, the following groups of children and youth will be eligible for the following extended periods of continuous enrollment:

- Children ages zero through five who enroll in Medicaid shall qualify for continuous enrollment beginning on the effective date of the child's most recent eligibility determination or redetermination and extending through the end of the month in which their sixth birthday falls;
- Individuals ages six through 18 who enroll in Medicaid shall qualify for a 24-month continuous enrollment period beginning on the effective date of the individual's most recent eligibility determination or redetermination; and
- Individuals under age 26 who aged out of foster care prior to January 1, 2023 and were enrolled in Medicaid at the time they aged out shall qualify for continuous enrollment period beginning on the effective date of the individual's most recent eligibility determination or redetermination extending through the end of the month in which their twenty-sixth birthday falls. This will align eligibility determination practices for these former foster care youth with other former foster care youth who aged out of foster care after January 1, 2023.

If any of the following circumstances occur during an individual's designated continuous

[9] Kaiser Family Foundation. Implications of Continuous Eligibility Policies for Children's Medicaid Enrollment Churn. December 2022 (**link**)
[10] Child Welfare and Foster Care Statistics. May 2023 (**link**)

eligibility period, the individual's Medicaid eligibility shall be redetermined or terminated:

- The individual is no longer a North Carolina resident;
- The individual requests termination of eligibility;
- The individual dies; or
- The agency determines that eligibility was erroneously granted at the most recent determination, redetermination or renewal of eligibility because of agency error or fraud, abuse, or perjury attributed to the individual.

North Carolina will establish procedures designed to ensure that enrollees can make timely and accurate reports of any changes in circumstances that may affect their eligibility as outlined in this demonstration. For all continuous enrollment periods longer than 12 months, North Carolina will establish procedures and processes to accept and update enrollee contact information on an annual basis and to check for the exceptions defined above and as required by CMS.

Initiative 2c: Coverage for Pre-Release Services for Justice-Involved Individuals

Background

Approximately 57,000 adults and youth in North Carolina were incarcerated in federal, state, and local carceral settings as of May 2023.[11] One projection indicates that 128,000 individuals cycle through local jails in North Carolina each year.[12] Stark racial disparities are reflected across the state's justice-involved population; Black adults are nearly six times as likely, Hispanic adults are approximately three times as likely, and Native American adults are approximately four times as likely to be incarcerated as individuals of other races.[13,14] Individuals leaving incarceration are particularly at risk of experiencing poor health outcomes. Compared to individuals who have never been incarcerated, justice-involved individuals have higher rates of physical and behavioral health needs.[15] Among justice-involved individuals who were recently released from a correctional setting in North Carolina, approximately 30% are identified as having physical health needs, approximately 75% are identified as having substance use disorder (SUD), and approximately 50% are identified as having other mental health needs.[16] Those recently released from a correctional setting in the state also have high rates of non-medical drivers of health; 29%

[11] Prison Policy Initiative (**link**)
[12] Prison Policy Initiative (**link**)
[13] Governor Cooper Establishes Task Force to Address Racial Inequity in the State Criminal Justice System. June 2020 (**link**)
[14] Vera Institute of Justice. Incarceration Trends in North Carolina. December 2019 (**link**)
[15] The Commonwealth Fund. September 2022 (**link**)
[16] North Carolina Sentencing and Policy Advisory Commission. Correctional Program Evaluation. 2019 (**link**)

are identified as having housing needs, 71% are identified as having transportation needs, and around 45% are identified as having vocational or employment needs.[17]

Moreover, justice-involved individuals are particularly vulnerable during the period immediately following release from a correctional setting, with one study reporting that the risk of death is over 10 times greater during this period for justice-involved individuals as compared to community members who are not involved with the justice system.[18] In North Carolina, individuals recently released from correctional settings are 40 times more likely to suffer an opioid overdose compared to individuals who have never been incarcerated.[19]

Justice-Involved Reentry Request

Ensuring continuity of health coverage and care and improving health outcomes for justice-involved populations is a high priority for North Carolina.[20] In line with this goal, and with CMS guidance,[21] North Carolina is requesting authority for federal Medicaid matching funds to provide a set of targeted Medicaid services to eligible justice-involved populations within the 90-day period prior to release, and to provide $315 million total computable in capacity building funding to support service delivery. These services will be available to individuals incarcerated in the State's prisons as well as to individuals incarcerated in select county- and tribal-operated jails and youth correctional facilities.

Eligibility

North Carolina aims to implement this initiative in its 53 State prisons over the course of the demonstration, as well as in a subset of county- and tribal-operated jails and youth correctional facilities that meet Department-defined readiness standards (e.g., have automated enrollment and suspension services, have agreed to participate in the initiative, and have appropriate operational capacity).

North Carolina will phase in participating correctional facilities based on readiness over the course of the demonstration period.

All adults and youth who are incarcerated in a participating correctional setting and are enrolled in Medicaid will be eligible to access pre-release services. Services will be available to individuals both pre- and post-adjudication. North Carolina estimates that approximately 39,000 individuals will receive pre-release services under this demonstration.

Benefits

[17] North Carolina Sentencing and Policy Advisory Commission. Correctional Program Evaluation. 2019 (**link**)
[18] The Commonwealth Fund. September 2022 (**link**)
[19] NCDHHS Announces Funding Opportunity to Serve Justice-Involved Individuals as COVID-19 Impacts Overdoses. October 2021 (**link**)
[20] North Carolina Department of Health and Human Services 2021-2023 Strategic Plan (**link**)
[21] CMS. State Medicaid Director Letter #23-003. "Opportunities to Test Transition-Related Strategies to Support Community Reentry and Improve Care Transitions for Individuals Who Are Incarcerated." April 17, 2023 (**link**)

North Carolina is requesting that the scope of pre-release services should be offered beginning up to 90-days prior to release from a participating correctional setting. Eligible individuals will, at a minimum, be able to access the following three services:

- **Case Management** under which providers (such as care managers, peer support specialists, and others) will establish client relationships, conduct a needs assessment, develop a person-centered care plan, and make appropriate linkages and referrals to post-release care and supports.
- **Medication for Opioid Use Disorder (MOUD)**[22] including medication in combination with counseling/behavioral therapies, as clinically appropriate.
- **At a Minimum, a 30-Day Supply of Prescription Medication** in hand upon release, consistent with Medicaid State Plan coverage.

In addition to the above three services, the following additional services will be phased in over the course of the demonstration period based on readiness to implement:

- **Physical and Behavioral Health Clinical Consultation Services** that are intended to support the creation of a comprehensive, robust, and successful reentry plan, such as clinical screenings and pre-release consultations with community-based providers.
- **Laboratory and Radiology Services** as clinically appropriate, consistent with Medicaid State Plan coverage.
- **Medications and Medication Administration** as clinically appropriate, consistent with Medicaid State Plan coverage.
- **Tobacco Cessation Treatment Services** as clinically appropriate.
- **Durable Medical Equipment Upon Release** in hand upon release, consistent with Medicaid State Plan coverage.

Capacity Building Funds

To support cross-system implementation efforts for this initiative, North Carolina is requesting $315 million total computable in capacity building funds. Capacity building funds will be available to entities partnering with DHHS to implement the initiative, including correctional facilities. This funding will support planning and implementation activities, including but not limited to: conducting stakeholder engagement, hiring and training new staff, strengthening health information technology systems, and establishing new

[22] Throughout this application, North Carolina uses the term Medication for Opioid Use Disorder (MOUD) to reference what CMS terms "Medication Assisted Treatment (MAT)". Pre-release MOUD services will align with the requirements for provision of MAT outlined in CMS guidance for reentry demonstrations.

operational workflows, processes, and space modifications needed to implement this initiative across participating correctional settings.

Objective 3: Strengthen Behavioral Health and I/DD Delivery System

Objective 3: Strengthen the behavioral health and I/DD delivery system through the following initiatives:

- **Initiative 3a.** Provide Medicaid coverage for the full continuum of OUD/SUD services.
- **Initiative 3b.** Improve the coordinated system of care for people with behavioral health and I/DD needs through targeted new investments in technology.
- **Initiative 3c.** Bolster the behavioral health and LTSS workforce.
- **Initiative 3d.** Expand access to critical supports offered under 1915(i) authority.

Initiative 3a: Providing Medicaid Coverage for the Full Continuum of OUD/SUD Services

Background

The current demonstration permits North Carolina to obtain Medicaid reimbursement for individuals obtaining short-term SUD treatment in an IMD, regardless of whether they are enrolled in Medicaid managed care or NC Medicaid Direct, North Carolina's fee-for-service delivery system. Concurrently, North Carolina is expanding its SUD service array to include the full ASAM continuum of care and aligning care with the third edition of ASAM standards. Under the demonstration, North Carolina is required to aim for a statewide average length of stay of 30 days in residential treatment settings to ensure short-term residential treatment stays.

The original SUD expenditure authority expired on October 31, 2023; however, North Carolina received a temporary, 12-month extension of the waiver authority that aligned the expiration dates across demonstration components to October 31, 2024. North Carolina submitted a five-year extension request to CMS through a separate application.

Initiative 3b: Investments in Behavioral Health and I/DD Technology

Background

Behavioral health concerns—further exacerbated by the COVID-19 pandemic—are a significant and growing issue in North Carolina that has been identified as a key priority for increased investment. Nearly one in five North Carolinians has a mental illness. During the COVID-19 pandemic, approximately one in three North Carolinians surveyed reported

symptoms of depression and/or anxiety.[23] However, more than half of North Carolinians and nearly three out of four children with a behavioral health condition have not received needed treatment for their condition.[24,25] In fact, more than half of North Carolina's counties have no child and adolescent psychiatrist.[26] Nationally, North Carolina is ranked within the bottom ten states for youth mental health, largely due to inadequate access to care and lack of adequate insurance coverage for mental health.[27]

Nearly half of all children in North Carolina have endured at least one Adverse Childhood Experience (ACE). ACEs are traumatic experiences, such as neglect or exposure to violence, which can contribute to toxic stress, exacerbate physical and mental health conditions, and negatively affect educational and employment outcomes later in life.[28] In 2022, 68% of teachers in North Carolina reported that their students had greater needs for social, emotional, and mental health support than in a typical school year.[29]

In recognition of the state's behavioral health crisis, Governor Roy Cooper released a $1 billion plan to bolster key aspects of the State's behavioral health system.[30] The plan prioritizes investment in data and technology to improve health access and outcomes through increased use of technology and data-driven decision-making. In particular, supporting under-resourced behavioral health providers' access to and use of electronic health records to share data and connect with the North Carolina Health Information Exchange, HealthConnex, is a key priority to ensure access to integrated, whole-person care as North Carolina continues its managed care transition. In addition, in recognition of the important role that schools play in identifying and addressing students' health and non-medical drivers of health and addressing adverse childhood experiences that impact behavioral health, North Carolina is seeking to invest in technology to support schools to appropriately document and bill for services delivered and make connections to external providers and other community-based resources and supports.

Behavioral Health and I/DD Technology Request

In the 1115 demonstration renewal, North Carolina is seeking $45 million in expenditure authority to allow Medicaid match for health information technology and related technical

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[23] North Carolina Department of Health and Human Services. Behavioral Health Convening. 2022 (**link**)
[24] North Carolina Department of Health and Human Services. Investing in Behavioral Health and Resilience. March 2023 (**link**)
25 North Carolina Department of Health and Human Services. Session Law 2021-132. April 2023 (**link**)
26 American Academy of Child and Adolescent Psychiatry. Workforce Maps by State. 2022 (**link**)
27 Reinert, M., T. Nguyen, and D. Fritze, The State of Mental Health in America 2022. 2022, Mental Health America: Alexandria VA (**link**)
[28] Child Welfare. The prevalence of adverse childhood experiences, nationally, by state, and by race or ethnicity. 2018 (**link**)
[29] North Carolina Teacher Working Conditions Survey. 2022 (**link**)
30 North Carolina Department of Health and Human Services. Investing in Behavioral Health and Resilience. March 2023 (**link**)

assistance for behavioral health, I/DD and TBI providers and schools to improve access to behavioral health services and promote care integration and whole-person care.

HIT Grants

North Carolina requests expenditure authority to provide health information technology (HIT) grants of up to $200,000 per practice ($30 million total computable) for providers who serve individuals with mental health conditions, substance use disorders, TBI, and/or I/DD located in North Carolina with a minimum of ten Medicaid patients and a Medicaid patient volume of at least 20%. Recipients of provider incentive payments under the Health Information Technology for Economic and Clinical Health (HITECH) Act who used funds to purchase or upgrade an electronic health record (EHR) system that can share real-time data with the North Carolina Health Information Exchange (NC HIE) would not be eligible for funding. Grants could cover costs of purchasing a new EHR system, making EHR system upgrades, and costs associated with enabling connectivity to NC HIE. Grants could also support training costs on EHR and NC HIE to enable providers to utilize technology to document and share patient data electronically and to utilize data to improve Medicaid enrollee health outcomes and identify and address disparities.

School Health Technology Capabilities

North Carolina requests expenditure authority to provide technology and related technical assistance to expand school's health and health-related capabilities for North Carolina Title I middle and high schools, tribal-operated schools, Tribal Local Educational Agencies (LEAs), and privately-run behavioral health and I/DD specialty schools that primarily serve children and youth with behavioral health conditions, I/DD, and/or TBI and cannot otherwise bill Medicaid as behavioral health or I/DD providers who would be eligible for the HIT Grants. Grants of up to $100,000 per school ($15 million total computable) could be used to purchase new technology and/or make upgrades to existing technology to support Medicaid functions, including to enable use of and data-sharing with Medicaid referral systems, support Medicaid billing, and provide related technical assistance.

Initiative 3c: Bolstering the Behavioral Health and LTSS Workforce

Background

North Carolina's workforce lacks the capacity to address the state's growing behavioral health crisis as well as fully meet the needs of people with I/DD and those in need of long term services and supports. Data indicate acute shortages with the state's current behavioral health workforce. For example, psychiatrists serving in North Carolina are only meeting 13% of the need in the state (compared to 28% nationally),[31] and nearly a third of counties do not have any practicing psychologists.[32] As of 2021, more than 2.6 million North

[31] Kaiser Family Foundation. Mental Health in North Carolina (**link**)
[32] North Carolina Department of Health and Human Services. Investing in Behavioral Health and Resilience. March 2023 (**link**)

Carolinians resided in a community without sufficient mental health professionals overall.[33] In addition to community-based provider shortages, North Carolina lost more than nine percent of its direct care workforce between 2016 and 2021.[34]

North Carolina has identified investment and support for the workforce within the behavioral health, I/DD and LTSS spaces as a key priority to reduce the current strain on the delivery system and improve access to behavioral health, LTSS, and other needed services.

Behavioral Health and LTSS Workforce Request

Under the renewed 1115 demonstration, North Carolina is seeking expenditure authority for $70 million in total computable funding to strengthen the behavioral health workforce, as well as providers and other professionals who serve individuals with I/DD and who provide LTSS. Studies have demonstrated that access to care is an important indicator of people's abilities to remain in or join the labor market, with a strong focus on health care and home care workers in particular.[35]

Loan Repayment Program

North Carolina requests $50 million in total computable expenditure authority to expand the state's behavioral health student loan repayment program to support additional behavioral health professionals statewide who provide care to Medicaid enrollees, individuals who receive services via Indian Health Services (IHS), and other under-resourced populations. This includes up to $300,000 in loan repayments for psychiatrists, nurse practitioners, and physician assistants as well as loan repayments ranging from $25,000 to $50,000 (depending on the professional type) for master's-level licensed clinicians (or above), bachelor's level behavioral health professionals, and registered nurses, in exchange for a service commitment in a qualified setting that serves Medicaid beneficiaries, individuals who receive services via IHS, and uninsured individuals.

Recruitment and Retention

North Carolina requests $50 million in total computable expenditure authority to provide recruitment and retention payments for direct support professionals and other professionals who provide Medicaid beneficiaries with long term services and supports, behavioral health services, and/or services and supports for individuals with I/DD, including: LTSS and BH/I/DD direct support professionals (DSPs), paraprofessionals as defined in North Carolina state administrative code, and other certified professionals (e.g., Peer Support Specialists, Family Partners, or Community Health Workers). The program would support

[33] National Alliance on Mental Illness. North Carolina Fact Sheet (**link**)
[34] North Carolina Department of Health and Human Services. North Carolina Launches Caregiving Workforce Strategic Leadership Council. March 2023 (**link**)
[35] The White House Briefing Room. FACT SHEET: White House Announces over $40 Billion in American Rescue Plan Investments in Our Workforce – With More Coming. July 2022 (**link**)

recruitment and retention bonus payments, childcare subsidies, funding for training programs, and/or transportation subsidies. Payments for each category would be capped and would not exceed up to $15,000 per year in total for qualifying professionals. North Carolina would contract with one or more vendors to distribute and administer these payments.

Initiative 3d: Changes to 1915(i) Eligibility

Background

In July 2023, North Carolina began transitioning select critical home and community-based services (HCBS) for enrollees with significant behavioral health needs, I/DD and TBI previously covered under 1915(b)(3) authority to 1915(i) authority. The State initiated this transition to reflect when Tailored Plans launch, Tailored Plan members will no longer be enrolled in North Carolina's prepaid inpatient health plans authorized under the State's 1915(b) waiver, meaning that they will not be able to access 1915(b)(3) services. Under 1915(b)(3) authority, North Carolina has allowed certain flexibilities that are not permitted under 1915(i); specifically, the State has allowed individuals with incomes above 150% FPL to be eligible for 1915(i) services and pays for one-time transitional costs for individuals to move from an institution for mental diseases (IMD) into their own private residence in the community or to divert an enrollee from entering an adult care home.

1915(i) Renewal Request

In order to maintain the eligibility criteria for critical HCBS as North Carolina transitions services from 1915(b)(3) to 1915(i) authority, North Carolina is requesting authority under the 1115 demonstration to:

- Allow Medicaid-enrolled with incomes above 150% FPL to be eligible for 1915(i) services
- Permit individuals transitioning out of an IMD to obtain North Carolina's 1915(i) community transition benefit, if they otherwise meet the 1915(i) eligibility criteria. The community transition benefit provides up to $5,000 in one-time transitional costs for individuals to move from an institutional setting into their own private residence.

Designated State Health Programs

North Carolina is seeking expenditure authority to support the non-federal share of funding for pre-release services for justice-involved individuals and related capacity building and new HOP expenditures for the next demonstration period using Designated State Health Program (DSHP) expenditures. North Carolina is requesting $610 million in total computable DSHP funding. North Carolina will work with CMS to finalize the demonstration initiatives that can be supported with DSHP funding, and to develop Special Terms and Conditions

(STCs) and DSHP funding and reimbursement protocols for the demonstration period to reflect the demonstration's goals and funding levels.

Section III – Benefits, Eligibility, Delivery System, and Cost Sharing

Benefits

Managed care benefits will continue to be defined under the State Plan or, where applicable, the 1915(c) waiver. The State is continuing to request an enhanced set of benefits for the Tailored Plans and Children and Families Specialty Plan in comparison to the Standard Plans as described in Section II.

Other changes to benefits proposed in the renewal are described in Section II above, and include:

- Expanding HOP statewide, reauthorizing the existing list of Pilot services, and modifying service definitions as proposed above
- Providing targeted pre-release services for justice-involved individuals in the 90 days prior to release
- Allowing Medicaid-enrolled individuals with incomes above 150% FPL to be eligible for 1915(i) services
- Permitting individuals transitioning out of an IMD to obtain North Carolina's 1915(i) community transition benefit, if they otherwise meet the 1915(i) eligibility criteria.

Eligibility

This demonstration renewal proposes to continue managed care eligibility as authorized in the current demonstration with no changes. All eligibility is defined under the State Plan, including M-CHIP, or, where applicable, the 1915(c) waiver. This demonstration affects all eligibility groups other than those listed in Table B below. The groups listed in Table B below will not be affected by the demonstration and will continue to receive Medicaid benefits through the service delivery system under the approved state plan or under existing waivers.

Table A: Full Benefit Medicaid Beneficiaries in This Table Are Eligible for SUD and HOP (if they meet the HOP criteria and are served by a HOP Administrator consistent with these STCs)[36]

GROUP NAME	CITATIONS
Duals Eligible for Full Medicaid, except those who are enrolled in the state's Innovations and TBI 1915(c) waiver programs, which qualifies the beneficiary for enrollment in the Tailored Plans	
Medically Needy • Medically Needy Pregnant Individuals except those covered by Innovations or TBI waivers • Medically Needy Children under 18 except those covered by Innovations or TBI waivers • Medically Needy Children Age 18 through 20 except those covered by Innovations or TBI waivers • Medically Needy Parents and Other Caretaker Relatives except those covered by Innovations or TBI waivers • Medically Needy Aged, Blind, or Disabled except those covered by Innovations or TBI waivers • Medically Needy Blind or Disabled Individuals Eligible in 1973 except those covered by Innovations or TBI waivers	1902(a)(10)(C)
Individuals Participating in the NC Health Insurance Premium Payment (HIPP) program except those covered by Innovations or TBI waivers	1906
Medicaid-only Beneficiaries Receiving Long-Stay Nursing Home Services	State Plan Eligibility
Community Alternatives Program for Children (CAP/C)	1915(c) waiver
Community Alternatives Program for Disabled Adults (CAP/DA)	1915(c) waiver

[36] North Carolina, consistent with requirements in state statute, intends to enroll dual eligible and long term stay nursing home populations into managed care in the future, and will update these tables as appropriate when more information is available on that change.

GROUP NAME	CITATIONS
Individuals in any eligibility category not otherwise excluded during their period of retroactive eligibility or prior to the effective date of PHP coverage[37]	1902(a)(34)

Table B: Populations Excluded from Comprehensive Managed Care and This Demonstration

GROUP NAME	CITATIONS
Duals Eligible for Cost-Sharing Assistance • Qualified Medicare Beneficiaries • Qualified Disabled and Working Individuals • Specified Low Income Medicare Beneficiaries • Qualifying Individuals	• 1902(a)(10)(E)(i) • 1905(p)(1) • 1902(a)(10)(E)(ii) • 1902(a)(10)(E)(iii) • 1902(a)(10)(E)(iv)
Individuals with Limited or no Medicaid Coverage (e.g., eligible for emergency services only)	• 1903(v)(2) and (3)
Individuals Eligible for Family Planning Services	• 1902(a)(10)(A)(ii)(XXI) • 42 CFR 435.214
Incarcerated Individuals *(Inpatient stays only), except for the provision of pre-release services to certain incarcerated individuals as described in this application*	• Clause (A) following 1905(a)(29)(A) • 42 CFR 435.1009, 1010
Presumptively Eligible • Presumptively Eligible Pregnant Individuals • Presumptively Eligible MAGI Individuals	• 1902(a)(47) • 1920 • 1920A • 1920B • 1920C
Individuals Participating in the Program of All-Inclusive Care for the Elderly (PACE)	• 1905(a)(26) • 1934

[37] Individuals in any eligibility category not otherwise excluded during their period of retroactive eligibility or prior to the effective date of PHP coverage are eligible for the SUD component of the demonstration but are not eligible for HOP.

Other eligibility-related changes proposed in the demonstration are described in more detail in Section II and include continuous enrollment to certain children and youth

Delivery System

The delivery system will remain as proposed and authorized in the last demonstration with changes to implementation dates as described in Section III and in Table C below.

Beneficiaries, except those excluded or exempted, shall be enrolled to receive services through a PHP under contract with the state. All Medicaid populations except for those who are excluded or exempt are either currently enrolled in PHPs or will be phased into PHPs according to the schedule detailed below in Table C. For these populations, Medicaid managed care enrollment is mandatory. Members of federally recognized tribes, including members of the EBCI, may voluntarily enroll in PHPs on an opt-in basis.

Table C: Managed Care Phase-in Schedule[38]

Managed Care Plan	Populations	Phase-In Timeline
Standard Plan	Medicaid and M-CHIP beneficiaries except those who are: • Excluded as described in Table B of this application; • Exempted individuals who choose not to enroll in managed care[39]; or • Eligible to enroll in a Tailored Plan or the Children and Families Specialty Plan[40]	Complete; implemented on July 1, 2021
Tailored Plan	Medicaid and M-CHIP beneficiaries eligible to enroll in Tailored Plans	Pending; anticipated to launch in 2024
Children and Families Specialty Plan	Medicaid and M-CHIP beneficiaries who are children in foster care; children receiving adoption assistance; former foster youth up to age 26; parents and caretaker relatives of children/youth in foster care who are making reasonable efforts to comply with a court-ordered plan of reunification; siblings of children/youth in foster care; minor children	Pending; anticipated to launch in late 2024 or 2025

[38] North Carolina, consistent with requirements in state statute, intends to enroll dual eligible and long term stay nursing home populations into managed care in the future, and will update these tables as appropriate when more information is available on that change.

[39] These populations may opt to enroll in a Standard Plan.

[40] These populations may opt to enroll in a Standard Plan.

	and certain family members receiving Child Protective Services In-Home Services; minor children of children/youth in foster care, of children/youth receiving adoption assistance or of former foster youth.	

Cost Sharing

There are no changes to cost sharing proposed under this demonstration. Cost sharing under this demonstration is consistent with the provisions of the approved state plan.

Section IV – Requested Waivers and Expenditure Authorities

Under the authority of Section 1115(a) of the Act, the following waivers and expenditure authorities shall enable North Carolina to implement the North Carolina Medicaid Reform Section 1115 demonstration from November 1, 2024, to October 31, 2029. To the extent that CMS advises the State that additional authorities are necessary to implement the programmatic vision and operational details described above, the State is requesting such waiver or expenditure authority, as applicable. North Carolina's negotiations with the federal government, as well as State legislative/budget changes, could lead to refinements in these lists as we work with CMS to move this demonstration forward.

Table D. Requested Waiver and Expenditure Authorities

Waiver/ Expenditure Authority	Use for Waiver / Expenditure Authority	Currently Approved Waiver / Expenditure Authority
Waiver Authorities		
Statewideness: Section 1902(a)(1)	To the extent necessary to enable the state to operate managed care on less than a statewide basis	Currently approved
	To the extent necessary to enable the state to implement the Healthy Opportunities Pilot in geographically limited areas of the state	Currently approved
	To enable the state to provide pre-release services to qualifying beneficiaries on a	Not currently approved

	facility limited basis, as outlined in this application	
Freedom of Choice: Section 1902(a)(23)(A)	To the extent necessary to enable the state to restrict freedom of choice of provider through the use of mandatory enrollment in managed care plans for the receipt of covered services including individuals in the Innovations and TBI 1915(c) waivers NC 0423.RO2.00, NC1326.R00.00, respectively. No waiver of freedom of choice is authorized for family planning providers.	Currently approved
	To enable the state to require qualifying beneficiaries to receive pre-release services, as described in this application, through only certain providers.	Not currently approved
Amount, Duration, and Scope of Services: Section 1902(a)(10)(B) **Comparability:** Section 1902(a)(17)	To the extent necessary to enable the state to vary the amount, duration, and scope of services offered to individuals in managed care under this demonstration, regardless of eligibility category	Currently approved
	To enable the state to provide Healthy Opportunities Pilot services as described in this application and that are not otherwise available to all beneficiaries in the same eligibility group.	Currently approved *(Note: language is slightly modified from previous approval)*
	To enable the state to provide additional benefits to Medicaid beneficiaries who are enrolled in the Healthy Opportunities Pilot program.	Currently approved
	To enable the state to provide only a limited set of pre-release services to qualifying beneficiaries, as described in this application, that is different than the services available to all other enrollees outside of carceral settings in the same eligibility groups authorized under the state plan or the demonstration	Not currently approved

Expenditure Authorities[41]		
Managed Care		
Tailored Plans	Expenditures under contracts with managed care entities that do not meet the requirements in 1903(m)(2)(A) and 1932(a) of the Act as implemented in 42 CFR 438.52(a), to the extent necessary to allow the state to limit the choice to a single Tailored Plan in each county for Medicaid enrollees meeting one of the following criteria: a. Residing in an ICF-IID b. Participating in North Carolina's Transitions to Community Living c. Enrolled in the Innovations or Traumatic Brain Injury 1915(c) waiver d. Receiving services/supports in state-funded residential treatment (i.e., individuals receiving services to support them in their residence/house setting, including services provided in group homes or non-independent settings such as Group Living, Family Living, Supported Living, and Residential Supports)	Currently approved
Healthy Opportunities Pilot		
Expenditures Related to Healthy Opportunities Pilot Services	Expenditures to provide Healthy Opportunities Pilot services for individuals who meet the eligibility criteria and in accordance with this application.	Currently approved *(Note: language is modified from previous approval to reflect statewide expansion and to remove October 31,*

[41] In the SUD waiver extension request submitted to CMS on September 11, 20223, North Carolina requested to continue expenditure authority for Residential and Inpatient Treatment for Individuals with a Substance Use Disorder (SUD).

		2024 expiration date)
Expenditures Related to Healthy Opportunities Pilot Program Capacity Building Funding	Expenditures for capacity building funding to support implementation of HOP.	Currently approved *(Note: Capacity building dollars were previously incorporated in the expenditure authority for Pilot services; North Carolina is proposing a separate expenditure authority in this application)*
Continuous Enrollment for Children		
Expenditures Related to Continuous Enrollment	Expenditures for continued benefits for individuals who have been determined eligible for the applicable continuous eligibility period who would otherwise lose coverage during an eligibility determination.	Not currently approved
Coverage for Justice-Involved Reentry		
Expenditures Related to Pre-Release Services	Expenditures for pre-release services provided to qualifying demonstration beneficiaries who would be eligible for Medicaid if not for their incarceration status, for up to 90 days immediately prior to the expected date of release from a participating state prison, county jail, or youth correctional facility.	Not currently approved
Expenditures Related to Pre-Release Services Capacity Building Funding	Expenditures for capacity building funding to support implementation of Justice-Involved Reentry Initiative.	Not currently approved
Behavioral Health and I/DD Technology		

Expenditures Related to Behavioral Health and I/DD HIT Infrastructure	Expenditures for the HIT Grants initiative.	Not currently approved
Expenditures Related to School Health Capabilities	Expenditures for the School Health and Health-Related Capabilities initiative.	Not currently approved
Behavioral Health and LTSS Workforce		
Expenditures Related to Clinical Loan Repayment Program	Expenditures for the Clinical Loan Repayment initiative.	Not currently approved
Expenditures Related to Recruitment and Retention	Expenditures for the Recruitment and Retention Payments initiative.	Not currently approved
1915(i) Services		
Community Transition Services	Expenditures to provide 1915(i) community transition services to Medicaid-enrolled individuals transitioning out of an IMD	Not currently approved
Expenditures Related to 1915(i) Services	Expenditures to provide 1915(i) services to Medicaid-enrolled individuals with incomes above 150% FPL	Not currently approved
Designated State Health Programs		
Designated State Health Programs	Expenditures for Designated State Health Programs, as described in this application, which are otherwise fully state-funded, and not otherwise eligible for Medicaid matching funds.	Not currently approved

Section V – Summaries of External Quality Review Organization (EQRO) Reports, Managed Care

Organization (MCO), and State Quality Assurance Monitoring

External Quality Review Organization Reports

Health Services Advisory Group (HSAG), North Carolina's EQRO, uses its analyses and evaluations of external quality review (EQR) activity findings to assess each Standard Plans' (and later Tailored Plans' and other managed care entities') performance in providing quality, timely, and accessible healthcare services to beneficiaries as required in 42 CFR §438.364. In the latest EQR report, HSAG includes overall findings and conclusions regarding quality, timeliness, and access for all Standard Plans. High-level findings include:

EQRO Results	
Domain	**Conclusion**
Quality	• **Strength:** The Standard Plans demonstrated a member-centric, quality-driven approach to serving the Medicaid population. • **Strength:** The encounter data validation (EDV) information systems (IS) review assessed self- reported qualitative information from all five Standard Plans. Based on the Standard Plan contract and the Department's requirements, Standard Plans demonstrated their capability to collect, process, and transmit encounter data to the Department, as well as develop data review and correction processes that can promptly respond to quality issues identified by Department. • **Strength:** The performance measure validation (PMV) activity identified that all five Standard Plans demonstrated extensive knowledge and experience in claims and encounter, membership/enrollment, data integration, rate production, and medical record procurement and abstraction processes. • **Strength:** All five Standard Plans achieved a PIP validation status of *Met* and 100 percent of the validation criteria for the first six steps submitted for validation. All PIPs were found to be methodologically sound. • **Opportunity for Improvement:** To improve the quality of encounter data submissions from the Standard Plans, the Department may want to assess whether there are common root cause(s) for Standard Plan encounter rejections. • **Opportunity for Improvement**: The Standard Plans did not consistently ensure that policies, procedures, processes, or committee materials

	satisfied program integrity (PI) requirements. These findings suggest that the Standard Plans may not have implemented processes to ensure all federal and Department requirements were met. • **Opportunity for Improvement:** Results of the PMV activity indicated that two health plans had an opportunity to establish consistent data feeds with the State immunization registry. This finding may impact the Standard Plans' ability to accurately assess enrollees for gaps in care.
Access	• **Strength:** Provider participation in quality forums revealed interest in continuing discussions to address access to care and best practices to improve Healthcare Effectiveness Data and Information Set (HEDIS) access measures.
Timeliness	• **Strength:** There was strong participation in EQRO activities, with consistent and timely submission of information that provided evidence of progress toward goals and continued improvement. • **Opportunity for Improvement:** Results of the PMV activity indicated that two health plans had an opportunity to establish consistent data feeds with the State immunization registry. This finding may impact the Standard Plans' ability to ensure that timely reporting of services is captured in quality measure reporting.

Note that reporting of the state's HEDIS quality measure performance is one year following the year reflected in the data. HEDIS measures require one full year of data; however, the Standard Plans' contracts did not go into effect until July 1, 2021. In consideration of this, HSAG and the Department worked closely with the Standard Plans to understand several nuances and complexities in the Standard Plans' abilities to produce 2021 HEDIS performance rates for review and validation. HSAG ensured that calendar year (CY) 2021 PMV methods aligned with CMS EQR Protocol 2. Validation of Performance Measures: A Mandatory EQR- Related Activity, October 2019; however, final measurement year (MY) 2021 rates were not available until mid-calendar year (CY) 2022 and will, therefore, be subsequently integrated into the EQR technical report produced in state fiscal year (SFY) 2023 (release pending).

The Standard Plans' primary performance improvement project (PIP) activities in the first year of managed care were initiating new PIPs and completing the first six steps of the submission form. For the 2022 validation, the PIPs had not progressed to including baseline

data or initiating QI activities or interventions. These will also be reported in the next annual EQR technical report in 2023.

More information is available in the full 2021-2022 EQR report here and on the North Carolina Medicaid Quality Management and Improvement webpage here. The Department will upload to the webpage and share with CMS future quality and evaluation-related reports, as available (e.g., Managed Care Health Equity Report, Annual Quality Report, Access to Care Report).

Managed Care Organization and State Quality Assurance Monitoring

North Carolina's managed care contracts include robust requirements to ensure that managed care plans meet and, in many cases, exceed the standards outlined in 42 CFR Part 438, Subpart D, and as specified by the Department. These standards are detailed throughout the Quality Strategy and EQR report and include requirements for enrollee access to care, network adequacy, availability of services, access to care during transitions of coverage, assurances of adequate capacity and services, coordination and continuity of care and coverage, and authorization. Further, these requirements focus on the structure and operations that managed care plans and other entities delivering managed care must have in place to ensure the provision of high-quality care.

Other Quality Documentation

The Department's CMS 416 Form (2021) can be found here.

The Department's Consumer Assessment of Healthcare Providers and Systems (CAHPS) reflects reporting respondents' experiences with their health care. Results from the 2022 report are here.

The Department administered a Medicaid Provider Experience Survey in the first year of managed care (2022), to assess the impact of the North Carolina Medicaid Transformation on primary care and obstetrics/gynecology (Ob/Gyn) practices that contract with NC Medicaid. The full report is available here; a baseline survey was conducted in 2021.

Section VI – Enrollment, Demonstration Financing and Budget Neutrality

This section describes the historical and expected enrollment impact, historical and expected financial expenditures, and budget neutrality considerations associated with the proposed demonstration renewal initiatives.[42] Additionally, North Carolina worked with its actuarial contractor Mercer to document the full budget neutrality and projected expenditure process using the CMS-prescribed budget neutrality Excel template. This model will be shared with CMS as part of the application submission.

Enrollment

Table E provides historical data on Member Months and estimated Person Count for North Carolina Medicaid Reform 1115 demonstration populations from November 1, 2019, to October 31, 2024. Note that a portion of the DY5 and all of the DY6 figures reflect continuation of reported experience through March 31, 2023.

Table E. Estimated Historical Person Count

		Historical Member Months and Person Count				
		DY2[43]	DY3[44]	DY4	DY5	DY6
Medicaid Eligibility Group		Nov 2019 to Oct 2020	Nov 2020 to Oct 2021	Nov 2021 to Oct 2022	Nov 2022 to Oct 2023	Nov 2023 to Oct 2024
Aged, Blind, Disabled (ABD)	Member months	0	303,156	1,198,700	1,256,600	1,256,600
	Person count	0	101,052	99,892	104,717	104,717

[42] The calculations and figures included in this Section have been developed for purposes of illustrating 1115 demonstration budget neutrality as required by CMS. 1115 demonstrations must be budget neutral to the federal government, not to the State, according to the policies negotiated in each demonstration. The required approach, inputs and methods for CMS may not align with estimates performed by the State for other purposes. For example, the illustrated per capita caps and expenditures do not consider the impact of pharmacy rebates or other costs that are outside of the managed care programs and populations included in this document.

[43] Demonstration Year 1 was associated with SUD waiver implementation only. This table reflects the appropriate Demonstration years for the comprehensive Medicaid Reform Demonstration.

[44] Demonstration Year 3 only reflects the four months following Standard Plan launch on July 1, 2021.

		Historical Member Months and Person Count				
		DY2[43]	DY3[44]	DY4	DY5	DY6
TANF & Related Adults	Member months	0	937,257	4,326,423	5,180,866	5,180,866
	Person count	0	312,419	360,535	431,739	431,739
TANF & Related Children	Member months	0	2,856,570	11,789,555	12,238,814	12,238,814
	Person count	0	952,190	982,463	1,019,901	1,019,901
Innovations/ Traumatic Brain Injury (TBI)	Member months	0	0	0	0	0
	Person count	0	0	0	0	0
Medicaid Expansion	Member months	N/A	N/A	N/A	N/A	5,200,000*
	Person count	N/A	N/A	N/A	N/A	472,727*

*Launch of Medicaid expansion is expected to occur December 1, 2023.

North Carolina has estimated enrollment for the next demonstration period for the purposes of public comment. Table F provides the estimated enrollment for the five years of the 1115 demonstration renewal from November 1, 2024, to October 31, 2029. Note that the figures for TANF & Related Children include estimated enrollment for M-CHIP.

Table F. Projected Member Months and Person Count Under Renewal

		Projected Member Months and Person Count Under Renewal				
		DY7	DY8	DY9	DY10	DY11
Medicaid Eligibility Group		**Nov 2024 to Oct 2025**	**Nov 2025 to Oct 2026**	**Nov 2026 to Oct 2027**	**Nov 2027 to Oct 2028**	**Nov 2028 to Oct 2029**
Medicaid Eligibility Groups						
ABD	Member months	2,217,445	2,239,620	2,262,016	2,284,636	2,307,482
	Person count	184,787	186,635	188,501	190,386	192,290

		Projected Member Months and Person Count Under Renewal				
		DY7	DY8	DY9	DY10	DY11
TANF & Related Adults	Member months	3,682,854	3,719,682	3,756,879	3,794,448	3,832,393
	Person count	306,904	309,974	313,073	316,204	319,366
TANF & Related Children	Member months	15,642,839	16,212,785	16,792,565	16,960,491	17,130,095
	Person count	1,303,570	1,351,065	1,399,380	1,413,374	1,427,508
Innovations/TBI	Member months	168,000	168,000	168,000	168,000	168,000
	Person count	14,000	14,000	14,000	14,000	14,000
Medicaid Expansion	Member months	7,415,187	7,489,339	7,564,232	7,639,874	7,716,273
	Person count	617,932	624,112	630,353	636,656	643,023

Continuously enrolled children and former foster youth are included in the TANF & Related Children Medicaid Eligibility Group projections noted above. Table G provides a summary of the estimated number of individuals impacted by these continuous enrollment changes.

Table G. Estimated Continuous Enrollment Impacts

	Estimated Number of Individuals Affected by Continuous Enrollment				
	DY7	DY8	DY9	DY10	DY11
Continuous Enrollment Groups	**Nov 2024 to Oct 2025**	**Nov 2025 to Oct 2026**	**Nov 2026 to Oct 2027**	**Nov 2027 to Oct 2028**	**Nov 2028 to Oct 2029**
Children ages 0 through five	27,431	41,558	55,964	56,524	57,089

	Estimated Number of Individuals Affected by Continuous Enrollment				
	DY7	DY8	DY9	DY10	DY11
Individuals ages 6 through 18	35,792	54,224	73,022	73,752	74,490
Former foster care youth	5,015	7,597	10,231	10,333	10,437

Justice-involved individuals are not included in the Medicaid Eligibility Group projections noted above. Table H provides a summary of the estimated number of individuals who will receive pre-release services under this demonstration.

Table H. Estimated Justice-Involved Reentry Initiative Impacts

	Estimated Number of Individuals Affected by Justice-Involved Reentry Initiative				
	DY7	DY8	DY9	DY10	DY11
	Nov 2024 to Oct 2025	Nov 2025 to Oct 2026	Nov 2026 to Oct 2027	Nov 2027 to Oct 2028	Nov 2028 to Oct 2029
Justice-involved Individuals	2,925	6,825	9,750	9,750	9,750

Expenditures

Table I provides historical data on the total expenditures for the North Carolina Medicaid Reform 1115 demonstration services and populations from November 1, 2019, to October 31, 2024. Note that a portion of the DY5 and all of the DY6 figures are estimated based on reported experience through March 31, 2023.

Table I. Historical Total Computable Expenditures

	Historical Total Computable Expenditures (in $M)				
	DY2[45]	DY3[46]	DY4	DY5	DY6
Historical Expenditures	**Nov 2019 to Oct 2020**	**Nov 2020 to Oct 2021**	**Nov 2021 to Oct 2022**	**Nov 2022 to Oct 2023**	**Nov 2023 to Oct 2024**
Medicaid Eligibility Groups					
ABD	0	$508,987,665	$2,046,744,665	$2,253,393,450	$2,253,393,450
TANF & Related Adults	0	$374,099,591	$2,287,582,053	$2,738,045,214	$2,738,045,214
TANF & Related Children	0	$620,287,515	$2,708,208,039	$2,863,757,092	$2,863,757,092
Innovations/TBI	0	0	0	0	0
Medicaid Expansion	0	0	0	N/A	$6,532,136,000*
Healthy Opportunities Pilot					
Capacity Building	0	$19,024,872	$18,689,376	$10,000,000	0
Services	0	0	$16,660,324	$10,021,754	$84,000,000

*Launch of Medicaid expansion is expected to occur December 1, 2023.

Table J provides the projected expenditures under the demonstration renewal. Projected expenditures were developed using a blended approach of reported DY4 expenditure and enrollment levels and DY6 approved per capita caps, amongst other data sources. The blended approach considers estimated prospective trends intended to align with President's Budget trend levels, adjustments for program adjustments as identified in the bullets below, and projected expenditures for new initiatives as outlined in this document.

[45] Demonstration Year 1 was associated with SUD waiver implementation only. This table reflects the appropriate Demonstration years for the comprehensive Medicaid Reform Demonstration.
[46] Demonstration Year 3 only reflects the four months following Standard Plan launch on July 1, 2021.

Projected expenditures include new initiatives for which the State is requesting aggregate expenditure authority under the 1115 demonstration renewal as well as the following program adjustments which impacted the historical and/or future demonstration years:[47]

- Continuous enrollment for children and former foster youth are included in expenditure projections for the TANF & Related Children MEG.
- Fee schedule increases for select service types including: hospital payment increases implemented July 1, 2021, HCBS direct care worker service rate increase implemented by DHHS in March 2022, and rate increases for personal care and private duty nursing services.
- Increased payments to SNFs based on a percent of Medicare payment approach required in managed care.
- Consideration for the impact of the public health emergency on future expenditures and enrollment.
- Tailored Plan and CFSP acuity and enrollment, once implemented.
- Expenditures to provide 1915(i) services to Medicaid-enrolled individuals.

Table J. Projected Total Computable Expenditures Under Renewal

	Projected Total Computable Expenditures				
	DY7	**DY8**	**DY9**	**DY10**	**DY11**
With Waiver Expenditures	**Nov 2024 to Oct 2025**	**Nov 2025 to Oct 2026**	**Nov 2026 to Oct 2027**	**Nov 2027 to Oct 2028**	**Nov 2028 to Oct 2029**
Medicaid Eligibility Groups					
ABD	$5,697,999,051	$6,013,953,098	$6,347,426,798	$6,699,391,614	$7,070,872,879
TANF & Related Adults	$3,075,134,793	$3,245,651,017	$3,425,622,366	$3,615,573,126	$3,816,056,656
TANF & Related Children	$5,238,959,565	$5,674,183,429	$6,141,565,378	$6,482,115,179	$6,841,548,465

[47] The following programs recently approved in the FY 2023-2025 budget may have financial impact on the projected expenditures: Healthcare Access and Stabilization Program (HASP), Behavioral Health Fee Schedule increases, Innovations/TBI, Private Intermediate Care Facilities for Individuals with Intellectual Disabilities (ICF-IID).

	Projected Total Computable Expenditures				
	DY7	**DY8**	**DY9**	**DY10**	**DY11**
Innovations/TBI	$1,568,206,688	$1,638,775,989	$1,712,520,908	$1,789,584,349	$1,870,115,645
Medicaid Expansion	$9,780,541,039	$10,372,263,772	$10,999,785,730	$11,665,272,767	$12,371,021,789
Healthy Opportunities Pilots					
Services	$425,000,000	$425,000,000	$425,000,000	$425,000,000	$425,000,000
Capacity Building*	$50,000,000	$150,000,000	$125,000,000	$25,000,000	$25,000,000
Justice-Involved Reentry					
Services	$4,096,381	$10,036,134	$15,054,201	$15,806,911	$16,597,256
Capacity Building*	$100,000,000	$125,000,000	$50,000,000	$30,000,000	$10,000,000
Behavioral Health and I/DD Provider Technology					
	$15,000,000	$15,000,000	$0	$0	$0
Behavioral Health and LTSS Workforce					
	$50,000,000	$50,000,000	$0	$0	$0
Technology to Advance Schools					
	$7,500,000	$7,500,000	$0	$0	$0
DSHP					
	$122,000,000	$122,000,000	$122,000,000	$122,000,000	$122,000,000

*North Carolina has allocated the total requested capacity building funding for the Healthy Opportunities Pilot and the Justice-Involved Reentry Initiative across the demonstration years based on the State's best estimates and requests flexibility on the timing of actual payments.

Budget Neutrality

As described above, North Carolina's proposed demonstration renewal seeks to continue existing demonstration initiatives and proposes new demonstration features. The demonstration is expected to be budget neutral as measured by CMS. Budget neutrality will align with the projected expenditures for the demonstration proposal as described above in Table J. Below,

Table K shows the requested budget neutrality treatment across initiatives in the renewal. North Carolina will continue to work with CMS to confirm and finalize budget neutrality during the demonstration negotiation and approval process.

Table K. Budget Neutrality (BN)

Waiver Initiative	Per Capita or Aggregate	Proposed Budget Neutrality Treatment
Managed Care	Per Capita	Main BN Test
Healthy Opportunities Services	Aggregate	Capped Hypothetical
Healthy Opportunities Capacity Building	Aggregate	Capped Hypothetical
Continuous Enrollment for Children	Per Capita	Hypothetical
Justice Involved Pre-Release Services	Per Capita	Hypothetical
Justice Involved Pre-Release Capacity Building	Aggregate	Hypothetical
Behavioral Health (BH) and LTSS Workforce Investments	Aggregate	Main BN Test
Behavioral Health and I/DD Provider HIT	Aggregate	Main BN Test
Technology to Expand Schools' Health and Health-Related Capabilities	Aggregate	Main BN Test
1915(i) Benefit Changes	Per Capita	Hypothetical
Designated State Health Programs (DSHP)	Aggregate	Main BN Test

Section VII – Evaluation

Evaluation Results from the Current Demonstration

Background

The purpose of the previously approved North Carolina Medicaid Reform 1115 Demonstration is to improve Medicaid enrollee health outcomes through the implementation of a new delivery system, to enhance the viability and sustainability of North Carolina's Medicaid program by maximizing the receipt of high-value care, and to reduce SUD statewide. As required under the special terms and conditions (STCs) of the North Carolina Medicaid Reform Section 1115 demonstration, the state engaged an independent research organization, the North Carolina University Cecil G. Sheps Center for Health Services Research ("Sheps Center"), to evaluate the performance of the demonstration initiatives, including, but not limited to, managed care transformation, expansion of SUD coverage, and HOP.

Because the many programs included in the demonstration have different time frames, structures, and funding streams, the evaluation designs and timelines for the programs also vary. The approved demonstration evaluation design, inclusive of the Department's objectives and hypotheses, is available here (the separate HOP evaluation design is available here). For initiatives where interim evaluation reports, rather than final evaluation reports, have been completed, work on the final evaluations is continuing and will be provided to CMS as required by the demonstration STCs, unless otherwise discussed and agreed upon by the State and CMS. The State's evaluation materials will be made available at specified areas of DHHS' website, such as the Quality Management and Improvement homepage, or are available upon request.

Demonstration Evaluation Findings to Date

Managed Care Evaluation

The Department's annual report from Demonstration Year 4 is available in Appendix A.[48]

The Department submitted a draft interim evaluation report to CMS on October 2, 2023, and is awaiting feedback from CMS. The State intends to post the interim evaluation report after addressing any comments it receives from CMS. The evaluation study period for the Interim

[48] The Department is pending feedback from CMS for the following: SUD Mid-Point Assessment and the SUD Interim Evaluation Report.

Evaluation Report runs from November 1, 2019 – February 28, 2023. Most of the analyses in the report compare the trends in metrics before and after the launch of Standard Plans, controlling for observable variables, such as comorbidities and demographic characteristics. A major (potentially) confounding event occurred during the Standard Plan implementation period: the Public Health Emergency from the COVID-19 pandemic began with stay-at-home orders in March 2020 and only ended in May 2023. The Sheps Center used interrupted time series models to examine the trends in metrics before the start of the Standard Plan launch and during the waiver implementation period. These models control for changes due to other factors such as the COVID-19 PHE, month effects, county effects, and beneficiary-level controls for age, race/ethnicity, sex, and the Chronic Disease Payment System (CDPS-Rx) risk score. The analysis does not incorporate a comparison group that was not exposed to the NC Medicaid transformation and thus the models will attribute any remaining factors that occurred during the Standard Plan implementation period to the Standard Plan waiver.

The Department looks forward to disseminating key findings from the interim evaluation report, once finalized. The report will include findings by hypothesis and will examine how the implementation of Standard Plans affected measures of access to care, quality of care, process, and outcomes. In addition, the Sheps Center also looked at the degree to which Standard Plan implementation affected groups differently.

Summaries of qualitative evaluation findings from Demonstration Year 3 and 4 are provided below for reference:

- Demonstration Year 3 Summary – Providers
- Demonstration Year 3 Summary – Standard Plans
- Demonstration Year 4 Summary – Providers

SUD Components of the Demonstration Evaluation

The Department, in collaboration with the Sheps Center, conducted an Interim Evaluation between October 1, 2015 – September 31, 2022, of the SUD components of the demonstration. This report is available in Appendix A. May 1, 2019 is used as the official start of the SUD expenditure authority. Many SUD changes were phased in over time and thus estimates will be conservative since Sheps included months prior to each event. Two major events occurred during the SUD implementation period. First, the COVID-19 PHE began with stay-at-home orders in March 2020 and only ended in May 2023, after the study period for this report. Sheps developed a novel method of identifying the return-to-normal dates in our data. Second, the launch of

Standard Plans occurred on July 1, 2021. While most of the population with an SUD has not yet enrolled in a managed care plan, but will be enrolled in a Tailored Plan, the launch of Standard Plans may have affected outcomes for people with SUD if Standard Plans' benefit design affected access to care or if Standard Plans changed providers' patterns of care, directly or indirectly. Sheps found that 25% of the population identified as having a SUD were enrolled in Standard Plans.

Sheps used interrupted time series models to examine the trends in metrics before the start of the SUD waiver and during the waiver implementation period. These models control for changes due to other factors, such the COVID-19 time period, Standard Plan implementation, month effects, county effects, and beneficiary-level controls for age, race/ethnicity, sex, and the Chronic Disease Payment System (CDPS- Rx) risk score. This evaluation does not incorporate a comparison group that was not exposed to the NC Medicaid transformation and thus the models will attribute any remaining factors that occurred during the SUD implementation period to the SUD waiver. Sheps takes this into account when describing results. The Department looks forward to posting key findings from the interim evaluation report after addressing any comments CMS provides.

HOP Evaluation

The Department's first Rapid Cycle Assessment (RCA) on the HOP program includes data regarding preparations for service delivery and delivery of services from March 15, 2022, to November 30, 2022. This report is available in Appendix A. A subsequent RCA, interim evaluation and summative evaluation will be submitted to CMS by the end of the demonstration period.

The Pilot aims to test evidence-based, non-medical interventions for their direct impact on North Carolina's Medicaid beneficiaries' health outcomes and healthcare costs, with the purpose of incorporating findings into the Medicaid program. The three evaluation questions and hypotheses for HOP that are explored in the first Rapid Cycle Assessment are:

- Evaluation Question 1 ("Effective Delivery of Pilot Services") analyses relate to activities undertaken by Network Leads and HSOs to establish the necessary infrastructure, workforce, and data systems needed to effectively contract with and build the capacity of a network of HSOs, and to deliver Pilot services once established. Overall, Evaluation Question 1 analyses help test the hypothesis that Network Leads will enable effective delivery of Pilot services
- Evaluation Question 2 ("Increased Rates of Social Risk Factor Screening and Connection to Appropriate Services") analyses relate to how the coordinated activities of HOP Administrators, Network Leads, and HSOs facilitate screening for social risk factors/needs in Pilot regions, and connect a higher proportion of those with social risk factors/needs to

services to address those needs in Pilot regions, compared with non-Pilot regions that do not have these coordinated activities. Overall, Evaluation Question 2 analyses help test the hypothesis that HOP will increase rates of Medicaid beneficiaries screened for social risk factors and connected to services that address these risk factors.

- Evaluation Question 3 ("Improved Social Risk Factors") analyses relate to improving the social risk factors that Pilot enrollees experience, across all eligibility categories: adults, pregnant individuals, children ages 0 to 21, and the subset of children age 0 to 3. Evaluation Question 3 analyses help test the hypothesis that HOP will measurably improve the qualifying social risk factors in participants.

The findings of the assessment are largely positive:

- North Carolina's goal of establishing effective multi-sector collaboration between the state, HOP Administrators, healthcare systems, and HSOs has been achieved. Although there are always areas of operations that can be improved, this was a major undertaking completed in a relatively compressed timeframe after unavoidable disruption due to the COVID-19 pandemic. In preparation to deliver services, staff at Network Leads and HSOs interviewed expressed concern about the scale of the task and the differences between the structure of HOP and their usual methods of operation, including interfacing with the Medicaid regulatory environment. Network Leads and HSOs began by collaborating with a core group of other organizations they had previously worked with, but substantially grew their collaborations so that a wide array of Pilot services could be offered.
- From the perspective of Network Leads and HSOs, benefits of participating in HOP include building networks of collaboration, supporting growth of HSOs, and improving community health and wellness. Components of HOP that Network Leads and HSOs thought were key to success included support for capacity building, facilitating of communication between HOP Administrators, Network Leads, and HSOs, and detailed planning for the complicated logistics of delivery Pilot services to a large number of participants.
- Operational data reveals that despite challenges, Pilot services are being delivered successfully. As of November 30, 2022 (seven months following launch), 2,705 unique individuals had been enrolled, and 14,427 services had been delivered across many different intervention types by 84 HSOs. Initial assessments of social needs occur quickly (most commonly at the time of enrollment). Within the data used for this report, 63% of those who enrolled—1,713 out 2,705 Pilot participants—had received at least one invoiced service, with more participants in the pipeline to receive services as time progresses. Further, there can be a lag between service delivery and invoicing for services. Services delivered typically began quickly--over 75% of services had a start of service date

within 2 weeks of enrollment in HOP. The rate of service receipt varied across need types. 68% of individuals reporting a food need received an invoiced food service during this period, while 40% of those reporting a housing need received an invoiced housing service, and 16% of those reporting a transportation need received an invoiced transportation service. This difference may reflect both the phased rollout of services, with food services preceding all other services, and the complexity of delivering services to address the varying needs. For example, housing shortages are common in many communities served by HOP, and the availability of transportation resources varies across communities as well. Very few cross-domain services were invoiced during this period, and no toxic stress services were invoiced during this evaluation period, including IPV-related services, as these services were not yet offered. Food services constituted the majority (90%) of services delivered.

- Invoices for services were paid in a timely fashion. 56.2% of invoices were paid within 30 days, 90.3% within 60 days, and 97.9% within 90 days. This is important as a major goal of HOP was to ensure that HSOs, many of which historically depend on grant funding received prior to delivery of services, could operate successfully with a financing model that includes payments made after services were delivered.
- Overall, the evidence regarding the effectiveness of Pilot services at addressing social needs was mixed. As anticipated, Sheps observed an initial increase in recorded needs as needs are identified by detailed assessments around the time of enrolling in the Pilot, followed by a decrease in needs as Pilot services address them. However, the magnitude of the decrease in needs was small and may not be clinically meaningful. For example, Sheps estimated that soon after enrollment in HOP, individuals reported an average of 1.73 needs, which declined to 1.68 needs at 90 days after enrollment. While statistically significant, whether a decrease of this magnitude is likely to improve health, healthcare utilization, or healthcare cost is unclear. Although prior studies have shown that improvements in social needs can be seen within 90 days, this is still a very brief time period for assessment, and greater changes may become evident over longer periods of observation. At present, there have not been enough individuals with longer Pilot participation to examine needs at 180 or 365 days. Such analyses will be reported in subsequent assessments.
- When examining specific needs, Sheps estimated that the probability of an individual reporting a food need at 90 days after Pilot enrollment (0.85) was almost identical to the probability around the time of enrollment (0.86). Similarly, the probability of reporting a housing need was 0.55 around the time of enrollment and still 0.55 at 90 days after Pilot enrollment, and the probability of reporting a transportation need was 0.31 around the

time of enrollment and 0.29 at 90 days after Pilot enrollment. IPV-related and toxic stress needs were not reported very frequently during this evaluation period, so Sheps could not draw conclusions about changes in those need types (and again, IPV-related services were not yet available in this time period). Two key limitations in interpreting these findings, however, are the relatively short enrollment time for most Pilot participants, and the possibility of bias owing to differential reassessment such that those whose needs went unmet were reassessed more frequently than those whose needs were met and required less contact with Pilot staff.

- Sheps observed interesting findings regarding specific services. A key rationale for conducting and evaluating HOP is that there are often different services that might plausibly address a need, without sufficient comparative effectiveness evidence to choose one over another. For example, both a food subsidy (such as a fruit and vegetable prescription) and delivery of healthy meals might address food needs, but which is more effective is not clear. Sheps did find suggestions of variations across intervention types. Healthy meal delivery was associated with lower probability of reporting a food need at 90 days of enrollment in HOP than other food services offered within HOP like fruit and vegetable prescriptions and food boxes, and these differences were large enough that they may be clinically meaningful. For example, the probability of reporting a food need at 90 days was 0.08 lower (95% Confidence Interval [CI]: 0.12 lower to 0.02 lower, p = .001) with delivered meals compared with fruit and vegetable prescriptions. Similarly, with regard to housing services, tenancy support and sustaining services (which provide one-to-one case management and/or educational services to prepare an enrollee for stable, long term housing) were associated with lower probability of reporting a housing need after 90 days of Pilot enrollment than other types of housing services.
- These findings thus support the rationale of using HOP to develop evidence on the comparative effectiveness of social needs interventions, so that the State of North Carolina can make an evidence-informed decision as to what services to offer for all Medicaid beneficiaries in subsequent years. However, these findings should also be interpreted cautiously at this time, as receipt of services was not randomly assigned, and thus the association observed may be confounded. Subsequent stages of the evaluation will be better able to address this potential threat to the validity of the findings.
- The ability to address some questions of interest in this assessment was hindered by the number of individuals enrolled in HOP. HOP was designed to ramp up during this assessment period, and so the enrollment numbers may reflect that. Another explanatory

factor could be that methods of social need assessment and enrollment require iteration. In any event, working to increase enrollment in HOP is a major goal going forward.

Plans for Evaluating Impact of Demonstration Renewal

North Carolina will continue to contract with an independent evaluator to assess the impact of proposed new demonstration features. North Carolina is proposing the research questions, hypotheses, and proposed evaluation approaches described below to include as part of its evaluation design.

North Carolina will continue to incorporate rapid cycle evaluation into its broader evaluation strategy to understand the impact of the services funded through managed care savings in real time. North Carolina will use the findings to adjust how it spends its savings to ensure that it is investing in models that advance the demonstration goals, while discontinuing initiatives that are not making an impact.

North Carolina will also continue to identify strategies to assess the extent to which the demonstration is addressing gaps in health outcomes and decreasing health disparities. During the demonstration period, North Carolina is working to improve its data systems and collaborate with community partners to strengthen the State's ability to collect and analyze data related to health outcomes, disparities and gaps in care for populations which have marginalized. This demonstration seeks to test the hypotheses outlined in Table L below through its continuing and new initiatives. Specific evaluation methodology will be submitted upon approval of the application via the revised evaluation design. As appropriate, the State will work with CMS to refine the evaluation goals and the hypotheses described in Table L prior to submitting the proposed evaluation design.

Table L. Approach to Evaluation for Demonstration Renewal

Hypotheses	Evaluation Approach and Data Sources
Managed Care	
• Improve health outcomes for Medicaid enrollees in managed care via a new delivery system • Maximize high-value care to ensure sustainability of the Medicaid program	Approach and data sources will be consistent with the North Carolina Medicaid Reform Demonstration Approved Evaluation Design, including: • Primary care/OB survey

• Reduce deaths from and/or need for more intensive services due to SUD/OUD	• Beneficiary interviews
Healthy Opportunities	
• Improve health outcomes for Healthy Opportunities Pilot participants • Improve the share of Medicaid enrollees receiving Pilot services that report improvements in unmet resource needs	Approach and data sources will be consistent with the Enhanced Case Management and Other Services Pilots Evaluation Design; Attachment H
Continuous Enrollment	
• Reduce churn and gaps in Medicaid coverage for children and youth, including for racial and ethnic groups that experience disproportionately high rates of churn • Improve health outcomes for children and youth	Analysis of enrollment and claims files
Justice Involved Pre-Release Services	
• Increase Medicaid coverage for justice-involved individuals • Improve health outcomes for justice-involved individuals, including by improving transitions into the community following release	Analysis of data files, including: • Claims linked with criminal justice indicators • Data on preventive and routine physical and behavioral health care • Data on avoidable ED visits and inpatient hospitalizations
Behavioral Health and I/DD Technology	
• Improve rates of real-time data sharing with the North Carolina HIE (HealthConnex) among participating behavioral health and I/DD providers • Improve rates of schools equipped with technologies need to improve billing and tracking for delivery of	• Analysis of Medicaid Enterprise Systems (MES) documentation • Survey and/or analysis of providers

services and referrals among participating school providers	
Behavioral Health and LTSS Workforce	
• Reduce workforce shortages • Increase provider retention and Medicaid participation among BH, I/DD and LTSS providers who serve Medicaid beneficiaries in North Carolina	• Analysis of administrative data such as Medicaid billing data, NC Health Professions Data System, and/or HCBS electronic visit verification • Survey and interviews of providers

Section VIII – Public Notice Process

North Carolina solicited public comments from August 20, 2023 through September 21, 2023.

North Carolina certifies that it provided public notice of the application on the State's Medicaid website https://medicaid.ncdhhs.gov/meetings-notices/proposed-program-design/nc-section-1115-demonstration-waiver beginning on August 21, 2023 through September 20, 2023. North Carolina also certifies that it provided notice of the proposed demonstration in the newspapers on the respective dates outlined in Table M. Copies of the notices (full and abbreviated) and a newspaper clipping are included in Appendix B.

Table M. Demonstration Renewal Newspaper Postings

Newspaper	Run Dates	AD #
Charlotte Observer	8/27, 8/30	IPL0038097
News & Observer	8/27, 8/30	IPL0038092
Greensboro News & Record	8/27, 8/30	0000845217-01
Winston-Salem Journal	8/27, 8/30	0000845218-01
The Fayetteville Observer	8/27, 8/30	L0011008
Wilmington Star-News	8/27, 8/30	L0011009
Asheville Citizen-Times	8/30, 9/1	L0011011
The Daily Reflector (Greenville NC)	8/26, 8/30	451145

North Carolina certifies that it convened five official public hearings more than twenty days prior to submitting the demonstration application to CMS. Specifically, North Carolina held the following hearings:

- **First Public Hearing**
  September 5, 2023, from 9:30-11:00 a.m.
  Mountain Area Health Education Center (MAHEC)
  121 Hendersonville Road, Asheville NC 28803

- **Second Public Hearing**
  September 6, 2023, from 9:30-11:00 a.m.
  McKimmon Conference & Training Center
  NC State University, 1101 Gorman Street, Raleigh NC 27606

- **Third Public Hearing**

September 6, 2023, from 5:30-7:00 p.m.
Virtual via Microsoft Teams and accessible by teleconference and webinar

- **Fourth Public Hearing**
  September 7, 2023, from 2:30-4:00 p.m.
  Greenville Convention Center
  303 SW Greenville Blvd., Greenville NC 27834

- **Fifth Public Hearing**
  September 15, 2023, from 11:30 a.m.-12:30 p.m. during the Medical Care Advisory Committee Meeting (MCAC)
  Virtual via Microsoft Teams and accessible by teleconference and webinar

The total number of attendees for the hearings was over 150 individuals. The slide decks used for the public hearings can be found on the State's Medicaid website: https://medicaid.ncdhhs.gov/meetings-notices/proposed-program-design/nc-section-1115-demonstration-waiver.

In addition to the five public hearings dedicated to the renewal request, North Carolina discussed the 1115 demonstration during its most recent post-award public forum held on January 30, 2023. The slide deck presented can be found here: https://medicaid.ncdhhs.gov/documents/medicaid/community-partnerswebinar-jan-30-2023/download?attachment

During the webinar, North Carolina presented on progress in the implementation of the 1115 demonstration and provided an overview of upcoming work and the timeline for implementation of future key aspects of the waiver. The presentation covered the transition to NC Medicaid managed care, the SUD IMD waiver, and the Healthy Opportunities Pilots.

Comments and questions were received on the following topics, with most questions focusing on Tailored Plans:

- Updates on the State's forthcoming 1915(i) services
- NC Health Choice beneficiary transition to NC Medicaid as part of the State's S-CHIP to M-CHIP transition
- BH I/DD Tailored Plan implementation including:
  - Launch timeline

  - Enrollment and disenrollment
  - Services available in BH I/DD Tailored Plans and care transitions policies
  - Transitions between BH I/DD Tailored Plans and other delivery systems
  - Provider contracting o Impact of BH I/DD Tailored Plan launch on Community Alternatives Program for Disabled Adults (CAP/DA) waiver
  - Impact of BH I/DD Tailored Plan launch on children in foster care
  - Identification of BH I/DD Tailored Plan members in MMIS o Member ombudsman
- Appeals of Medicaid disenrollment
- Impact of the end of the PHE on the NC Medicaid population
- NC counties served by the Integrated Care for Kids (InCK) program

North Carolina also conducted additional meetings with Healthy Opportunities Pilot partners as outlined in Table N.

Table N. Healthy Opportunities Pilot Demonstration Renewal Engagement

Meeting Date & Time	Meeting Title	Pilot Entity Participants
August 24, 2023 3:00 PM-4:00 PM ET	HOP PHP, CIN & NL Meeting - (4th Thursday of the Month)	Prepaid Health Plans (PHPs) Network Leads (NLs) Clinically Integrated Networks (CINs)
August 25, 2023 12:00 PM-12:50 PM ET	Monthly Healthy Opportunities Pilots Office Hours	CINs Local Health Departments (LHDs)
August 31, 2023 10:30 AM-11:00 AM ET	Ad Hoc LHD/CIN Office Hours: Pilot-related 1115 Waiver Renewal Public Comment Questions	CINs LHDs
September 5, 2023 11:30 AM-12:00 PM ET	HOP - TP Engagement on the NC 1115 Waiver Renewal Public Comment Period	Tailored Plans (TPs)
September 5, 2023 1:00 PM-1:25 PM ET	Healthy Opportunities Weekly Status Check In - WellCare	Wellcare
September 5, 2023	Healthy Opportunities Weekly Status Check in - CCH	Carolina Complete Health (CCH)

1:30 PM-1:55 PM ET		
September 5, 2023 3:30 PM-3:55 PM ET	Healthy Opportunities Weekly Status Check In - UHC	United Health Care (UHC)
September 6, 2023 1:30 PM-1:55 PM ET	Healthy Opportunities Weekly Status Check In - BCBSNC	Blue Cross Blue Shield North Carolina (BCBSNC)
September 6, 2023 2:00 PM-2:25 PM ET	Healthy Opportunities Weekly Status Check In - AMHC	AmeriHealth Caritas North Carolina (AMHC)
September 7, 2023 10:00 AM-10:30 AM ET	NL Engagement Session	NLs

North Carolina certifies that it used an electronic mailing list to provide notice of the proposed demonstration renewal request to the groups listed below. A copy of this email notice can be found in Appendix B:

- NC Medicaid Member Operations
- Medicaid Contact Center and Help Center
- State-operated facilities
- NC DHHS division directors and Medicaid staff
- Area Health Education Centers (AHEC)
- Community Care of North Carolina (CCNC)
- Historically marginalized population groups
- Adult correctional facility and juvenile justice partners
- Advanced Medical Home Technical Advisory Group
- Tailored Care Management Technical Advisory Group
- North Carolina Department of Insurance
- Hospital Government Affairs
- Providers via NCTracks
- Health plans including Standard Plans, Tailored Plans, and Local Management Entities-Managed Care Organizations (LME/MCOs)
- Provider associations
- NC Medicaid community partners
- Health equity groups

- NC Medicaid Ombudsman
- Federally Qualified Health Centers (FQHCs) and Free Clinics
- State Consumer and Family Advisory Committee (SCFAC)
- Behavioral health consumer groups
- Minority Provider Coalition/Resource Connections
- Local Health Departments (LHDs)
- Healthy Opportunities Pilot Partners, Clinically Integrated Networks (CINs), and Network Leads

Section IX – Responses to Public Comments

North Carolina received 208 public comments during the public notice period, including 181 submitted via email, 22 provided orally or via the Microsoft Teams chat functionality during the five public hearings, and five comments through other stakeholder engagement venues.

Key themes from the comments that were related to the 1115 demonstration are described below. Of the comments, approximately a dozen were related to topics outside the scope of the 1115 demonstration, including those related to community health workers, Social Security Benefits, the TBI Waiver, the HIPAA privacy rule, and the CMS Making Care Primary Model. The State appreciates these comments and looks forward to continuing to engage with community partners to improve the health and wellbeing of North Carolinians.

All public comments are available on the 1115 demonstration page of the State's Medicaid website: https://medicaid.ncdhhs.gov/meetings-notices/proposed-program-design/nc-section-1115-demonstration-waiver.

Overarching Demonstration Renewal Comments

Comment: **Many commenters expressed support for renewing the North Carolina Medicaid Reform 1115 Demonstration, citing both its focus on health equity, as well as its objectives and initiatives related to:**

1) **Supporting a continued, smooth transition to managed care with a focus on improving health for enrollees with the most complex needs**
2) **Strengthening access to a person-centered and well-coordinated system of care which addresses both medical and non-medical drivers of health**

3) Strengthening the behavioral health and intellectual and developmental disabilities (I/DD) delivery system

Response: North Carolina appreciates the commenters' support for the 1115 demonstration renewal request. The State is committed to improving health and well-being for all North Carolinians through a whole-person, well-coordinated system of care that addresses both medical and non-medical drivers of health and advances health access by reducing disparities for historically marginalized populations.

Managed Care Comments

Comment: **Several commenters applauded the transition from fee-for-service to managed care, and the launch of Standard Plans. Some commenters also expressed concerns with provider administrative burden and other implementation issues associated with the transition to managed care. These commenters requested:**

- **Greater alignment with other payers**
- **Greater oversight of managed care plans including oversight related to denied and pended claims**
- **Standardization and reduction of required quality metrics**
- **Stronger evaluation and network adequacy criteria**
- **Support and technical assistance for independent and rural providers**
- **Encouragement of participation in the state health information exchange (HIE)**
- **Correction of attribution and assignment issues**
- **Contract and administrative simplification**

Commenters also noted the importance of engaging plans, providers, and members in the continued transition to managed care.

Response: The State thanks the commenters for their feedback and is committed to continuing to provide integrated whole-person, well-coordinated care for Medicaid enrollees. The State included efforts to mitigate provider administrative burden in its design for managed care. The State will continue to take steps to mitigate administrative burden on providers as NC Medicaid continues to implement the transition to managed care, including better standardizing data collection and quality measurement; simplifying contract, claiming, and other administrative processes; providing needed technical assistance; and addressing ongoing issues related to primary care attribution and assignment. North Carolina is committed to engaging with

community partners, including health plans, providers, and enrollees, on an ongoing basis throughout the continued design and implementation of managed care.

Comment: **One commenter sought clarification on whether Outpatient and Partial Hospitalization Services will be added to the Standard Plan benefit or if the service(s) will be allowable "coverage" until claims are received by State given underperformance outlined in the current evaluation.**

Response: North Carolina appreciates the commenter's question. During the next demonstration period, Standard Plans will continue to serve the majority of enrollees by providing integrated physical health, behavioral health, LTSS, and pharmacy services. The Standard Plan benefit package already covers partial hospitalization for mental health conditions. North Carolina's FY2023-F2025 budget permits Standard Plans to begin covering substance abuse comprehensive outpatient treatment program services and substance abuse intensive outpatient program services as well. Standard Plans began covering these services on October 1, 2023.

Comment: **A few commenters expressed support for the forthcoming launch of Tailored Plans and recognized them as a tool to provide integrated care to individuals with behavioral health conditions and address non-medical drivers of health.**

Response: The State appreciates the commenters' support and is committed to supporting a continued, smooth transition to managed care and providing integrated care for individuals with serious mental illness, serious emotional disturbance, severe SUD, I/DD, and/or TBI, through the launch of BH I/DD Tailored Plans.

Comment**: A handful of commenters expressed concerns related to inadequacy of provider networks, a lack of support and accountability for direct care providers, and insufficient access to outpatient services for Tailored Plan and Tailored Care Management-eligible populations that could otherwise help avoid unnecessary emergency department stays.**

Response: North Carolina is preparing to launch Tailored Plans to provide integrated physical health, behavioral health, I/DD, TBI, LTSS, and pharmacy services to individuals with complex behavioral health conditions, I/DD, and TBI. In its planning, North Carolina's highest priority is to ensure that enrollees experience a smooth transition from NC Medicaid Direct to Tailored Plans *without* disruptions in care. Consistent with the Special Terms and Conditions for North Carolina's 1115 demonstration, North Carolina is working with plans, providers, and care management entities to ensure continuity of care across physical health, behavioral health, and non-medical

drivers of health; ensure network adequacy across provider types; and deliver integrated care management through North Carolina's new Health Home program targeted to this population—Tailored Care Management.

Comment: **Two commenters sought clarification on the populations that will be eligible for Tailored Plans once they are launched.**

Response: Individuals eligible for Tailored Plans include those with a serious mental illness (SMI), a serious emotional disturbance (SED), a severe substance use disorder (SUD), an intellectual / developmental disability (I/DD), or who have survived a traumatic brain injury (TBI) and who are receiving traumatic brain injury services, who are on the waiting list for the Traumatic Brain Injury waiver, or whose traumatic brain injury otherwise is a knowable fact.

Additional detail on how DHHS identifies individuals meeting the Tailored Plan eligibility criteria can be found on the NC Medicaid website at: https://medicaid.ncdhhs.gov/appendix-b-behavioral-health-idd-tailored-plan-criteria-0/download?attachment

Comment: **A handful of commenters noted concerns with accessing needed services under the 1915(c) Innovations Waiver and called for more supports for those with I/DD, including housing services, and opening more slots to serve those who are currently on the Waiver wait list.**

Response: The State thanks the commenters for their feedback on the Innovations Waiver and is pursuing opportunities outside the 1115 demonstration to improve access to Innovations Waiver services (e.g., the FY 2023-2025 budget includes increased rates for Innovations Waiver direct care workers and an expanded number of Innovations Waiver slots). The new proposed Behavioral Health and LTSS Workforce initiatives also aim to improve access to Home- and Community-Based Services (HCBS), including Innovations Waiver Services. The State is committed to supporting individuals with I/DD in living successfully in the community.

Comment: **Commenters expressed support for the launch of the Children and Families Specialty Plan (CFSP). One commenter noted adequacy and access concerns with services currently being provided to foster children by LME/MCOs and Medicaid Direct (e.g., Tailored Care Management) in the period prior to CFSP launch. Two commenters requested that North Carolina align CFSP care management requirements with existing managed care requirements to minimize administrative burden. One commenter requested that parents and caretaker relatives of children/youth in foster care continue to be enrolled in the CFSP 90 days after a Termination of Parental Rights (TPR).**

Response: The State appreciates the commenters' support for the CFSP. North Carolina is eager to launch CFSP to ensure comprehensive physical and behavioral health services for children and youth in foster care and their families and to improve coordination among service providers, families, involved entities (e.g., Department of Social Services, Division of Juvenile Justice, schools), and other external partners involved in serving CFSP members. In the interim period, North Carolina will work with the LME/MCOs and primary care case management entity (PCCMe) vendors (including CCNC and the EBCI Tribal Option) to ensure this population continues to have support in accessing healthcare and care management/care coordination services through NC Medicaid Direct. The State plans to continue taking steps to mitigate administrative burden on providers and align requirements across managed care programs.

North Carolina anticipates that the majority of parents and caretaker relatives of children/youth in foster care whose parental rights are terminated at court order will be eligible for Medicaid via expansion beginning December 1, 2023. As with others who experience a change of circumstance, the Department will redetermine their eligibility for Medicaid following a Termination of Parental Rights and, as eligible, enroll them in the most appropriate health plan (e.g., Standard Plan, Tailored Plan).

***Comment*: One commenter requested that the State consider a path for transitioning dual eligible enrollees to managed care in a way that protects consumer choice, simplifies provider experience, and minimizes administrative complexity.**

Response: North Carolina appreciates the commenter's feedback. As the State develops its approach for enrolling individuals who are dually eligible for Medicare and Medicaid into integrated managed care, it will strive to ensure that the transition is as seamless as possible for both enrollees and providers.

Healthy Opportunities Pilot (HOP) Comments

General Support

***Comment:* Commenters overwhelmingly supported the Healthy Opportunities Pilots (HOP) renewal request, noting further investment and evaluation of HOP and the integration of non-medical services into the healthcare delivery system will strengthen statewide health and social service infrastructure. Commenters supported the renewal of all prior features of HOP as well as the following proposed modifications:**

- **Expanding the HOP program statewide,**
- **Modifying HOP services to better serve the needs of members,**
- **Expanding eligibility criteria to allow more members to qualify, and**
- **Investing in capacity to support high quality service delivery across North Carolina.**

Response: North Carolina thanks commenters for their support of the HOP program and proposed modifications. The State is committed to strengthening access to a person-centered and well-coordinated system of care which addresses both medical and non-medical drivers of health via HOP.

Expanding HOP Statewide and Scaling Services

Comment: **Many commenters supported statewide expansion of the HOP program and scaling services, noting that the HOP program has helped many enrollees address their non-medical drivers of health and improve their health conditions. Commenters noted many more North Carolinians would benefit from HOP services, and it would be more equitable were the program to be expanded statewide. Commenters requested additional details on the timeline for statewide Pilot implementation and eligibility. Some commenters also raised operational considerations for the Department related to HSO capacity and statewide expansion and recommended the State assess HSO capacity and service expertise in new counties and phase in the launch of HOP services. Other commenters recommended the State consider developing statewide standards to promote standardization during scale-up.**

Response: North Carolina appreciates commenters' support for expanding the HOP program statewide and feedback on operational considerations. The state intends to build on existing HOP infrastructure investment and experience to expand non-medical drivers of health services to North Carolinians across the state. The state plans to determine which services to scale in new regions based on service efficacy and human service organization (HSO) capacity to deliver high-quality services to qualifying members. The Department looks forward to collaborating with HOP partners across the state on best practices for scaling up HOP service delivery to operate statewide in a sustainable and effective manner while preserving regional flexibility to tailor the HOP delivery system to the needs of the community being served. The Department will provide additional details to partners about statewide implementation, and expects to use a collaborative process that will take place over several months prior to the expansion of HOP services to new areas of the state.

HOP Eligibility Criteria

Comment: **Many commenters voiced support for the State's proposal to expand Pilot eligibility criteria. Several commenters advocated for further expanding and simplifying Pilot-qualifying eligibility criteria. For example, many recommended that the State allow individuals with an identified social need to be considered eligible for HOP services regardless of clinical need. A handful of commenters commended the State's proposal to expand HOP eligibility to individuals impacted by natural disasters and suggested further broadening the eligibility criteria, given that disaster recovery takes time. Other commenters recommended that individuals with experience in the justice system be eligible for HOP regardless of the time horizon, including making HOP services available to justice involved individuals pre-release.**

Response: North Carolina thanks commenters for their recommendations on how to expand and further simplify HOP eligibility criteria. In response to commenter's feedback, the State will include the following expanded criteria in the waiver application:

- individuals who have prior experience with the justice system, regardless of time horizon, and individuals who are pre-release, where appropriate.
- individuals who are currently or have been impacted by natural disasters in the past 12 months.

While North Carolina appreciates commenters suggestion to expand the request to include enrollees with an identified social need regardless of clinical need or coverage type, North Carolina will align with CMS guidelines on the delivery of non-medical drivers of health services in Medicaid which require service eligibility to consider both social and clinical needs. The state will maintain its request to broaden the clinical risk factors used to determine Pilot eligibility, including the expansion to those at risk of chronic condition. North Carolina remains committed to increasing access to Pilot services and improving the health and well-being of North Carolinians.

HOP Services

Comment: **North Carolina received several comments in support of the state's proposal to increase Pilot nutrition supports to offer three meals per day instead of two. One commenter flagged several considerations associated with the operationalization of food services, including promoting consistent, high-quality, culturally responsive nutrition-related services across the state.**

Response: North Carolina appreciates commenters' support of the proposal to expand select nutrition supports services to include three meals per day. The state will continue to explore opportunities to promote the consistent delivery of high-quality, culturally-responsive nutrition supports to qualifying members.

Comment: **North Carolina received several comments in support of the State's proposal to adapt an existing housing service to provide six months of rental assistance (including payment of rental arrears) for high-needs enrollees. Commenters requested that the State consider expanding the service definition further. Two commenters requested additional clarification on what would qualify an enrollee as "high-need" to receive the rental service. Multiple commenters requested that the service be available to all enrollees who demonstrate a need, not just high-needs enrollees. Two commenters recommended extending the service to include mortgage assistance (including payment of arrears) noting this would help to stabilize housing for qualified enrollees who reside in their own homes but have fallen behind in making their mortgage payments or are at risk of doing so.**

Response: North Carolina appreciates the support of the state's proposal to provide six months of rental assistance (including payment of rental arrears) for high-needs enrollees. In response to commenter's suggestions, the state is modifying its request to include mortgage assistance (and payment of arrears) recognizing this could help to further stabilize housing for HOP enrollees who reside in homes they own. The state recognizes many enrollees would benefit from this service; however, the State is mindful that CMS guidance limits availability of this service to specific high need populations. North Carolina will continue to work with Pilot partners to ensure that qualifying enrollees can access needed housing services.

Comment: **Several commenters offered support for the State's proposal to add a firearm safety service noting the potential to improve health outcomes by reducing injury and mortality related to firearms. Some commenters acknowledged that firearm safety may be a sensitive subject for enrollees and frontline HOP entities to address and requested supplemental training and resources (e.g., scripts) if firearm safety is added to the list of approved HOP services. Two commenters recommended North Carolina create public resources, education and training to complement the HOP service and ensure that this service aligns with other existing programs throughout the state.**

Response: North Carolina appreciates support received on the proposal to add a firearm safety service to HOP. The state acknowledges commenters' questions related to how the service will be

implemented. The state is committed to working closely with all HOP entities—in particular frontline providers—to ensure any individual or entity participating in the delivery of this service feels well equipped. North Carolina will work with stakeholders to understand the needs of enrollees and providers and will provide training and technical assistance resources. The Department will explore opportunities to complement and align with other firearm safety programs throughout the state.

Comment: **North Carolina received multiple recommendations to modify existing Pilot services and add new service domains. Commenters recommended the State modify existing HOP services to include basic hygiene products (e.g., diapers and menstruation products), enhance existing transportation services to cover additional activities, include liquid nutritional supplements and medical nutrition therapy in HOP food and nutrition services, and expand the scope of health-related legal supports. Multiple commenters recommended North Carolina create new service domains focused on economic security and employment or offer services that would enhance economic security. Commenters recommended additional Pilot services focused on medication management and harm reduction services, childcare supports, and doula services for all pregnant HOP enrollees with a special focus on connecting Black pregnant people to services.**

Response: The state thanks commenters for their recommendations to modify existing HOP services and consider the addition of new HOP service domains. Based on feedback received, the State is adding a targeted childcare support service to the Pilots in order to promote early childhood development and health for certain high need children and/or families, for whom this service would be medically appropriate. North Carolina currently allows diapers and formula to be provided through existing HOP services, and will explore opportunities in the current service definitions to modify existing Pilot services to incorporate additional activities or goods that may have a positive impact on health and wellbeing (e.g., adding hygiene services to the healthy food boxes or healthy home goods HOP service). North Carolina is also exploring coverage for doulas outside the 1115 demonstration (e.g., through a state plan amendment). The state looks forward to working with HOP partners across the state to determine where there is capacity to deliver high-quality services to qualifying members.

Comment: **Three respondents commended North Carolina for offering Medical Respite under the current HOP program. All three commenters noted the positive impact Medical Respite has on health care outcomes when enrollees are transitioning out of a health care setting. Commenters asked the state to consider expanding this service to operate statewide while**

balancing the complexities of service delivery and significant capacity building needs to ensure the success of this service.

Response: North Carolina appreciates commenters feedback on the positive impact Medical Respite can have for HOP enrollees and the request to scale it statewide. North Carolina plans to determine which HOP services to scale in new regions based on service effectiveness, HSO capacity to provide select Pilot services, and regional and population-based readiness to participate. The State is requesting dedicated capacity building funding to build the necessary infrastructure to deliver Pilot services statewide.

Other Program Improvements

Comment: **One commenter applauded the state's vision for the role of "Network Leads" in HOP. Several commenters encouraged the state to draw upon the expertise and experience of the existing Network Leads in planning for and deploying HOP services and networks across the state, including formally leveraging existing Network Leads to support, train and mentor new Network Leads.**

Response: North Carolina appreciates the commenter's support of the critical role of Network Leads in HOP design. The state intends to draw upon the experience and expertise of existing Network Leads to support statewide expansion and community engagement.

Comment**: North Carolina received a few comments regarding the state's proposal to allow experienced HSOs to contract directly with the state's PHPs for the delivery of Pilot services (instead of via Network Leads). Some commenters commended the state for seeking the flexibility to allow some HSOs to contract directly with PHPs. Others highlighted the need for specific oversight and monitoring policies to ensure that direct contracting relationships are operating as the state intended.**

Response: North Carolina appreciates the commenters' feedback on the proposal allowing experienced HSOs to contract directly with the state's PHPs for the delivery of Pilot services. The state intends to work with HOP partners to inform the design of the direct contracting relationship between PHPs and HSOs. North Carolina will maintain the direct contracting proposal and continue to explore opportunities to promote oversight and monitoring of new contracting relationships between PHPs and HSOs to ensure that they are operating as intended.

Comment: **Many commenters provided feedback on the HOP Fee Schedule. Multiple commenters stated that some service rates are low and do not adequately account for**

administrative efforts related to service delivery. Other commenters noted that service definitions should be revisited to ensure high fidelity and quality of service and to consider where it is appropriate to bundle or couple services to improve efficiency. Several commentors recommended the State consider alternative payment approaches, including prospective payments to cover high upfront costs of some services (e.g., housing services).

Response: North Carolina appreciates commenters feedback on the HOP Fee Schedule. The State is currently conducting a comprehensive review of the HOP fee schedule rates in Fall 2023/Winter 2023-2024 to ensure that payments reflect the costs of delivering services today. The State is working with Network Leads to ensure frontline HSOs—responsible for delivering services--have the opportunity to provide direct feedback. The State will closely review the Fee Schedule service definitions and work with Pilot partners to explore needed modifications to reduce variability in service delivery and improve efficiency. The State will consider exploring opportunities for prospective payment approaches for services where appropriate to support sustainability and HSO capacity, while maintaining program integrity. North Carolina recognizes that sustainable service rates will be even more important as the HOP program expands statewide.

Capacity Building Funding

Comment: **Many commenters underscored the importance of capacity building funds to ensure the statewide expansion of HOP is successful. Commenters recommended North Carolina increase the capacity building budget allocation to ensure there are sufficient resources to scale HOP infrastructure to new areas of the state while maintaining existing capacity to serve new member types. Some commenters requested that capacity building funds be available throughout the demonstration period and for new entity types, noting that these funds are essential to supporting ongoing HOP activities and maintaining HSO network diversity, capacity and sustainability. Other commentors suggested the state implement a strategic capacity building investment plan to ensure maximum benefit the HOP program and HSO capacity.**

Response: North Carolina thanks commenters for their feedback on the role of capacity building funding on the success of HOP. The state is proposing increasing the overall HOP budget request to $2.5 billion, $375M of which would be dedicated to capacity building funding. This change is driven by feedback from stakeholders, anticipated changes to Medicaid enrollment due to expansion of adult eligibility under the Affordable Care Act, and the increase in members that are likely to be eligible for HOP under a broadened set of HOP eligibility criteria. North Carolina looks

forward to working with Pilot partners to ensure capacity building funding can support key HOP priorities to improve service delivery capacity, increase enrollment and promote health equity.

Operational and Implementation Considerations

Comment: Several commenters provided feedback on current Pilot operations (e.g., related to the use of NCCARE360, the Network Lead model, streamlining documentation requirements, strategies for proactively reaching out to members and the role of care managers in the Pilot service delivery model, ensuring adequate HSO capacity, Network Lead procurement, expanding the state's existing expedited enrollment initiative and incentivizing social determinants of health screening, etc.).

Response: North Carolina appreciates the comments on current HOP operations. The state will continue working with HOP partners to refine the existing HOP delivery system to promote member-centeredness, equity and efficiency.

Comment: **Several commenters highlighted the need for the Department to collaborate closely with a diverse set of stakeholders on the design and implementation of the HOP program under the current and subsequent 1115 waiver. In particular, commenters highlighted the need for engagement efforts to be equity centered and ensure that the voices of underserved communities are included. In addition, other commenters flagged the need for HSOs to play an active role in decision making regarding HOP design and operations. Some commenters flagged the importance of developing a communications strategy that can help support education and awareness of HOP services.**

Response: North Carolina appreciates the feedback on the importance of engaging a diverse set of partners in current and future Pilot design. The state looks forward to working with HOP partners and interested stakeholders on a robust engagement plan to ensure there are many forums and modalities for entities to provide feedback on Pilot design. The state is also interested in working with partners to develop a communications strategy that builds awareness of Pilot services.

Comment: **One commenter highlighted limited resources in the state to address non-medical drivers of health, particularly for housing, and asked if the Department is considering any statewide or regional plans to expand access to affordable housing to complement or dovetail with HOP services.**

Response: North Carolina appreciates the comment regarding the importance of affordable housing stock in addressing members non-medical drivers of health. Medicaid is prohibited from

paying for capital investments in housing stock. The HOP program addresses housing needs of members via a comprehensive suite of housing-related supports and interventions. The Department is proposing to expand the types of housing supports covered under HOP as part of this 1115 demonstration waiver request.

Comment: **Several commenters requested the State make workforce-related investments in provider types that can support HOP, including by investing in the community health worker (CHW) workforce and by providing additional supports for HOP-participating care managers, via improved trainings on Pilot referral processes and services (e.g., IPV services).**

Response: North Carolina appreciates the commenter's feedback on the critical role of CHWs and care managers in the Pilot and the need for further investments to support the CHW workforce and care manager training. The State will continue to explore opportunities to invest in workforce to support Pilot operations and training and technical assistance to support critical HOP partners, including through the use of HOP capacity building funding.

Continuous Enrollment Comments

Comment: **North Carolina received several comments supporting the continuous enrollment request. Commenters highlighted the impact of this policy on ensuring access to vital early intervention and preventative services, reducing costs and administrative burden, and preventing churn among children and youth who are eligible for Medicaid in the state.**

Response: North Carolina appreciates the commenters' feedback and support of the continuous enrollment waiver request and remains committed to pursuing this policy to prevent disruptions in care, promote health equity, and reduce administrative burden. North Carolina will continue to explore opportunities to streamline and strengthen its eligibility and enrollment processes so that individuals are not denied coverage due to procedural reasons.

Comment: **One commenter sought clarification on the estimated enrollment impacts for continuous enrollment and questioned whether the estimated member counts for former foster care youth reflect those who were in foster care on their 18th birthday and "aged out" (i.e., young adults who are 18-26 years old).**

Response: The estimates for former foster care youth reflect youth who aged out of foster care prior to January 1, 2023 until age 26, aligning eligibility determination practices for these former foster care youth with other former foster care youth who aged out of foster care after January 1, 2023.

Justice-Involved Reentry Comments

Comment: **North Carolina received over 100 comments strongly supporting the justice-involved reentry initiative request. Commenters highlighted the stark physical and behavioral health needs, such as those related to substance use, maternal health, and physical and developmental disabilities, among justice-involved individuals as compared to other community members and acknowledged the positive impact that access to health and health-related services can have on both supporting reentry into the community and reducing recidivism. Commenters encouraged North Carolina to work with local advocates and other external partners to operationalize this demonstration, including to define the Medicaid managed care plans that are best suited to meet the needs of justice-involved individuals of all ages. Commenters also noted that the implementation of Medicaid expansion would complement this initiative by extending Medicaid coverage to many more North Carolinians.**

Response: North Carolina appreciates the commenters' feedback and support of the request and remains committed to pursuing this policy to improve health outcomes, ensure continuity of care, and support reentry into the community for justice-involved individuals. North Carolina looks forward to collaborating with correctional systems, providers, health plans, care management entities, community-based organizations, individuals with lived experience, and other key partners on the implementation of this initiative.

Comment: **North Carolina received several comments describing the need for robust care management to connect justice-involved individuals to both health and health-related services. Several commenters highlighted the critical role that community health workers with lived experience can play in supporting reentry. One commenter encouraged the State to also cover peer support services and enhanced care management to permit reimbursement at the primary care medical home upon release.**

Response: North Carolina appreciates the commenters' feedback and support of providing case management as one of three mandatory services in the 90-day period prior to release for all Medicaid-eligible adults and youth. North Carolina agrees on the importance of robust case management for this population and will align the case management service with both the requirements outlined by CMS in its April 2023 guidance and with best practices for serving justice-involved individuals. North Carolina will work closely with correctional systems, care management entities, individuals with lived experience, and other key partners to operationalize the reentry initiative, including determining if case management will be provided by carceral or

community-based entities across the state's participating correctional settings. North Carolina also agrees that peer supports are an important component of case management for justice-involved individuals and intends to allow peer support specialists to serve as part of case management teams.

Additionally, as discussed in the "HOP Eligibility Criteria" section above, North Carolina will extend HOP eligibility to individuals who have prior experience with the justice system, regardless of time horizon, and individuals who are pre-release, to help ensure that justice-involved individuals receive the services and supports they need upon reentry into the community.

***Comment*: North Carolina received a few comments encouraging the State to provide a 60-90 supply of medications in-hand upon release. The commenters noted that some correctional settings in the state already provide a 30-day supply of medication in-hand upon release. One commenter also encouraged the State to provide treatment for chronic Hepatitis C.**

Response: North Carolina will align with state plan coverage of medications provided both pre- and post-release, as well as with the requirements outlined by CMS in its April 2023 guidance for medications provided post-release. North Carolina will provide more than a 30-day supply of prescription medications where permitted by the state plan and when clinically appropriate based on the medication dispensed and the indication. Hepatitis C treatment can also be provided pre- and post-release, consistent with state plan pharmacy coverage.

***Comment*: North Carolina received a few comments related to the facilities that will be eligible to participate in the reentry demonstration. One commenter requested that the justice-involved reentry demonstration not be limited to state prisons and instead include county jails, juvenile detention centers, and federal correctional facilities. Other commenters requested that Psychiatric Residential Treatment Facilities (PRTFs) and state hospitals that serve incarcerated individuals be included among the facilities eligible to participate in the reentry demonstration.**

Response: North Carolina will align with the requirements outlined by CMS in its April 2023 guidance on carceral settings that are eligible to participate in this initiative. North Carolina aims to implement this initiative in its 53 state prisons over the course of the demonstration, as well as in a subset of county- and tribal-operated jails and youth correctional facilities that meet Department-defined readiness standards. North Carolina will phase in participating correctional facilities based on readiness over the course of the demonstration period. Per CMS guidance, federal correctional facilities, state hospitals, and PRTFs are not approvable settings for this

initiative. However, many Medicaid enrollees in state hospitals and PRTFs are able to access similar Medicaid services, as authorized under the state plan.

***Comment*: A few commenters encouraged the State to provide more specificity with respect to its request for capacity building funds. Commenters noted the need for funds to support IT infrastructure as well as linkages to health-related supports. Some commenters emphasized the importance of allocating as much funding as possible for community-based reentry partners.**

Response: North Carolina appreciates the commenters' feedback and is requesting capacity building funds to support a range of planning and implementation activities, including but not limited to conducting stakeholder engagement, hiring and training new staff, strengthening health information technology systems, and establishing new operational workflows, processes, and space modifications needed to implement this initiative. North Carolina will work closely with external partners to develop more guidance and protocols on capacity building funding for this initiative.

Substance Use Disorder Comments

***Comment*: North Carolina received two comments supporting the request to extend the substance use disorder (SUD) waiver for another five-year period.**

Response: North Carolina appreciates the commenters' feedback and support of the waiver extension request and remains committed to providing behavioral health services to individuals in the least restrictive, clinically indicated settings. The original SUD expenditure authority expired on October 31, 2023; therefore, North Carolina submitted a separate application to extend the SUD waiver, and received CMS approval for a temporary 12-month extension through October 31, 2024. North Carolina solicited public comments prior to submitting the SUD waiver extension request.

***Comment*: North Carolina received a comment recommending that it align its licensing criteria for SUD providers with the ASAM criteria.**

Response: North Carolina appreciates the commenter's feedback. The State is currently working to align its SUD provider licensure rules with the ASAM criteria and anticipates completing this process in early 2024.

***Comment:* North Carolina received a comment recommending that it increase Medicaid reimbursement rates for residential and outpatient SUD and mental health treatment services.**

Response: North Carolina appreciates the commenter's feedback. The General Assembly approved $285 total federal and state ($130 million state dollars) for the 2023-2025 fiscal biennium to increase the Medicaid reimbursement rates for mental health, substance use disorder, and I/DD services.

Behavioral Health and I/DD Technology Comments

***Comment:* Commenters expressed support for the investments in behavioral health and I/DD technology. A few commenters specifically emphasized the importance of accessible health technology and investments in health data collection/reporting on SUD and I/DD.**

Response: The State values the commenters' support for the new targeted investments in behavioral health and I/DD technology. North Carolina is dedicated to improving data collection and health information technology for behavioral health, SUD, I/DD, and TBI providers through its new proposed investments in technology, including encouraging connection to the statewide health information exchange (HIE), and other ongoing data and evaluation efforts.

A few commenters suggested eligibility changes to the HIT Grants, including: expanding HIT grants to all providers (including primary care providers) and CINs; prioritizing SUD providers for HIT grants; requiring that providers participate in Standard Plan network to be eligible for grants; and allowing recipients of prior payments under the Health Information Technology for Economic and Clinical Health (HITECH) Act be eligible to apply with demonstrated need.

Response: The State appreciates these comments. The goal of this initiative is to provide funding to those providers who have historically not participated in or have been excluded from HIT funding (e.g., HITECH dollars). For this 1115 demonstration renewal request, North Carolina intends to focus its HIT Grants on the previously outlined provider types, which includes SUD providers.

One commenter suggested expanding School Health Technology Funding to privately-run behavioral health I/DD specialty schools that meet the outlined requirements.

Response: The State appreciates these comments and acknowledges the important work of behavioral health and I/DD specialty schools in North Carolina. North Carolina agrees with expanding School Health Technology Funding to privately-run behavioral health and I/DD specialty schools that primarily serve children and youth with behavioral health conditions, I/DD, and/or TBI and cannot otherwise bill Medicaid as BH or I/DD providers who would be eligible for HIT Grants. The State has updated the application to reflect this change.

A few commenters suggested other enhancements to the Behavioral Health and I/DD Technology initiative, including leveraging funds to support expanded telehealth and digital literacy, data collection, and quality measurement standardization; bolstering participation in the state HIE; allowing the use of funds at school-based health centers; and making direct investments to improve digital equity.

Response: The State appreciates these comments and is pursuing these suggestions through the Behavioral Health and I/DD Technology initiative and efforts outside the 1115 Demonstration. This feedback aligns with North Carolina's goals and objectives for the initiative, as well as with the overall demonstration.

Behavioral Health and LTSS Workforce Comments

Comment: **Many commenters expressed support for the behavioral health and long term services and supports (LTSS) workforce initiatives, citing direct care worker shortages and administrative burden. A couple commenters requested that the State engage other state Medicaid programs, community-based organizations and advocacy groups, direct care workers, and enrollees to implement these initiatives. One commenter emphasized the importance of engaging rural providers to address geographical gaps in behavioral health care access.**

Response: The State values the commenters' support for the new initiatives to bolster the behavioral health and LTSS workforce. Given the shortage of providers and paraprofessionals across the state, particularly in rural areas, the State is dedicated to strengthening the behavioral health workforce, as well as providers, direct care workers, and other professionals who serve individuals with I/DD and provide LTSS. North Carolina is also committed to engaging with community partners, including direct care workers and the people and families who depend on them, on an ongoing basis throughout the design and implementation of the proposed demonstration.

Comment: **A few commenters suggested eligibility changes to the Loan Repayment Program, including permitting loan repayment for social workers; permitting loan repayment for associate level professionals (e.g., Licensed Clinical Social Worker Associates (LCSW-A)); clarifying whether care managers are eligible for loan repayment; and permitting loan repayment for behavioral health professionals working in for-profit settings.**

Response: The State appreciates these comments and acknowledges the important work of these providers serving individuals with behavioral health conditions, I/DD, TBI, and other LTSS needs.

For this 1115 demonstration renewal request, North Carolina intends to focus its Loan Repayment Program on the previously outlined provider types, aligning with NC definitions for Associate Professionals and Qualified Professionals. This includes up to $300,000 in loan repayments for psychiatrists, nurse practitioners, and physician assistants as well as loan repayments ranging from $25,000 to $50,000 (depending on the professional type) for master's-level licensed clinicians (or above), bachelor's level behavioral health professionals, and registered nurses, in exchange for a service commitment in a qualified setting that serves Medicaid enrollees, individuals who receive services via Indian Health Services, and uninsured individuals. Many social workers, associate level professionals, and care managers are already eligible under the current provider types (i.e., master's-level licensed clinicians or above, bachelor's level behavioral health professionals, and registered nurses). Professionals working in for-profit settings are also eligible if they meet the currently outlined qualifications.

Comment: **A few commenters suggested eligibility changes to the Recruitment and Retention Funding, including: permitting Peer Recovery Specialists, Peer Support Specialists, and Community Health Workers to receive recruitment and retention funding; limiting Recruitment and Retention Funding to only behavioral health professionals who commit to working in a community-based setting; and clarifying whether professionals providing LTSS are eligible for Recruitment and Retention Funding.**

Response: The State appreciates these comments and acknowledges the important work of these providers in providing LTSS and serving those with behavioral health conditions, I/DD, and TBI. For this 1115 demonstration renewal request, North Carolina intends to focus its Recruitment and Retention Funding on the outlined provider types. Professionals providing LTSS are eligible if they meet the currently outlined qualifications. Peer Specialists, Peer Recovery Specialists and Community Health Workers are eligible (i.e., as certified behavioral health professionals). North Carolina recognizes that there are BH and LTSS workforce shortages across the state's delivery system, ranging from community-based to institutional settings, and therefore recruitment and retention funding will be available to providers working in a variety of settings.

Comment: **One commenter requested ongoing hourly pay raises rather than lump-sum recruitment and retention payments.**

Response: The State appreciates the commenter's feedback. Recruitment and Retention Funding is designed to be a lump-sum payment for up to $15,000 per year per qualifying professional. A lump-sum approach reduces administrative burden compared to an hourly, ongoing approach.

Qualifying professionals may request additional funding across multiple years. The FY 2023-2025 budget does also include funding to enable NC Medicaid to increase the Medicaid reimbursement rates for mental health, SUD, and I/DD services providers.

Comment: **A few commenters requested additional funding for the Behavioral Health and LTSS Workforce initiatives beyond the $70 million total computable requested in the initial application to reflect the need for additional investments for LTSS staff.**

Response: The State appreciates these comments and values the crucial work of professionals providing LTSS to Medicaid members. North Carolina agrees with increasing the funding requested to provide additional support to professionals providing LTSS and will be requesting $50 million, up from $20 million, for the Recruitment and Retention Payments. The State has updated the application to reflect this change.

Comment: **A few commenters suggested additional enhancements to Behavioral Health and LTSS Workforce initiatives, including: providing yearly bonuses with cost-of-living adjustments; offering transportation and childcare subsidies; funding caregiver education and training programs; recruiting workers who speak multiple languages or use American Sign Language; ensuring regular, high quality rate studies; requiring that direct support workers have paid time off; developing a recruitment plan for college graduates; and leveraging funds for the Collaborative Care Model.**

Response: The State appreciates these comments and is already pursuing many of these suggestions through the Behavioral Health and LTSS Workforce initiatives and efforts outside the 1115 Demonstration. Bonuses, transportation and childcare subsidies, and career advancement training are already permitted uses of Recruitment and Retention Funding. Recruiting a more diverse and culturally competent workforce is aligned with the initiative's goals and objectives, as well as with the overall demonstration. The other requests are outside the purview of the 1115 waiver as this initiative is focused specifically on loan repayment and recruitment and retention payments.

Home and Community-Based Services Under 1915(i)

Comment**: Three commenters expressed support for expanding access to critical supports offered under 1915(i) authority. One commenter emphasized the need for more robust data collection on those receiving services under 1915(i) authority.**

Response: The State values the commenters' support for transitioning select home and community-based services for enrollees with significant behavioral health needs, I/DD, and TBI from 1915(b)(3) authority to 1915(i) authority.

Evaluation and Oversight Comments

Comment: **One commenter sought clarification on whether the State has plans to evaluate and compare metrics between Standard Plan and Tailored Plans/PIHPs.**

Response: North Carolina currently conducts an annual review process, soliciting input from internal and external stakeholders, to evaluate managed care quality metrics for Standard Plans and PIHPs and plans to conduct a similar process for Tailored Plans after launch. This process includes consideration of quality metrics to add, retire or revise (e.g., change reporting responsibility) based on prior year performance and other factors, such as specification changes indicated by the measure steward, endorsement by national quality entities, and use in other state Medicaid incentive programs. The State does examine quality measure performance for the Standard Plan, Tailored Plan and PIHP populations, respectively, and identifies areas for quality improvement based on this analysis. As of now, the State is not conducting comparative analyses by plan as plan populations differ by baseline risk factors, and also because Tailored Plans have not yet launched.

Comment**: North Carolina received several comments regarding the intersection of HOP design and evaluation. Commenters highlighted the need for Pilot evaluation to be informative of HOP design, including by outlining a clear plan for how the efficacy of services is being defined, how the state will make modifications to HOP services based on the evaluation and providing HOP partners with guidance on how to make HOP services most effective based on the results of the evaluation (e.g., by pairing two HOP services together or specific populations that benefit from particular HOP services). Some commenters requested that North Carolina add new dimensions to the evaluation to understand the impact HOP has had on health equity. One commenter highlighted the need to more explicitly focus HOP evaluation hypotheses on children.**

Response: North Carolina appreciates the commenters' feedback on the HOP evaluation design and its impact on "on the ground" Pilot operations. The state remains committed to a rigorous HOP evaluation of the efficacy of HOP services on reducing unmet resource needs, improving health outcomes and reducing utilization and cost. North Carolina will continue to explore opportunities to strengthen and refine the HOP evaluation and communicate findings and

updates to HOP partners through guidance and/or other materials. The Department remains fully committed to pursuing health equity across all waiver initiatives and will seek new and additional ways to evaluate the impact of HOP on improving health equity across the state, which will become even more pertinent as HOP expands to new regions. The state will work with its evaluator to ensure that the HOP-related evaluation explores a range of analyses related to all Pilot services being offered and the distinct needs of the different populations served (e.g., children, pregnant women and adults).

Comment: **One commenter requested that the State note previous public input and engagement, including litigation and legal action, between NC DHHS and Disability Rights North Carolina (DRNC) that occurred during the 1115 demonstration period as part of the included Medicaid Section 1115 Monitoring Report.**

Response: North Carolina appreciates the commenters' feedback on the Medicaid Section 1115 Monitoring Report. The state will include information about broader litigation activities in future Medicaid Section 1115 Monitoring Reports.

Section X – Responses to Tribal Consultation

North Carolina certifies that it conducted Tribal consultation according to the consultation process outlined in its approved state plan. North Carolina notified the Eastern Band of Cherokee Indians (EBCI) of the proposed 1115 demonstration renewal request via email on August 8, 2023. The email correspondence was sent to Casey Cooper, CEO of the Cherokee Indian Hospital Authority, and Brandy Davis, Interim Secretary of EBCI Public Health and Human Services. North Carolina presented the proposed 1115 demonstration renewal request during a meeting with EBCI representatives on August 4, 2023. The State also notified EBCI when the application was posted online for public comment on August 31, 2023. EBCI provided comments on the proposed 1115 demonstration renewal request on September 19, 2023. The notice and comments appear in Appendix C.

EBCI expressed support for the proposed 1115 demonstration renewal request and underscored the importance of ensuring that eligible tribal members, including those who are enrolled in the Tribal Option PCCM or NC Medicaid Direct, have access to all services that are available to tribal members who are enrolled in Medicaid managed care plans. EBCI noted that transitioning services from 1915(b)(3) to 1915(i) authority will improve access to these services for tribal members.

EBCI noted the implementation challenges that tribal providers experienced as part of Medicaid transformation efforts during the first demonstration period and acknowledged the need to continue to reduce administrative complexity both to encourage greater participation among tribal health entities in the Medicaid program and to support a smoother launch of Tailored Plans. North Carolina looks forward to continuing to work with ECBI, providers, health plans, and other external partners to facilitate a continued transition to managed care for all Medicaid enrollees.

EBCI expressed support and excitement that EBCI Tribal Option members will be eligible for participation in the Healthy Opportunities Pilots (HOP). EBCI shared several concerns that must be mitigated prior to launching HOP for the EBCI population. Specifically, EBCI flagged that the current HOP model is overly clinical in nature and may need to be tailored to the specific needs of the EBCI population. Further, the existing eligibility criteria may be too restrictive and does not focus enough on individual's upstream needs that would prevent them from getting sick in the first place. EBCI suggests different eligibility criteria for IHS/Tribal members that reflects the fact that they are at higher risk of health disparities and trauma. EBCI highlighted several operational challenges associated with implementing HOP including challenges associated with the member journey to access services, prior authorization, use of NCCARE360 and with HOP-related billing, which closely mirrors medical claims billing. Finally, EBCI expressed support for the addition of three meals per day, the new firearm safety service and new rental assistance service. The Department is seeking waiver authority to continue to broaden Pilot eligibility criteria, including for individuals "at risk of" a chronic condition, and add new/modified services to meet the needs of North Carolinians, including EBCI. The Department looks forward to working with EBCI on Pilot design and implementation that is tailored to and responsive to the specific needs of the EBCI population.

EBCI expressed support for the justice-involved reentry initiative and requested that tribal-operated correctional facilities be added to the list of participating carceral settings. In response to this feedback, North Carolina added tribal-operated correctional facilities to the list of settings that are eligible to participate in and receive capacity building funds for the reentry initiative.

EBCI expressed support for providing continuous enrollment for children and youth as described in the renewal request, particularly in light of the volume of procedural terminations that are occurring amidst the ongoing public health emergency unwinding period.

EBCI expressed support for the request for behavioral health and I/DD technology funding and asked that tribal-operated schools be included among the entities that are eligible to receive

Medicaid match for technology-related investments in schools. In response to this feedback, North Carolina added tribal-operated schools and Tribal Local Educational Agencies (LEAs) to the list of entities eligible to participate in and receive School Health Technology Funding through the behavioral health and I/DD technology initiative.

EBCI expressed support for the behavioral health and LTSS workforce requests and noted that it would like to participate in this initiative. North Carolina confirms that the current renewal request seeks expenditure authority for loan repayments to a variety of providers, including those who serve individuals eligible to receive services via Indian Health Services.

EBCI expressed support for the substance use disorder (SUD) waiver extension request and encouraged the State to also apply for a waiver of the IMD exclusion for short-term mental health treatment. North Carolina remains committed to providing behavioral health services to individuals in the least restrictive, clinically indicated settings. As the State pursues a variety of reforms to its behavioral health delivery system, including the upcoming launch of Tailored Plans, it continues to explore requesting a waiver of the IMD exclusion for short-term mental health treatment.

Beyond the 1115 demonstration, ECBI highlighted the need for a culturally appropriate, trauma-informed care model under Medicaid to reduce disparities. North Carolina is currently working with EBCI to explore and implement this service under Medicaid.

North Carolina also notified the Unity Healing Center, an IHS facility in the state, of the proposed 1115 demonstration renewal request via email on August 8, 2023, and offered to schedule a conference call to discuss the proposed request. The email correspondence was sent to Joni Lyon and Cherie Rose at Indian Health Services as well as to Robert Sanders at Indian Health Services. No comments were received in response to this communication. The notification appears in Appendix C.

Appendices

Appendix A. Quality Reports and Monitoring

- North Carolina Medicaid Reform Demonstration DY4Q3 Narrative Report
- North Carolina Medicaid Reform Demonstration DY4Q4 Narrative Report
- North Carolina Medicaid Section 1115 SUD Demonstration Monitoring Report
- North Carolina Healthy Opportunities Pilots Rapid Cycle Assessment 1

Appendix B. Public Notice

- Posting on the North Carolina Department of Health and Human Services Website
- Full Public Notice
- Abbreviated Public Notice
- Newspaper Clipping
- Stakeholder Emails

Appendix C. Tribal Consultation

- Email Correspondence with Eastern Band of Cherokee Indians
- Comments from Eastern Band of Cherokee Indians
- Email Notification to Indian Health Services

Appendix A

Medicaid Section 1115 Monitoring Report

North Carolina - North Carolina Medicaid Reform Demonstration

DY4Q3 – May 1, 2022 through July 31, 2022

Submitted on Sep. 29, 2022

State	*North Carolina*
Demonstration Name	*North Carolina Medicaid Reform Demonstration*
Approval Date	*October 24, 2018*
Approval Period	*November 1, 2019 through October 31, 2024*
Demonstration Goals and Objectives	*North Carolina seeks to transform its Medicaid delivery system by meeting the following goals:* *• Measurably improve health outcomes via a new delivery system;* *• Maximize high-value care to ensure sustainability of the Medicaid program; and* *• Reduce Substance Use Disorder (SUD).*

Contents

DEMONSTRATION YEAR 4 QUARTER 3 REPORT

Executive Summary

This quarterly report covers Demonstration Year 4, Quarter 3 (DY4Q3) of the North Carolina Medicaid Reform Demonstration, May 1, 2022, through July 31, 2022.

This quarter, the Department marked one year since Standard Plans, the first phase of NC Medicaid Managed Care, became operational. On July 1, 2021, North Carolina transferred 1.6 million Medicaid beneficiaries from NC Medicaid Direct (fee-for-service Medicaid) to five Prepaid Health Plans (PHPs): AmeriHealth Caritas, Healthy Blue of North Carolina, UnitedHealthcare of North Carolina, WellCare of North Carolina and Carolina Complete Health.

The Department continues to monitor Standard Plan performance closely and address issues through formal notification, corrective action plans, and the assessment of liquidated damages, when applicable. In this quarter, the Department monitored Standard Plan performance related to non-emergency medical transportation (NEMT), provider network file discrepancies, network adequacy, and call center performance.

The Department continues to prepare for the launch of the Behavioral Health I/DD Tailored Plans (Tailored Plans) on Dec. 1, 2022. Tailored Plan operational readiness reviews began March 17, 2022. The Department began the onsite portion of the readiness review process with Tailored Plans in July. Representatives from each business and technology area across the Department were hosted by Tailored Plans at their home office locations to provide an overview of their implementation progress, participate in interviews with Department representatives and provide live system demonstrations. On June 15, 2022, Tailored Plan member and provider service lines went live, and the Tailored Plans began marketing activities.

Pharmacy Point of Sale (POS) claims for members enrolled in Tailored Plans will be temporarily managed by NCTracks when the plans launch on Dec. 1, 2022, through March 31, 2023. Beginning on April 1, 2023, these claims will be managed by the Tailored Plans. This change was made as a result of a key pharmacy benefit manager (PBM) unexpectedly leaving the NC Medicaid market in late 2021, which required some Tailored Plans to procure another PBM. There will be no impact to members' pharmacy benefits during this transition period.

Effective June 15, 2022, three new Healthy Opportunities Pilots services are available to qualified members to address toxic stress and multiple non-medical needs: evidenced-based parenting classes, home visiting services, and medical respite. The Department continues to prepare to launch Healthy Opportunities Pilots services with the Tailored Plans in 2023.

Medicaid Managed Care

Operational Updates

The Department continues to monitor Standard Plan performance closely and to address identified issues through formal notification, corrective action plans, and the assessment of liquidated damages, if applicable. In this quarter, the Department monitored Standard Plan performance related to non-

emergency medical transportation (NEMT), provider network file discrepancies, network adequacy, and call center performance.

Tailored Plan operational readiness reviews officially kicked off March 17, 2022. The Department began the onsite portion of readiness review process with Tailored Plans in July. Representatives from each business and technology area across the Department were hosted by Tailored Plans at their home office locations to provide an overview of their implementation progress, participate in interviews with Department representatives and provide live system demonstrations.

The Department onboarded the Tailored Plans into the Medicaid Help Center and TechOps processes to resolve business and technology related issues leading up to launch. The Medicaid Help Center process enables the Department to address business-related issues and questions from providers, members and stakeholders across all vendors. The Tailored Plans now participate in weekly status calls regarding cases submitted to the Medicaid Help Center that require their action to resolve. Similarly, the TechOps process enables the Department to address technology operations issues self-reported from stakeholders and vendors involved in technology processes critical to NC Medicaid Managed Care operations. The Tailored Plans participate in four TechOps status calls per week with the Department and other vendors to address production technology issues. Tailored Plans also attend ad hoc discussions to resolve high priority issues that require escalation and immediate attention.

The Department decided that pharmacy point of sale (POS) claims for members enrolled in Tailored Plans will be temporarily managed by NCTracks when the plans launch on Dec. 1, 2022, through March 31, 2023. Beginning on April 1, 2023, these claims will be managed by the Tailored Plans. This change was made because a key pharmacy benefit manager (PBM) unexpectedly leaving the NC Medicaid market in late 2021, which required some Tailored Plans to procure another PBM.

There will be no impact to members' pharmacy benefits during this transition period. From Dec. 1, 2022, through March 31, 2023, member identification cards will not include pharmacy information. New cards will be issued for April 1, 2023, with the new RxBin and PCN numbers for the Tailored Plans. The Department will reach out to members, pharmacists and providers in the coming months with additional information about the transition.

Key achievements and to what conditions and efforts successes can be attributed

Standard Plans

1. The Advanced Medical Home (AMH) Technical Advisory Group continues to advise and inform the Department on key aspects of the design and evaluation of the AMH program. At its June meeting, the Data Subcommittee discussed the impact of and potential solutions for three priority data issues: beneficiary assignment, Clinically Integrated Network (CIN)-AMH relationship tracking, and the patient risk list.
2. The North Carolina Integrated Care for Kids (NC InCK) program aims to improve quality of care and reduce expenditures for children under age 21 covered by NC Medicaid through prevention, early identification, and treatment of behavioral and physical health needs. While the program is distinct from the 1115 waiver, beneficiaries in NC InCK are included in the transition to NC Medicaid Managed Care. The InCK Team has provided feedback on provider contract amendments from all Standard Plans regarding alternative payment model (APM)

implementation. The InCK team delivered finalized data specification documentation for the InCK APM reports to Standard Plans and CINs, and APM implementation is expected to begin in November.

Tailored Plans

1. Following the start of operational readiness reviews in March, the Department continued reviewing responses and documentary evidence on the desktop review tools that were shared with the Tailored Plans. The Desktop Review tools have gone through three review and response iterations between the Department and the Tailored Plans, and only a small number of issues remain open.
2. The Department began the onsite portion of the readiness review process with Tailored Plans in July. Representatives from each business and technology area across the Department were hosted by Tailored Plans at their home office locations to provide an overview of their implementation progress, participate in interviews with Department representatives and provide live system demonstrations.
3. The Department shared finalized operational report templates and an operational report guide with Tailored Plans. The Department's analytics team drove an effort across all business units to review and standardize the operational reporting templates prior to sharing with Tailored Plans. Tailored Plans will use the operational report guide as a reference document to understand first submission dates and processes for operational reports required as part of the Tailored Plan contract.
4. The Department has met with all Tailored Plans on amendment item language to be included in the first amendment to the Tailored Plan contract. The final draft amendment is currently under review with the Department's contracts and legal teams and is anticipated for execution during Quarter 4.
5. All Round 1 and Round 2 Advanced Medical Home Plus (AMH+) practices/Care Management Agencies (CMAs) candidates have completed certification, and readiness reviews are scheduled in August and September. A Provider Readiness Review Q&A session was held in July, and a second session will be held in August to prepare providers for the reviews. These organizations will be one vehicle through which Tailored Plan members receive comprehensive care management support, in addition to the Tailored Plans. All Tailored Plan members will be offered choice of a Tailored Care Management entity (plan or provider-based), and members will be assigned to an entity if one is not selected. Federal authority for the AMH+/CMA program is expected to come from a Medicaid Health Home SPA, which was submitted in September.

Key challenges, underlying causes of challenges, and how challenges are being addressed

Standard Plans

1. The Enrollment Broker is experiencing call center staffing shortages and high attrition rates that reflect broader trends in the call center industry. To mitigate the issue, the Enrollment Broker is

increasing hiring class sizes and holding weekly meetings with the Department until the issue is resolved.

2. In February 2022, the Department published a review of the Standard Plans' networks for compliance across all network adequacy standards and with all state and federal laws and regulations. All five Standard Plans had gaps in compliance, resulting in the issuance of corrective action plans (CAPs). In this quarter, the Department monitored plans' progress under the CAPs and expects to close the CAPs and complete the annual review process in the next quarter.
3. The Department's pharmacy team identified that two of the five Standard Plans did not meet the preferred drug list (PDL) compliance benchmark of 95% during the first three quarters of State Fiscal Year 2022. The Department is preparing submissions for liquidated damages for both plans.

Tailored Plans

1. Provider network coverage is an area of risk across all Tailored Plans. Since the Tailored Plans started reporting monthly on provider contracting in early May, results have not met network adequacy standards across the provider categories. This could result in a lack of providers for PCP auto-assignment beginning in October. The Department is mitigating this risk through close tracking of provider contracting data in the Tailored Plan Weekly Scorecards, one-on-one calls with the Tailored Plans and by working through our provider engagement and communications teams to clarify the process for providers contracting with Tailored Plans.
2. Providers in the Tailored Care Management certification process have been slow to complete more advanced levels of the certification progress. A low number of certified Tailored Care Management providers could create less capacity in provider-based care management than the current NC Medicaid and Tailored Plan target. The Department continues to provide coaching support to potential Tailored Care Management providers and has also published a second roll-out timeline of Feb. 1, 2023, to launch the service if providers are not ready for a Dec. 1, 2022 launch. Members can still receive Tailored Care Management from their Tailored Plan, so all members will have a source of Tailored Care Management at launch.
3. Tailored Plans are developing new claims processing engines to handle physical and behavioral health claims, as Tailored Plans, functioning as LME/MCOs, previously only handled behavioral health claims. The Department established a Tailored Plan claims processing mitigation strategy to prepare Tailored Plans for launch, including comparative claims testing entry criteria, comparative claims testing, provider claims testing entry criteria, provider claims testing, copay exemption documentation initiative, weekly calls with Tailored Plans for claims special topics and a covered code initiative.
4. End-to-end testing for Tailored Plans started in May and has trended behind schedule throughout this quarter for both the Auto-Enrollment and Plan Launch milestones. This is largely due to long turnaround times in the defect resolution process for Tailored Plans and a delay in

obtaining Privacy Security Officer (PSO) documentation sign-off for the five technology vendors who are supporting the Tailored Care Management providers. The End-to-End team meets with the Tailored Plans weekly and escalates plan-specific challenges through biweekly calls with Tailored Plans' executive leadership teams. The Department is working with the providers and vendors participating in End-to-End testing and the PSO to obtain the correct documentation and has been able to get approval for three of the five providers and their technology partners.

Milestones

1. On July 1, 2022, the Department reached one year since the launch of NC Medicaid Managed Care with the Standard Plans.
2. The Tailored Plan member and provider service lines went live on June 15, 2022.
3. The Tailored Plans began marketing activities on June 15, 2022.

Issues or complaints identified by beneficiaries

The Department receives beneficiary complaints primarily from the Office of Compliance and Program Integrity, Office of Administration and the NC Medicaid Member Ombudsman. The NC Medicaid Ombudsman is an independent organization that provides education, guidance and referrals to NC Medicaid beneficiaries.

In DY4Q3, the Ombudsman handled 4,293 cases, an increase of approximately 29% from last quarter. Many calls involved educating beneficiaries or connecting them to the entity that could provide the service they need. (See Appendix A for a full list of cases by category type.) This quarter, the Office of Administration received 13 complaints, compared to 33 last quarter. There were no complaints reported to the Office of Compliance and Program Integrity.

NC Medicaid Member Ombudsman Cases

May 2022		June 2022		July 2022		Total Cases
Information	Issue Resolution	Information	Issue Resolution	Information	Issue Resolution	
518	879	522	1,033	364	977	**4,293**

Office of Administration Member/Constituent Concerns, May 2022 – July 2022

Issue Category	Number of Issues
Beneficiary/Member Eligibility	2
Clinical Policy	2
Electronic Visit Verification	3
Non-Emergency Medical Transportation (NEMT)	3
Provider Operations	3
TOTAL	**13**

Lawsuits or legal actions

There are no lawsuits or legal actions to report this quarter.

Unusual or unanticipated trends

There are no unusual or unanticipated trends to report this quarter.

Legislative updates

The 2022 Short Session began May 18, 2022. The General Assembly has paused most activity but has not yet adjourned. During this reporting period the following legislation impacting managed care implementation was enacted.

S.L. 2022-46, enacted July 7, 2022, makes various changes and clarification to insurance laws:

- § 5 requires a PHP's solvency plans to allow continuation of health care services until the PHP's contract is terminated, and enrollees are transitioned to another PHP in the event of insolvency.

S.L. 2022-74, enacted July 11, 2022, adjusts base budget appropriations for the 2021-2023 biennium and enacts new programmatic, administrative and operational requirements for NC Medicaid:

- § 9D.4 authorizes NCDHHS to seek authority to extend Medicaid coverage of health care services that qualify for 100% FMAP when provided by an Indian Health Service provider or Eastern Band of Cherokee Indian facility to individuals with no other form of health coverage.
- § 9D.7 requires implementation of Tailored Plans by Dec. 1, 2022, and the initial contract to end on Dec. 1, 2026. It requires that Tailored Plans receive the equivalent extension of the contract that a PHP offering Standard Plan services may receive.
- § 9D.8 clarifies that the PHPs must reimburse ingredient costs and dispensing fees at 100% of the State Plan rate for pharmacy reimbursements. Establishes NADAC as primary method to

calculate retail pharmacy reimbursement for non 340B drugs. This provision is in effect retroactively to Nov. 11, 2021, and expires June 30, 2026.

- § 9D.9 allows the agency until Dec. 31, 2022, to develop a new service and reimbursement rate to have LME/MCOs pay for emergency department bed holds.
- § 9D.13 (a) authorizes payment in fee-for-service for point-of-sale prescription drugs for Medicaid beneficiaries enrolled in a Tailored Plan for up to six months after launch. Requires Tailored Plans to cover prescription drugs submitted as medical outpatient professional claims through the Physician Administered Drug Program; (b) waives statutory solvency requirements for LME/MCOs with a Tailored Plan contract until Dec. 31, 2023, and replaces them with contractual solvency and capital reserve requirements; (c) requires LME/MCOs to include essential providers with respect to behavioral health, IDD, and TBI services in their closed network; (d) until Dec. 1, 2023, requires dissolution of an LME/MCO whose Tailored Plan contract is terminated and requires DHHS to submit a report on actions to be taken upon termination of any contract and LME/MCO holds.
- § 9G.6 grants primary care case management entities access to client-specific immunization information in the NC Immunization Registry.

Descriptions of post-award public fora

No public fora this quarter.

Performance Metrics

Impact of the demonstration in providing insurance coverage to beneficiaries and the uninsured population

No metrics to report in this category for the reporting period.

Outcomes of care

The Department plans to report three outcome measures in its monitoring reports: Comprehensive Diabetes Care, Low Birth Weight, and Rating of Personal Doctor. Currently, only Rating of Personal Doctor results are available.

The Low Birth Weight Measure is a modified version of the Live Births Weighing <2,500 grams measure (NQF #1382), and was developed to assess, monitor, and support PHP efforts in North Carolina. 2020 Low Birth Weight rates will be available in October 2022, and 2021 rates are expected at the end of 2022. Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Poor Control (>9.0%) rates are not available yet, as the Department does not receive A1c values via claims and encounters. The Department is working to obtain accurate A1c data through the NC Health Information Exchange in order to report this measure.

CAHPS measures do not reflect a full calendar year, as the survey was administered April 9, 2021, to August 15, 2021. Members were asked to think about services received *in the past 6 months* when answering survey questions. At the time of survey administration, almost all respondents' health plans would be NC Medicaid Direct. For many individuals who responded to the survey between July 1, 2021,

and August 15, 2021, their current health plan would have been a Standard Plan, but most of their experience in the past six months would still have been while they were enrolled in NC Medicaid Direct.

Measure/Measure Steward	Description	2019	2020	2021
Rating of Personal Doctor/CAHPS	Percentage of respondents who rated their personal doctor as an 8 or above (on a scale of 1-10)	83.2%	NA*	86.3%
	Percentage of respondents who rated their child's doctor as an 8 or above (on a scale of 1-10)	93.69%	NA*	91.15%

*CAHPS was not conducted during 2020 due to the Public Health Emergency

Quality of care

North Carolina measurement year 2021 quality measure results became available in July 2022. Because NC Medicaid Managed Care launched July 1, 2021, quality measure results for 2021 represent the last six months of fee-for-service and the first six months of managed care for North Carolina's Standard Plan population. All quality measures reflect the calendar year, except for CAHPS measures.

The Department continues to work on statewide performance improvement projects related to increasing Immunizations in Children, Early Access to Prenatal Care, Postpartum Care and Diabetes Control for Adults.

Measure/Measure Steward	Description	2019	2020	2021
Child and Adolescent Well-Care Visits (WCV)/ NCQA[1]	Members ages 12-21 who had at least one comprehensive well-care visit with a primary care physician or an OB/GYN during the measurement year.	NA	45.6%	47.8%
Childhood Immunization Status (CIS) (Combination 10)/ NCQA	Children age 2 who had four diphtheria, tetanus and acellular pertussis; three polio; one measles, mumps and rubella; three haemophilus influenza type B; three Hep B; one chicken pox; four pneumococcal conjugate; one hepatitis A; two or three rotavirus; and two influenza vaccines by their second birthday.	35.0%	36.2%	34.3%
Immunizations for Adolescents (IMA) (Combination 2)/ NCQA	Adolescents age 13 who had one dose of meningococcal conjugate vaccine, one tetanus, diphtheria toxoids and a cellular pertussis vaccine, and have completed the HPV vaccine series.	31.6%	31.2%	30.3%

Measure/Measure Steward	Description	2019	2020	2021
Use of First-Line Psychosocial care for Children and Adolescents on Antipsychotics (APP)/ NCQA	Children and adolescents ages 1-17 who had a new prescription for an antipsychotic medication, but no US Food and Drug Administration primary indication for antipsychotics and had documentation of psychosocial care as first-line.	52.1%	50.8%	45.0%
Well-child visits in the first 30 months of life (W30)/ NCQA[2]	Percent of children who received six or more well-child visits in the first 15 months	NA	62.3%	62.1%
	Percent with two or more well-child visits from 15 to 30 months	NA	70.8%	66.4%
Total Eligibles Receiving at Least One Initial or Periodic Screening/ NCDHHS	Rate of preventive dental service use by children and adolescents in NC. Higher rates are better on this measure.	53%	44.5%	NA
Follow-Up Care for Children Prescribed ADHD Medication (ADD)/ NCQA	Initiation phase rate: Percentage of children ages 6-12 as of the Index Prescription Start Date (IPSD) with an ambulatory prescription dispensed for ADHD medication, who had one follow-up visit with a practitioner with prescribing authority during the 30-day Initiation Phase.	50.1%	51.8%	53.7%
	Continuation rate: Percentage of children ages 6-12 with an ambulatory prescription dispensed for ADHD medication who remained on the medication for at least 210 days and who, in addition to the visit in the Initiation Phase, had at least two follow-up visits with a practitioner within 270 days (9 months) after the Initiation Phase ended.	63.5%	62.9%	64.9%
Metabolic Monitoring for Children and Adolescents on Antipsychotics (APM)/ NCQA	The percentage of children ages 1 to 17 who had two or more antipsychotic prescriptions and had metabolic testing. Three rates are reported: Percentage of children and adolescents on antipsychotics who received blood glucose testing	53.7%	47.4%	51.1%
	Percentage of children and adolescents on antipsychotics who received cholesterol testing	37.7%	34.1%	35.4%

Measure/Measure Steward	Description	2019	2020	2021
	Percentage of children and adolescents on antipsychotics who received blood glucose and cholesterol testing	34.9%	31.0%	32.61%
Prenatal and Postpartum Care (PPC)/ NCQA[3]	Timeliness of Prenatal Care: The percentage of deliveries that received a prenatal care visit as a member of the organization in the first trimester or within 42 days of enrollment in the organization.	35.5%	40.0%	39.5%
	Postpartum Care: The percentage of deliveries that had a postpartum visit on or between 21 and 56 days after delivery.	68.8%	64.5%	53.7%
Cervical Cancer Screening (CCS)/ NCQA	Women ages 21-64 who had cervical cytology performed every 3 years.	43.82%	42.83%	40.7%
Chlamydia Screening in Women (CHL)/ NCQA	Women ages 16-24 who were identified as sexually active and who had at least one test for chlamydia during the measurement period.	58.22%	57.19%	56.79%
Breast cancer screening (BCS)/ NCQA	Women 50–74 years of age who had at least one mammogram to screen for breast cancer in the past two years.	41.4%	35.4%	31.6%
Flu vaccinations for adults (FVA, FVO)/ NCQA	Adults ages 18 years and older self-report receiving an influenza vaccine within the measurement period.	42.9%	49.9%	N/A
Plan All-Cause Readmission – Observed Versus Expected Ratio (PCR)/NCQA	Adults ages 18 years and older, the number of acute inpatient and observation stays during the measurement year that were followed by an unplanned acute readmission for any diagnosis within 30 days and predicated probability of an acute readmission.	0.93%	0.99%	.99%
Controlling High Blood Pressure (CBP)/NCQA[4]	Percentage of patients 18 to 85 years of age who had a diagnosis of hypertension (HTN) and whose blood pressure (BP) was adequately controlled (<140/90) during the measurement year.	N/A	4.58%	24.62%

Measure/Measure Steward	Description	2019	2020	2021
Antidepressant Medication Management (AMM)/NCQA	Adults 18 years of age and older with a diagnosis of major depression who were newly treated with antidepressant medication and remained on their antidepressant medications. Effective Acute Phase Treatment: Adults who remained on an antidepressant medication for at least 84 days (12 weeks).	58.2%	60.1%	54.1%
	Effective Continuation Phase Treatment: Adults who remained on an antidepressant medication for at least 180 days (6 months).	39.3%	41.6%	33.9%
Diabetes Screening for People with Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)/NCQA	Percentage of adults 18–64 years of age with schizophrenia or bipolar disorder, who were dispensed an antipsychotic medication and had a diabetes screening test during the measurement year.	80%	75%	77%
Asthma Medication Ratio (AMR)/ NCQA	Percentage of adults 19-64 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 during the measurement year.	53.9%	60.3%	60.6%
Customer Service/ CAHPS	**Composite measure (adult):** Respondents were asked, “In the last 6 months, how often did your health plan’s customer service give you the information or help you needed?” and “In the last 6 months, how often did your health plan’s customer service staff treat you with courtesy and respect?”	83.3%	NA	86.5%
	Composite measure (child): Respondents were asked, “In the last 6 months, how often did customer service at your child’s health plan give you the information or help you needed?” and “In the last 6 months, how often did customer service staff at your child’s health plan treat you with courtesy and respect?”	78.8%	NA	85.9%

Measure/Measure Steward	Description	2019	2020	2021
Coordination of Care/CAHPS	Respondents who answered “Usually” or “Always” 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?"	86.6%	NA	85.8%
	Respondents who answered “Usually” or “Always” to the question, “In the last 6 months, how often did your child's personal doctor seem informed and up-to-date about the care your child got from these doctors or other health providers?”	81.9%	NA	85.4%

[1]This measure specification changed in 2020.

[2]This measure specification changed in 2021. The Well-Child Visits in the First 15 Months of Life (W15-CH) measure was modified by the measure steward. It now includes two rates: (1) six or more well-child visits in the first 15 months and (2) two or more well-child visits from 15 to 30 months.

[3]Rates for this measure are artificially low due to bundled payment for prenatal and postpartum care.

[4]NC Medicaid does not get blood pressure values via claims and encounters. **Consequently**, **our results are to be interpreted with caution.** The Department is currently developing a process to receive accurate blood pressure data via the North Carolina Health Information Exchange.

Cost of care

No metrics to report in this category for the reporting period.

Access to care

Network Time/Distance Standards

The percentage of members with access to provider types that meet network adequacy standards is shown below for each Standard Plan by region and type of service provider. The state’s time or distance network adequacy standards require that at least 95% of the membership meet the access standard. All Standard Plans met the state’s time or distance standards for the five key service categories of hospitals, OB/GYN, primary care (adult and child), pharmacy and outpatient behavioral health (adult and child) as of this quarter.

AmeriHealth Caritas									
Region	# of Counties	# of Members*	Hospitals	OB/GYN	Primary Care (Adult)	Primary Care (Child)	Pharmacy	Outpatient Behavioral Health (Adult)	Outpatient Behavioral Health (Child)
			% Members	% Members	% Members	% Members	% Members	% Members	% Members
1	19	146,103	100%	100%	100%	100%	100%	100%	100%
2	13	306,492	100%	100%	100%	100%	100%	100%	100%
3	12	432,242	100%	100%	100%	100%	100%	100%	100%
4	14	351,755	100%	100%	100%	100%	100%	100%	100%
5	15	292,624	99%	100%	100%	100%	100%	100%	100%
6	27	223,552	99%	100%	100%	100%	100%	100%	100%

Carolina Complete Health									
Region	# of Counties	# of Members*	Hospitals	OB/GYN	Primary Care (Adult)	Primary Care (Child)	Pharmacy	Outpatient Behavioral Health (Adult)	Outpatient Behavioral Health (Child)
			% Members	% Members	% Members	% Members	% Members	% Members	% Members
1	19	146,103							
2	13	306,492							
3	12	432,242	100%	100%	100%	100%	100%	100%	100%
4	14	351,755	100%	100%	100%	100%	100%	100%	100%
5	15	292,624	100%	100%	100%	100%	100%	100%	100%
6	27	223,552							

Healthy Blue/Blue Cross Blue Shield of NC									
Region	# of Counties	# of Members*	Hospitals	OB/GYN	Primary Care (Adult)	Primary Care (Child)	Pharmacy	Outpatient Behavioral Health (Adult)	Outpatient Behavioral Health (Child)
			% Members	% Members	% Members	% Members	% Members	% Members	% Members
1	19	146,103	100%	100%	100%	100%	100%	100%	100%
2	13	306,492	100%	100%	100%	100%	100%	100%	100%
3	12	432,242	100%	100%	100%	100%	100%	100%	100%
4	14	351,755	100%	100%	100%	100%	100%	100%	100%
5	15	292,624	100%	100%	100%	100%	100%	100%	100%
6	27	223,552	99%	99%	100%	100%	99%	100%	100%

United Healthcare									
Region	# of Counties	# of Members*	Hospitals	OB/GYN	Primary Care (Adult)	Primary Care (Child)	Pharmacy	Outpatient Behavioral Health (Adult)	Outpatient Behavioral Health (Child)
			% Members	% Members	% Members	% Members	% Members	% Members	% Members
1	19	146,103	100%	100%	100%	100%	100%	100%	100%
2	13	306,492	100%	100%	100%	100%	100%	100%	100%
3	12	432,242	100%	100%	100%	100%	100%	100%	100%
4	14	351,755	100%	100%	100%	100%	100%	100%	100%
5	15	292,624	100%	100%	100%	100%	100%	100%	100%
6	27	223,552	100%	100%	100%	100%	100%	100%	100%

Wellcare									
Region	# of Counties	# of Members*	Hospitals	OB/GYN	Primary Care (Adult)	Primary Care (Child)	Pharmacy	Outpatient Behavioral Health (Adult)	Outpatient Behavioral Health (Child)
			% Members	% Members	% Members	% Members	% Members	% Members	% Members
1	19	146,103	100%	100%	100%	100%	100%	100%	100%
2	13	306,492	100%	100%	100%	100%	100%	100%	100%
3	12	432,242	100%	100%	100%	100%	100%	100%	100%
4	14	351,755	100%	100%	100%	100%	100%	100%	100%
5	15	292,624	100%	100%	100%	100%	100%	100%	100%
6	27	223,552	99%	100%	100%	100%	99%	100%	100%

Provider Enrollments by PHP

Provider enrollment by provider type is available by PHP. There are 25 provider type categories. Provider enrollment for two categories, ambulatory health care facilities and behavioral health/social service providers, is provided below for illustration. See Appendix B for the full list.

Provider Enrollment by PHP – Select Categories

Provider Type	AmeriHealth	Healthy Blue	CCH	United	WellCare
Ambulatory Health Care Facilities	974	1,219	941	860	833
Behavioral Health & Social Service Providers	8,090	9,207	6,597	3,961	5,466

Beneficiaries Per AMH Tier

The Department developed the AMH model as the primary vehicle for care management in Standard Plans. AMH Tier 3s are the Department's highest level of primary care, focused on care management and quality. The tables below show the count and proportion of beneficiaries in each AMH tier by PHP.

Member Count by PHP and AMH Tier

	AmeriHealth	CCH*	Healthy Blue	United	WellCare	Total
No PCP Tier	7,819	1,180	18,637	16,570	4,866	**49,072**
Tier 1	2,500	3,204	9,110	3,863	3,366	**22,043**
Tier 2	42,437	39,956	76,392	67,631	55,035	**281,451**
Tier 3	260,657	180,029	358,739	288,094	308,643	**1,396,162**

*CCH only operates in regions 3, 4 and 5.

Member Proportion by PHP and AMH Tier

	AmeriHealth	CCH	Healthy Blue	United	WellCare	Total
No PCP Tier	2.49%	0.53%	4.03%	4.41%	1.31%	**.03%**
Tier 1	0.80%	1.43%	1.97%	1.03%	0.91%	**.01%**
Tier 2	1354%	17.81%	16.50%	17.98%	14.80%	**16.09%**

Tier 3	83.17%	80.24%	77.50%	76.58%	82.99%	**79.84%**

AMH Provider Enrollment

Proportion of Providers Contracted by State-Designated AMH Tier by PHP*

	AmeriHealth	Healthy Blue	CCH**	United	WellCare
Tier 1	27.23%	56.03%	58.77%	47.86%	38.91%
Tier 2	45.80%	86.10%	79.69%	58.04%	53.85%
Tier 3	88.56%	84.53%	90.16%	79.83%	88.20%

*Providers that are not contracted at the State-designated AMH tier are not included in these counts.

**CCH is only required to contract with providers in regions 3, 4 and 5. CCH's denominator only includes AMHs located in these three regions.

Care Management Penetration Rate

These data represent members enrolled in Standard Plans receiving care management through a Standard Plan, AMH, Care Management for At-Risk Children (CMARC) program or Care Management for High-Risk Pregnancies (CMHRP) program since Standard Plan launch (July 2021). These data are provided with a one-month lag (e.g., DY4Q3 ends July 31; however, data are available only through June.)

CMHRP is the Department's primary vehicle to deliver care management to pregnant women who may be at risk for adverse birth outcomes. CMARC offers a set of care management services for at-risk children ages 0 to 5. Both services are performed by local health departments (LHDs) as delegates of the Standard Plans. Care management provided through a Standard Plan or AMH is reported by Standard Plans on the BCM051 operational report. Care management provided for CMARC/CMHRP by LHDs is reported by Community Care of North Carolina (CCNC), the Department vendor that oversees CMARC and CMHRP programs.

Care management rates were below the annual penetration target of 20% of members receiving care management by the end of Year 1 of NC Medicaid Managed Care.

Care Management Penetration Rate, July 2021 – June 2022

	PHP	AMH	CMARC	CMHRP	Overall
% of Total Members	3.9%	13.3%	1.5%	1.6%	**17.9%**
Care Management Distinct Member Count	72,437	246,110	28,377	30,553	**331,977**

Emergency Department Visits per 1,000 Members and Inpatient Admissions per 1,000 Members

Emergency department visits per 1,000 members and inpatient admissions per 1,000 members are measured for the adult NC Medicaid population (age 21 and older) and broken out by Standard Plan and NC Medicaid Direct. Claims denied because they were erroneously billed to NC Medicaid Direct instead of a Standard Plan were excluded from measurement calculations to avoid duplication. Medicaid beneficiaries not eligible for hospital coverage (e.g., family planning participants) were excluded from NC Medicaid Direct calculations

Due to the lag in claims and encounter reporting, the rates below are reported with a one-month lag. It should be noted that higher rates are expected for NC Medicaid Direct, as members with substantial behavioral health issues to be enrolled in Tailored Plans in December 2022 currently remain in NC Medicaid Direct.

Emergency Department Visits per 1,000 Members, April – June

AmeriHealth	CCH	Healthy Blue	Medicaid Direct	United	WellCare
61.7	62.6	58.8	77.0	63.2	59.0

Inpatient Admissions per 1,000 Members, April – June

AmeriHealth	CCH	Healthy Blue	Medicaid Direct	United	WellCare
13.0	13.8	13.9	22.4	13.5	15.4

Results of beneficiary satisfaction surveys

No results to report this quarter.

Budget Neutrality and Financial Reporting Requirements

The Department will provide CMS with updated budget neutrality information through July 31, 2022, in the next budget neutrality workbook submission.

Evaluation Activities and Interim Findings

The DY4Q3 reporting period activities have continued the evaluation work by the Sheps Center team. The evaluation uses a mixed-methods approach, combining analysis of administrative data with qualitative data to obtain detailed insights into the transformation that are not easily captured through claims and surveys; for example, how providers are preparing for the transformation and what can be done to improve their satisfaction with the Medicaid program.

Transition to Capitated Encounter Data from Standard Plans

Sheps Center data scientists and analysts have continued working with the encounter data which tracks utilization from Medicaid beneficiaries enrolled in Standard Plans. We have been providing feedback on the quality and completeness of this data to the State and our team has continued to revise code on metrics to include services, medications, and diagnoses received through either claims or encounter data.

Quantitative Update

The quantitative team received new data from the NC Division of Public Health, including birth and death certificate and immunization data, and began linking that data to NC Medicaid member information to generate new metrics that will be tracked during the evaluation period. In addition, the team continues to update many of the metrics from established custodians consistent with the NC Medicaid Quality Strategy, Adult and Child Core measures, and other metrics that will address the study hypotheses. Sheps has completed the evaluation of the use of Marketplace enrollees from a NC-based insurer as a potential comparison group for the difference-in-differences analysis through the comparison in trends in seven identified measures. These measures showed generally similar trends between Medicaid and Blue Cross and Blue Shield of North Carolina (BCBSNC) Marketplace plans in the pre-implementation period, although there were concerns about relatively small sample size for some of the metrics that look at specific subsamples (such as well-child visits for children and adolescents due to the relatively modest number of children in Marketplace plans). The evaluation will use BCBSNC data as a control group for a limited number of metrics, while simultaneously seeking other options for a comparison group, such as through other states' Medicaid data.

The evaluation team is working with the Department to refine and field a new dashboard to track other behavioral health metrics that are not included in the substance use disorder dashboard that the evaluation team currently updates monthly. This new behavioral health dashboard will increase the rapid monitoring of metrics that may have been influenced by Standard Plan implementation and other milestones. Other dashboards specific to Foster Care plan members, individuals with intellectual and developmental disabilities, and physical/overall health metrics are planned.

Qualitative Update

The qualitative team completed 40 interviews with 26 health systems and health care practices from March to July 2022. Of the 26 organizations, 10 were repeat participants from year 1 (demonstration year 3, Nov 2020 to Oct 2021). The sample included 3 health systems, 14 independent practices, 5 FQHCs, and 4 local health departments. Of the 14 independent practices, 5 were internal and/or family medicine, and 9 were pediatric practices. The qualitative team reached out to 18 independent obstetric practices identified from the year 1 provider file, survey respondents file, and NCDHHS website. They were either unavailable to participate or did not respond to the interview request. The team is continuing to recruit representatives from health systems.

At the request of CMS, the Department is providing preliminary evaluation findings in its monitoring reports. Preliminary findings from these interviews represent the first qualitative data on the provider experience gathered after the launch of NC Medicaid Managed Care. Interview topics included the

organization's experience with PHPs, AMH status, referrals, member attribution, and Tailored Plan implementation. Key findings included:

- Of the 26 participating health systems and practices, 14 had contracted with all five PHPs. Three had contracted with two or fewer PHPs.
- Participants reported mixed experiences in working with PHPs. Common factors that the participants considered were responsiveness, claim processing, reworking denials, and ease of using the website.
- An overwhelming majority of participants described initial challenges with auto-assignment to a primary care provider, which improved over time. The concerns included difficulty accessing member assignment lists, correcting member assignment, attribution of performance to primary care providers for wrongly assigned members, and loss of revenue.
- 18 of the participating independent practices and health systems had an AMH Tier 3 status, of which 11 contracted with a CIN and 5 had an in-house care management infrastructure.
- 12 of the participating practices and health systems were unsure about their participation in the Tailored Plans, and four had no intention to participate due to their experience of implementing Standard Plans. Six were either gathering information or had contracts underway.

The rapid analysis of the year 2 (DY4, Nov 2021 to Oct 22) health system and health care practices data is complete. The report has been drafted and shared with the advisory committee. It will be updated if new insights are gained from additional health system interviews. The qualitative team is preparing a manuscript on patient engagement using the data from year 1 interviews. An abstract is being prepared for submission to the publications committee.

Proposed Changes to Evaluation Design

The Sheps Center, in collaboration with NC Medicaid, has updated the evaluation design to address changes to the implementation environment such as the Covid-19 Public Health Emergency, implementation delays and adjustments to programs and policies. CMS requested that evaluation design changes be presented in quarterly monitoring reports.

Major updates to the Waiver Evaluation Design document include:

- Updates to the dates of major milestones, including Standard and Tailored Plan implementation dates and SUD waiver implementation dates in Table 1 and throughout the document
- The addition of a Tribal Option is now noted
- Update to the design because of the statewide rather than regional implementation of Standard Plans
- Two hypotheses were added on the impact of value-based payments on access, quality of care, and outcomes (Hypothesis 1.6) and on services and Medicaid expenditures (Hypothesis 2.5) after the release of detailed information on VBP expectations in Standard Plans in January 2020.
- Updates to some of the metrics tracked due to metric discontinuation by measure custodians, new measures in use, updates to the NC Medicaid Quality Strategy and low rates of reporting for certain measures (such as flu shots or depression screening) that make analysis impractical.
- Detailed sections about how the design changed due to the COVID-19 Public Health Emergency (e.g., changes to the qualitative design, changes to the estimation approach to acknowledge the

lower rates of use during the stay-at-home orders and subsequent changes in care) as well as the ability to track populations with COVID-19 diagnoses and receiving COVID-19 vaccines.

- Changes to the strategy for qualitative analysis due to the difficulty obtaining responses from providers during the pandemic and lack of information from many providers about changes to NC Medicaid (a full panel will no longer be used, with some providers interviewed annually but new providers interviewed each year)
- We have slightly shortened the baseline period which initially begin Jan. 1, 2014, to now begin on Oct. 1, 2015, because ICD-10 diagnostics were in effect on this date, affecting most of the algorithms used for measures. This still yields just over a three-year baseline period for the SUD metrics (October 2015 – December 2018) and over a five-year baseline period for the non-SUD components of the waiver (October 2015 – June 2021).
- We have added a section on local or contextual variables that will be added to multivariate analyses to better model heterogeneity in response to waiver components
- We have added a section summarizing each of the data sources included and how they are integral to the analysis
- We have removed the NC Hospital Discharge data as a source of information due to significant deficits in the data and its duplication with other sources such as claims and encounter data

Enhanced Case Management (ECM) and Other Services Pilot Program

Operational Updates

Introduction

The Department continued to hold regular implementation meetings with AMH Tier 3s and their CINs, PHPs, and Network Leads to review pilot design questions and to align on the scope and timing of the implementation activities. The Department completed implementation of a phased launch approach to the Healthy Opportunities Pilots, with services from all domains going live between March 15 and June 15, 2022. Services to address toxic stress and multiple non-medical needs launched on June 15 and include evidenced-based parenting classes, home visiting services, and medical respite. There is ongoing design and technical development in progress for the launch of a subset of sensitive services.

Key achievements and to what conditions and efforts successes can be attributed

The Department continued weekly individual and group engagement sessions with the Standard Plans and Network Leads to discuss the progress on implementation activities. This has allowed the Department to mediate key programmatic challenges. The Department also continued implementation efforts to launch Pilots services with the Tailored Plans in 2023. Ongoing implementation efforts are adapting lessons learned from Standard Plans to the Tailored Plan model.

The Department continued to engage with community stakeholders and Pilot entities to identify and address gaps in the program's equity strategy. Key findings from these sessions will be incorporated into a broader Healthy Opportunities Pilots health equity strategy.

Additionally, the Department continued to work with the technology vendor, Unite Us, to ensure that invoices that were converted into automated claims will be available to PHPs with minimal burden to Human Service Organization (HSO) providers. This was achieved after extensive engagement efforts to

identify a solution that ensured providers and PHPs experienced minimal disruption to their current workflows.

Key challenges, underlying causes of challenges, and how challenges are being addressed

Key challenges for the Healthy Opportunities Pilots program included troubleshooting challenges experienced by Pilot entities as the program launched a more complete set of services. The Department worked to mitigate implementation challenges in the housing domain, payment challenges with the provision of provider remittance advice, and the delayed launch of IPV-related sensitive services.
Both Network Leads and PHPs have worked to incorporate and improve upon new policies and processes as part of the implementation of the Pilots. A key process which both entities have continued to work to improve is ensuring that remittance advice is transmitted by the PHP to the corresponding HSO and contains all necessary information for the HSO to accurately account for service payment. The Department is working with both entities to ensure that there are both short-term solutions that address any historical gaps in data and long-term solutions which ensure that all necessary information is transmitted and received by the corresponding entity.

The Department worked with partner organizations to address challenges that arose for each service domain throughout the implementation process. Housing services have presented a particular challenge, due in part to the intricacy of the housing landscape which has seen further exacerbations of existing challenges due to the COVID-19 Pandemic. The State has continued to work with subject matter experts to identify long-term solutions that will allow for implementation with a priority on simplicity for providers.
Additionally, the Department continued to work toward identifying design and technical solutions to allow for the implementation of interpersonal violence-related sensitive services. Stakeholder engagement with subject matter experts provided a framework to allow for the future launch of sensitive services. The Department continues to balance federal regulations, industry best practices, and the priority of survivor safety.

Issues or complaints identified by beneficiaries

No issues or complaints identified by beneficiaries to report this quarter.

Lawsuits or legal actions

No lawsuits or legal actions to report this quarter.

Unusual or unanticipated trends

No unusual or unanticipated trends to report this quarter.

Legislative updates

Descriptions of post-award public for a

No post-award public for a to report this quarter.

Performance Metrics

Incentive Payments to PHPs, NLs, and Pilot providers

To ensure a successful Pilot launch, the Department determined milestones for each Network Lead and Standard Plan to reach during the Pilot Implementation Period (May 2021 through March 2022). These milestones are tied to meeting key Pilot implementation measures, including establishing an HSO network, providing training to HSOs and care management staff, establishing payment and reporting processes, and completion of readiness testing. The Department developed an incentive payment fund for both Network Leads and Standard Plans during the implementation year and weighted each milestone based on importance to Pilot launch to determine the milestone payment amounts.

As of this quarter, the Department will begin reporting Network Lead incentive payments by the payment date, when the funds are disbursed to Network Leads, instead of by the deadline for Network Leads to achieve the milestone. This change aligns the reporting of payments with how payment reports are processed internally by the Department.

For consistency, a revised table of DY4Q2 Network Lead VBP Payments that follows the new reporting structure is included, outlining actual payments disbursed for incentive-based payment milestones in DY4Q2. The following incentive-based payment milestones were achieved in DY4Q2, but payment was issued in DY4Q3: "Completion of Implementation Year training, technical assistance, and engagement as outlined in the Network Lead's Pilot Entity Engagement, Training, and Technical Assistance Plan" and "Completion of Department readiness evaluation, including that HSO network is prepared to deliver services." Previously, these milestones were reported in DY4Q2, but they are now reported in DY4Q3 as payment was disbursed this quarter.

All three Network Leads submitted these deliverables on time and received the corresponding incentive payment for reaching each milestone. The details of each incentive payment made are listed in the following table:

DY4Q3 Network Lead VBP Payments			
Entity	**Milestone(s) Achieved**	**Payment Date**	**Amount Paid**
Access East	5. Completion of Implementation Year training, technical assistance, and engagement as outlined in the Network Lead's Pilot Entity Engagement, Training, and Technical Assistance Plan.	6/22/2022	$17,857.00
Access East	6. Completion of Department readiness evaluation, including that HSO network is prepared to deliver services.	6/22/2022	$26,785.00
Impact Health	5. Completion of Implementation Year training, technical assistance, and engagement as outlined in the Network	6/22/2022	$17,857.00

	Lead's Pilot Entity Engagement, Training, and Technical Assistance Plan.		
Impact Health	6. Completion of Department readiness evaluation, including that HSO network is prepared to deliver services.	6/22/2022	$26,785.00
Community Care of the Lower Cape Fear	5. Completion of Implementation Year training, technical assistance, and engagement as outlined in the Network Lead's Pilot Entity Engagement, Training, and Technical Assistance Plan.	6/22/2022	$17,857.00
Community Care of the Lower Cape Fear	6. Completion of Department readiness evaluation, including that HSO network is prepared to deliver services.	6/22/2022	$26,785.00

REVISED DY4Q2 Network Lead VBP Payments			
Entity	**Milestone Achieved**	**Payment Date**	**Amount Paid**
Access East	3. Disbursement of first capacity building funds to HSOs.	3/29/2022	$17,857.00
Access East	4. Received Department approval of HSO Network Report.	3/29/2022	$26,785.00
Community Care of the Lower Cape Fear	3. Disbursement of first capacity building funds to HSOs.	3/29/2022	$17,857.00
Community Care of the Lower Cape Fear	4. Received Department approval of HSO Network Report.	3/29/2022	$26,785.00
Impact Health	3. Disbursement of first capacity building funds to HSOs.	3/29/2022	$17,857.00
Impact Health	4. Received Department approval of HSO Network Report.	3/29/2022	$26,785.00

This reporting period, the Department disbursed incentive payments to the Standard Plans for completing end-to-end testing and readiness activities associate with Pilot launch by the established deadlines. All five Standard Plans completed these milestones on time and received the corresponding incentive payments. The details of each incentive payment made are listed in the following table:

Prepaid Health Plan VBP Payments			
Entity	**Milestone Achieved**	**Payment Date**	**Amount Paid**
AmeriHealth Caritas of NC	Meet Department Pilot-related systems integration and end-to-end testing standards related to Pilot eligibility, service authorization, referral, invoice, and payment. Successful completion of DHB Readiness Review to implement Pilots.	6/14/22	$70,000.00
Blue Cross Blue Shield of NC	Meet Department Pilot-related systems integration and end-to-end testing standards related to Pilot eligibility, service authorization, referral, invoice, and payment. Successful completion of DHB Readiness Review to implement Pilots.	6/14/22	$70,000.00
Carolina Complete Health	Meet Department Pilot-related systems integration and end-to-end testing standards related to Pilot eligibility, service authorization, referral, invoice, and payment. Successful completion of DHB Readiness Review to implement Pilots.	6/14/22	$70,000.00
United Healthcare	Meet Department Pilot-related systems integration and end-to-end testing standards related to Pilot eligibility, service authorization, referral, invoice, and payment. Successful completion of DHB Readiness Review to implement Pilots.	6/14/22	$70,000.00
WellCare	Meet Department Pilot-related systems integration and end-to-end testing standards related to Pilot eligibility, service authorization, referral, invoice, and payment. Successful completion of DHB Readiness Review to implement Pilots.	6/14/22	$70,000.00

ECM Capacity Building

In this reporting period, $12,106,683.50 of capacity building funding was released to the Network Leads for Year 2 program activities. The Network Leads were able to invoice up to 50% of their total Year 2 capacity building budget. The amounts and breakdown of the second capacity building invoices are:

Access East: $2,133,350.00

Description of Expense	Category of NL Allowable Use	Category of HSO Allowable Use	Amount
NL Salary Dollars	Staff Time: Establishing the LPE	N/A	$538,407.00
Program and General Supplies	Administrative Overhead costs	N/A	$15,000.00
Minor Equipment: Computer Package	Purchases for Functional Systems	N/A	$800.00
Minor Equipment: Conference Room Communications	Administrative Overhead costs	N/A	$ -
Minor Equipment: Phone System	Purchases for Functional Systems	N/A	$ -
Staff Training & Education	Staff Time: Establishing the LPE	N/A	$2,000.00
Staff Training & Education	Staff Time: Establishing the LPE	N/A	$ -
Lease Payments	Administrative Overhead costs	N/A	$43,750.00
Furnishings: Offices	Administrative Overhead costs	N/A	$ -
Furnishings: Conference Room	Administrative Overhead costs	N/A	$ -
Cell Phones	Purchases for Functional Systems	N/A	$300.00
Cell Service (annual)	Purchases for Functional Systems	N/A	$4,050.00
Mobile Hotspots	Purchases for Functional Systems	N/A	$2,100.00
HSO Network Educational Events/Outreach Activities	Other Use Approved by the Department	N/A	$3,080.00
Stakeholder Engagement	Other Use Approved by the Department	N/A	$11,250.00
Marketing	Marketing and Outreach Material	N/A	$5,000.00
Travel: Network Development & Onsite Assessment	Administrative Overhead costs	N/A	$36,540.00
HSO - Assessments (subcontract)	Administrative Overhead costs	N/A	$ -
System Development, Implementation/Network Integration	Administrative Overhead costs	N/A	$ -

Description of Expense	Category of NL Allowable Use	Category of HSO Allowable Use	Amount
HSO Staff Training & Education	Administrative Overhead costs	N/A	$2,090.00
HSO Travel	Administrative Overhead costs	N/A	$13,920.00
HSO Capacity Building Funding Distribution	Other Use Approved by the Department	N/A	$1,342,365.00
Board Training	Administrative Overhead costs	N/A	$ -
Shared Services Legal, HR, Financial	Administrative Overhead costs	N/A	$39,123.00
NL Travel	Administrative Overhead costs	N/A	$19,575.00
Learning Community Meetings	Administrative Overhead costs	N/A	$54,000.00

Community Care of the Lower Cape Fear: $5,000,000.00

Description of Expense	Category of NL Allowable Use	Category of HSO Allowable Use	Amount
Executive Director	Staff Time: Establishing the LPE	N/A	$3,533.00
Program Director	Staff Time: Establishing the LPE	N/A	$7,814.00
Recruiting	Administrative Overhead costs	N/A	$ -
Office Space/Rent	Administrative Overhead costs	N/A	$29,250.00
Office Supplies	Administrative Overhead costs	N/A	$6,500.00
Travel	Administrative Overhead costs	N/A	$6,500.00
Training and Development	Administrative Overhead costs	N/A	$3,250.00
Payroll Services	Administrative Overhead costs	N/A	$3,250.00
Liability Insurance	Administrative Overhead costs	N/A	$11,000.00

Description of Expense	Category of NL Allowable Use	Category of HSO Allowable Use	Amount
Misc. ROUNDING	Administrative Overhead costs	N/A	$(528.00)
Executive Director	Staff Time: Developing a Network of HSOs	N/A	$3,533.00
Program Director	Staff Time: Developing a Network of HSOs	N/A	$19,533.00
Care Council Leads	Staff Time: Developing a Network of HSOs	N/A	$47,559.00
QI Coordinator	Staff Time: Developing a Network of HSOs	N/A	$10,871.00
Program Managers	Staff Time: Developing a Network of HSOs	N/A	$50,956.00
Marketing	Administrative Overhead costs	N/A	$2,500.00
Misc.	Administrative Overhead costs	N/A	$1,250.00
Executive Director	Staff Time: Developing Infrastructure/Systems	N/A	$3,533.00
QI Coordinator	Staff Time: Developing Infrastructure/Systems	N/A	$5,435.00
Compliance Manager	Staff Time: Developing Infrastructure/Systems	N/A	$23,780.00
Program Managers	Staff Time: Developing Infrastructure/Systems	N/A	$50,956.00
Data Analyst	Staff Time: Developing Infrastructure/Systems	N/A	$39,067.00
Office Management	Administrative Overhead costs	N/A	$8,125.00
HR Management	Administrative Overhead costs	N/A	$11,375.00
IT Management	Administrative Overhead costs	N/A	$8,125.00
CRM Licenses	Administrative Overhead costs	N/A	$6,500.00
Software Licenses	Administrative Overhead costs	N/A	$3,250.00
CRM/ Cultural Competency Training	Administrative Overhead costs	N/A	$11,375.00

Description of Expense	Category of NL Allowable Use	Category of HSO Allowable Use	Amount
Computer and Communication Equipment	Administrative Overhead costs	N/A	$ -
Executive Director	Staff Time: Providing TA/Training to HSOs	N/A	$3,533.00
Program Director	Staff Time: Providing TA/Training to HSOs	N/A	$3,907.00
Care Council Leads	Staff Time: Providing TA/Training to HSOs	N/A	$47,559.00
QI Coordinator	Staff Time: Providing TA/Training to HSOs	N/A	$10,871.00
Program Managers	Staff Time: Providing TA/Training to HSOs	N/A	$50,956.00
Executive Director	Staff Time: Distributing Capacity Building Funding to HSOs	N/A	$3,533.00
Program Director	Staff Time: Distributing Capacity Building Funding to HSOs	N/A	$19,533.00
Accountant/Claims	Staff Time: Distributing Capacity Building Funding to HSOs	N/A	$40,765.00
CFO Services (by CCLCF)	Administrative Overhead costs	N/A	$20,000.00
Executive Director	Staff Time: Facilitating Collaboration and Governance	N/A	$3,533.00
Program Director	Staff Time: Facilitating Collaboration and Governance	N/A	$3,907.00
QI Coordinator	Staff Time: Facilitating Collaboration and Governance	N/A	$5,435.00
Team Consultant	Staff Time: Facilitating Collaboration and Governance	N/A	$10,191.00
Legal Services	Administrative Overhead costs	N/A	$5,000.00

Description of Expense	Category of NL Allowable Use	Category of HSO Allowable Use	Amount
Meetings, Facilitation and Travel	Administrative Overhead costs	N/A	$2,750.00
Cultural Competency Training (UNC-W)	Administrative Overhead costs	N/A	$26,225.00
Teambuilding, Coaching and Facilitation	Administrative Overhead costs	N/A	$ -
Collaboration and Teambuilding	Administrative Overhead costs	N/A	$ -
Communication	Administrative Overhead costs	N/A	$9,750.00
BOD Expenses	Administrative Overhead costs	N/A	$2,000.00
Executive Director	Staff Time: Reporting	N/A	$3,533.00
Program Director	Staff Time: Reporting	N/A	$11,720.00
Care Council Leads	Staff Time: Reporting	N/A	$47,559.00
QI Coordinator	Staff Time: Reporting	N/A	$21,741.00
Reporting (Audit & Tax Prep Fees)	Administrative Overhead costs	N/A	$6,250.00
Executive Director	Staff Time: Participating in Community Engagement	N/A	$3,533.00
Program Director	Staff Time: Participating in Community Engagement	N/A	$11,720.00
Care Council Leads	Staff Time: Participating in Community Engagement	N/A	$47,559.00
Team Consultant	Staff Time: Participating in Community Engagement	N/A	$10,191.00
Program Managers	Staff Time: Participating in Community Engagement	N/A	$50,956.00
HSO Funding	N/A	N/A	$4,137,500.00

Impact Health: $4,973,333.50

Description of Expense	Category of NL Allowable Use	Category of HSO Allowable Use	Amount
Network Lead Establishment	Staff Time	Establishing the LPE	$819,475.00
Network Lead Establishment	Administrative Overhead costs	Overhead	$409,114.00
Network Lead Establishment	Staff Time	Developing a Network of HSOs	$43,260.00
HSO Network Development	Other Use Approved by the Department	Convenings	$2,537.00
HSO technical assistance and training	Staff Time	HSO technical assistance and training	$115,875.00
HSO technical assistance and training	Other Uses Approved by the Department	HSO technical assistance and training	$163,148.00
Governance and Cross-Entity Collaboration	Staff Time	Governance and Cross-Entity Collaboration	$69,525.00
Governance and Cross-Entity Collaboration	Other uses approved by the department	Governance and Cross-Entity Collaboration	$62,500.00
Program administration, evaluation and oversight	Staff Time	Program administration, evaluation and oversight	$46,350.00
Program administration, evaluation and oversight	Staff Time	Program administration, evaluation and oversight	$7,725.00
HSO Capacity Building Fund Distribution	Other Use Approved by the Department	Modifications to Existing Physical Infrastructure	$590,000.00
HSO Capacity Building Fund Distribution	Administrative Overhead costs	Office Furnishings, Supplies, and Equipment	$590,000.00
HSO Capacity Building Fund Distribution	Staff Time: Developing Infrastructure/Systems	Staff Time: Developing Infrastructure/Systems	$375,000.00
HSO Capacity Building Fund Distribution	Staff Time: Developing Infrastructure/Systems	Staff Time: Developing Infrastructure/Systems	$600,000.00
HSO Capacity Building Fund Distribution	Staff Time: Developing Infrastructure/Systems	Staff Time: Developing Infrastructure/Systems	$400,000.00
HSO Capacity Building Fund Distribution	Staff Time: Developing Infrastructure/Systems	Staff Time: Developing Infrastructure/Systems	$375,000.00
HSO Capacity Building Fund Distribution	Staff Time: Developing Infrastructure/Systems	Staff Time: Developing Infrastructure/Systems	$300,000.00

Healthy Opportunities Pilots Evaluation Activities and Interim Findings

During this period, evaluation consisted of three main activities. The first was providing ongoing technical assistance and engagement with NC Medicaid staff to facilitate the Pilots evaluation. Activities included participating in weekly and monthly standing meetings, documenting emerging implementation themes to inform ongoing data collection and analysis planning, and communicating about operational questions as needed.

The second activity involved working with the data team at the Sheps Center to prepare the necessary information technology infrastructure to receive and analyze descriptive and quantitative data regarding Pilot activities, expected in September 2022. Activities included identification of necessary data elements, planning to receive data when available, and creating staffing assignments to support analysis workflows across analysts and other research team members.

The third focus of this quarter was primary data collection for evaluation question 1. Team members completed quantitative and qualitative data collection with Network Leads and HSOs regarding their experiences preparing for and delivering early phase pilot services. Analyses for these data are expected to be completed by next quarter.

Evaluation Design Changes

In response to a CMS request to include additional stratifications in the evaluation report, we will report stratified data to examine differences in health across populations defined by categories of race and ethnicity, gender, primary language, and rurality. A new equity analysis section has been proposed for Hypotheses 4, 5, and 6. These changes are outlined in detail in Appendix C.

Residential and Inpatient Treatment for Individuals with a Substance Use Disorder

The Department will provide detailed information in the Substance Use Disorder quarterly monitoring report due to CMS Oct. 28, 2022.

Medicaid Section 1115 Monitoring Report

North Carolina - North Carolina Medicaid Reform Demonstration

Demonstration Year 4 – November 1, 2021 through October 31, 2022

Submitted on Feb. 1, 2023

State	*North Carolina*
Demonstration Name	*North Carolina Medicaid Reform Demonstration*
Approval Date	*October 24, 2018*
Approval Period	*November 1, 2019 through October 31, 2024*
Demonstration Goals and Objectives	*North Carolina seeks to transform its Medicaid delivery system by meeting the following goals:* • *Measurably improve health outcomes via a new delivery system;* • *Maximize high-value care to ensure sustainability of the Medicaid program; and* • *Reduce Substance Use Disorder (SUD).*

Contents

ANNUAL REPORT - DEMONSTRATION YEAR 4

Executive Summary

This annual report covers Demonstration Year 4 (DY4) of the North Carolina Medicaid Reform Demonstration, Nov. 1, 2021, through Oct. 31, 2022.

Standard Plans

On July 1, 2021, North Carolina transferred most Medicaid beneficiaries from NC Medicaid Direct (fee-for-service Medicaid) to five Prepaid Health Plans (PHPs): AmeriHealth Caritas, Healthy Blue of North Carolina, UnitedHealthcare of North Carolina, WellCare of North Carolina and Carolina Complete Health. Referred to as Standard Plans, the transition to these PHPs marked the launch of NC Medicaid Managed Care. Following Standard Plan launch, the Department has focused on addressing post-implementation concerns and supporting providers and members in the transition to managed care. The Department extended or made permanent numerous COVID-19 policy flexibilities in areas such as telehealth and prior authorizations and extended some temporary provider rate increases. The Department continues to monitor Standard Plan performance closely and address issues through formal notification, corrective action plans, and the assessment of liquidated damages, when applicable.

The Department has partnered with Standard Plans to drive clinical improvements in areas with existing health inequities. In DY4, workgroups were created to address integrated care, sickle cell disease and gender affirming care.

Tailored Plans

The Department has moved the launch of the Behavioral Health and Intellectual/Developmental Disability (I/DD) Tailored Plans (Tailored Plans) from the original date of July 1, 2022, to April 1, 2023. In November 2021, the launch was delayed until Dec. 1, 2022. Several factors contributed to the date change, including that Tailored Plan contracts were awarded later than originally planned and numerous counties chose to disengage from Cardinal Innovations Healthcare and partner with new Local Management Entities-Managed Care Organizations (LME-MCOs). At the end of September 2022, the Department further delayed launch until April 1, 2023. The delay will allow Tailored Plans more time to contract with additional providers and to validate that data systems needed for launch are working. The Department's goal continues to be to ensure a seamless and successful experience for LME-MCO beneficiaries, their families and advocates, providers, and other stakeholders committed to improving the health of North Carolinians.

While the launch of Tailored Plans was delayed to April 1, 2023, the Department and LME-MCOs supported providers of Tailored Care Management to launch their services on Dec. 1, 2022. Through the innovative Tailored Care Management program, eligible beneficiaries have a single designated care manager supported by a multidisciplinary team to provide integrated care management that addresses whole-person health needs. To account for the increased burden this coordination will potentially place on medical homes, the Department increased the per member per month payment during this period of transition. Please see Appendix A for the NC Medicaid bulletin on this change.

Healthy Opportunities Pilots

Healthy Opportunities Pilot (HOP) service delivery began on March 15, 2022. HOP launched in three regions that collectively cover 33 counties in North Carolina. To ensure system and partner readiness and a successful launch for members, the Department adopted a phased launch approach in which service domains launched over a period of several months. Services launched on the following schedule:

- March 15, 2022: Food services
- May 1, 2022: Housing and transportation services
- June 15, 2022: Toxic stress and cross-domain services

Over 24,000 services addressing unmet social needs have been delivered to eligible Standard Plan members to date. Due to legal and technical challenges, interpersonal violence (IPV) services are not yet available. The Department is working on design and technical modifications for these sensitive services that will safeguard HOP enrollee safety and data. Additionally, the Department is preparing to launch HOP services with the Tailored Plans in the second quarter of 2023.

Medicaid Managed Care

Operational Updates

Standard Plans

Following the launch of Standard Plans on July 1, 2021, the Department has focused on addressing post-implementation concerns and supporting providers and members in the transition to managed care. Following launch, the Department extended or made permanent numerous COVID-19 policy flexibilities regarding telehealth, prior authorizations and the extension of some temporary provider rate increases. The Department has closely monitored Standard Plans' compliance with network adequacy standards. In February 2022, the Department issued the results of its review of Standard Plans networks. All five PHPs had gaps in compliance, which resulted in the issuance of corrective action plans (CAPs) that are being monitored by the Department.

In January 2022, the Department extended the timeline for required Standard Plan National Committee for Quality Assurance (NCQA) accreditation by one year, from June 2024 to June 2025. The change addresses concerns that there was not enough time between the launch of the NC Medicaid state credentialing program, which is scheduled to be operational in 2023, and the start of the look-back period for the NCQA Health Plan Accreditation Full Survey. The extension does not affect NCQA Accreditation requirements for Tailored Plans.

The Department holds a monthly public meeting for providers that brings together Standard Plan and Tailored Plan leadership and addresses topics related to NC Medicaid Managed Care. In addition to providing timely updates, these sessions usually result in over 100 provider questions being answered in real time and approximately 500 people attend per month on average.

Tailored Plans

The Department has moved the launch of Tailored Plans from the original date of July 1, 2022, to April 1, 2023. On November 15, 2021, the Department initially delayed the launch to Dec. 1, 2022. Several factors contributed to this announcement, including:

- Tailored Plan contracts were awarded later than originally planned.
- The need to respond to the COVID-19 pandemic by providers, LME-MCOs and the Department required a reallocation of priorities and human and financial resources.
- Numerous counties chose to disengage from Cardinal Innovations Healthcare and to partner with new LME-MCOs.

On Sep. 30, 2022, the Department announced that Tailored Plan launch would be further delayed until April 1, 2023. The delay will allow Tailored Plans more time to contract with additional providers to support member choice and to validate that data systems needed for launch are working. While the launch of Tailored Plans will be delayed, the Department and LME-MCOs will support providers of Tailored Care Management to launch their services on Dec. 1, 2022. Through Tailored Care Management, eligible beneficiaries will have a single designated care manager supported by a multidisciplinary team to provide integrated care management that addresses the beneficiary's whole-person health needs.

Tailored Plan operational readiness reviews officially kicked off March 17, 2022. The Department began the onsite portion of the readiness review process with Tailored Plans in July 2022. Representatives from each business and technology area across the Department were hosted by Tailored Plans at their home office locations to provide an overview of their implementation progress, participate in interviews with Department representatives and provide live system demonstrations.

In August 2022, the Department began the enrollment process for beneficiaries who will be eligible for Tailored Plans at launch, known as Tailored Plan Criteria Review. The Department confirmed approximately 150,000 members to be eligible at launch. An initial group of individuals received notices regarding their eligibility in August, while others will enroll throughout the year. The Department expects enrollment to continue to grow up to launch and through the year following launch until the end of the federal public health emergency unwinding. Following the eligibility criteria review, beneficiaries will be mailed a notice informing them of their health care choices and how to change their health care option. The Tailored Plan choice period will begin on Jan. 15, 2023.

Key achievements and to what conditions and efforts successes can be attributed

Standard Plan Achievements

1. In collaboration with the Standard Plans and in alignment with the Department's values of proactive communication and transparency, in DY4Q1 the Department began publishing the following reports and dashboards that provide insight into Standard Plan performance:

    - Network Adequacy Report: A summary report of network adequacy results for Standard Plans based on network data submitted by the Department in July and September 2021.
    - NC Medicaid Managed Care Claim Denials Dashboard: Highlights top reasons for claims denials for each Standard Plan, is updated monthly, and includes notes to provide context.
    - NC Medicaid Enrollment Dashboard: Provides an overview which allows users to view enrollment by PHP, region, and county, along with NC Medicaid Managed Care status and program aid category.

2. In December 2021, the Department published Standard Plan network adequacy results based upon network data submitted by PHPs on July 12, 2021, and Sep. 20, 2021. This was the first release of network adequacy results following the Standard Plan launch. The Department reports on compliance with network time/distance standards in the Performance Metrics section of this report.
3. As part of their Quality Assessment and Performance Improvement Plan (QAPI), Standard Plans are required to submit at least three Performance Improvement Projects (PIPs), including one non-clinical PIP, annually. The Department approved the following clinical PIPs for Standard Plan Contract Year 2:
    - Timeliness of Prenatal Care: Prenatal and Postpartum
    - Childhood Immunization Status (Combo 10)
    - Comprehensive Diabetes Care: HbA1c Poor Control (>9.0%)
4. In January 2022, the Department released the Quality Measurement Technical Specifications Manual for Standard Plans and Tailored Plans. The manual provides an overview of the Department's plans for promoting high-quality care through NC Medicaid Managed Care and provides technical details related to the measurement of the goals and objectives of the Department's Quality Strategy.
5. Health Services Advisory Group (HSAG), the Department's External Quality Review Organization, completed the validation of performance measures for Year 1.
6. The North Carolina Integrated Care for Kids (InCK) program launched in Standard Plans on Jan. 3, 2022, in five counties. The NC InCK model aims to improve quality of care and reduce expenditures for children under 21 years of age covered by NC Medicaid through prevention, early identification, and treatment of behavioral and physical health needs. While the program is distinct from the 1115 waiver, beneficiaries in InCK are included in the transition to NC Medicaid Managed Care. Currently, the approximately 95,000 NC InCK beneficiaries receive integrated care management through Standard Plans and Medicaid Direct.

    InCK beneficiaries in need of greater supports are identified through service integration level (SIL) assignments based on a child and family's health, healthcare utilization, socioeconomic factors, and the risk of being placed out-of-home. Higher risk beneficiaries are assigned a Family Navigator, a care management role unique to the InCK program. The Department released the InCK Performance Measure Technical Specifications Manual outlining the 10 performance measures to be included in the InCK alternative payment model (APM).
7. The Department hosted the PHP Health Equity Quarterly Workgroup Kickoff meeting on Oct. 12, 2022, with Standard Plans and Tailored Plans. This was the first of planned quarterly PHP Health Equity workgroup sessions. At the kickoff, the Department provided an introduction on the purpose and objectives of the workgroup as well as an update to PHP Health Equity Leads on the Department's work on health equity.

8. The Department partnered with PHPs to drive clinical improvements in several areas of existing health inequity.
    - In January 2022 the Department partnered with PHPs to launch a Collaborative Care Consortium, a multipayer, multistakeholder initiative to drive integrated care for persons with mild to moderate behavioral health needs in the medical home.
    - In August 2022 the Department partnered with PHPs to launch a Sickle Cell Disease (SCD) Workgroup to better understand barriers to meeting care goals for members with SCD.
    - In January 2022 the Department partnered with PHPs to launch a Gender Affirming Services Workgroup to understand the unmet needs of beneficiaries living with gender dysphoria.

Tailored Plan Achievements

1. Tailored Plan operational readiness reviews officially kicked off March 17, 2022. The Department provided an overview of federal readiness requirements, presented the approach for Tailored Plan readiness reviews and reviewed the timeline of upcoming readiness activities.
2. The Department developed a weekly scorecard tracking Tailored Plan progress and began issuing it to Tailored Plans in April 2022. The scorecards present a summary progress report on areas identified as critical to Tailored Plan launch and post-launch success. Plans are given scores for each area, which are used to calculate an overall score. The critical areas measured include inbound deliverables, readiness review, provider network coverage, end to end and system integration testing, and technology operations/Help Center.
3. Certified Care Management Agencies (CMAs) and Advanced Medical Home + (AMH+) providers from rounds one and two of the certification process completed their readiness reviews and started providing Tailored Care Management on Dec. 1, 2022. Tailored Care Management is the vehicle through which Tailored Plan members receive comprehensive care management support. All Tailored Plan members will be offered choice of a Tailored Care Management entity, and members will be assigned to an entity if one is not selected. Under Tailored Care Management, members have a single care manager who will be equipped to manage all their needs, spanning physical health, behavioral health, I/DD, traumatic brain injury (TBI), pharmacy, long-term services and supports (LTSS) and unmet health-related resource needs.
4. In August 2022, the Department used the Tailored Plan Criteria Review to determine that approximately 150,000 beneficiaries will be eligible for Tailored Plans at launch.
5. The Department approved Contract Year 1 clinical PIPs for Tailored Plans, including:
    - Comprehensive Diabetes Care: HbA1c Poor Control (>9.0%)
    - Follow-up After Hospitalization for Mental Illness: 7 and 30-day
    - One clinical PIP related to diversion, in-reach and/or transition for populations in or at risk of entering institutional settings

6. In response to the delay of Tailored Plan launch, the Department completed re-alignment activities, including updating the timeline for implementation milestones, determining required contract changes, re-evaluating the proposed non-critical items flexibilities from Tailored Plans, and publishing a quick reference guide on delay impacts based on Tailored Plan questions. In November 2022, the proposed re-baselining changes will be submitted to Department executive leadership for approval.

Key challenges, underlying causes of challenges, and how challenges are being addressed

Standard Plan Challenges

1. Throughout DY4, the Enrollment Broker has experienced call center staffing shortages and high attrition rates that reflect broader trends in the call center industry. While this largely impacted Standard Plans in the beginning of the year, there is also concern that there may not be enough agents to meet demand during the Tailored Plan choice period. To mitigate the issue, the Enrollment Broker is increasing hiring class sizes and holding weekly meetings with the Department until the issue is resolved. The Enrollment Broker began training 35 new agents on Oct. 31, 2022.
2. The Department addressed an issue where some nursing facilities were not accepting Standard Plan members upon hospital discharge due to delays in the long-term care financial eligibility determination process. After reviewing information provided by PHPs and consulting with representatives from the NC Healthcare Association and NC Health Care Facilities Association, the Department took the following actions:
    - Published a memo to Standard Plan CEOs on nursing facility payment that encourages PHPs to use existing flexibilities – such as rates, delivery models, and interim payments (or hardship advancements) to facilitate timely care. NC Medicaid strongly encourages PHPs to support providers with interim payments/hardship advances when there are delays in paying nursing facilities due to the long-term care financial eligibility determination process.
    - Created a new standardized form for PHPs and nursing facilities to communicate with local Departments of Social Services (DSS), streamlining processes for nursing facility admissions and the determination of long-term care financial eligibility.
    - Created stakeholder-specific fact sheets for counties, health plans, and providers (including hospitals and nursing facilities). The fact sheets outline the information flow, timelines and requirements for the long-term care financial eligibility determination process.
    - Are pursuing payment modifications to align with Medicare to create an incentive for SNFs to accept Medicaid members.
3. Corrective Action Plans (CAPs) were created for four Standard Plans in Spring 2022 to address errors on the PHP Network Files (PNFs), which required the plans to submit monthly self-audits to report on their errors and progress. Although one of the four plans is now in compliance, the

other three CAPs must be extended and will now include a liquidated damage (LD) for failure to remove providers not active in NC Medicaid from their PNFs.

4. Two of the five Standard Plans did not meet the preferred drug list (PDL) compliance benchmark of 95% during all four quarters of State Fiscal Year 2022. The Department issued Notice of Deficiency memos on October 31, 2022, requesting liquidated damages for both plans. Additionally, one Standard Plan did not meet the compliance benchmark in the first quarter of SFY22. This plan was given a Notice of Deficiency, but liquidated damages were not assessed. Q1 was the first quarter of Standard Plan implementation.
5. In response to provider concerns about on-going member assignment and panel management issues for AMHs, the Department is working with Standard Plans to analyze errors and create easier pathways for providers to reach Standard Plans and resolve panel issues:
    - Standard Plans have identified one lead contact for each plan, and the Department distributed this information to providers.
    - Standard Plans are working to ensure their member and provider call lines are equipped to respond to calls related to AMH assignment.
    - Providers can also discuss panel limits with Standard Plans so they understand their panel limits with the plan based on initial contracting and can update limits as needed.
6. In response to concerns raised by the North Carolina Hospital Association (NCHA) regarding how Standard Plans approve and pay for newborn care, the Department convened a workgroup with NCHA and PHPs to align on a standardized approach to healthy normal newborns including:
    - Allowing providers one year to adjust to new newborn notification requirements by requiring plans to pay for medically necessary newborn claims through Year 1 of Managed Care.
    - Aligned on newborn event statuses and their triggers, which would result in notification to plans to promote care management support.
    - Aligned on a threshold for post-payment reviews for newborn claims for assurance purposes.
7. Providers have expressed concern that some Standard Plan members in need of intensive substance use disorder recovery services can't obtain these services while in a Standard Plan. These members will be eligible for Tailored Plans at launch, which cover these services. The Department convened a workgroup with the Standard Plans and LME-MCOs to avoid adverse outcomes for members in Standard Plans. Solutions from that work group included:
    - Allowing Standard Plans to submit In Lieu of Service (ILOS) requests as a bridge for members until they are moved to Tailored Plans
    - Prioritizing legislative change to allow Standard Plans to cover these services in some instances to enable timely service provision before moving to a Tailored Plan

Tailored Plan Challenges

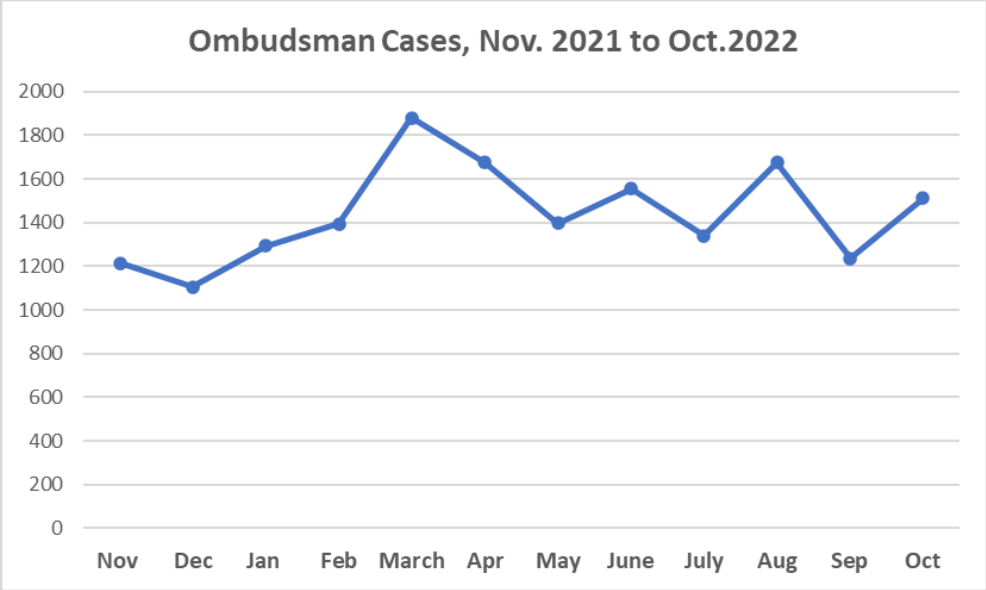
1. Adequate provider network coverage continues to be a risk across all Tailored Plans due to lower than expected provider contracting. Since the Tailored Plans started submitting provider contracting reports in early May, the results have not met network adequacy standards across the various provider categories. This could result in a lack of providers for primary care provider (PCP) auto-assignment beginning in February. The Department has worked to mitigate this risk through the following activities:
    - Close tracking of provider contracting data in the Weekly Tailored Plan Scorecards
    - Monitoring monthly AMH/PCP contracting submissions and other specialties from the monthly network submission
    - Monitoring bi-weekly contracting data submitted in response to a Notice of Concern issued to the plans
    - One-on-one calls with the Tailored Plans to get more frequent updates on contracting progress and challenges
    - Working through the Provider Engagement and Communications team to clarify the process to contract with Tailored Plans and the changes coming with Tailored Plan launch
2. End-to-end testing continued trending behind schedule for both the PCP Auto-Enrollment and plan launch milestones. The End-to-End team is meeting weekly with the Tailored Plans and escalating plan-specific delays and challenges through bi-weekly calls with the Tailored Plans' executive leadership teams. The main drivers of the delay have been:
    - Incorrect provider data setup by the Tailored Plans
    - Incorrect claim submissions
    - Enrollment Broker open defects on ongoing notices
    - Medicaid PIHP end-to-end testing overlapping with the Tailored Plan end-to-end testing schedule has added complexity and risk to the current end-to-end schedule.
3. Providers in the Tailored Care Management certification process have been slow to complete more advanced levels of the certification. A low number of certified Tailored Care Management providers could create less capacity in provider-based care management than the current target. The Department continues to provide coaching support to potential Tailored Care Management providers and has also published a second roll-out timeline of Feb. 1, 2023, to launch the service if providers are not ready for a Dec. 1, 2022 launch. Members can still receive Tailored Care Management from their Tailored Plan, so all members will have a source of Tailored Care Management at launch.
4. Tailored Plans are developing new claims processing engines to handle physical and behavioral health claims, as Tailored Plans, functioning as LME-MCOs, previously only handled behavioral health claims. The Department established a Tailored Plan claims processing mitigation strategy to prepare Tailored Plans for launch, including comparative claims testing entry criteria, comparative claims testing, provider claims testing entry criteria, provider claims testing, copay

exemption documentation initiative, weekly calls with Tailored Plans for claims special topics and a covered code initiative**.**

5. Some Tailored Plans demonstrated higher than expected turnover in key leadership positions over the past year, including difficulty hiring and retaining Chief Medical Officers (CMOs) and Deputy CMOs.

Issues or complaints identified by beneficiaries

The Department receives beneficiary complaints primarily from the Office of Administration and the NC Medicaid Member Ombudsman. The NC Medicaid Ombudsman is an independent organization that provides education, guidance and referrals to NC Medicaid beneficiaries. Not all Ombudsman calls should be interpreted as complaints, as many involve educating beneficiaries or connecting them to the entity that can provide the service they need. In DY4, the Ombudsman handled 17,280 total cases. Of these, 6,979 cases involved members seeking information and 10,301 involved issue resolution. The Office of Administration largely handles cases referred from state legislative offices. The Office handled 70 complaints in DY4.



Office of Administration Member/Constituent Concerns, DY4

Issue Category	Issue Count
Beneficiary/Member Eligibility	16
Clinical Policy - Medical Health	9
Dental	1
Durable Medical Equipment (DME) and Prosthetics Orthotics & Supplies	2
Electronic Visit Verification	3
Finance/PHP Claims Issues	17
Long-Term Services & Supports	1
Non-Emergency Medical Transportation (NEMT)	7
Outpatient Specialized Therapies (Prior Approvals) Leadership Escalation	3
Plan Administration	1
Program Integrity	1
Provider Operations	14
TOTAL	**70**

Unusual or unanticipated trends

1. In late November 2021, Envolve RX, the pharmacy benefit manager (PBM) vendor for three of the Tailored Plans - Eastpointe, Trillium Health Resources and Vaya Health - indicated that the company would be exiting the PBM market nationally in April 2022. Consequently, these three Tailored Plans underwent a re-procurement process to identify and contract with new PBMs. This process took longer than anticipated, and the Department was notified of the selection of the last outstanding PBM on April 4, 2022. There was concern that this would negatively impact the end-to-end testing timeline and Tailored Plan launch. To mitigate this risk, the Department decided that Pharmacy Point of Sale (POS) claims for Tailored Plan members would be temporarily managed by NCTracks from Dec. 1, 2022 through March 31, 2023. This will no longer be necessary due to the delay of Tailored Plan implementation, and Tailored Plans will manage pharmacy claims at launch.
2. In early December 2021, OneCall, the NEMT vendor for Eastpointe and Vaya Health indicated that it will be exiting the national marketplace. As a result, Eastpointe and Vaya Health had to identify and contract with a new vendor, and subsequently assess any potential impact to the development timeline.

3. The Department received a concerned citizens letter from three advocacy groups (Charlotte Center for Legal Advocacy, National Health Law Program and Disability Rights NC) on behalf of their constituents. The letter outlined concerns regarding the physical health benefit for Tailored Plans and the potential impact on member provider choice. Department leadership met with the groups and discussed their concerns. The Department continues to monitor contracting across Tailored Plans for both physical and behavioral health providers and to analyze how contracting progress will impact provider choice and access for members. The Department issued a notice of concern to all Tailored Plans around network adequacy and provider contracting in August 2022 to allow for more frequent reporting on Plans' progress. One of the contracting targets set by the notice of concern specifically addresses limiting member disruption and maximizing the number of members who retain their historical PCP at Tailored Plan launch.

Lawsuits or legal actions

All Standard Plan protests/cases were dismissed in favor of the State. For the Healthy Opportunities Pilots, the complaint filed with the Office of Administrative Hearings by Duke was dismissed in March 2022. As such, there are no pending legal actions.

Legislative updates

S.L. 2021-180, enacted on Nov. 18, 2021, makes base budget appropriations for the 2021-2023 biennium and enacts new programmatic, administrative and operational requirements for NC Medicaid. The following sections pertain directly to managed care implementation:

- § 9D.14 authorizes parents of children in foster care to retain Medicaid eligibility so long as the parent is making reasonable efforts to comply with a court-ordered reunification plan.
- §9D.15 increases wages for direct care workers employed at intermediate care facilities for individuals with intellectual disabilities and requires an increase in the capitation amount.
- §9D.15A and B increases direct care wages for providing home and community-based services as well as private duty nursing.
- § 9D.17 authorizes LME-MCOs to select any nationally recognized accreditation organization that the Department approves for purposes of operating a Tailored Plan during the initial contract.
- § 9D.19A requires PHPs to reimburse the prescription ingredient cost and dispensing fee at 100% of the fee-for-service rate from November 18, 2021, to June 30, 2023.
- § 9D.22 requires LME-MCOs to pay for behavioral health services while discharge from emergency department is pending starting July 1, 2022.

Additional sections listed below have an indirect impact on managed care implementation:

- § 9D.10 increases copayment for many Medicaid services to $4.00.
- § 9D.13 extends full array of Medicaid services to pregnant women twelve months post-partum.
- § 9D.19 authorizes reimbursement to podiatrists who prescribe orthotic devices, prosthetic devices and other durable medical equipment.

S.L. 2022-46, enacted July 7, 2022, makes various changes and clarification to insurance laws:

- § 5 requires a PHP's solvency plans to allow continuation of health care services until the PHP's contract is terminated, and enrollees are transitioned to another PHP in the event of insolvency.

S.L. 2022-74, enacted July 11, 2022, adjusts base budget appropriations for the 2021-2023 biennium and enacts new programmatic, administrative and operational requirements for NC Medicaid:

- § 9D.4 authorizes NCDHHS to seek authority to extend Medicaid coverage of health care services that qualify for 100% FMAP when provided by an Indian Health Service provider or Eastern Band of Cherokee Indian facility to individuals with no other form of health coverage.
- § 9D.7 requires implementation of Tailored Plans by Dec. 1, 2022, and the initial contract to end on Dec. 1, 2026. It requires that Tailored Plans receive the equivalent extension of the contract that a PHP offering Standard Plan services may receive.
- § 9D.8 clarifies that the PHPs must reimburse ingredient costs and dispensing fees at 100% of the State Plan rate for pharmacy reimbursements. Establishes NADAC as primary method to calculate retail pharmacy reimbursement for non 340B drugs. This provision is in effect retroactively to Nov. 11, 2021, and expires June 30, 2026.
- § 9D.9 allows the agency until Dec. 31, 2022, to develop a new service and reimbursement rate to have LME/MCOs pay for emergency department bed holds.
- § 9D.13 (a) authorizes payment in fee-for-service for point-of-sale prescription drugs for Medicaid beneficiaries enrolled in a Tailored Plan for up to six months after launch. Requires Tailored Plans to cover prescription drugs submitted as medical outpatient professional claims through the Physician Administered Drug Program; (b) waives statutory solvency requirements for LME/MCOs with a Tailored Plan contract until Dec. 31, 2023, and replaces them with contractual solvency and capital reserve requirements; (c) requires LME/MCOs to include essential providers with respect to behavioral health, IDD, and TBI services in their closed network; (d) until Dec. 1, 2023, requires dissolution of an LME/MCO whose Tailored Plan contract is terminated and requires DHHS to submit a report on actions to be taken upon termination of any contract and LME/MCO holds.
- § 9G.6 grants primary care case management entities access to client-specific immunization information in the NC Immunization Registry.

Descriptions of post-award public fora

On Dec. 10, 2021, the Department held a post-award public forum during North Carolina's quarterly Medical Care Advisory Committee (MCAC) meeting. The Department presented on progress in the implementation of the 1115 waiver as of the time of the presentation and provided an overview of upcoming work and the timeline for implementation of future key aspects of the waiver. The Department detailed areas that were brought to the attention of the state by providers and beneficiaries and provided details on how the state has addressed changes as part of the 1115 waiver amendment.

Comments and questions were received on the following topics:

- Comment expressing concern that creating an assessment on hospitals to fund the extension of post-partum services for Medicaid beneficiaries will create an undue burden for hospitals

- Comment in support of enacting Medicaid expansion in North Carolina to receive the enhanced Federal Medical Assistance Percentage (FMAP), in hopes of alleviating budgetary concerns and health care staffing issues.
- Question regarding NC Medicaid benefits for parents of children who enter foster care.
- Question on how the Department plans to manage the volume of Medicaid redeterminations that will need to be done at the end of the Public Health Emergency.
- Comment that NC Medicaid Managed Care members are not being shown as enrolled in Medicaid when trying to pick up prescriptions at pharmacies.
- Question regarding coverage for dual eligible beneficiaries.

Additionally, the Department received numerous questions about COVID-19 and coverage changes that were brought up in response to other presentations.

Performance Metrics

Outcomes of care

The Department plans to report three outcome measures in its monitoring reports: Comprehensive Diabetes Care, Low Birth Weight, and Rating of Personal Doctor. Thus far, only Rating of Personal Doctor results are available.

The Low Birth Weight Measure is a modified version of the Live Births Weighing <2,500 grams measure (NQF #1382), and was developed to assess, monitor, and support PHP efforts in North Carolina. Currently, low Birth Weight rates are still under production. Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Poor Control (>9.0%) rates are not available yet, as the Department does not receive A1c values via claims and encounters. The Department is working to obtain accurate A1c data through the NC Health Information Exchange in order to report this measure.

CAHPS measures do not reflect a full calendar year, as the survey was administered April 9, 2021, to August 15, 2021. Members were asked to think about services received *in the past 6 months* when answering survey questions. At the time of survey administration, almost all respondents' health plans would be NC Medicaid Direct. For many individuals who responded to the survey between July 1, 2021, and August 15, 2021, their current health plan would have been a Standard Plan, but most of their experience in the past six months would still have been while they were enrolled in NC Medicaid Direct.

Measure/ Measure Steward	Description	2019	2020	2021
Rating of Personal Doctor/CAHPS	Percentage of respondents who rated their personal doctor as an 8 or above (on a scale of 1-10)	83.2%	NA*	86.3%
	Percentage of respondents who rated their child's doctor as an 8 or above (on a scale of 1-10)	93.69 %	NA*	91.15 %

*CAHPS was not conducted during 2020 due to the Public Health Emergency

Quality of care

North Carolina measurement year 2021 quality measure results became available in July 2022. Because NC Medicaid Managed Care launched July 1, 2021, quality measure results for 2021 represent the last six months of fee-for-service and the first six months of managed care for North Carolina's Standard Plan population. All quality measures reflect the calendar year, except for CAHPS measures. These measures were originally reported in DY4Q3.

The Department continues to work on statewide performance improvement projects related to increasing Immunizations in Children, Early Access to Prenatal Care, Postpartum Care and Diabetes Control for Adults.

Measure/Measure Steward	Description	2019	2020	2021
Child and Adolescent Well-Care Visits (WCV)/ NCQA[1]	Members ages 12-21 who had at least one comprehensive well-care visit with a primary care physician or an OB/GYN during the measurement year.	NA	45.6%	47.8%
Childhood Immunization Status (CIS) (Combination 10)/ NCQA	Children age 2 who had four diphtheria, tetanus and acellular pertussis; three polio; one measles, mumps and rubella; three haemophilus influenza type B; three Hep B; one chicken pox; four pneumococcal conjugate; one hepatitis A; two or three rotavirus; and two influenza vaccines by their second birthday.	35.0%	36.2%	34.3%
Immunizations for Adolescents (IMA) (Combination 2)/ NCQA	Adolescents age 13 who had one dose of meningococcal conjugate vaccine, one tetanus, diphtheria toxoids and a cellular pertussis vaccine, and have completed the HPV vaccine series.	31.6%	31.2%	30.3%
Use of First-Line Psychosocial care for Children and Adolescents on Antipsychotics (APP)/ NCQA	Children and adolescents ages 1-17 who had a new prescription for an antipsychotic medication, but no US Food and Drug Administration primary indication for antipsychotics and had documentation of psychosocial care as first-line.	52.1%	50.8%	45.0%
Well-child visits in the first 30 months of life (W30)/ NCQA[2]	Percent of children who received six or more well-child visits in the first 15 months	NA	62.3%	62.1%
	Percent with two or more well-child visits from 15 to 30 months	NA	70.8%	66.4%

Measure/Measure Steward	Description	2019	2020	2021
Total Eligibles Receiving at Least One Initial or Periodic Screening/ NCDHHS	Rate of preventive dental service use by children and adolescents in NC. Higher rates are better on this measure.	53%	44.5%	NA
Follow-Up Care for Children Prescribed ADHD Medication (ADD)/ NCQA	Initiation phase rate: Percentage of children ages 6-12 as of the Index Prescription Start Date (IPSD) with an ambulatory prescription dispensed for ADHD medication, who had one follow-up visit with a practitioner with prescribing authority during the 30-day Initiation Phase.	50.1%	51.8%	53.7%
	Continuation rate: Percentage of children ages 6-12 with an ambulatory prescription dispensed for ADHD medication who remained on the medication for at least 210 days and who, in addition to the visit in the Initiation Phase, had at least two follow-up visits with a practitioner within 270 days (9 months) after the Initiation Phase ended.	63.5%	62.9%	64.9%
Metabolic Monitoring for Children and Adolescents on Antipsychotics (APM)/ NCQA	The percentage of children ages 1 to 17 who had two or more antipsychotic prescriptions and had metabolic testing. Three rates are reported: Percentage of children and adolescents on antipsychotics who received blood glucose testing	53.7%	47.4%	51.1%
	Percentage of children and adolescents on antipsychotics who received cholesterol testing	37.7%	34.1%	35.4%
	Percentage of children and adolescents on antipsychotics who received blood glucose and cholesterol testing	34.9%	31.0%	32.61%
Prenatal and Postpartum Care (PPC)/ NCQA[3]	Timeliness of Prenatal Care: The percentage of deliveries that received a prenatal care visit as a member of the organization in the first trimester or within 42 days of enrollment in the organization.	35.5%	40.0%	39.5%

Measure/Measure Steward	Description	2019	2020	2021
	Postpartum Care: The percentage of deliveries that had a postpartum visit on or between 21 and 56 days after delivery.	68.8%	64.5%	53.7%
Cervical Cancer Screening (CCS)/ NCQA	Women ages 21-64 who had cervical cytology performed every 3 years.	43.82%	42.83%	40.7%
Chlamydia Screening in Women (CHL)/ NCQA	Women ages 16-24 who were identified as sexually active and who had at least one test for chlamydia during the measurement period.	58.22%	57.19%	56.79%
Breast cancer screening (BCS)/ NCQA	Women 50–74 years of age who had at least one mammogram to screen for breast cancer in the past two years.	41.4%	35.4%	31.6%
Flu vaccinations for adults (FVA, FVO)/ NCQA	Adults ages 18 years and older self-report receiving an influenza vaccine within the measurement period.	42.9%	49.9%	N/A
Plan All-Cause Readmission – Observed Versus Expected Ratio (PCR)/NCQA	Adults ages 18 years and older, the number of acute inpatient and observation stays during the measurement year that were followed by an unplanned acute readmission for any diagnosis within 30 days and predicated probability of an acute readmission.	0.93%	0.99%	.99%
Controlling High Blood Pressure (CBP)/NCQA[4]	Percentage of patients 18 to 85 years of age who had a diagnosis of hypertension (HTN) and whose blood pressure (BP) was adequately controlled (<140/90) during the measurement year.	N/A	4.58%	24.62%
Antidepressant Medication Management (AMM)/NCQA	Adults 18 years of age and older with a diagnosis of major depression who were newly treated with antidepressant medication and remained on their antidepressant medications. Effective Acute Phase Treatment: Adults who remained on an antidepressant medication for at least 84 days (12 weeks).	58.2%	60.1%	54.1%

Measure/Measure Steward	Description	2019	2020	2021
	Effective Continuation Phase Treatment: Adults who remained on an antidepressant medication for at least 180 days (6 months).	39.3%	41.6%	33.9%
Diabetes Screening for People with Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)/NCQA	Percentage of adults 18–64 years of age with schizophrenia or bipolar disorder, who were dispensed an antipsychotic medication and had a diabetes screening test during the measurement year.	80%	75%	77%
Asthma Medication Ratio (AMR)/ NCQA	Percentage of adults 19-64 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 during the measurement year.	53.9%	60.3%	60.6%
Customer Service/ CAHPS	**Composite measure (adult):** Respondents were asked, “In the last 6 months, how often did your health plan’s customer service give you the information or help you needed?” and “In the last 6 months, how often did your health plan’s customer service staff treat you with courtesy and respect?”	83.3%	NA	86.5%
	Composite measure (child): Respondents were asked, “In the last 6 months, how often did customer service at your child’s health plan give you the information or help you needed?” and “In the last 6 months, how often did customer service staff at your child’s health plan treat you with courtesy and respect?”	78.8%	NA	85.9%
Coordination of Care/CAHPS	Respondents who answered “Usually” or “Always” 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?"	86.6%	NA	85.8%

Measure/Measure Steward	Description	2019	2020	2021
	Respondents who answered "Usually" or "Always" to the question, "In the last 6 months, how often did your child's personal doctor seem informed and up-to-date about the care your child got from these doctors or other health providers?"	81.9%	NA	85.4%

[1]This measure specification changed in 2020.

[2]This measure specification changed in 2021. The Well-Child Visits in the First 15 Months of Life (W15-CH) measure was modified by the measure steward. It now includes two rates: (1) six or more well-child visits in the first 15 months and (2) two or more well-child visits from 15 to 30 months.

[3]Rates for this measure are artificially low due to bundled payment for prenatal and postpartum care.

[4]NC Medicaid does not get blood pressure values via claims and encounters. **Consequently**, **our results are to be interpreted with caution.** The Department is currently developing a process to receive accurate blood pressure data via the North Carolina Health Information Exchange.

Cost of care

No metrics to report in this category for this reporting period. The Department is working to develop these measures.

Access to care

Network Time/Distance Standards

The state's time or distance network adequacy standards require that at least 95% of the membership meet the access standard. In each of the past four quarters, all Standard Plans met the state's time or distance standards for the five key service categories of hospitals, OB/GYN, primary care (adult and child), pharmacy and outpatient behavioral health (adult and child). The most recent network adequacy rates by Standard Plan are available in the report section for DY4Q4.

Care Management Penetration Rate

These data represent members enrolled in Standard Plans who received care management through a Standard Plan, AMH, the Care Management for At-Risk Children (CMARC) program or the Care Management for High-Risk Pregnancies (CMHRP) program within the Standard Plan contract year (beginning July 1). These data are provided with a one-month lag (e.g., DY4Q4 ends Oct. 31; however, data are available only through September.)

CMHRP is the Department's primary vehicle to deliver care management to pregnant women who may be at risk for adverse birth outcomes. CMARC offers a set of care management services for at-risk children ages 0 to 5. Both services are performed by local health departments (LHDs) as delegates of the Standard Plans. Care management provided through a Standard Plan or AMH is reported by Standard Plans on the BCM051 operational report. Care management provided for CMARC/CMHRP by LHDs is

reported by Community Care of North Carolina (CCNC), the Department vendor that oversees CMARC and CMHRP programs.

As the Standard Plan contract year does not align with the waiver demonstration year, rates are provided below for all of contract Year 1 (July 2021 – June 2022) and three months of Year 2 (July to September 2022) of Standard Plan operation. The tables below show the percent of Standard Plan members receiving any care management overall and the percent of care management provided by each entity. Care management rates were below the annual penetration target of 20% of members receiving care management by the end of Year 1 of NC Medicaid Managed Care. For Year 2, the Department has set a penetration target of 22%.

Standard Plan Care Management Rates, Year 1

Period:	*July 1, 2021 - June 30, 2022*		
Total Members Reported:	*1,853,442*		
Overall CM Penetration Rate	**17.0%**		**315,310 Members**
Percent of care management provided by each entity:			
SP	**AMH3**	**CMARC**	**CMHRP**
23.0%	78.1%	5.4%	6.0%
72,437	246,110	16,949	18,820

Source: Members in table are derived from BCM051 Care Management Interaction report prepared by PHPs and submitted to the Department.

Standard Plan Care Management Rates, Year 2 (SFY Q1 only)

Overall Care Management (CM) Rates

Period:	*July 1 - September 30, 2022*		
Total Members Reported:	*1,782,785*		
Overall CM Penetration Rate	**8.7%**		**154,818 Members**
Percent of care management provided by each entity:			
SP	**AMH3**	**CMARC**	**CMHRP**
13.4%	78.5%	1.7%	3.0%
20,783	121,569	2,708	4,572

Source: Members in table are derived from BCM051 Care Management Interaction report prepared by PHPs and submitted to the Department.

Care Management Rates by Entity, Year 2 (SFY Q1 only)

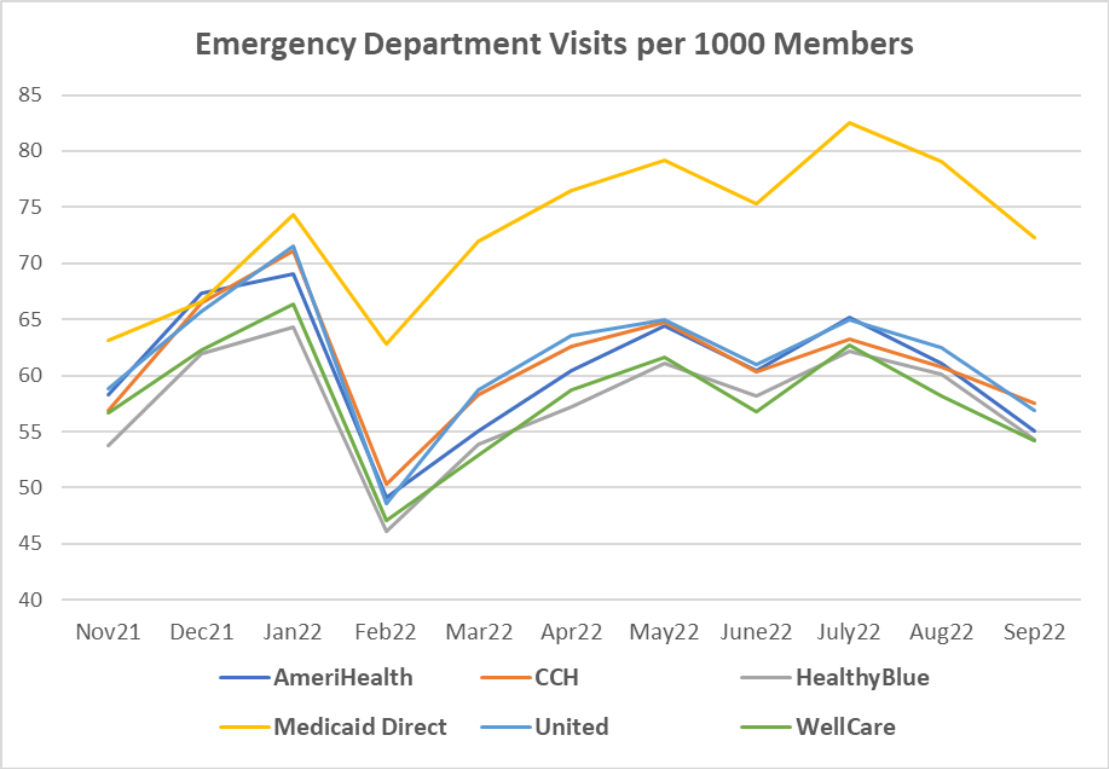
Period:	*July 1 - September 30, 2022*			
CM penetration rate by entity:				
	SP	**AMH3**	**CMARC**	**CMHRP**
Members with CM	20,783	121,569	2,708	4,572
Members assigned to entity	1,042,961	799,972	5,305	9,044
Penetration rate	**2%**	**15%**	**51%**	**51%**

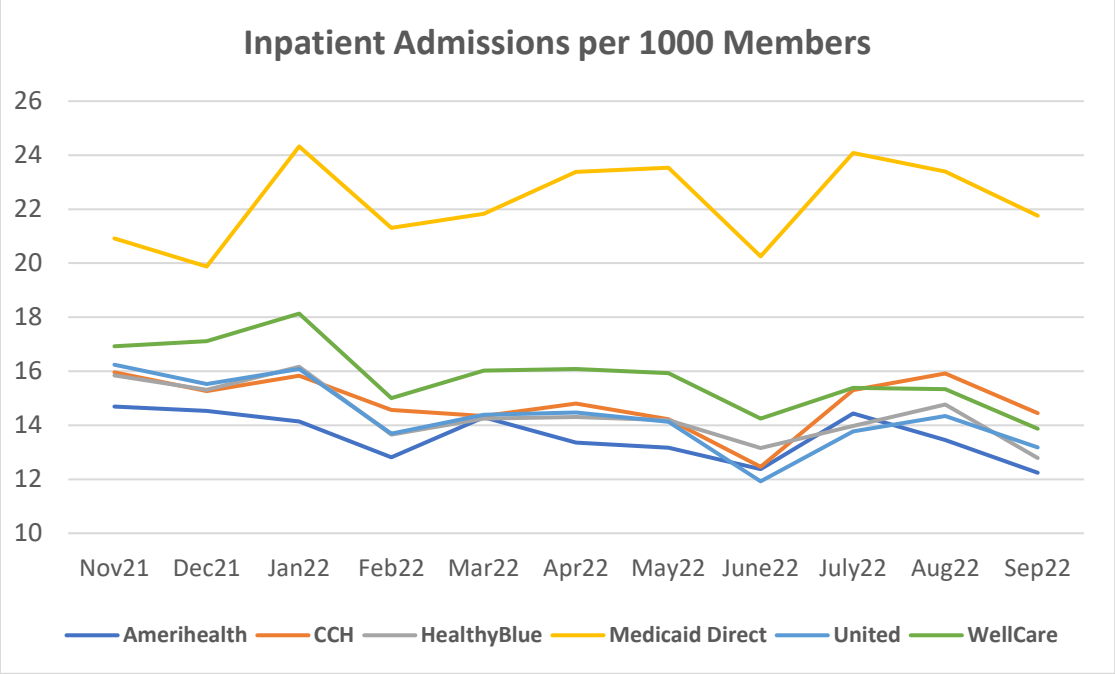
Source: Members in table are derived from BCM051 Care Management Interaction report prepared by PHPs and submitted to the Department. Some members may be receiving CM from multiple entities and may be counted in multiple categories.

Emergency Department Visits per 1,000 Members and Inpatient Admissions per 1,000 Members

Emergency department visits per 1,000 members and inpatient admissions per 1,000 members are measured for the adult NC Medicaid population (age 21 and older) and broken out by Standard Plan and NC Medicaid Direct. Claims denied because they were erroneously billed to NC Medicaid Direct instead of a Standard Plan were excluded from measurement calculations to avoid duplication. Medicaid beneficiaries not eligible for hospital coverage (e.g., family planning participants) were excluded from NC Medicaid Direct calculations.

Due to the lag in claims and encounter reporting, the rates are one month behind the quarterly monitoring schedule. Therefore, the rates below cover November 2021 to September 2022. It should be noted that higher rates are expected for NC Medicaid Direct, as members with substantial behavioral health issues to be enrolled in Tailored Plans currently remain in NC Medicaid Direct.


Emergency Department Visits per 1000 Members
85
80
75
70
65
60
55
50
45
40
Nov21
Dec21
Jan22
Feb22
Mar22
Apr22
May22
June22
July22
Aug22
Sep22
AmeriHealth
CCH
HealthyBlue
Medicaid Direct
United
WellCare


Inpatient Admissions per 1000 Members
26
24
22
20
18
16
14
12
10
Nov21
Dec21
Jan22
Feb22
Mar22
Apr22
May22
June22
July22
Aug22
Sep22
Amerihealth
CCH
HealthyBlue
Medicaid Direct
United
WellCare

Results of beneficiary satisfaction surveys

The Department released the results of the latest *Consumer Assessment of Healthcare Providers and Systems* (CAHPS) surveys in August 2022. NC Medicaid administers the CAHPS surveys to adult and child Medicaid beneficiaries to understand the Medicaid beneficiary experience and inform improvements in care.

Medicaid respondents were contacted for participation in the 2021 CAHPS survey between April 9, 2021, and August 15, 2021, and were asked to think about services received in the past 6 months when answering all survey questions. Data from the 2019 survey were compared to 2021 to see how responses have changed from pre- to mid-pandemic. At the time this survey was administered, almost all respondent's health plans would be NC Medicaid Direct. For many individuals who responded to the survey between July 1, 2021, and August 15, 2021, their current health plan would have been a Standard Plan, but most of their experience in the past six months would still have been while they were enrolled in Medicaid Direct. **Thus, the survey results largely do not reflect the experience of Medicaid members in NC Medicaid Managed Care.** A summary of results from the 2022 CAHPS survey, reflecting beneficiary experiences after Standard Plan launch, will be available in the next quarterly report.

Key findings include:

- Overall health and mental health ratings did not change appreciably between 2019 and 2021, except for child mental health, which declined slightly during the Public Health Emergency.
  - In 2021, 56.57% of adults rated their overall health as good, very good, or excellent compared to 54.72% of 2019 respondents.
  - 97.21% of adult respondents in 2021 rated their child's overall health as good, very good, or excellent, compared to 95.50% in 2019.
  - 87.10% of adult respondents in 2021 rated their child's overall mental or emotional health as good, very good, or excellent, compared to 91.09% in 2019.
- Both adults and children were less likely to use non-emergency care in 2021, but there were no differences across years in the ability to access care when needed.
  - 34.31% of adults in 2021 reported that they did not use non-emergency health care in the previous six months, compared to 20.99% in 2019.
  - 84.77% of adults reported they usually or always received care right away when needed in 2021, compared to 81.25% in 2019
  - Approximately 41.79% of 2021 respondents reported their child did not use non-emergency health care in the previous six months, compared to 27.87% in 2019
  - 95.95% of adult respondents reported their child usually or always received care right away when needed in 2021, compared to 95.07% in 2019

Budget Neutrality and Financial Reporting Requirements

The next budget neutrality workbook will be submitted to CMS by Jan. 31, 2023.

Evaluation Activities and Interim Findings

The Department has contracted the Sheps Center for Health Services Research at the University of North Carolina to conduct evaluation activities. The evaluation uses a mixed-methods approach, combining

analysis of administrative data with qualitative data to obtain detailed insights into the transformation that are not easily captured through claims and surveys; for example, how providers are preparing for the transformation and what can be done to improve their satisfaction with the Medicaid program.

Transition to Capitated Encounter Data from Standard Plans

In DY4, Sheps analysts began working with encounter data that tracks utilization by NC Medicaid beneficiaries enrolled in Standard Plans. Utilization of services by NC Medicaid beneficiaries who were enrolled in Standard Plans is now packaged into encounter data rather than traditional claims data when it arrives at NC Medicaid. Beginning at Standard Plan launch, the encounter data arrived with a different type of scrambled beneficiary-level identifier, which did not allow it to be linked to prior NC Medicaid Direct claims data for beneficiaries that transitioned into Standard Plans. Sheps worked closely with the Department to resolve this issue. Sheps also provided feedback on the quality and completeness of the data to the Department while continuing to revise code on metrics to include services, medications and diagnoses received through either claims or encounter data.

In DY4Q4, Sheps had to shift considerable focus to data quality issues caused by a faulty file sent by the state's data vendor for managed care. The file contained mismatched IDs for Standard Plan members. A replacement file was created, but this required a complete rebuild of Sheps's claims and encounter system, which delayed reporting by months. The issue is expected to be resolved by December 2022.

Quantitative Update

The Sheps quantitative team onboarded new metrics that will be tracked during the evaluation period, drawing metrics both from established custodians consistent with the NC Medicaid Quality Strategy, many Adult and Child Core measures, and other metrics that will allow Sheps to address the study hypotheses. Sheps has completed the evaluation of the use of Marketplace enrollees from a NC-based insurer as a potential comparison group for the difference-in-differences analysis through the comparison in trends in seven identified measures. These measures showed generally similar trends between Medicaid and Blue Cross and Blue Shield of North Carolina (BCBSNC) Marketplace plans in the pre-implementation period, although there were concerns about relatively small sample size for some of the metrics that look at specific subsamples (such as well-child visits for children and adolescents, due to the relatively small number of children in Marketplace plans). The evaluation will use BCBSNC data as a control group for a limited number of metrics, while simultaneously seeking other options for a comparison group, such as through other states' Medicaid data.

In the last year, Sheps began building a new dashboard to track behavioral health metrics that are not included in the substance use disorder dashboard that the evaluation team currently updates monthly. This new behavioral health dashboard will increase the rapid monitoring of metrics that may have been influenced by Standard Plan implementation and other milestones. Other dashboards specific to Foster Care plan members, individuals with intellectual and developmental disabilities, and physical/overall health metrics are also planned.

Qualitative Update

The qualitative team completed 40 interviews with 26 health systems and health care practices from March to July 2022. Of the 26 organizations, 10 were repeat participants from Year 1 (demonstration year 3, Nov 2020 to Oct 2021). The sample included three health systems, 14 independent practices, five

FQHCs, and four local health departments. Of the 14 independent practices, five were internal and/or family medicine, and nine were pediatric practices. The qualitative team reached out to 18 independent obstetric practices identified from the Year 1 provider file, survey respondents file, and NCDHHS website. They were either unavailable to participate or did not respond to the interview request. The Department included high-level findings from these interviews in the DY4Q3 monitoring report.

Based on the interviews, Sheps created three findings briefs on the provider and PHP experience and presented findings to the Department during a "Deep Dive" session in October 2022. All Department employees are encouraged to attend weekly Deep Dive sessions that cover a specific topic of interest to the Department and provide employees an opportunity to ask the presenters questions.

Sheps plans to conduct beneficiary focus groups in early 2023 via Zoom. This will include recruiting up to 24 family caregivers of pediatric patients on Medicaid and up to 24 adult Medicaid beneficiaries. The two groups will each be divided into no more than eight groups of three to six caregivers/adult beneficiaries. Discussions are underway regarding the possibility of offering at least one Spanish language focus group. Staff are developing recruitment materials and focus group guides. Once details have been finalized for this additional qualitative work, IRB approval will be sought.

The rapid analysis of the DY4 health system and health care practices data is complete. The report has been drafted and shared with the advisory committee. It will be updated if new insights are gained from additional health system interviews. The qualitative team is preparing a manuscript on patient engagement using the data from Year 1 interviews. An abstract is being prepared for submission to the publications committee.

Proposed Changes to Evaluation Design

The Sheps Center, in collaboration with NC Medicaid, has updated the evaluation design to address changes to the implementation environment such as the Covid-19 Public Health Emergency, implementation delays and adjustments to programs and policies. A summary of evaluation design changes was included in the DY4Q3 monitoring report. Please see Appendix B for a document with waiver evaluation design changes.

Healthy Opportunities Pilots (previously Enhanced Case Management and Other Services)

Operational Updates

Introduction

In December 2021, the Department announced that HOP would adopt a phased launch approach to allow additional time for testing technical systems, training key staff, and ensuring partner readiness. Though readiness reviews were not required for the Healthy Opportunities Pilot, the Department determined that conducting the reviews would lead to a more successful pilot launch. Therefore, the Department conducted readiness reviews of Standard Plans and Network Leads that were completed in February 2022. Standard Plans and Network Leads, in turn, were required to ensure the readiness of their contracted Human Service Organizations (HSOs) and care management entities. All Standard Plans

and Network Leads met the minimum requirements for HOP launch. The Department phased in HSOs and care management entities that demonstrated readiness through the phased launch timeline, noted below.

Under the revised timeline, services, HSOs, and care management entities launched on the following schedule:

Feb. 1, 2022: HSO Engagement and NCCARE360 Technical Functionality
- Newly developed "Base Pilot Functionality" in NCCARE360 became available. Pilot-participating entities (PHPs, CINs, Network Leads, HSOs) gained access to an NCCARE360 training environment.
- Allowed for additional time for engagement between PHPs and Network Leads/HSOs and training key staff at Pilot-participating entities

March 15, 2022: Launch food services and three CINs
- Launched delivery of food services
- NC Medicaid Standard Plan members were assessed for Pilot eligibility and enrolled into HOP through the three CINs that provide care management for most Medicaid-covered lives in HOP regions

May 1, 2022: Launch housing and transportation services and additional CINs
- Launched delivery of housing and transportation services
- Members were assessed for Pilot eligibility and enrolled into HOP through additional interested CINs and Tier 3 AMHs

June 15, 2022: Launch toxic stress and cross-domain services
- Launched services to address toxic stress and multiple non-medical needs
- Members were assessed for Pilot eligibility and enrolled in HOP through Standard Plans, in addition to CINs and Tier 3 AMHs
- Due to legal and technical challenges, interpersonal violence services are not available yet.

Since March 2022, the Department has delivered over 24,000 services addressing unmet resource needs to over 3,000 Standard Plan members. Medicaid members have recounted numerous stories about how HOP services have impacted their lives. The Department is preparing to launch HOP services for Tailored Plans members in 2023 and is adapting lessons learned from Standard Plans to the Tailored Plan model.

Key achievements and to what conditions and efforts successes can be attributed

Generated Partnerships and Collaboration Across Health and Human Service Sectors

HOP relies on an ecosystem of multiple medical and non-medical partners to address whole-person health, including unmet social needs. Currently, five Standard Plans, 23 care management organizations, three Network Lead organizations, and over 100 HSOs are participating in HOP across North Carolina. All these organizations are taking on new responsibilities and adapting their business models to change how they fundamentally address health. North Carolina has seen significant collaboration develop through regular HOP engagement. Additionally, in 2022, the Department developed first-of-their-kind model contracts to govern relationships between PHPs and Network Leads, and Network Leads and

HSOs. The model contracts clearly define the roles and responsibilities of each entity to ensure clear accountability.

Built a Single, Statewide Technology Platform (NCCARE360) to Facilitate HOP Activities and Created Standardized, Electronic Non-Medical Encounters

In 2020, NCCARE360, the first statewide technology platform to connect the health and human service sectors, went live in all 100 of North Carolina's counties. In 2022, the Department worked with NCCARE360 partners to build additional functionalities into NCCARE360 to facilitate HOP-specific processes. These additional functionalities include the ability to document HOP eligibility and enrollment, facilitate HOP service authorization, refer 29 standardized HOP services to HOP-participating HSOs, and invoice for HOP services. Considering the array of stakeholders involved in HOP, having a single technology platform that most HOP participants were already using reduced the technological barriers to participation, especially for HSOs. The Department prioritized using invoicing, which most HSOs were already familiar with, as opposed to claims to encourage HSO participation.

The Department then worked with technology and PHP partners to automatically translate invoices into standardized claims and encounters. PHPs receive non-medical service invoices through NCCARE360, translate them into encounters, and submit them to the Department. We believe that North Carolina is the first state in the nation with the ability to receive non-medical encounters, which the Department can analyze within the same data warehouse as medical encounters to assess whole-person health.

The Department has worked with the Sheps Center to begin transmitting both NCCARE360 and encounter data, which is now available for Pilot monitoring and evaluation. Developing, testing and launching these system functionalities is a result of months of partnership between NC Medicaid, the NCDHHS Information Technology Division and numerous technical partners. There were extensive engagement efforts to identify a solution that ensured HSOs and PHPs experienced minimal disruption to their current workflows.

Created Care Management Trainings on Non-Medical Needs and Services

Though care managers often address whole person health through their work with NC Medicaid members, HOP requires an in-depth understanding of complex non-medical needs and services. In 2022, the Department, in collaboration with NC Area Health Education Centers (AHEC), other NCDHHS divisions and HSOs, developed extensive training materials for care managers to better assess non-medical needs, determine which non-medical services are most appropriate for members, and conduct whole-person care management. These trainings provide detail on HOP services (e.g., when to refer a member to post-hospitalization housing vs. medical respite) and have led to greater collaboration between care managers at medical entities and HSOs. These trainings were the result of months of collaboration between multiple medical and non-medical, public and private partnerships.

Launch of Service Delivery

In the first HOP launch phase in February 2022, "Base Pilot Functionality" in NCCARE360 became available. This functionality included an eligibility documentation system, an enrollment and service authorization system, referral enhancements and invoicing. Due to the Department's focus on launching the Pilot quickly, these processes were somewhat manual, but are being improved to incorporate

automation and integrations through "Advanced Pilot Functionality," which will roll out in phases in 2022 and 2023.

On March 15, food services launched, providing eligible members access to services such as food and nutrition access case management; healthy food boxes/meals; fruit and vegetable prescriptions; and group nutrition classes. The first enrollment pathway opened on the same date, which allowed NC Medicaid Managed Care members assigned to three major CINs for care management in Pilot regions to begin enrolling in HOP. These three CINs provide care management to the vast majority of NC Medicaid members receiving care management in Pilot regions. Enrollment pathways continued to open in May and June.

Transportation and housing services launched on May 1, 2022. Housing services include navigation support and sustaining services; inspection for housing safety and quality; move-in support; essential utility setup; home remediation services; and accessibility and safety modifications. Transportation services include reimbursement for health-related public or private transportation and transportation for case management services.

On June 15, 2022, toxic stress and cross-domain services launched. These services include evidenced-based parenting classes, home visiting services and medical respite. The Department intends to launch IPV services in 2023.

Key challenges, underlying causes of challenges, how challenges are being addressed

Low Referral Volume

Although the Department purposely launched the pilot slowly and in phases, there is still an unexpectedly low volume of enrollees in the Pilot. The Department worked with partner organizations to identify strategies to increase referral volume quickly and equitably. These strategies included initiatives to promote direct community outreach by HSOs, technical solutions to allow community organizations to make referrals to care managers within the technology system and working with Standard Plans to improve their processes for proactive outreach to potentially eligible members.

Payment challenges – Provider Remittance Advice

Both Network Leads and Standard Plans have worked to incorporate and improve upon new policies and processes as part of the implementation of the Pilots. A key process which both entities have continued to improve is ensuring that remittance advice is transmitted by the Standard Plan to the corresponding HSO and contains all necessary information for the HSO to accurately account for service payment. The Department is working with both entities to ensure that there are both short-term solutions that address any historical gaps in data and long-term solutions which ensure that all necessary information is transmitted and received by the corresponding entity.

Housing Services

There have been fewer than expected housing services delivered through the Pilots. This is partly due to limitations in the current housing support infrastructure, such as very limited affordable housing in rural areas, and funding limitations, especially for HSOs that had historically operated with a smaller budget. The funding challenges were addressed, in part, through capacity building funds which allow the HSOs flexibility to deliver higher cost housing services. This continues to be monitored to ensure appropriate

use of Pilot funds and that members receive necessary services in a timely manner. The limitations in affordable housing extend beyond the scope of the program. The Department continues to work with housing subject matter experts (SMEs) to ensure that challenges are addressed within the context of broader housing support infrastructure.

Delayed launch of IPV services

Due to legal and technical challenges, interpersonal violence services did not become available this year. The planned launch date for these services had been June 15, 2022. For services that are part of the IPV domain, the Department worked with domestic violence and IPV SMEs to determine design modifications necessary to ensure Pilot enrollee safety and data confidentiality for these sensitive services. Over the last year, the Department and its partners identified technology system, contract, and training modifications necessary to address safety considerations for individuals experiencing interpersonal violence. These modifications are intended to ensure that Violence Against Women Act (VAWA) and Victims of Crime Act (VOCA) regulatory considerations are met, as well as incorporate best practices for protecting the privacy and safety of individuals experiencing IPV. The Department continues to work toward the launch of this service domain while balancing federal regulations, industry best practices and survivor safety.

Issues or complaints identified by beneficiaries

Member reactions to HOP have been overwhelmingly positive. However, some members have said that the enrollment and consent process for HOP is too time consuming and detailed. The Department is currently working to address this feedback by shortening and streamlining both the enrollment and consent processes for participating in HOP.

Members have also communicated that many individuals are not aware of HOP services or how to access them. Some members also expressed confusion about what services are available to them through HOP, especially in the housing domain. The Department is currently developing a broad communications campaign to increase member, provider and community awareness of HOP services and how to access them, including the development of outreach materials for partners to distribute in their communities.

Members have also noted gaps in the availability of certain services – especially housing services, due to a general housing shortage in North Carolina, and public transportation options in rural areas. The Department is continuing to work with Network Leads and HSOs to develop additional infrastructure for these services.

Lawsuits or legal actions

There are no legal actions to report for the demonstration year.

Legislative updates

Legislative updates are included in the Managed Care section of this report.

Descriptions of post-award public fora

Descriptions of post-award public fora are included in the Managed Care section of this report.

Performance Metrics

Incentive Payments to PHPs, NLs, and Pilot Providers (HSOs)

To ensure a successful Pilot launch, the Department determined milestones for each Network Lead and Standard Plan to reach during the Pilot Implementation Period (May 2021 through March 2022). These milestones are tied to meeting key Pilot implementation measures, including establishing an HSO network, providing training to HSOs and care management staff, establishing payment and reporting processes, and completion of readiness testing. The Department developed an incentive payment fund for both Network Leads and Standard Plans during the implementation year and weighted each milestone based on importance to Pilot launch to determine the milestone payment amounts. The Incentive Payment Milestone Guides for Network Leads and PHPs can be found as Appendices C and D.

Network Lead Incentive Payments - DY4

Network Lead	Milestone Achieved	Quarter Disbursed	Amount Paid
Access East	Established an HSO Capacity Building Payment Distribution Approach	DY4Q1	$17,857.00
Access East	Established data reporting processes	DY4Q1	$17,857.00
Community Care of the Lower Cape Fear	Established an HSO Capacity Building Payment Distribution Approach	DY4Q1	$17,857.00
Community Care of the Lower Cape Fear	Established data reporting processes	DY4Q1	$17,857.00
Impact Health	Established an HSO Capacity Building Payment Distribution Approach	DY4Q1	$17,857.00
Impact Health	Established data reporting processes	DY4Q1	$17,857.00
Access East	Disbursement of first capacity building funds to HSOs.	DY4Q2	$17,857.00

Network Lead	Milestone Achieved	Quarter Disbursed	Amount Paid
Access East	Received Department approval of HSO Network Report.	DY4Q2	$26,785.00
Community Care of the Lower Cape Fear	Disbursement of first capacity building funds to HSOs.	DY4Q2	$17,857.00
Community Care of the Lower Cape Fear	Received Department approval of HSO Network Report.	DY4Q2	$26,785.00
Impact Health	Disbursement of first capacity building funds to HSOs.	DY4Q2	$17,857.00
Impact Health	Received Department approval of HSO Network Report.	DY4Q2	$26,785.00
Access East	Completion of Implementation Year training, technical assistance, and engagement.	DY4Q3	$17,857.00
Access East	Completion of Department readiness evaluation; HSO network prepared to deliver services.	DY4Q3	$26,785.00
Impact Health	Completion of Implementation Year training, technical assistance, and engagement.	DY4Q3	$17,857.00
Impact Health	Completion of Department readiness evaluation; HSO network prepared to deliver services.	DY4Q3	$26,785.00
Community Care of the Lower Cape Fear	Completion of Implementation Year training, technical assistance, and engagement.	DY4Q3	$17,857.00
Community Care of the Lower Cape Fear	Completion of Department readiness evaluation; HSO network prepared to deliver services.	DY4Q3	$26,785.00

PHP Incentive Payments – DY4

PHP	Milestone Achieved	Quarter Disbursed	Amount Paid
AmeriHealth Caritas of NC	Execute contracts with all Network Leads that are operating in the PHP's region.	DY4Q2	$30,000.00
Blue Cross Blue Shield of NC	Execute contracts with all Network Leads that are operating in the PHP's region.	DY4Q2	$30,000.00
Carolina Complete Health	Execute contracts with all Network Leads that are operating in the PHP's region.	DY4Q2	$30,000.00
United Healthcare	Execute contracts with all Network Leads that are operating in the PHP's region.	DY4Q2	$30,000.00
WellCare	Execute contracts with all Network Leads that are operating in the PHP's region.	DY4Q2	$30,000.00
AmeriHealth Caritas of NC	Meet Department Pilot-related systems integration and end-to-end testing standards related to Pilot eligibility, service authorization, referral, invoice, and payment. Successful completion of DHB Readiness Review to implement Pilots.	DY4Q3	$70,000.00
Blue Cross Blue Shield of NC	Meet Department Pilot-related systems integration and end-to-end testing standards related to Pilot eligibility, service authorization, referral, invoice, and payment. Successful completion of DHB Readiness Review to implement Pilots.	DY4Q3	$70,000.00
Carolina Complete Health	Meet Department Pilot-related systems integration and end-to-end testing standards related to Pilot eligibility, service authorization, referral, invoice, and payment. Successful completion of DHB Readiness Review to implement Pilots.	DY4Q3	$70,000.00

PHP	Milestone Achieved	Quarter Disbursed	Amount Paid
United Healthcare	Meet Department Pilot-related systems integration and end-to-end testing standards related to Pilot eligibility, service authorization, referral, invoice, and payment. Successful completion of DHB Readiness Review to implement Pilots.	DY4Q3	$70,000.00
WellCare	Meet Department Pilot-related systems integration and end-to-end testing standards related to Pilot eligibility, service authorization, referral, invoice, and payment. Successful completion of DHB Readiness Review to implement Pilots.	DY4Q3	$70,000.00

Pilot Capacity Building Funding

Two rounds of capacity building funding were released over the demonstration year. On Jan. 4, 2021, $6,341,624 in capacity building funding was released to Network Leads. This was the third issuance of Capacity Building Funds for the May 27, 2021–May 26, 2022 budget period. In DY4Q3, $12,106,683.50 of capacity building funding was released to the Network Leads for Year 2 program activities.

The State permitted Network Leads to request up to $10,000,000 in capacity building funds for 2021-2022 budget period and up to $10,000,000 for the May 27, 2022–May 26, 2023 budget period. Network Leads must disburse at least 51% of their capacity building funds to HSOs in their Pilot network. Please see Appendix E for a breakdown of funding received by Network Lead by date and purpose.

Pilot Enrollee Costs

The Pilot evaluator ran the first enrollment cost report in December 2022, looking at services provided between March 17, 2022 and Oct. 28, 2022. Data were aggregated using NCCARE360 invoice data provided by the Department, containing 8,749 services provided for 1,208 unique enrollees. Unfortunately, the Department is unable to report the enrollment cost data at this time due to two issues. Firstly, discrepancies were noted between total paid amount and total invoiced amount for several services. The discrepancies were most pronounced in the category of food delivery services. The Department is working with the evaluator and the NCCARE360 vendor, Unite Us, to resolve this issue. Secondly, Medicaid encounter data were investigated as a potential data source for cost analysis of HOP-related claims, but this data source could not be used to calculate costs per enrollee due to a known data issue involving unique identifiers. (This issue is summarized in the Evaluation Activities and Interim Findings section of the report under “Transition to Capitated Encounter Data from Standard Plans” above). Currently this issue disproportionally affects members enrolled in the Pilots (34.5% of enrollees). This issue is actively being resolved, such that in future analyses Medicaid encounter claim data may be used for cost analysis. The Department intends to provide Pilot enrollee cost data in DY5Q1.

Healthy Opportunities Pilot Evaluation Activities and Interim Findings

Throughout DY4, the Sheps Center provided technical assistance in the operationalization of HOP to facilitate evaluation. This included meeting with the Department, Network Leads, HSOs and other stakeholders to engage with questions around workflows for Pilot service delivery, provision of IPV services, payment activities, eligibility criteria and types of services to emphasize. Additionally, Sheps documented emerging implementation themes to inform data collection and analysis and developed data collection procedures that ensure safety and confidentiality for Pilot members affected by IPV.

Sheps prepared the necessary information technology infrastructure to receive and analyze descriptive and quantitative data regarding Pilot activities. Preparation included identification of necessary data elements, planning to receive data when available, and creating staffing assignments to support analysis workflows across analysts and other research team members.

Sheps conducted primary data collection for evaluation question 1 (Network Lead service delivery networks). Team members completed quantitative and qualitative data collection with Network Leads and HSOs regarding their experiences preparing for and delivering early phase Pilot services. Team members analyzed qualitative data on service delivery to be compiled in reports to the Department. The Sheps team also conducted activities for evaluation question 4 (patient-reported health outcomes). Survey data collection planning is underway, and an initial IRB submission was completed in October 2022 for Pilot member telephone interviews with adults, parents and adolescents.

In response to a CMS request to include additional stratifications in the evaluation report, Sheps will report stratified data to examine differences in health across populations defined by categories of race and ethnicity, gender, primary language and rurality. A new equity analysis section has been proposed for Hypotheses 4, 5, and 6. These changes were first reported in DY4Q3.

Residential and Inpatient Treatment for Individuals with a Substance Use Disorder

The Department will provide detailed information in the Substance Use Disorder annual submission that is due to CMS Feb. 28, 2023.

DEMONSTRATION YEAR 4 QUARTER 4 REPORT

Executive Summary

This section of the report covers Demonstration Year 4, Quarter 4 (DY4Q4) of the North Carolina Medicaid Reform Demonstration, August 1, 2022, through October 31, 2022.

On September 30, 2022, the Department announced that the launch of Behavioral Health I/DD Tailored Plans would be delayed until April 1, 2023. The delay will allow Tailored Plans more time to contract with additional providers to support member choice and to validate that data systems needed for launch are working. Following announcement of the delayed Tailored Plan implementation, the Department's business units finalized proposed adjusted dates for all major Tailored Plan program milestones. In early November, the proposal will be submitted to Department executive leadership for approval. While the launch of Tailored Plans will be delayed, the Department and LME/MCOs will support providers of Tailored Care Management to launch their services on December 1, 2022. Through Tailored Care Management, eligible beneficiaries will have a single designated care manager supported by a multidisciplinary team to provide integrated care management that addresses the beneficiary's whole-person health needs.

Last quarter the Department reported that Pharmacy Point of Sale (POS) claims for Tailored Plan members would be temporarily managed by NCTracks from Dec. 1, 2022 through March 31, 2023, as a result of a key pharmacy benefit manager (PBM) unexpectedly leaving the NC Medicaid market in late 2021. This will no longer be necessary due to the delay of Tailored Plan implementation; Tailored Plans will manage pharmacy claims at launch.

In early August 2022, the Department began the enrollment process for those who will be eligible for Tailored Plans at launch, known as Tailored Plan Criteria Review. The Department confirmed that approximately 150,000 members will be eligible at launch. The Tailored Plan choice period will begin on Jan. 15, 2023.

The Department is preparing to launch Healthy Opportunities Pilot services with the Tailored Plans in the second quarter of 2023. Lessons learned from Standard Plans are being adapted to the Tailored Plan model in implementation activities.

Medicaid Managed Care

Operational Updates

Recognizing this is a time of substantial change for North Carolina Medicaid enrollees, providers, and health plans, the Department implemented temporary flexibilities and program changes in the lead-up to Tailored Plan launch. To focus resources on requirements that are critical for implementation, the Tailored Plans submitted a collective list of requests to the Department of requirements that they viewed as non-critical to go-live and recommended modifying. Department leadership evaluated the recommendations and either approved, approved with modification, or denied the requests. Following announcement of the implementation delay, the responses were re-evaluated and adjusted based on

the April 1, 2023, launch date. Mirroring the Standard Plan launch, the Department approved select temporary policy flexibilities to reduce provider burden during implementation. The policy flexibilities range in duration from 90 to 181 days following Tailored Plan launch.

The Department continues to have regular meetings with the Tailored Plans, including weekly status meetings with each Plan to track development work and address any potential business issues and risks, and bi-weekly calls with the Tailored Plan executive leadership teams to address key issues and risks.

Tailored Plan Criteria Review

In early August 2022, the Department began the enrollment process for those who will be eligible for Tailored Plans at launch, known as Tailored Plan Criteria Review. The Department confirmed approximately 150,000 members to be eligible at launch. An initial group of individuals received notices regarding their eligibility in August, while others will enroll throughout the year. The Department expects enrollment to continue to grow up to launch and through the year following launch until the end of the federal public health emergency unwinding.

Individuals are identified as eligible for Tailored Plans consistent with North Carolina statute. The start date for the lookback period for eligibility criteria that rely on service utilization has been updated to December 1, 2020. The original lookback period began January 2018 and was selected to identify beneficiaries who would be exempt from mandatory enrollment in Standard Plans due to their expected enrollment in Tailored Plans. With the delay of Tailored Plan launch, the original lookback period was determined to no longer be clinically appropriate for service-based criteria. Other eligibility criteria that rely on qualifying diagnoses or special program participation will continue with the original lookback period of January 1, 2018, in order to identify beneficiaries who are exempt from mandatory Standard Plan enrollment. Approximately 50,000 beneficiaries who previously qualified for an exemption from mandatory Standard Plan enrollment due to meeting Tailored Plan criteria will not be eligible to enroll in a Tailored Plan at launch because their qualifying services are now outside the look-back period or they do not meet the revised state-funded service use criteria. These beneficiaries will be auto-enrolled in a Standard Plan in November 2022, with coverage effective December 1, 2022.

Beneficiaries who utilized the Request to Move process, which allows Standard Plan members to move to NC Medicaid Direct or a Tailored Plan, in the past will continue to remain eligible for a Tailored Plan. The Request to Move process will also continue to be available for beneficiaries who may not be identified through the Tailored Plan Criteria Review process.

Following the eligibility criteria review, beneficiaries will be mailed a notice informing them of their health care choices and how to change their health care option. The Tailored Plan choice period will begin on Jan. 15, 2023. To disenroll from the Tailored Plan and enroll in a Standard Plan, Tailored Plan members must contact the Enrollment Broker to ensure they understand they will no longer receive enhanced services provided only by the Tailored Plan and provide informed consent. Individuals will be permitted to move back to the Tailored Plan at any time if they continue to meet the criteria.

Key achievements and to what conditions and efforts successes can be attributed

Standard Plans

1. The Department hosted the PHP Health Equity Quarterly Workgroup Kickoff meeting on Oct. 12, 2022, with Standard Plans and Tailored Plans. This was the first of planned quarterly PHP Health Equity workgroup sessions. At the kickoff, the Department provided an introduction on the purpose and objectives of the workgroup as well as an update to PHP Health Equity Leads on the Department's work on health equity.

Tailored Plans

1. The Department began the enrollment process, known as Tailored Plan Criteria Review, for beneficiaries who will be eligible for Tailored Plans effective April 1, 2023. The Department confirmed approximately 150,000 members to be eligible at launch. An initial group of individuals received notices regarding their eligibility in August, with others enrolling throughout the year. The Department expects enrollment to continue to grow up to launch and throughout the year following launch until the end of the federal public health emergency.
2. In response to the delay of Tailored Plan launch, the Department conducted re-alignment activities, including updating the timeline for implementation milestones, determining required contract changes, re-evaluating the proposed non-critical items flexibilities from Tailored Plans, and publishing a quick reference guide on delay impacts based on Tailored Plan questions. In early November, the proposed re-baselining changes will be submitted to Department executive leadership for approval.
3. The Department's pharmacy business unit held a community pharmacist stakeholder summit with the Tailored Plans to provide an update on Tailored Plan implementation following the launch delay.

Key challenges, underlying causes of challenges, and how challenges are being addressed

Standard Plans

1. The Department addressed an issue where some nursing facilities were not accepting Standard Plan members upon hospital discharge due to delays in the long-term care financial eligibility determination process. After reviewing information provided by PHPs and consulting with representatives from the NC Healthcare Association and NC Health Care Facilities Association, the Department took the following actions:
    - Published a memo to Standard Plan CEOs on nursing facility payment that encourages PHPs to use existing flexibilities – such as rates, delivery models, and interim payments (or hardship advancements) to facilitate timely care. NC Medicaid strongly encourages PHPs to support providers with interim payments/hardship advances when there are delays in paying nursing facilities due to the long-term care financial eligibility determination process.

- Created a new standardized form for PHPs and nursing facilities to communicate with local Departments of Social Services (DSS), streamlining processes for nursing facility admissions and the determination of long-term care financial eligibility.
- Created stakeholder-specific fact sheets for counties, health plans, and providers (including hospitals and nursing facilities). The fact sheets outline the information flow, timelines and requirements for the long-term care financial eligibility determination process.

2. Corrective Action Plans (CAPs) were created for four Standard Plans in Spring 2022 to address errors on the PHP Network Files (PNFs), which required the plans to submit monthly self-audits to report on their errors and progress. Although one of the four plans is now in compliance, the other three CAPs must be extended and will now include a liquidated damage (LD) for failure to remove providers not active in NC Medicaid from their PNFs.

3. Two of the five Standard Plans did not meet the preferred drug list (PDL) compliance benchmark of 95% during all four quarters of State Fiscal Year 2022. The Department issued Notice of Deficiency memos on October 31, 2022, requesting liquidated damages for both plans. Additionally, one Standard Plan did not meet the compliance benchmark in the first quarter of SFY22. This plan was given a Notice of Deficiency, but liquidated damages were not assessed. Q1 was the first quarter of Standard Plan implementation.

4. In response to provider concerns about on-going member assignment and panel management issues for AMHs, the Department is working with Standard Plans to analyze errors and create easier pathways for providers to reach Standard Plans and resolve panel issues:

    - Standard Plans updated their contact information for providers to contact them with panel questions or issues.
    - Standard Plans are working to ensure their member and provider call lines are equipped to respond to calls related to AMH assignment.
    - Providers can also discuss panel limits with Standard Plans so they understand any panel limits they currently have with the plan based on initial contracting and can update panel limits as needed.

Tailored Plans

1. Adequate provider network coverage continues to be a risk across all Tailored Plans due to lower than expected provider contracting. Since the Tailored Plans started submitting provider contracting reports in early May, the results have not met network adequacy standards across the various provider categories. This could result in a high rate of separation of Tailored Plan beneficiaries from the PCP they were assigned under fee-for service and a lack of providers for PCP auto-assignment beginning in February. The Department has worked to mitigate this risk through the following activities:

    - Close tracking of provider contracting data in the Weekly Tailored Plan Scorecards
    - Monitoring monthly AMH/PCP contracting submissions and other specialties from the monthly network submission

- Monitoring bi-weekly contracting data submitted in response to a Notice of Concern issued to the plans
- One-on-one calls with the Tailored Plans to get more frequent updates on contracting progress and challenges
- Working through the Provider Engagement and Communications team to clarify the process to contract with Tailored Plans and the changes coming with Tailored Plan launch

2. End-to-end testing continued trending behind schedule throughout this quarter for both the Auto-Enrollment and Plan Launch milestones. The main drivers of this trend have been:

    - Incorrect provider data setup by the Tailored Plans
    - Incorrect claim submissions
    - Enrollment Broker open defects on ongoing notices
    - Medicaid PIHP end-to-end testing overlapping with Tailored Plan end-to-end testing schedule adds complexity and risk to the current end-to-end plan and schedule.

    The End-to-End team is meeting weekly with the Tailored Plans and escalating plan-specific delays and challenges through bi-weekly calls with the Tailored Plans' Executive Leadership teams.

Milestones

1. The first Tailored Plan Contract Amendment was executed with the plans in early September.

Issues or complaints identified by beneficiaries

The Department receives beneficiary complaints primarily from the Office of Compliance and Program Integrity, Office of Administration and the NC Medicaid Member Ombudsman. The NC Medicaid Ombudsman is an independent organization that provides education, guidance and referrals to NC Medicaid beneficiaries.

In DY4Q4, the Ombudsman handled 4,422 cases. Case volume remained relatively stable, with an increase of approximately 3% from last quarter. Many calls involved educating beneficiaries or connecting them to the entity that could provide the service they need. (See Appendix F for a full list of cases by category type.) This quarter, the Office of Administration received 20 complaints, compared to 13 last quarter. There were no complaints reported to the Office of Compliance and Program Integrity.

NC Medicaid Member Ombudsman Cases

August 2022		September 2022		October 2022		Total Cases
Information	Issue Resolution	Information	Issue Resolution	Information	Issue Resolution	
567	1,108	482	754	523	988	**4,422**

Office of Administration Member/Constituent Concerns, August 2022 – October 2022

Issue Category	Number of Issues
Beneficiary/Member Eligibility	4
Clinical Policy	2
PHP Claims/Finance	10
Non-Emergency Medical Transportation (NEMT)	1
Program Integrity	1
Provider Operations	2
TOTAL	**20**

Lawsuits or legal actions

There are no lawsuits or legal actions to report this quarter.

Unusual or unanticipated trends

There are no unusual or unanticipated trends to report this quarter.

Legislative updates

There are no legislative updates to report this quarter.

Descriptions of post-award public fora

There were no public fora this quarter.

Performance Metrics

Outcomes of care

Available outcomes of care measures are included in the annual section of this report.

Quality of care

North Carolina measurement year 2021 quality measure results were reported in DY4Q3 and are available in the annual section of this report.

Cost of care

No metrics to report in this category for the reporting period.

Access to care

Network Time/Distance Standards

The percentage of members with access to provider types that meet network adequacy standards is shown below for each Standard Plan by region and type of service provider. The state's time or distance network adequacy standards require that at least 95% of the membership meet the access standard. Based upon networks submitted on Oct. 31, 2022, all Standard Plans met the state's time or distance standards for the five key service categories of hospitals, OB/GYN, primary care (adult and child), pharmacy and outpatient behavioral health (adult and child).

AmeriHealth Caritas									
Region	# of Counties	# of Members*	Hospitals	OB/GYN	Primary Care (Adult)	Primary Care (Child)	Pharmacy	Outpatient Behavioral Health (Adult)	Outpatient Behavioral Health (Child)
			% Members	% Members	% Members	% Members	% Members	% Members	% Members
1	19	144,579	100%	100%	100%	100%	100%	100%	100%
2	13	301,714	100%	100%	100%	100%	100%	100%	100%
3	12	426,328	100%	100%	100%	100%	100%	100%	100%
4	14	347,131	100%	100%	100%	100%	100%	100%	100%
5	15	289,152	100%	100%	100%	100%	100%	100%	100%
6	27	220,932	99%	99%	100%	100%	100%	100%	100%

**Number of members currently mandated in Managed Care population as of 10/19/22. This metric is NOT representative of each Standard Plan's membership.*

Carolina Complete Health									
Region	# of Counties	# of Members*	Hospitals	OB/GYN	Primary Care (Adult)	Primary Care (Child)	Pharmacy	Outpatient Behavioral Health (Adult)	Outpatient Behavioral Health (Child)
			% Members	% Members	% Members	% Members	% Members	% Members	% Members
1	19	144,579							
2	13	301,714							
3	12	426,328	100%	100%	100%	100%	100%	100%	100%
4	14	347,131	100%	100%	100%	100%	100%	100%	100%
5	15	289,152	100%	100%	100%	100%	100%	100%	100%
6	27	220,932							

**Number of members currently mandated in Managed Care population as of 10/19/22. This metric is NOT representative of each Standard Plan's membership.*

Healthy Blue/Blue Cross Blue Shield of NC									
Region	# of Counties	# of Members*	Hospitals	OB/GYN	Primary Care (Adult)	Primary Care (Child)	Pharmacy	Outpatient Behavioral Health (Adult)	Outpatient Behavioral Health (Child)
			% Members	% Members	% Members	% Members	% Members	% Members	% Members
1	19	144,579	100%	100%	100%	100%	100%	100%	100%
2	13	301,714	100%	100%	100%	100%	100%	100%	100%
3	12	426,328	100%	100%	100%	100%	100%	100%	100%
4	14	347,131	100%	100%	100%	100%	100%	100%	100%
5	15	289,152	100%	100%	100%	100%	100%	100%	100%
6	27	220,932	99%	100%	99%	99%	100%	100%	100%

**Number of members currently mandated in Managed Care population as of 10/19/22. This metric is NOT representative of each Standard Plan's membership.*

United Healthcare									
Region	# of Counties	# of Members*	Hospitals	OB/GYN	Primary Care (Adult)	Primary Care (Child)	Pharmacy	Outpatient Behavioral Health (Adult)	Outpatient Behavioral Health (Child)
			% Members	% Members	% Members	% Members	% Members	% Members	% Members
1	19	144,579	100%	100%	100%	100%	100%	100%	100%
2	13	301,714	100%	100%	100%	100%	100%	100%	100%
3	12	426,328	100%	100%	100%	100%	100%	100%	100%
4	14	347,131	100%	100%	100%	100%	100%	100%	100%
5	15	289,152	100%	100%	100%	100%	100%	100%	100%
6	27	220,932	100%	100%	100%	100%	100%	100%	100%

**Number of members currently mandated in Managed Care population as of 10/19/22. This metric is NOT representative of each Standard Plan's membership.*

Wellcare									
Region	# of Counties	# of Members*	Hospitals	OB/GYN	Primary Care (Adult)	Primary Care (Child)	Pharmacy	Outpatient Behavioral Health (Adult)	Outpatient Behavioral Health (Child)
			% Members	% Members	% Members	% Members	% Members	% Members	% Members
1	19	144,579	100%	100%	100%	100%	100%	100%	100%
2	13	301,714	100%	100%	100%	100%	100%	100%	100%
3	12	426,328	100%	100%	100%	100%	100%	100%	100%
4	14	347,131	100%	100%	100%	100%	100%	100%	100%
5	15	289,152	100%	100%	100%	100%	100%	100%	100%
6	27	220,932	99%	100%	100%	100%	100%	100%	100%

**Number of members currently mandated in Managed Care population as of 10/19/22. This metric is NOT representative of each Standard Plan's membership.*

Provider Enrollments by PHP

Provider enrollment by provider type is available by PHP. There are 25 provider type categories. Provider enrollment for two categories, ambulatory health care facilities and behavioral health/social service providers, is provided below for illustration. See Appendix G for the full list.

Provider Enrollment by PHP – Select Categories

Provider Type	AmeriHealth	Healthy Blue	CCH	United	WellCare
Ambulatory Health Care Facilities	988	1,237	919	1,423	2,478
Behavioral Health & Social Service Providers	8,685	9,115	6,914	3,789	6,340

Beneficiaries Per AMH Tier

The Department developed the AMH model as the primary vehicle for care management in Standard Plans. AMH Tier 3s are the Department's highest level of primary care, focused on care management and quality. The tables below show the count and proportion of beneficiaries in each AMH tier by PHP.

Member Count by PHP and AMH Tier

	AmeriHealth	CCH*	Healthy Blue	United	WellCare	Total
No PCP Tier	8,602	1,233	26,676	21,825	6,022	**64,358**
Tier 1	2,845	3,117	8,941	4,580	3,064	**22,547**
Tier 2	41,815	40,993	76,090	69,727	54,482	**283,107**
Tier 3	259,896	176,961	355,931	274,040	309,682	**1,376,510**

*CCH only operates in regions 3, 4 and 5.

Member Proportion by PHP and AMH Tier

	AmeriHealth	CCH	Healthy Blue	United	WellCare	Total
No PCP Tier	2.75%	0.55%	5.70%	5.90%	1.61%	**3.68%**
Tier 1	0.91%	1.40%	1.91%	1.24%	0.82%	**1.29%**
Tier 2	13.35%	18.44%	16.27%	18.84%	14.60%	**16.21%**
Tier 3	82.99%	79.60%	76.11%	74.03%	82.97%	**78.81%**

AMH Provider Enrollment

Proportion of Primary Care Providers Contracted by State-Designated AMH Tier by PHP*

	AmeriHealth	CCH**	Healthy Blue	United	WellCare
Tier 1	28.92%	58.18%	56.63%	48.19%	35.74%
Tier 2	47.37%	66.67%	88.33%	62.51%	52.18%
Tier 3	86.15%	90.31%	85.67%	85.49%	88.96%

*Providers that are not contracted at the State-designated AMH tier are not included in these counts.

**CCH is only required to contract with providers in regions 3, 4 and 5. CCH's denominator only includes AMHs located in these three regions.

Care Management Penetration Rate

Care management penetration rates for July to September, 2021 are located in the annual section of this report.

Emergency Department Visits per 1,000 Members and Inpatient Admissions per 1,000 Members

Emergency department visits per 1,000 members and inpatient admissions per 1,000 members are measured for the adult NC Medicaid population (age 21 and older) and broken out by Standard Plan and NC Medicaid Direct. Claims denied because they were erroneously billed to NC Medicaid Direct instead of a Standard Plan were excluded from measurement calculations to avoid duplication. Medicaid beneficiaries not eligible for hospital coverage (e.g., family planning participants) were excluded from NC Medicaid Direct calculations.

Due to the lag in claims and encounter reporting, the rates below are reported with a one-month lag. It should be noted that higher rates are expected for NC Medicaid Direct, as members with substantial behavioral health issues to be enrolled in Tailored Plans currently remain in NC Medicaid Direct.

Emergency Department Visits per 1,000 Members, July – September 2022

AmeriHealth	CCH	Healthy Blue	Medicaid Direct	United	WellCare
60.5	60.5	58.9	78.0	61.4	58.3

Inpatient Admissions per 1,000 Members, July – September 2022

AmeriHealth	CCH	Healthy Blue	Medicaid Direct	United	WellCare
13.38	15.22	13.84	23.08	13.77	14.86

Results of beneficiary satisfaction surveys

No results to report this quarter.

Budget Neutrality and Financial Reporting Requirements

The Department will submit the next budget neutrality workbook by Jan. 31, 2023.

Evaluation Activities and Interim Findings

The Sheps Center for Health Services Research (Sheps) is the independent evaluator for North Carolina's 1115 demonstration. The evaluation uses a mixed-methods approach, combining analysis of administrative data with qualitative data to obtain detailed insights into the transformation that are not easily captured through claims and surveys, such as how providers are preparing for the transformation and what can be done to improve their satisfaction with NC Medicaid.

Transition to Capitated Encounter Data from Standard Plans

Sheps data scientists and analysts have continued working with the encounter data that tracks utilization by Standard Plan members. Sheps has provided feedback on the quality and completeness of this data to the Department while continuing to revise code on metrics to include services, medications and diagnoses received through either claims or encounter data. This quarter, Sheps had to shift considerable focus to data quality issues caused by a faulty file sent by the state's data vendor for managed care. The file contained mismatched IDs for Standard Plan members. A replacement file was created, but this required a complete rebuild of Sheps's claims and encounter system, which has delayed reporting by months. The issue is expected to be resolved by December 2022.

Quantitative Update

The quantitative team continues to receive new data from the NC Division of Public Health, including updates to birth and death certificate and immunization data. The team is also ingesting new files on care management data, value-based payment data and NCCARE360, the database that tracks Pilot services and referrals. All data sources are ingested into UNC's secure data warehouse and will be linked to NC Medicaid member information to generate new metrics that will be tracked during the evaluation period. In addition, the team continues to update many of the metrics from established custodians consistent with the NC Medicaid Quality Strategy, Adult and Child Core measures, and other metrics that will address the study hypotheses. Sheps has completed the evaluation of the use of Marketplace enrollees from a NC-based insurer as a potential comparison group for the difference-in-differences analysis through the comparison in trends in seven identified measures. These measures showed generally similar trends between Medicaid and Blue Cross and Blue Shield of North Carolina (BCBSNC) Marketplace plans in the pre-implementation period, although there were concerns about relatively

small sample size for some of the metrics that look at specific subsamples (such as well-child visits for children and adolescents, due to the relatively small number of children in Marketplace plans). The evaluation will use BCBSNC data as a control group for a limited number of metrics, while simultaneously seeking other options for a comparison group, such as through other states' Medicaid data.

The evaluation team has been refining the new dashboard on behavioral health metrics while updating the focused substance use disorder dashboard monthly; both dashboards have recently been delayed because of the data quality issue noted above. Other dashboards specific to Foster Care plan members, individuals with intellectual and developmental disabilities, and physical/overall health metrics are planned.

Qualitative Update

The qualitative team created three findings briefs on both the provider experience and PHP experience. The briefs will be posted on the Sheps Center website once they have been reviewed by the Department and appropriate stakeholders. The qualitative team also presented findings to the Department during a Deep Dive session in October 2022. All Department employees are invited to attend weekly Deep Dive sessions that cover a specific topic of interest to the Department and provides employees an opportunity to ask the presenters questions.

Sheps continues to work on the patient engagement manuscript, which focuses on the data from Year 1 interviews.

Sheps plans to conduct beneficiary focus groups in early 2023 via Zoom. This will include recruiting up to 24 family caregivers of pediatric patients on Medicaid and up to 24 adult Medicaid beneficiaries. The two groups will each be divided into no more than eight groups of three to six caregivers/adult beneficiaries. Discussions are underway regarding the possibility of offering at least one Spanish language focus group. Staff are developing recruitment materials and focus group guides. Once details have been finalized for this additional qualitative work, IRB approval will be sought.

Healthy Opportunities Pilots (previously Enhanced Case Management and Other Services)

Operational Updates

Introduction

The Healthy Opportunities Pilots (HOP) launched service delivery in March 2022. HOP launched in three regions that collectively cover 33 counties in North Carolina. The Pilot has resulted in over 20,000 services addressing unmet social needs being delivered to eligible Standard Plan members.

Key achievements and to what conditions and efforts successes can be attributed

Further, the technology system developed to link medical and non-medical sectors has effectively allowed for program eligibility and service authorization, service referrals, and service invoicing. The Department has worked with the Pilots evaluator to begin to transmit service data which is now available for Pilot evaluation.

Key challenges, underlying causes of challenges, and how challenges are being addressed

The Pilots have experienced challenges related to referral volume, service delivery implementation and system processes.

There was an unexpectedly slow ramp-up in referral volume. The Department worked with partner organizations to identify strategies to increase referral volume quickly and equitably. These strategies included initiatives to promote direct community outreach by HSOs, technical solutions to allow community organizations to make referrals to care managers within the technology system and working with Standard Plans to improve their processes for proactive outreach to potentially eligible members.

Service delivery for the IPV and housing domains has been particularly challenging. Challenges have in part been due to limitations in the current housing support infrastructure, such as very limited affordable housing in rural areas, and funding limitations, especially for HSOs that had historically operated with a smaller budget. The funding challenges were addressed, in part, through capacity building funds which allow the HSOs flexibility to deliver higher cost housing services. This continues to be monitored to ensure appropriate use of Pilot funds and that members receive necessary services in a timely manner. The limitations in affordable housing extend beyond the scope of the program. The Department continues to work with housing subject matter experts (SMEs) to ensure that challenges are addressed within the context of broader housing support infrastructure.

For services that are part of the IPV domain, the Department worked with domestic violence and IPV SMEs to determine design modifications necessary to ensure Pilot enrollee safety and data confidentiality for these sensitive services. Over the last year, the Department worked to modify the technology system to address safety considerations, such as having detailed contact information for members readily available, and make modifications needed to ensure that Violence Against Women Act (VAWA) and Victims of Crime Act (VOCA) regulatory considerations were met, such as ensuring that sensitive data is only visible to individuals who providing IPV services.

The Department continues to work to modify the technology system and build an advanced functionality which automates processes. At service delivery launch, there were various manual workflows which were put in place temporarily.

Issues or complaints identified by beneficiaries

No issues or complaints identified by beneficiaries to report this quarter.

Lawsuits or legal actions

No lawsuits or legal actions to report this quarter.

Unusual or unanticipated trends

No unusual or unanticipated trends to report this quarter.

Performance Metrics

Incentive Payments to PHPs, NLs, and Pilot providers

There were no incentive payments released this quarter.

Pilot Capacity Building Funding

There were no capacity building payments released this quarter.

Healthy Opportunities Pilots Evaluation Activities and Interim Findings

In this quarter, the Sheps Center provided ongoing technical assistance and engagement with the Department to facilitate the Pilots evaluation. Activities included participating in weekly and monthly standing meetings, documenting emerging implementation themes to inform data collection and analysis and developing data collection procedures that ensure safety and confidentiality for Pilot members affected by IPV.

Sheps staff prepared to receive and analyze data relating to Pilot activities. Sheps began to receive data on the Pilots enrollment roster and claims during this period and anticipates initial delivery of data necessary for the evaluation in the upcoming quarter. Associated activities included identification of necessary data elements, planning to receive data when it becomes available, and creating staffing assignments to support analysis workflows.

The final evaluation focus of this quarter was primary data collection for evaluation questions one (lead pilot entity services delivery networks) and four (patient-reported health outcomes). Team members analyzed qualitative data on services delivery to be compiled in reports to the Department. Survey data collection planning continued for patient-reported health outcomes, and an initial IRB submission was completed in October 2022 for Pilot member telephone interviews with adults, parents and adolescents.

Residential and Inpatient Treatment for Individuals with a Substance Use Disorder

The Department will provide detailed information in the Substance Use Disorder quarterly monitoring report due to CMS Feb. 28, 2023.

INTERIM EVALUATION REPORT OF THE SUBSTANCE USE DISORDER (SUD) COMPONENTS OF NORTH CAROLINA'S 1115 WAIVER

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Executive Summary

The purpose of the NC 1115 Waiver is to improve Medicaid beneficiary health outcomes through the implementation of a new delivery system, to enhance the viability and sustainability of the NC Medicaid program by maximizing the receipt of high-value care, and to reduce substance use disorders (SUD) statewide. The demonstration consists of two major elements: components to address the opioid use epidemic and general substance use treatment needs in the state of North Carolina, and other components to restructure Medicaid and Health Choice delivery system and benefit structure in NC. The SUD components were authorized on January 1, 2019 and will expire on October 31, 2023. This report evaluates changes in a large number of metrics reflecting quality of care, process of care, and health outcomes, focused on the SUD components of the 1115 waiver.

The report presents two driver diagrams developed for the Evaluation Design document that convey the pathways by which waiver goals would be achieved. These diagrams lead to a number of testable hypotheses and research questions, which are developed and tested below. We focus on Goal 3 of the waiver, to reduce substance use disorder, and test research questions using a number of data sources including Medicaid enrollment, claims and encounters, and state-level public data sources such as Behavioral Risk Factor Surveillance System. We also test several hypotheses and research questions related to general health and access to preventative care and access to mental health treatments for beneficiaries with a substance use disorder diagnosis.

The evaluation study period for the Interim Evaluation Report runs from October 1, 2015 – September 31, 2022. May 1, 2019 is used as the official start of the SUD waiver, since approval was received in April 2019. Many waiver SUD changes were phased in over time and thus our estimates will be conservative since we include months prior to each event. Two major events occurred during the SUD implementation period. First, the Public Health Emergency from the COVID-19 pandemic began with stay-at-home orders in March 2020 and only ended in May 2023, after the study period for this report. We developed a novel method of identifying the return-to-normal dates in our data. Second, the launch of Standard Plans (SPs) occurred on July 1, 2021. While most of the population with an SUD has not yet enrolled in a managed care plan, but will be enrolled in a Tailored Plan, the launch of SPs may have affected outcomes for people with SUD if SP's benefit design affected access to care or if SPs changed

providers' patterns of care, directly or indirectly. We found that 25% of the population identified as having a substance use disorder were enrolled in SPs.

We use interrupted time series models to examine the trends in metrics before the start of the SUD waiver and during the waiver implementation period. These models control for changes due to other factors such the COVID-19 time period, SP implementation, month effects, county effects, and beneficiary-level controls for age, race/ethnicity, sex, and the Chronic Disease Payment System (CDPS-Rx) risk score. This report does not incorporate a comparison group that was not exposed to the NC Medicaid transformation and thus the models will attribute any remaining factors that occurred during the SUD implementation period to the SUD waiver. We take this into account when describing results.

Below, we summarize the findings by major hypothesis:

Hypothesis 3.1: Expanding coverage of SUD services will result in improved care quality and outcomes for beneficiaries with SUD.

We examined 27 metrics reflecting quality of care and outcomes for Medicaid beneficiaries with substance use disorders to test hypothesis 3.1. Analysis of these variables found that only six metrics represented progress in improving outcomes and quality of care for people with SUD, one metric demonstrated no change, one had data issues and could not be analyzed, while the remaining 19 metrics demonstrated declines. The metrics that improved during the SUD waiver were important high-level reflections of the health of the population of Medicaid beneficiaries who struggle with substance use disorders. These include proportionately a greater percent of beneficiaries with diagnosed with SUD after a peak around the time of the COVID-19 pandemic, potentially indicating better access to care (although we note that it is impossible to tell whether this reflects a higher prevalence of SUD or a higher diagnosed prevalence), greater use of withdrawal management services, the growth in the availability of providers to provide SUD and medications for opioid use disorder (MOUD) treatments, continued low lengths of stay in inpatient or residential treatment facilities, often referred to as Institutes for Mental Disease (IMDs), and greater continuity of care for opioid use disorder (OUD). These are important metrics of the success of the waiver. Many of the metrics demonstrating declines were measures of access to specific types of services, initiation and engagement in care. Most of these metrics declined during the COVID PHE, despite our effort to control these effects using trends from Medicaid beneficiaries without SUD diagnoses. The remaining metrics that did not demonstrate progress examined availability and use of specialty behavioral health services, which may reflect the fact

that many of the expansions in benefits offered to meet American Society of Addiction Medicine (ASAM)'s levels of care have only been recently introduced or are still in process. In addition, the Tailored Plans had been envisioned as a major driver of improvements in care have still not been implemented and potentially caused disruption in care during the two prior delayed launches of this benefit plan.

Hypothesis 3.2: Expanding coverage of SUD services will increase the use of MOUD and other appropriate opioid treatment services and decrease the long-term use of prescription opioids.

We examined the trends in 16 additional metrics reflecting medication and other treatments for OUD and long-term use of opioids in order to test Hypothesis 3.2 (Table 1). Four of the metrics demonstrated appreciable progress since the SUD waiver implementation, one demonstrated no change, and the remaining 11 moved in the opposite direction as the waiver goals. The metrics that indicated appreciable progress during the SUD waiver implementation period included the use of pharmacotherapy for OUD, 30-day follow up after emergency department (ED) visit for mental health among beneficiaries with SUD diagnoses; two metrics reflecting the receipt of opioids from multiple providers. The use of non-medication services for OUD did not change. The eleven metrics that did not demonstrate progress included metrics reflect follow up care after emergency and hospital visits for SUD, use of opioids at high doses, and the rate of ED and inpatient use per 1000 beneficiaries with SUD.

Hypothesis 3.3: Expanding coverage of SUD services will result in no changes in total Medicaid and out-of-pocket costs for people with SUD diagnoses and increases in Medicaid costs on SUD IMD services.

We examined six measures reflecting total spending, per beneficiary spending, and out-of-pocket costs overall for SUD services and specifically for IMD services. We found that total spending on SUD services increased after SUD waiver implementation, as expected. This reflects both the greater number of beneficiaries receiving benefits, especially after the start of the PHE, but also greater spending per capita, even after controlling for changes in case mix. Spending on SUD services in IMDs remained stable, although per capita spending on SUD services in IMDs grew slightly. A somewhat greater percent of beneficiaries with SUD had out-of-pocket spending after the waiver was implemented, affecting 2% of beneficiaries with SUD. However, the average copay among beneficiaries with some out-of-pocket

spending declined during the SUD implementation period.

Additional Hypothesis 4.1: The implementation of the SUD waiver will increase access to health care and improve the quality of care and health outcomes.

We examined eight measures reflecting general health care quality and health outcomes in order to test the effect of the SUD waiver implementation on overall health. We note that the largest component of the SUD waiver intended to improve overall health among beneficiaries with SUD, Tailored Plans, were intended to launch earlier in the waiver, but have not yet launched, and thus the mechanisms for improving overall health outcomes for people with SUD are not strong. In this set of analyses, we found an improvement in one measure of care – access to ambulatory / preventative visits. We found that three of the measures did not have a measurable effect of the SUD waiver, and four of the measures showed worse outcomes associated with the SUD waiver implementation.

Additional Hypothesis 4.2: The implementation of the SUD waiver will increase the rate of use of behavioral health services at the appropriate level of care and improve the quality of behavioral health care received.

This section mostly focuses on the impact of the SUD waiver on mental health measures. A high proportion of people with substance use disorders also qualify for mental health diagnoses. We tested hypothesis 4.2 on access to and quality of behavioral health care for beneficiaries with SUD diagnoses using 18 measures, including 13 that had been used in prior hypotheses (see Table 1). One of the measures was unaffected by the Medicaid SUD transformation (antidepressant management during the acute phase), while all remaining 17 measures declined during SUD implementation. These estimates attempt to control for trends observed during the COVID-19 PHE in the Medicaid beneficiary population without SUD and not transitioned to standard plans, but these adjustments are not without limitations due to the differences in these populations.

Stratified analyses show important declines in several disparities in care across numerous dimensions and effects both directly from SP implementation as well as indirect effects in the beneficiary population with SUD diagnoses.

Conclusions

The results from this report are consistent with the tremendous losses and pivots that North Carolina, like virtually all other states, had to make during the COVID-19 PHE. The SUD components of the waiver were only beginning to gain traction as the PHE began, having been implemented only 10 months before its start. Most NC DHHS staff and providers worked under extraordinary conditions, that lasted longer than anyone imagined. Many professionals left the public health and medical workforce at a time of greater demand for substance use services. The findings in this report do not in any way detract from the dedication of the thousands of dedicated public health professionals that accomplished daily miracles during this time. The SUD waiver is the most challenging waiver component to evaluate because it is not a discrete event, like managed care launch, but comprised of multitudes of policy changes and approvals, many of which are still in progress. One major event, the IMD waiver, happened quickly, to little fanfare, while the other, Tailored Plan launch, has been postponed several times, compromising the momentum of SUD implementation.

There are some bright spots in this report: the number of beneficiaries diagnosed with a substance use disorder has started to decline, consistent with the stated goals of the demonstration, the number of people using evidence-based medication treatments for opioid use disorder is increasing, the continuity of pharmaceutical care for OUD is increasing, more providers are available to provide SUD services to beneficiaries, fewer beneficiaries without cancer are receiving opioid prescriptions from multiple providers, and beneficiaries with SUD diagnoses are accessing more ambulatory and preventative care.

In no uncertain terms, however, we have identified serious lack of access to many essential services for people with substance use disorders, even after the implementation of many of the components of the SUD waiver. Most of the SUD metrics required by CMS for SUD 1115 waivers declined rather than improved during the waiver implementation. The percent of beneficiaries with SUD receiving any type of care has stagnated at 35-40% of the population identified for treatment. This statistic alone indicates that more than 60% of people in the target population are not receiving any type of Medicaid-paid SUD service in a given month. The percent of beneficiaries with a diagnosed SUD condition receiving outpatient SUD services has dropped to levels below those experienced during the initial months of the PHE when the state was under stay-at-home orders. These levels indicate that in a typical month almost 75% of the eligible population is not receiving a single outpatient service. Finally, over 40% of non-elderly adults with opioid use disorder are not accessing evidence-based medication treatments for opioid use disorder, an essential tool the provider community has to fight this deadly condition.

Chapter 1: General Background Information

This document is the Interim Evaluation Report of the Substance Use Disorder (SUD) components of North Carolina's 1115 waiver. The purpose of the NC 1115 Waiver is to improve Medicaid beneficiary health outcomes through the implementation of a new delivery system, to enhance the viability and sustainability of the NC Medicaid program by maximizing the receipt of high-value care, and to reduce substance use disorders statewide. North Carolina's 1115 waiver entitled "North Carolina Medicaid Reform Demonstration" was approved by the Centers for Medicare & Medicaid Services (CMS) on October 24, 2018. The demonstration consists of two major elements: components to address the opioid use epidemic and general substance use treatment needs in the state of North Carolina, and other components to restructure Medicaid and Health Choice delivery system and benefit structure in NC. The SUD components were authorized on January 1, 2019 and will expire on October 31, 2023.

The SUD waiver components consist of several important policy changes. First, as of July 2019, the State was approved to begin billing for substance use services received in an "Institute for Mental Disease" (IMD), the traditional term for specialty facilities that have more than 16 beds with most patients receiving treatment for mental illness and/or substance use disorder. State Medicaid programs have been historically unable to bill for services in IMDs for Medicaid beneficiaries between the ages of 21 and 64. IMDs typically consist of psychiatric hospitals and residential SUD treatment facilities. The ability of the State to bill for SUD services in an IMD creates substantial savings for the State by allowing NC to receive the Federal financial participation or Federal match for these services, reducing the price of IMD services by almost 66%. Second, the state has modified numerous policies that expand SUD services in the state by increasing the types of providers who can bill Medicaid for SUD services and expanding the continuum of care to be consistent with the American Society of Addiction Medicine (ASAM) continuum. These benefit expansions started during the first year of the waiver and continue to be implemented, with many still in progress. Finally, Medicaid enrollees with severe SUD, severe mental illness, intellectual or developmental disabilities, and/or traumatic brain injuries who meet criteria established by the Department of Health and Human Services will be enrolled in separate capitated plans with specialized features that have enhanced behavioral health benefits, called BH I/DD Tailored Plans. The transition to Tailored Plans was initially scheduled to occur earlier in the demonstration, but the launch of this waiver component has been postponed until October 1, 2023 and thus is not evaluated in this report.

Other components of the 1115 waiver, such as the transition of most Medicaid beneficiaries without a SUD diagnosis into capitated health plans called Standard Plans, on July 1, 2021, or implementation of the Healthy Opportunities Pilots in the spring of 2022, creating a new set of covered benefits which address social-related health needs, such as food insecurity or housing instability in certain regions of the state, may have affected patterns of health care for people with SUD diagnoses. This report, however, will focus on the direct impact of the SUD components of the waiver outlined above.

While most Medicaid beneficiaries with SUD will be covered under either a Standard or Tailored capitated plan under the demonstration, several groups are excluded from participation in any type of managed care, including Medicaid enrollees dually eligible for Medicare[2], Medicaid enrollees who are eligible through the Medically Needy program, those with limited eligibility such as through family planning waivers, those presumptively eligible for Medicaid, and prison inmates receiving Medicaid covered inpatient services. In addition, Medicaid-only beneficiaries receiving long-stay nursing home services and Community Alternatives Program for Children and Community Alternatives Program for Disabled Adults enrollees are also excluded. These beneficiaries will remain in fee-for-service Medicaid, now called NC Medicaid Direct.

Evaluation Questions and Hypotheses

There are three stated goals of the demonstration:

1. Measurably improve health outcomes via a new delivery system
2. Maximize high-value care to ensure sustainability of the Medicaid program, and
3. Reduce the Burden of Substance Use Disorder (SUD)[1]

All three goals can be used as a lens through which the SUD components of the waiver are evaluated, although the third goal is the most specific for this report.

The primary and secondary drivers, or pathways through which these goals will be achieved, are diagrammed below. Goal 3 is additionally broken out in more detail in the subsequent figure.

[1] The original goal was stated as “Reduce Substance Use Disorder.” It has since been modified to “Reduce the Burden of Substance Use Disorder.”

The primary drivers for both Goals 1 and 2 include an increased use of alternative payment models, providing care with a whole person orientation, enhanced access to care, and more use of evidence-based practices and medicines.

The use of alternative payment models is expected to increase through the use of prepaid health plans including Standard Plans (SP), which serve most of the Medicaid population and Tailored Plans (TP), according to the value-based payment strategy. SPs are encouraged to use alternative payment models (APMs) to pay providers and are incentivized to move along the Health Care Payment Learning and Action Network's Framework[6] towards more population-based models of payment and accountability. With the use of value-based payments, SPs will have more ability to place incentives upon providers to meet quality expectations. The SPs are held to quality expectations and other oversight/compliance by the State; this puts more emphasis on quality and value than existed prior to the waiver.

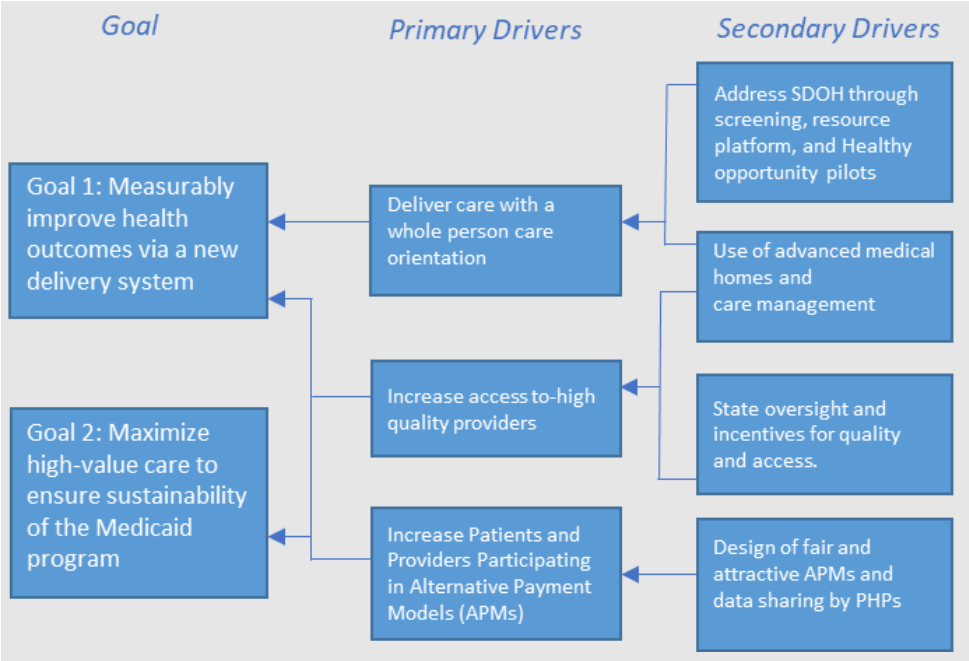
It is well known that medical care is only responsible for a fraction of a person's health; other factors like social determinants of health and the environment are also considerable drivers. An increased emphasis on a whole person orientation will improve beneficiary outcomes. A number of managed care initiatives specifically address social determinants of health; these include the Healthy Opportunities Pilots, the resource platform linking needs to local assets, and mandated screening for patients' SDOH-related needs.

Multiple secondary drivers will improve the use of evidence-based practices (EBP). This driver is deliberately worded to account for both the recommendation of EBPs by providers as well as the ability and willingness of patients to participate in the EBP - ability to access recommended care (e.g., transportation needs met), trust in the provider's recommendation through shared decision-making, and adherence to the recommended treatment (e.g., medication). Some of the secondary drivers are focused on the provider side (e.g., quality improvement activity and shared data/transparency) while others are more focused on the patient and family (patient engagement, use of advanced medical homes). Likewise, oversight of the PHPs and providers will increase the practice of EBPs, and access to the resource platform will attenuate social barriers inhibiting patients' abilities to access evidence-based practices.

Finally, these primary drivers also improve the ability of patients to access care more generally. These will improve provider satisfaction and willingness to treat and manage Medicaid beneficiaries. As

providers become more satisfied with the Medicaid program, more providers will be willing to manage Medicaid beneficiaries, and many will increase the number of Medicaid beneficiaries they are able to manage.

Figure 1 Driver Diagram for Goals 1 and 2.



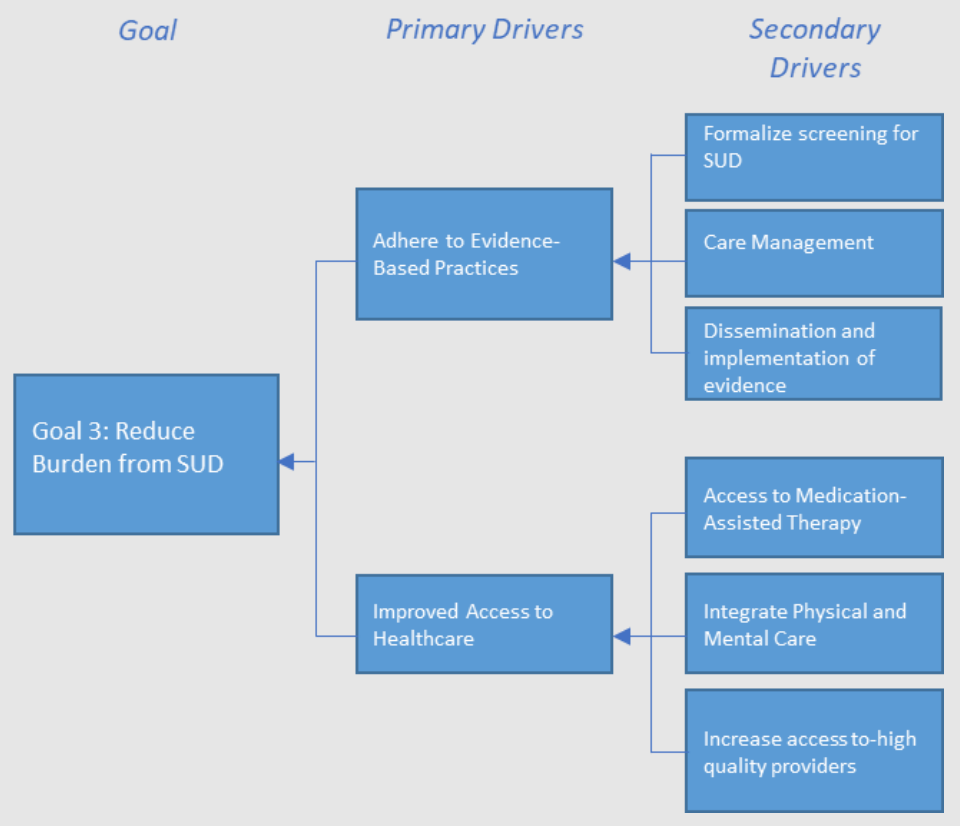
Goal 3 is "reduce the burden of substance use disorder." In Figure 2, we provide additional detail on this goal, which includes reducing the burden of substance use disorder, both in terms of reductions in mortality and morbidity. The primary intention of the SUD components of the waiver is to provide beneficiaries with substance use disorders the high-quality care they need and to reduce the long-term use of opioids.

The Goal 3-specific Driver Diagram focuses on drivers uniquely leading to Goal 3. Secondary drivers of better management, integration between physical and behavioral health, patient satisfaction with SUD treatment and an increase in prescribers of medications for opioid use disorders (MOUD; also referred to as Medication Assisted Therapies, (MAT)[2]) leads to treatment being provided in the most appropriate care setting, adherence to medications and SUD services (including, as above, the notion that providers

[2] We use both terms in this report: MOUD is the currently preferred term while MAT is the traditional name and is included here only when it is the name of specific outcome metrics or interventions.

need to be recommending EBPs as well), and improving rates of treatment and engagement with SUD treatment and providers.

Figure 2 Driver Diagram for Goal 3.



Each of the three goals leads to a number of hypotheses which will be tested in the demonstration evaluation through the related research questions. The research questions specific to SUD services or beneficiaries with SUD diagnoses include:

Goal 3: Reduce the Burden of Substance Use Disorder (SUD)

Hypothesis 3.1: Expanding coverage of SUD services will result in improved care quality and outcomes for patients with SUD.

- Research question 3.1.a Does the expanded coverage of SUD services increase the quality of care for patients with SUD?
- Research question 3.1.b Does the expanded coverage of SUD services improve outcomes for people with SUD?

Hypothesis 3.2: Expanding coverage of SUD services will increase the use of MOUD and other appropriate opioid treatment services and decrease the long-term use of prescription opioids.

- Research question 3.2.a Does the expanded coverage of SUD services increase the use of MOUD?
- Research question 3.2.b Does the expanded coverage of SUD services increase the use of non-medication opioid treatment services at the appropriate level of care?
- Research question 3.2.c Does the expanded coverage of SUD services decrease the probability of long-term use of opioids?

Hypothesis 3.3: Expanding coverage of SUD services will result in no changes in total Medicaid and out-of-pocket costs for people with SUD diagnoses, increases in Medicaid costs on SUD IMD services, increases in SUD pharmacy, outpatient, and rehabilitative costs, and decreases in acute care crisis-oriented, inpatient, ED, long-term care and other SUD costs.

- Research question 3.3a Does the expanded coverage of SUD services change total Medicaid costs?
- Research question 3.3b Does the expanded coverage of SUD services change out-of-pocket costs to Medicaid enrollees with an SUD diagnosis?
- Research question 3.3c Does the expanded coverage of SUD services increase Medicaid costs on SUD IMD services, SUD pharmacy, outpatient, and rehabilitative costs?
- Research question 3.3d Does the expanded coverage of SUD services decrease Medicaid costs on acute care crisis-oriented, inpatient, ED, long-term care and other SUD costs?
- Research question 3.3e Does the expanded coverage of SUD services decrease Medicaid spending on non-SUD services for people with an SUD diagnosis?

We also test several hypotheses and research questions related to general health and access to preventative care and access to mental health treatments for beneficiaries with a substance use disorder diagnosis. The metrics for this were drawn from those relevant to people with SUD diagnoses and available in our database.

Evaluation Measures

This Interim Evaluation Report assesses the current degree to which the Demonstration has been effective in achieving its goals to date and will examine the processes, facilitators and barriers experienced during the initial four years of the Demonstration period using a set of metrics relevant to beneficiaries with SUD that measure the quality of care, the process of care, and the outcomes of care.

The sections and tables below detail the quantitative measures to be used to test each hypothesis, the source or custodian of each measure, the sample or population to which the measure is relevant, and the proposed data sources. Measures were generated from the CMS-required metrics for SUD 1115 waiver demonstrations, PHP Quality Metrics,[3] the Quality Strategy,[4] the SUD guidance document,[5,6] and other public sources. Several of these measures will be employed for multiple hypotheses, to examine the effect of different components of the waiver on outcomes or in different Medicaid populations. The data sources and analytic methods are further described below. For the majority of these measures, we used claims and encounter data, which includes fee-for-service (FFS) claims data prior to July 1, 2021 as well as remaining populations or services subject to FFS payments after July 1, 2021; LME/MCO encounter data; and SP encounter data.

Table 1 Measures included in the Interim Evaluation Report.

Measure (Metric abbreviation)	Hypotheses	Milestone*	Measure custodian	Numerator	Denominator	Process / Outcome
Hypothesis 3.1: Expanding coverage of SUD services will result in improved care quality and outcomes for patients with SUD						
Medicaid Beneficiaries with SUD Diagnosis (M3)	3.1		CMS	Coded as receiving MAT or have qualifying facility, provider, or pharmacy claims with a SUD diagnosis and a SUD-related treatment service	All beneficiaries	Outcome

[3] BH I/DD Tailored Plan Quality Metrics. Available at: https://files.nc.gov/ncdma/4---Addendum-3-RFA-30-2020-052-DHB-Section-VII-Attachments-A-P.pdf

[4] NC Medicaid Managed Care Quality Strategy. Available at: https://medicaid.ncdhhs.gov/transformation/quality-management-and-improvement

[5] Monitoring Metrics for Section 1115 Demonstrations with SUD Policies . Available at: https://www.medicaid.gov/medicaid/section-1115-demo/downloads/evaluation-reports/sud-monitoring-metrics.pdf

[6] NC Substance Use Disorder Implementation Plan Protocol. Available at: https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/nc/Medicaid-Reform/nc-medicaid-reform-demo-sud-imp-plan-prtcl-20190425.pdf

Measure (Metric abbreviation)	Hypotheses	Milestone*	Measure custodian	Numerator	Denominator	Process / Outcome
Medicaid Beneficiaries Treated in an IMD for SUD (M5)	1.2, 3.1	2	CMS	Coded as receiving inpatient/residential treatment in an IMD	Beneficiaries with SUD diagnosis	Process
Any SUD treatment (M6)	1.3, 3.1, 3.2	1	CMS	Beneficiaries receiving at least one SUD treatment or pharmacy claim	Beneficiaries with SUD diagnosis	Outcome
Early Intervention for SUD (M7)	3.1	1	CMS	Beneficiaries with a service claim for early intervention services	Beneficiaries with SUD diagnosis	Outcome
Outpatient Services for SUD (M8)	3.1	1	CMS	Beneficiaries with a service claim for outpatient services for SUD	Beneficiaries with SUD diagnosis	Outcome
Intensive Outpatient and Partial Hospitalization Services (M9)	3.1	1	CMS	Beneficiaries who have a service or pharmacy claim for intensive outpatient and/or partial hospitalization services for SUD	Beneficiaries with SUD diagnosis	Outcome
Residential and Inpatient Services (M10)	3.1	1	CMS	Beneficiaries who have a service for residential and/or inpatient services for SUD	Beneficiaries with SUD diagnosis	Outcome
Withdrawal Management (M11)	3.1	1	CMS	Beneficiaries with a service or pharmacy claim for withdrawal management services	Beneficiaries with SUD diagnosis	Outcome
Medication-Assisted Treatment (M12)	1.3, 3.1, 3.2	1	CMS	Beneficiaries who have a claim for a MAT dispensing event for SUD	Beneficiaries with SUD diagnosis	Process
Behavioral health Providers with a Medicaid contract	3.1		UNC	Number of behavioral health providers with a Medicaid contract	Number of Medicaid beneficiaries with SUD	Outcome
SUD Provider availability (M13)	3.1, 3.2	4	CMS	Total number of SUD providers who were enrolled and qualified to deliver Medicaid services		Process
SUD Provider availability for MAT (M14)	3.1, 3.2	4	CMS	Total number of SUD providers who were enrolled and qualified to		Process

Measure (Metric abbreviation)	Hypotheses	Milestone*	Measure custodian	Numerator	Denominator	Process / Outcome
				deliver Medicaid services and who meet standards to provide buprenorphine or methadone as part of MAT		
Initiation and Engagement of Alcohol and Other Drug Abuse or Dependence Treatment (IET/M15)	1.2, 1.5, 3.1	6	NQF#: 0004 / NCQA – HEDIS / Adult Core Set	Beneficiaries who initiated AOD treatment within 14 days of the diagnosis and who were engaged in ongoing AOD treatment within 34 days of the initiation visit	Adult beneficiaries with a new episode of SUD	Process
Concurrent Use of Opioids and Benzodiazepines (M21/COB)	1.1, 3.1	5	NQF#: 3389 / PQA / Adult Core Set	Received concurrent prescriptions for opioids and benzodiazepines	Adults beneficiaries with two or more prescriptions of opioids on different service dates and with a cumulative days' supply of 15 or more days	Process
Access to Preventive/Ambulatory Health Services for Adult Medicaid Beneficiaries with SUD (M32)	3.1		NCQA – HEDIS / CMS	Had an ambulatory or preventative care visit	Adult beneficiaries with SUD	Process
Average Length of Stay in IMDs (M36)	1.1, 3.1	2	CMS	Number of days in an IMD for inpatient/residential discharges for SUD	Number of discharges from an IMD for beneficiaries with an inpatient or residential treatment stay for SUD	Outcome
Percent of Individuals Receiving MOUD who are also Receiving Counseling and Behavioral Therapies to Treat Substance Use Disorders (Q3)	1.3, 3.1, 3.2		--	Psychosocial visits during the current and prior 3 months	Beneficiaries in their first 12 months of receiving MOUD	Process
Poor mental health in the past 30 days	3.1		BRFSS			

Measure (Metric abbreviation)	Hypotheses	Milestone*	Measure custodian	Numerator	Denominator	Process / Outcome
Binge drinking in the past 30 days	3.1		BRFSS			
Hypothesis 3.2: Expanding coverage of SUD services will increase the use of MAT and other appropriate opioid treatment services and decrease the long-term use of prescription opioids						
Follow-Up After Emergency Department Visit for Alcohol and Other Drug Abuse or Dependence (M17.1)	1.2, 3.2	6	NQF#: 3488 / NCQA – HEDIS / Adult Core Set	A follow-up visit with any practitioner within 7 and 30 days of the ED visit	ED visits for beneficiaries ages 18 and older with a principal diagnosis of AOD abuse or dependence	Outcome
Follow-Up After Emergency Department Visit for Mental Illness (M17.2)	1.2, 3.2	6	NQF#: 3489 / NCQA – HEDIS / Adult Core Set	A follow-up visit with any practitioner within 7 and 30 days of the ED visit	ED visits for beneficiaries ages 18 and older with a principal diagnosis of mental illness or intentional self-harm	Outcome
Use of Opioids at High Dosage in Persons without Cancer (M18)	1.3, 3.2	5	NQF#: 2940 / PQA / Adult Core Set	Beneficiaries who received prescriptions for opioids with an average daily dosage of ≥90 morphine milligram equivalents (MME) over a period of 90 days or more	Adults with two or more prescription claims for opioids filled on different service dates and with a cumulative days' supply of 15 or more days	Outcome
Use of Opioids from Multiple Providers in Persons Without Cancer (M19)	1.3, 3.2	5	NQF#: 2950 / PQA	Evidence of opioid prescription claims from 4 or more prescribers AND 4 or more pharmacies within 180 days	Adults with two or more prescription claims for opioids filled on different service dates and with a cumulative days' supply of 15 or more days	Outcome
Use of Opioids at High Dosage and from Multiple Providers in Persons Without Cancer (M20)	1.3, 3.2	5	NQF#: 2951 / PQA	Evidence of opioid prescription claims with an average daily dosage of ≥90 morphine milligram equivalents (MME) AND from 4 or more prescribers AND 4 or more pharmacies	Adults with two or more prescription claims for opioids filled on different service dates and with a cumulative days' supply of 15 or more days	Outcome
Percent of Enrollees Diagnosed with OUD Receiving Non-medication	3.2		--	Evidence of psychosocial service for OUD	Beneficiaries with an OUD diagnosis	Process

Measure (Metric abbreviation)	Hypotheses	Milestone*	Measure custodian	Numerator	Denominator	Process / Outcome
Opioid Treatment Services						
Emergency Department Utilization for SUD per 1000 beneficiaries (M23)	3.2	5	CMS	Number of ED visits for SUD	All fully eligible beneficiaries	Process
Inpatient Stays for SUD per 1000 beneficiaries (M24)	3.2		CMS	Number of inpatient discharges related to a SUD stay	All fully eligible beneficiaries	Process
Hypothesis 3.3: Expanding coverage of SUD services will result in no changes in total Medicaid and out-of-pocket costs for people with SUD diagnoses, increases in Medicaid costs on SUD IMD services, increases in SUD pharmacy, outpatient, and rehabilitative costs, and decreases in acute care crisis-oriented, inpatient, ED, long-term care and other SUD costs						
SUD spending (M28)	3.3		CMS	Total Medicaid spending on SUD treatment services		Outcome
SUD spending within IMDs (M29)	3.3		CMS	Total Medicaid spending on inpatient/residential treatment for SUD provided within IMDs		Outcome
Per capita SUD spending (M30)	3.3		CMS	Total Medicaid spending on SUD treatment services	All fully eligible beneficiaries	Outcome
Per capita SUD spending within IMDs (M31)	3.3		CMS	Total Medicaid spending on inpatient/ residential treatment for SUD provided within IMDs	All fully eligible beneficiaries with a claim for inpatient/residential treatment for SUD in an IMD	Outcome
Out-of-pocket costs to Medicaid Enrollees (All services)	2.3, 3.3		--	Total out-of-pocket expenditures	Beneficiaries with SUD diagnosis	Outcome
Additional measures examined among beneficiaries with a SUD diagnosis						
Avoidable or Preventable Emergency Department Visits	--		Oregon Health	Evidence of an avoidable ED visit	Beneficiaries with a SUD diagnosis	Outcome

Measure (Metric abbreviation)	Hypotheses	Milestone*	Measure custodian	Numerator	Denominator	Process / Outcome
Readmissions Among Beneficiaries with SUD (M25)	--	6	CMS	Readmission within 30 days of discharge	Hospital stays for beneficiaries with a SUD diagnosis	Outcome
Connecting Primary Care to SUD Service Offerings (Q2)	--		--	Had a PCP visit in the 30 days following a SUD visit	SUD visits that did not have an inpatient or residential SUD stay for 30 days after the visit	Process
Rate of Screening for Pregnancy Risk	--		NC Administrative Measure	Coded as receiving screening for pregnancy risk	Women with a SUD diagnosis and a claim/encounter for prenatal services	Process
Annual Dental Visits (ADV)	--		NQF#: 1388 / NCQA - HEDIS	Coded as receiving 1 or more outpatient dental visit	Beneficiaries 2 years of age or older and with a SUD diagnosis	Process
Breast Cancer Screening (BCS)	--		NQF#: 2372 / NCQA – HEDIS / Adult Core Set	Coded as receiving breast cancer screening	Women 50-74 years of age with a SUD diagnosis	Process
Cervical Cancer Screening (CCS)	--		NQF#: 0032 / NCQA – HEDIS / Adult Core Set	Coded as receiving cervical cancer screening	Women 21-64 years of age with a SUD diagnosis	Process
Continuity of Pharmacotherapy for OUD (M22)	--	1	NQF#: 3175 / University of Southern California / HEDIS	At least 180 days of continuous pharmacotherapy use	Adult beneficiaries 18 years of age and older with OUD and at least one claim for pharmacotherapy	Process
Follow-up After Hospitalization for Mental Illness (FUH): 7 and 30 days after discharge	--		NQF#: 0576 / NCQA – HEDIS / Adult & Child Core Set	Evidence of outpatient visit in the appropriate time frame	Beneficiaries ages 6 and older who were hospitalized for treatment of selected mental illnesses and have a SUD diagnosis	Process

Measure (Metric abbreviation)	Hypotheses	Milestone*	Measure custodian	Numerator	Denominator	Process / Outcome
Use of Behavioral Health Care for People with SMI/SUD/SED	--			Evidence of behavioral health care use	Children and adults with a SUD diagnosis	Process
Antidepressant Medication Management (AMM)	--		NQF#: 0105 / NCQA – HEDIS / Adult Core Set	Beneficiaries who remained on antidepressant treatment	Beneficiaries ages 18 and older with a SUD diagnosis who filled at least one prescription for antidepressant medication	Process

* SUD metrics are also presented by Milestones in Table 2.

Chapter 2: Assessment Methodology

Evaluation Design

The evaluation design in this Interim Evaluation Report focuses on the trends in and analysis of the measures outlined in Table 1. We have conducted analyses of metrics on a monthly or annual basis. Many of these results have already been reported to NC DHHS through data dashboards that have been developed as part of the Evaluation as well as through verbal and written reports.

Evaluation Period

The evaluation study period for the Interim Evaluation Report runs from October 1, 2015 – September 31, 2022. The baseline period is slightly less than five years prior to the start of Demonstration, but coincident with the launch of ICD-10 codes. Monthly metrics use this full time-period unless a look back for specific metrics is required. Annual measures have different baseline periods, depending on whether they are calendar-year metrics (baseline begins January 1, 2016) or demonstration year metrics (baseline begins November 1, 2015).

May 1, 2019 is used as the official start of the SUD waiver, since approval was received in April 2019. Many waiver SUD changes were phased in over time and thus our estimates will be conservative since we include months prior to each event. We note in the results section if the metrics are trending up or down during the SUD implementation period.

Important Confounders during SUD Implementation

Two major events occurred during the SUD implementation period. First, the PHE from the COVID-19 pandemic began with stay-at-home orders in March 2020 that dramatically reduced the use of most Medicaid-funded health care services and also resulted in a number of policy levers implemented to attempt to reduce the impact on the Medicaid beneficiary and provider populations. The PHE only ended in April 2023, after the study period for this report, although different types of service returned to normal at different times during the PHE. We developed a novel method of identifying the return-to-normal dates in our data, as described below. Our estimation analysis includes the relevant time period for COVID as identified in our return-to-normal analysis, although for two categories of service, prescription drugs and hospitalizations, utilization has not yet returned to normal as of the end of our

study period. This has a very important implication for our estimation models, because there are only 10 months of data during the SUD implementation period before the COVID PHE began and thus it is much harder to tease out independent effects of the waiver. In addition, we fully acknowledge that there are many dimensions in which health care use and the Medicaid program design has not returned to normal. Telehealth continues to be used, especially for behavioral health care, which may permanently affect patterns of care. Providers and practices may still function differently from before the pandemic in ways that are not fully captured in these data. Finally, Medicaid has made several of the PHE policies permanent, which may also affect patterns of care, that are difficult to tease out from the SUD waiver effects.

Second, as described above, the launch of Standard Plans (SPs) occurred on July 1, 2021. While most of the population with an SUD has not yet enrolled in a managed care plan, but will be enrolled in a Tailored Plan, the launch of SPs may have affected outcomes for people with SUD due to reduced behavioral health benefits in SPs or if SPs changed providers' patterns of care, directly or indirectly. In addition, TPs have been scheduled to launch twice during the SUD implementation period examined here and have been postponed a third time to October 1, 2023. Gearing up for TP launch may have affected patterns of care examined here and would be attributed to the waiver. Differences in the effect of SP launch by beneficiaries ever in SPs or never in SPs are described in Chapter 5.

Data Sources

The data sources used for this analysis are briefly described below.

NC Medicaid FFS claims and membership information; LME/MCO encounter; and PHP encounter data: These data create the backbone of the quantitative analysis and include specific information on services paid through the Medicaid program (or its subcontracting MCO or PHP plans), administrative diagnoses received, and Medicaid enrollment information, as well as demographic characteristics. This set of data is referred to as "Medicaid data" below.

There are three sources of data we had anticipated using to test metrics for Hypotheses 3.1-3.3 but that were not yet available or became irrelevant. **Death certificate data** would have been used to test hypotheses about the reduction in overdose deaths, but linkage of these data was delayed due to computing limitations and other factors. These data are in progress and should be available for future analyses. The **Controlled Substances Reporting System (CSRS)** data were not made available for this analysis, as the state agency denied repeated requests to access this data. The **DEA waiver data** was

abandoned both because the DEA stopped making this data available and because of changes in the DEA waiver policy that no longer required a waiver to prescribe buprenorphine.

Analysis of Monthly Measures

Most of the measures analyzed for this report are generated monthly, and thus have sufficient data points to conduct interrupted time-series analysis models to examine the effect that the SUD components of 1115 Waiver have on the monthly outcomes both in terms of shifting the average values up or down, as compared to prior to the implementation of the SUD waiver, as well as examining differences in the rate of change of the metrics after the implementation of the SUD waiver components as compared to the baseline period.

Interrupted time-series (ITS) analysis models take the following form:

$$Y_{it} = f(\beta_0 + \beta_1 Time_{it} + \beta_2 Post_t + \beta_3 Time_{it} * Post_t + \beta_4 Z_{it}) + \varepsilon_{it}$$

We use estimates from this model to generate average marginal effects of the SUD intervention on the level of each outcome and on the trends in the outcomes. Models are currently run as linear models for ease of interpretation. A limitation of the ITS approach is that it is subject to confounding from events that occur during the post-period such as the availability of treatments or changes in the health services environment.

Monthly analyses control for the effects of COVID-19, using a variable-time approach described below. We also control for baseline, post-waiver, COVID-19, and managed care periods intercepts and slopes, month fixed effects, county fixed effects, and beneficiary-level controls: age (in quadratic form), race/ethnicity, sex, and CDPS-Rx risk score (in quadratic form). SUD weights are omitted in the CDPS risk score calculation since the full sample for analyses have a SUD diagnosis. A small number of monthly metrics occurred too infrequently to use the full set of beneficiary characteristics: for M5 (beneficiaries treated in an IMD for SUD), analysis was performed on the aggregate count of those treated rather than analyzing outcomes at the beneficiary level. M7 (early intervention for SUD) was a rare outcome with a idiosyncratic pattern, so we only present a descriptive count without ITS analysis. Spending metrics are particularly meaningful both at the aggregate (state) level and the beneficiary (per capita) level: thus, we present state-level monthly SUD spending and SUD spending with IMDs, as well as per capita spending.

Analysis of Annual Measures

We used adjusted and unadjusted linear regression models to evaluate the trends in annual measures specified in Table 1. Adjusted analyses controls for other covariates that may affect the outcomes, including age (in quadratic form), sex (if appropriate), urban location, race, ethnicity, and risk adjustment through the Chronic Illness and Disability Payment System (CDPS + Rx) risk adjustment scores to account for changes in the prevalence of chronic conditions in the Medicaid population over time.

Annual measures that required a lookback period for the identification of the eligible population exclude the first year of the baseline period, as described above. We applied Version 5.0 of the SUD Technical Specifications to all years of available data at the time of analyses.

In order to explore the impact of the intervention on mental health related outcomes from the BRFSS survey, we used linear regression models within the framework of a quasi-experimental difference-in-differences approach. The effects of the SUD waiver were evaluated during the post-intervention period (2019- 2021) compared to pre-intervention years (2016-2018). The treatment group included individuals who resided in North Carolina, whereas those from Oklahoma formed the control group. Oklahoma was chosen as a control state because of its relative similarity in terms of population composition and absence of Medicaid managed care in the state during the baseline period. The regression models included separate interaction terms between the treatment status indicator and post-SUD waiver implementation time period indicator. The coefficients on these interaction terms indicate the changes in the outcome associated with the SUD waiver in NC. We included the following covariates: sex, age groups, employment, educational and marital status variables as well as year and state fixed effects. Due to small sample size issues, we did not restrict the sample to only Medicaid beneficiaries, so the estimated effects under-estimate true waiver effects. Observations with missing values for covariates were excluded from the sample.

Cost of Care

Research question 3.3 examines the costs of SUD care and out-of-pocket costs to beneficiaries. We use actual payments from NC DHHS or from the Standard plans to providers in our analysis. This means that

we are not taking a strictly Medicaid perspective for this analysis, which would only include direct fee-for-service payments and the capitated payments to SPs but would omit the services delivered through SPs since those come at no net cost to NC DHHS. For this report, we opt to use actual payments as expenditure weights, using expenditures to reflect the intensity of service use.

Limitations

Our analysis approach uses distinct time periods to examine different phases of waiver activities, although in reality, these are not as distinct as would be ideal. Efforts to create a managed care waiver were initiated by North Carolina's General Assembly some time before the baseline time period incorporated here. If provider behavior changed as a result of expectations of upcoming changes, then our baseline period does not capture a true baseline, but rather a baseline under increasing expectation of managed care implementation. An additional concern when using encounter data is how accurate and complete these data are, given that the incentives for complete reporting are dampened over fee-for-service claims. Any deficits in quality of encounter data would confound the SP analyses, since they would be contemporaneous to the implementation of capitated care. The evaluation team has monitored the quality of encounter data as the SPs were implemented and have reported any data quality concerns to NC DHHS as soon as they were discovered, in an effort to improve data quality as the demonstration continues. An additional limitation is that the ITS models are unable to tease out effects that happened concurrently with the SUD waiver implementation. We control for the COVID-19 pandemic by comparing trends in care from Medicaid beneficiaries that were not affected by either the SUD or the managed care components of the waiver, and thus and changes we see during this time period are more likely to be from the PHE. The ITS approach may capture over changes that were contemporaneous with the SUD waiver but may have had nothing to do with the waiver. We will continue to compare trends in utilization measures from encounter data to similar measures in NC claims data as well as external data sources (e.g., trends in the BRFSS data), although these sources tend to have a greater lag in availability. Finally, the evaluation will not be able to assess all aspects of the Demonstration due either to data limitations or statistical limitations. For example, we do not have information on enrollees' labor market status and thus were not able to evaluate whether improved services increase the ability of enrollees to participate in the labor market.

Chapter 3: Results

In this chapter, we report the results of our analyses, organized by the Hypotheses from the Evaluation Design Document[7].

For monthly metrics reported below, we begin by presenting a figure of the unadjusted metric during the full evaluation period to date. Metric numbers for required SUD metrics refer to the numbering system used by CMS for these metrics, although we describe the metric in the text. We present a table of estimates from the interrupted time series (ITS) models for each monthly metric with adequate sample size, focusing on estimates of the difference in the average effect of the metric during the full post- SUD implementation period (May 2019 – present) as well as differences in the rate of change during the post SUD implementation period. The intercept reflects the immediate impact of the waiver on metrics and is given in the tables below as Difference in the Predicted Outcome in May 2019. A difference in the slope from the baseline (baseline) to the post-waiver (implementation) time periods indicates that the rate of change was different since SUD implementation than it was during the baseline period. An outcome can have changes in either the intercept or slope, both, or neither. We provide a brief interpretation of the metric findings in each section.

We also plot the counterfactual estimated rate for each measure, should the waiver not have been implemented. By comparing the actual measures at each time period to this estimated rate, we can observe the estimate of the impact of the SUD waiver on outcomes, controlling for other characteristics and events that may also affect outcomes.

Hypothesis 3.1: Expanding coverage of SUD services will result in improved care quality and outcomes for beneficiaries with SUD.

We examined 27 metrics reflecting quality of care and outcomes for Medicaid beneficiaries with substance use disorders to test hypothesis 3.1 (Table 2). Analysis of these variables found that only six metrics represented progress in improving outcomes and quality of care for people with SUD, one metric demonstrated no change, one had data issues and could not be analyzed, while the remaining 19

[7] https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/nc/Medicaid-Reform/nc-medicaid-reform-demo-eval-des-appvl-01152020.pdf

metrics demonstrated declines. The metrics that improved during the SUD waiver were important high-level reflections of the health of the population of Medicaid beneficiaries who struggle with substance use disorders. These include proportionately a greater percent of beneficiaries with SUD diagnoses after a peak around the time of the COVID-19 pandemic (although we note that it is impossible to tell whether this reflects a higher prevalence of SUD or a higher diagnosed prevalence), greater use of withdrawal management services, the growth in the availability of providers to provide SUD and MOUD treatments, continued low lengths of stay in IMDs, and greater continuity of care for OUD. These are important metrics of the success of the waiver. Many of the metrics demonstrating declines were measures of access to specific types of services, initiation and engagement in care. Most of these metrics declined during the COVID PHE, despite our effort to control these effects using trends from Medicaid beneficiaries without SUD diagnoses. The remaining metrics that did not demonstrate progress examined availability and use of specialty behavioral health services, which may reflect the fact that many of the expansions in benefits offered to meet American Society of Addiction Medicine (ASAM)'s levels of care have only been recently introduced or are still in process. In addition, the Tailored Plans had been envisioned as a major driver of improvements in care have still not been implemented and potentially caused disruption in care during the two prior delayed launches of this benefit plan.

Table 2. Summary of SUD Metric Results for Hypothesis 3.1

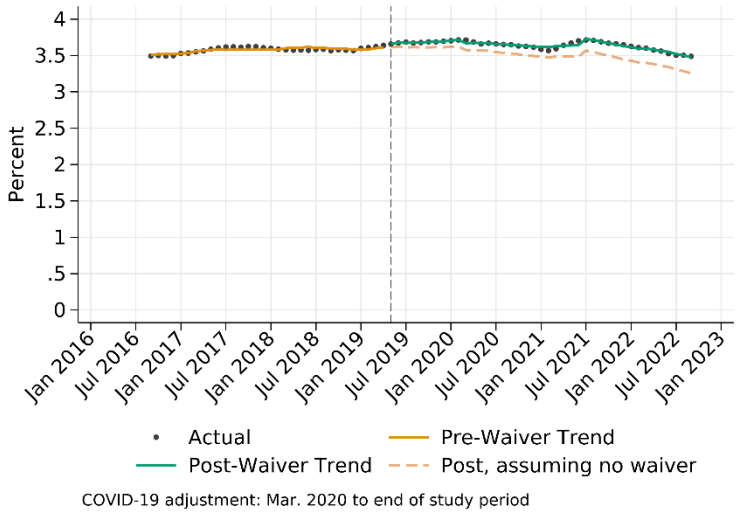
#	Measure (Metric abbreviation)	State's demonstration target+	Directionality at mid-point (Oct 2021)	Adjusted waiver effects at Sept 2022	Progress * (Yes/No)
3.1.1	Medicaid Beneficiaries with SUD Diagnosis (M3)	Increase then decrease	Increase	Increase	Yes
3.1.2	Medicaid Beneficiaries Treated in an IMD for SUD (M5)	Increase	Increase	Decrease	No
3.1.3	Any SUD treatment (M6)	Increase	NI	Decrease	No
3.1.4	Early Intervention for SUD (M7)	Increase	Decrease	--	--
3.1.5	Outpatient Services for SUD (M8)	Increase	Increase	Decrease	No
3.1.6	Intensive Outpatient and Partial Hospitalization Services (M9)	Increase	Decrease	Decrease	No
3.1.7	Residential and Inpatient Services (M10)	Increase	Decrease	Decrease	No
3.1.8	Withdrawal Management (M11)	Increase	Increase	Increase	Yes

#	Measure (Metric abbreviation)	State's demonstration target+	Directionality at mid-point (Oct 2021)	Adjusted waiver effects at Sept 2022	Progress * (Yes/No)
3.1.9	Medication-Assisted Treatment (M12)	Increase	Increase	Decrease	No
3.1.10	Behavioral Health Providers with a Medicaid Contract	Increase	NI	Decrease	No
3.1.11	Ratio of Behavioral Health Providers with a Medicaid Contract per 1000 Medicaid Beneficiaries	Increase	NI	Decrease	No
3.1.12	SUD Provider availability (M13)	Increase	NI	Increase	Yes
3.1.13	SUD Provider availability for MAT (M14)	Increase	NI	Increase	Yes
3.1.14	Initiation of Alcohol Abuse or Dependence Treatment (IET/M15)	Increase	NI	Initiation: Decrease	No
3.1.15	Initiation of OUD Treatment (IET/M15)	Increase	NI	Initiation: Decrease	No
3.1.16	Initiation of Other Drug Abuse or Dependence Treatment (IET/M15)	Increase	NI	Initiation: Decrease	No
3.1.17	Initiation of Any Drug Abuse or Dependence Treatment (IET/M15)	Increase	Initiation: Increase	Initiation: Decrease	No
3.1.18	Engagement in Alcohol Abuse or Dependence Treatment (IET/M15)	Increase	NI	Engagement: Decrease	No
3.1.19	Engagement in OUD Treatment (IET/M15)	Increase	NI	Engagement: Decrease	No
3.1.20	Engagement in Other Drug Abuse or Dependence Treatment (IET/M15)	Increase	NI	Engagement: Decrease	No
3.1.21	Engagement in Any Drug Abuse or Dependence Treatment (IET/M15)	Increase	Engagement: Decrease	Engagement: Decrease	No
3.1.22	Concurrent Use of Opioids and Benzodiazepines (M21/COB)	Decrease	Decrease	--	--
3.1.23	Average Length of Stay in IMDs (M36)	Decrease	Increase	No change	Yes[1]
3.1.24	Percent of Individuals Receiving MOUD who are also Receiving Counseling and Behavioral Therapies to Treat Substance Use Disorders (Q3)	Increase	NI	Decrease	No
3.1.25	Continuity of Pharmacotherapy for OUD (M22)	Increase	Decrease	Increase	Yes
3.1.26	Poor mental health in the past 30 days	Decrease	NI	Increase	No
3.1.27	Binge drinking in the past 30 days	Decrease	NI	--	No

+= if a target wasn't explicitly created for a metric, then we use the projected direction from the Driver Diagram or the study team's intuition. 1=because this metric is substantially below CMS's target, even if this change wasn't due to the waiver, we believe remaining low indicates progress. NI=Not included in the MPA.

3.1.1 Medicaid Beneficiaries with SUD increased slightly during the SUD waiver period.

Figure 3.1 Trends in Medicaid Beneficiaries with SUD



Notes: Baseline and SUD Waiver Implementation trends are predictions from the multivariate interrupted time series model described in Methods. "Post, assuming no waiver" is a prediction from the same ITS model, setting the post-waiver incremental intercept and slope to zero but including trends due to COVID or changing beneficiary characteristics.

Figure 3.1.1 Interrupted time series estimates: Medicaid beneficiaries with SUD

	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	3.68* (3.65, 3.70)	3.73* (3.70, 3.76)	0.051* (0.028, 0.074)
Slope	0.0028* (0.0017, 0.0039)	0.0071* (0.0039, 0.0102)	0.0042* (0.0007, 0.0078)
N	145,672,259		

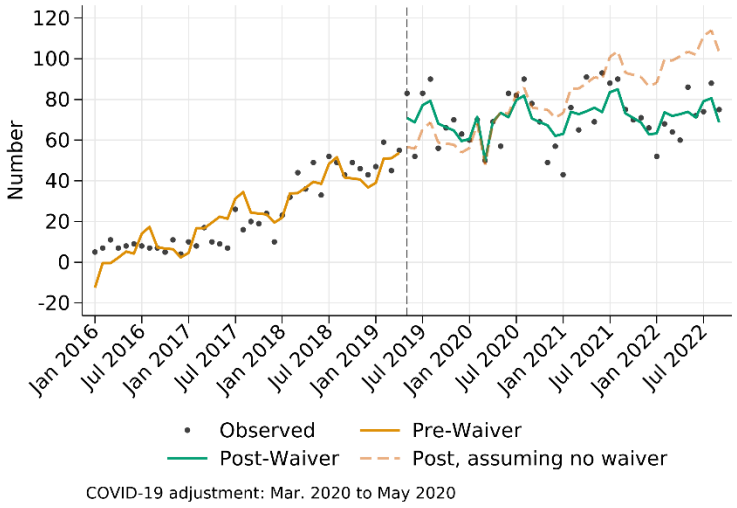
*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation slope is the sum of the baseline slope and the slope change during the implementation period. Baseline and SUD Waiver Implementation means are the means of the unadjusted outcomes.*

Metric 3 quantifies the percent of Medicaid beneficiaries diagnosed with a substance use disorder diagnosis in a rolling 12-month period. We calculate this as a rate over the total number of fully eligible Medicaid beneficiaries, since the beneficiary population expanded substantially during the PHE. At the start of the baseline period for this metric, around 3.5 percent of beneficiaries of all ages had a SUD diagnosis during the prior 12-month period. This rate was trending upwards slightly during the baseline period. During the waiver period, we estimated an average of just over one-quarter of a percent (0.28%-point) increase in the rate of SUD diagnoses. This rate increased at a slightly quicker rate during the implementation period, with a 0.0071% point increase each month after waiver implementation, compared to a 0.0028%-point increase before waiver implementation. Overall, we estimate that the percent of beneficiaries with SUD is slightly higher than it would have been without the SUD waiver.

While an increase in SUD diagnoses is difficult to place a value on, since it could reflect either an increase in the prevalence of substance use diagnoses in the beneficiary population or greater access to SUD care, the stated goal of the waiver was to first increase the rate of diagnoses for SUD as new cases are discovered in the beneficiary population due to greater access to a broader array of SUD services and then to decrease the proportion of beneficiaries diagnosed through greater prevention and treatment. Although we have not yet observed the decline, we count this as a metric with demonstrated progress (Table 2). However, the estimated changes are small, and the rate of SUD diagnosis has varied little since October 2015.

3.1.2 More Medicaid beneficiaries with SUD are treated in an IMD but at a slower rate of growth.

Figure 3.1.2 Trends in the number of beneficiaries with SUD treated in an IMD.



Notes: Baseline and SUD Waiver Implementation trends are predictions from the multivariate interrupted time series model described in Methods. "Post, assuming no waiver" is a prediction from the same ITS model, setting the post-waiver incremental intercept and slope to zero but including trends due to COVID or changing beneficiary characteristics.

Table 3.1.2 Interrupted time series estimates: Medicaid beneficiaries with SUD treated in an IMD.

	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	53.90 (48.78, 59.02)	68.10 (58.39, 77.81)	14.20* (3.15, 25.25)
Slope	1.43* (1.19, 1.67)	0.21 (-0.53, 0.95)	-1.22* (-2.00, -0.44)
N	81		

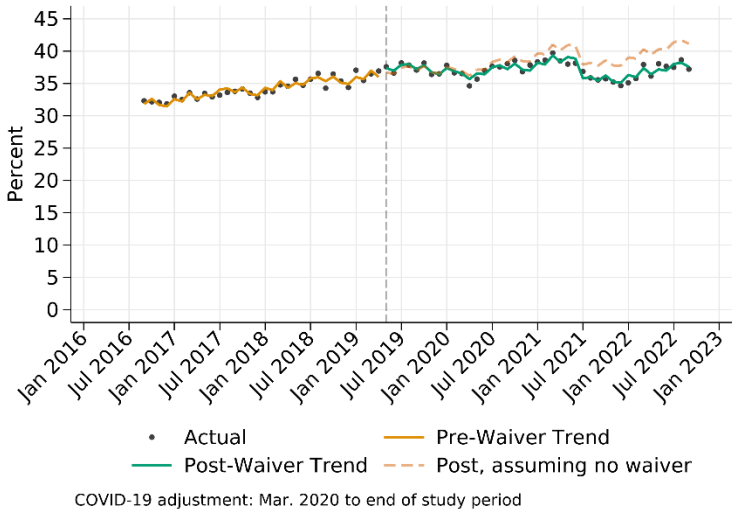
*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation slope is the sum of the baseline slope and the slope change during the implementation period. Baseline and SUD Waiver Implementation means are the means of the unadjusted outcomes. Data run on aggregated counts only because of small cell sizes. 95% confidence intervals in brackets.*

Metric 5 counts the number of unique beneficiaries who used Medicaid-paid services in an IMD. The technical specifications for this metric do not restrict to the age groups that would be affected by waiving this provision (ages 22-64), so it does not necessarily reflect the number of individuals who are newly covered for IMD benefits. We converted this metric from an annual measure to a monthly measure to better capture changes over time. Because of the small sample size, this metric was run only on monthly counts, which means the ITS model and projections do not control for comorbidities, demographic factors or other person-level covariates.

The number of beneficiaries treated in an IMD with stays paid for by Medicaid has been increasing over time, even before the waiver was implemented. In the baseline period, there was an average of one additional person using services each month. After the waiver was implemented, we estimated an initial increase of 14 people overall. There was a decline in the rate of change of Medicaid-paid IMD users during the implementation period, by 1.2 people per month. The figure shows that in the early months of the waiver, there was a higher level of IMD use compared to what was estimated in the absence of the waiver, but by January 2020, the IMD usage dropped below what it would have been in the absence of the waiver, even after controlling for trends in hospital utilization during the COVID-19 PHE.

3.1.3 More Medicaid beneficiaries with SUD received any SUD treatment after waiver implementation, but at a declining rate.

Figure 3.1.3. Trends in the use of any SUD treatment among those with a SUD diagnosis.



Notes: Baseline and SUD Waiver Implementation trends are predictions from the multivariate interrupted time series model described in Methods. "Post, assuming no waiver" is a prediction from the same ITS model, setting the post-waiver incremental intercept and slope to zero but including trends due to COVID or changing beneficiary characteristics.

Table 4.1.3. Interrupted time series estimates: Percent of Medicaid beneficiaries with SUD who receive any treatment.

	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	36.98* (36.71, 37.25)	37.63* (37.30, 37.96)	0.65* (0.32, 0.98)
Slope	0.15* (0.14, 0.17)	0.0487* (-0.0020, 0.0993)	-0.106* (-0.159, -0.052)
N	4,992,585		

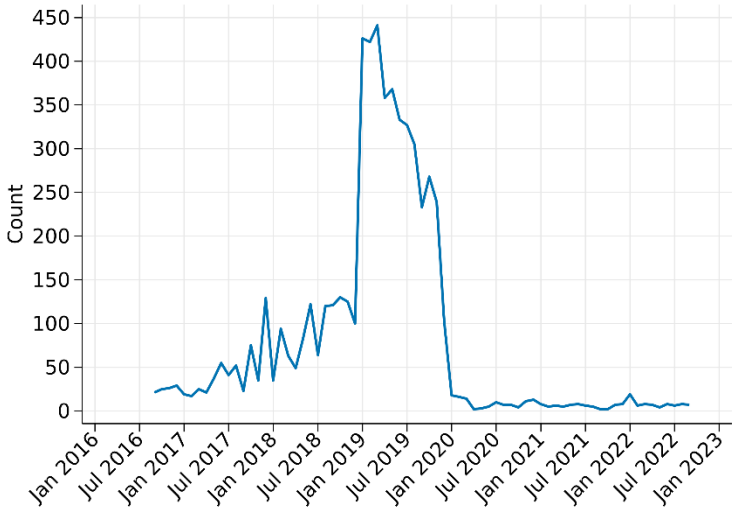
*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation slope is the sum of the baseline slope and the slope change during the implementation period. Baseline and SUD Waiver Implementation means are the means of the unadjusted outcomes.*

The percent of the population with an active SUD diagnosis who received any type of treatment has been steadily increasing over the study period, but is still low, ranging from an average of approximately 35% prior to the waiver to an average of about 38% after the waiver. The treatment rate increased

overall by almost 0.65%-point at the beginning of the SUD implementation period, but the rate of increase declined during this period by approximately 0.1%-point. The treatment rate is actually estimated to be slightly higher in the absence of the SUD waiver than with the waiver, as seen by the dashed yellow line above the green line in Figure 3.1.3. This trend began with the COVID PHE and may reflect uncaptured effects due to the PHE.

3.1.4 Early intervention for SUD

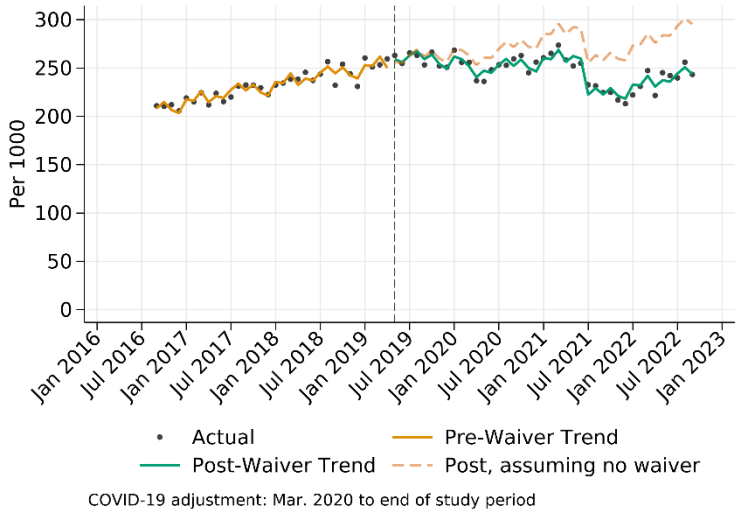
Figure 3.1.4. Trends in Early intervention services for SUD.



Early intervention services are seldom used in North Carolina's Medicaid program, with fewer than 1% of Medicaid beneficiaries with SUD receiving these services. The number of users per month ranged from about 25 to over 400 and the large variation coupled with the small sample size did not allow for reliable multivariate ITS estimates. We therefore present only the unadjusted trends in the use in the figure above. For unknown reasons, there was a relatively large increase in use in early 2019, that dropped off almost entirely by early 2020 before the start of the PHE. There were only a small number of providers providing these services during the study period.

3.1.5 The percent of beneficiaries with SUD receiving outpatient services increased after implementation then declined.

Figure 3.1.5. Trends in the percent of beneficiaries with SUD receiving outpatient services for SUD.



Notes: Baseline and SUD Waiver Implementation trends are predictions from the multivariate interrupted time series model described in Methods. "Post, assuming no waiver" is a prediction from the same ITS model, setting the post-waiver incremental intercept and slope to zero but including trends due to COVID or changing beneficiary characteristics.

Table 3.1.5. Interrupted time series estimates: the percent of Medicaid beneficiaries with SUD who received outpatient SUD services.

	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	259.72 (257.18, 262.27)	262.38 (259.39, 265.37)	2.66 (-0.25, 5.57)
Slope	1.55* (1.44, 1.67)	0.19 (-0.25, 0.63)	-1.36* (-1.84, -0.89)
N	5,260,516		

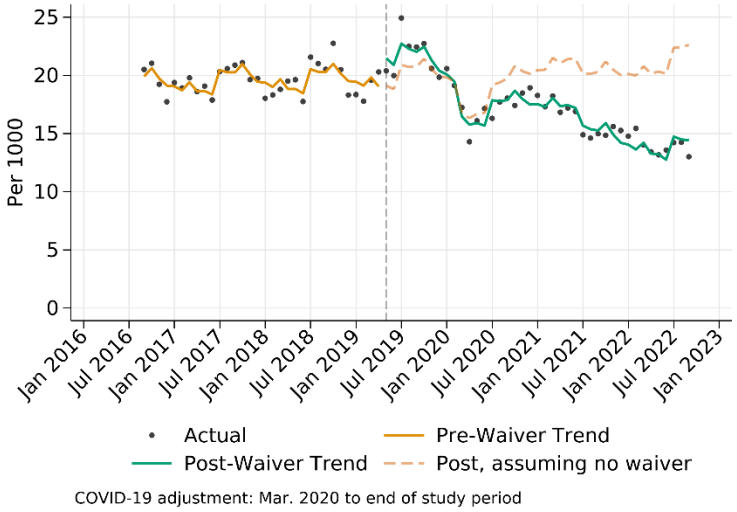
*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation slope is the sum of the baseline slope and the slope change during the implementation period. Baseline and SUD Waiver Implementation means are the means of the unadjusted outcomes.*

The percent of Medicaid beneficiaries with a SUD diagnosis receiving outpatient SUD services ranged from 20% to 25% during the study period. The rate increased during the baseline period by about 1.5 people per 1000 beneficiaries with SUD each month. We estimate no difference in the average

percentage of beneficiaries with a SUD diagnosis receiving outpatient services but found that the trend in outpatient service use began declining during SUD waiver implementation by 1.4 people per 1000, even after controlling for the PHE. The percent of beneficiaries with SUD receiving outpatient SUD services is estimated to have been lower with the waiver than it was estimated to be in its absence; this difference started before the COVID PHE.

3.1.6 Initial increase in the use of intensive outpatient services with a substantial decline over time.

Figure 3.1.6. Trends in the use of intensive outpatient services



Notes: Baseline and SUD Waiver Implementation trends are predictions from the multivariate interrupted time series model described in Methods. "Post, assuming no waiver" is a prediction from the same ITS model, setting the post-waiver incremental intercept and slope to zero but including trends due to COVID or changing beneficiary characteristics.

Table 3.1.6. Interrupted time series estimates: the percent of Medicaid beneficiaries with SUD who received intensive outpatient services.

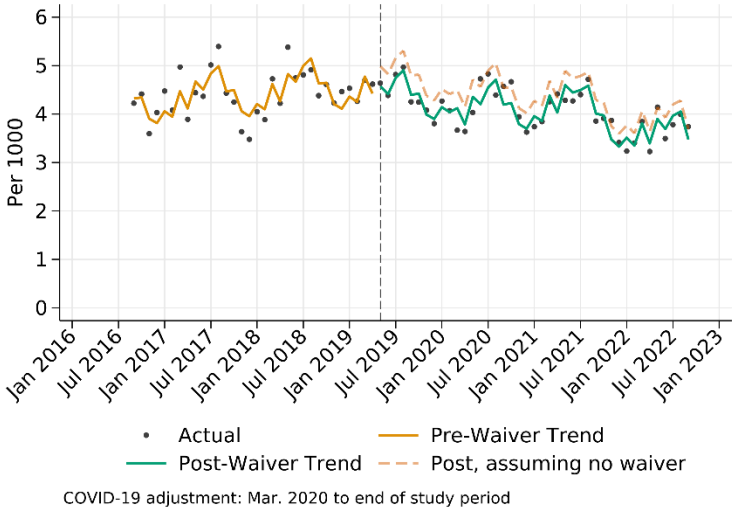
	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	19.98* (19.34, 20.63)	22.34* (21.33, 22.34)	2.35* (1.25, 3.46)
Slope	0.0391* (0.0067, 0.0714)	-0.225* (-0.400, -0.049)	-0.264* (-0.444, -0.083)
N	5,260,516		

*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation slope is the sum of the baseline slope and the slope change during the implementation period. Baseline and SUD Waiver Implementation means are the means of the unadjusted outcomes.*

This metric, like most examined in this report, is based on national technical specifications for intensive outpatient or partial hospitalization services, for brevity referred to here as *intensive outpatient services*; these are not limited to North Carolina's SACOT services. Just under 20 beneficiaries with SUD per 1000 received intensive outpatient services during the baseline period. This rate increased slightly each month during the baseline period. During the waiver implementation period, the number of intensive outpatient or partial hospitalization service users increased by 2 people per 1000 but declined slightly over time. We estimate that starting around the time of the COVID PHE, the rate of receipt of intensive outpatient or partial hospitalization services was substantially lower during the waiver implementation period than it would have been without the waiver. This difference could reflect uncaptured effects due to the PHE.

3.1.7 Receipt of residential and inpatient services was slightly lower during the SUD waiver period

Figure 3.1.7. Trends in the use of residential or inpatient services



Notes: Baseline and SUD Waiver Implementation trends are predictions from the multivariate interrupted time series model described in Methods. "Post, assuming no waiver" is a prediction from the same ITS model, setting the post-waiver incremental intercept and slope to zero but including trends due to COVID or changing beneficiary characteristics.

Table 3.1.7. Interrupted time series estimates: the percent of Medicaid beneficiaries with SUD who received residential or inpatient services.

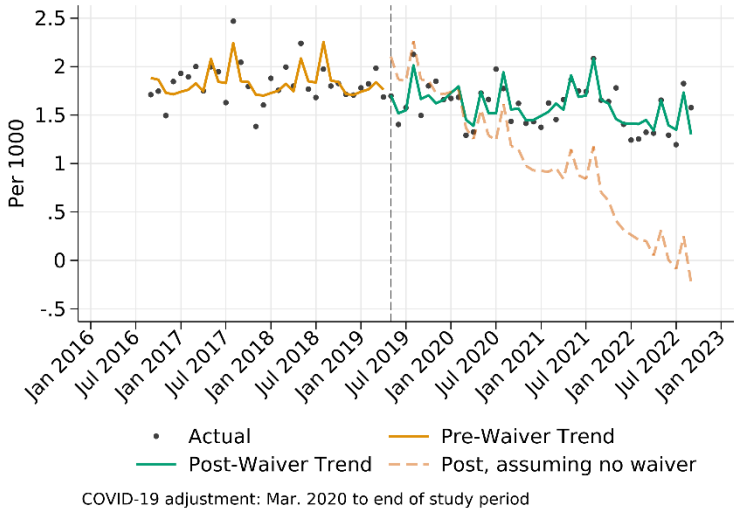
	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	4.67* (4.45, 4.89)	4.26* (3.92, 4.60)	-0.416* (-0.800, -0.032)
Slope	0.0122* (0.0014, 0.0231)	0.0172 (-0.0430, 0.0773)	0.0049 (-0.0565, 0.0664)
N	5,260,516		

*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation slope is the sum of the baseline slope and the slope change during the implementation period. Baseline and SUD Waiver Implementation means are the means of the unadjusted outcomes.*

Just under 5 in 1000 Medicaid beneficiaries with SUD received residential or inpatient service use for SUD each month during the study period. This metric is not entirely coincident with IMD services because other inpatient or residential services are included in this metric. The rate of use was relatively flat during both the baseline period and the SUD implementation period, although the average level of use decreased slightly after SUD implementation, by an average of 0.42 users per 1000. Overall, the rate of use of residential or inpatient services for SUD is slightly below what we would have predicted without the waiver.

3.1.8 Lower but increasing rate of use of withdrawal management services.

Figure 3.1.8: Trends in the use of withdrawal management services



Notes: Baseline and SUD Waiver Implementation trends are predictions from the multivariate interrupted time series model described in Methods. "Post, assuming no waiver" is a prediction from the same ITS model, setting the post-waiver incremental intercept and slope to zero but including trends due to COVID or changing beneficiary characteristics.

Table 3.1.8: Interrupted time series estimates: the percent of Medicaid beneficiaries with SUD who received withdrawal management services.

	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	1.84* (1.70, 1.98)	1.44* (1.24, 1.65)	-0.39* (-0.63, -0.15)
Slope	-0.0023 (-0.0091, 0.0046)	0.046* (0.0080, 0.0839)	0.0482* (0.0095, 0.0870)
N	5,260,516		

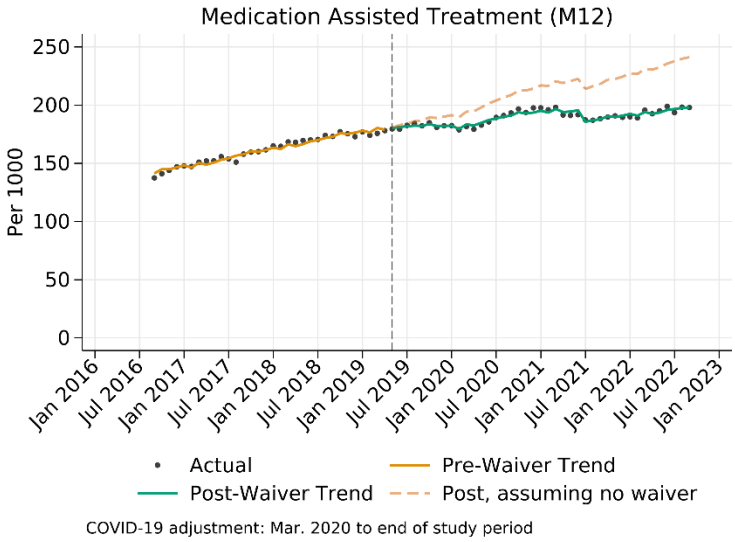
*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation slope is the sum of the baseline slope and the slope change during the implementation period. Baseline and SUD Waiver Implementation means are the means of the unadjusted outcomes.*

Only approximately two per 1000 Medicaid beneficiaries with SUD received withdrawal management service use during the study period. The rate of use was flat during the baseline period. After SUD implementation, the average use rate had a decline of 0.39 beneficiaries using withdrawal management services per 1000 beneficiaries per month, which is large in relative terms, representing a 10% relative

decrease. The trend in utilization increased slightly after SUD waiver implementation. We estimate that the rate of receipt of withdrawal management services was substantially above the rate that it would have been without the waiver but note that the counterfactual trend is estimated to be unrealistically steep.

3.1.9 Medication Assisted Treatment continued to increase during the waiver period, but at a slower rate.

Figure 3.1.9. Trends in the use of Medication Assisted Treatment per 1000 beneficiaries with a SUD diagnosis



Notes: Baseline and SUD Waiver Implementation trends are predictions from the multivariate interrupted time series model described in Methods. "Post, assuming no waiver" is a prediction from the same ITS model, setting the post-waiver incremental intercept and slope to zero but including trends due to COVID or changing beneficiary characteristics.

Table 3.1.9. Interrupted time series estimates: the percent of Medicaid beneficiaries with SUD who received Medication Assisted Treatment.

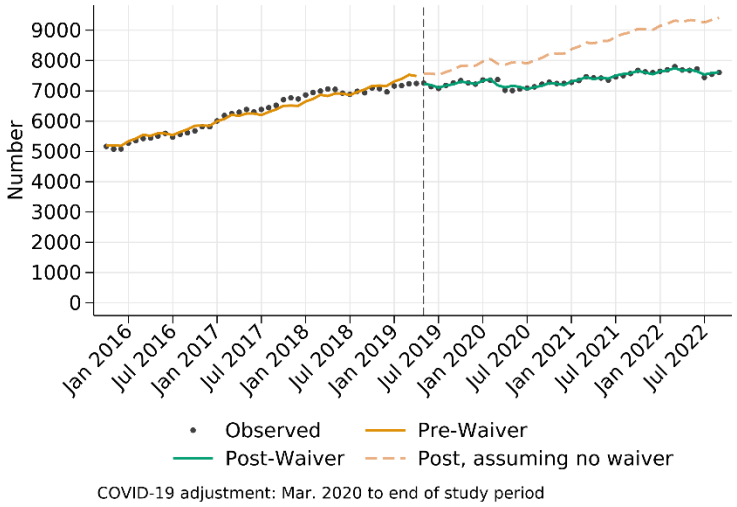
	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	188.83* (186.19, 191.47)	188.40* (185.67, 191.13)	-0.44 (-2.64, 1.77)
Slope	1.41* (1.30, 1.51)	0.336* (0.020, 0.653)	-1.07* (-1.42, -0.72)
N	5,260,516		

*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation slope is the sum of the baseline slope and the slope change during the implementation period. Baseline and SUD Waiver Implementation means are the means of the unadjusted outcomes.*

The percent of people with SUD who received MAT ranged from about 14% of people with a SUD diagnosis to about 20%. Note that MAT is not an appropriate treatment for all types of SUDs, so we would not expect this rate ever get close to 100%. The rate had been increasing by about 1.4 people per 1000 per month during the baseline period. While the unadjusted rate continued to grow during the SUD implementation period, the ITS model finds that after controlling for covariates, there was no overall change in the level of use and the trend flattened out during the SUD implementation period, resulting in a net decline in use. We predict that the rate of use after the waiver implementation would have been higher in the absence of the waiver than it was with the waiver. In Hypothesis 3.2, we examine a more focused measure of MOUD use among non-elderly adults with OUD.

3.1.10 The number of behavioral health providers with a contract with NC Medicaid dropped slightly and leveled off during the SUD waiver implementation.

Figure 3.1.10. Trends in the number of behavioral health providers with a contract with NC Medicaid



Notes: Baseline and SUD Waiver Implementation trends are predictions from the multivariate interrupted time series model described in Methods. "Post, assuming no waiver" is a prediction from the same ITS model, setting the post-waiver incremental intercept and slope to zero but including trends due to COVID or changing beneficiary characteristics.

Table 3.1.10. Interrupted time series estimates of the number of behavioral health providers with a contract with Medicaid

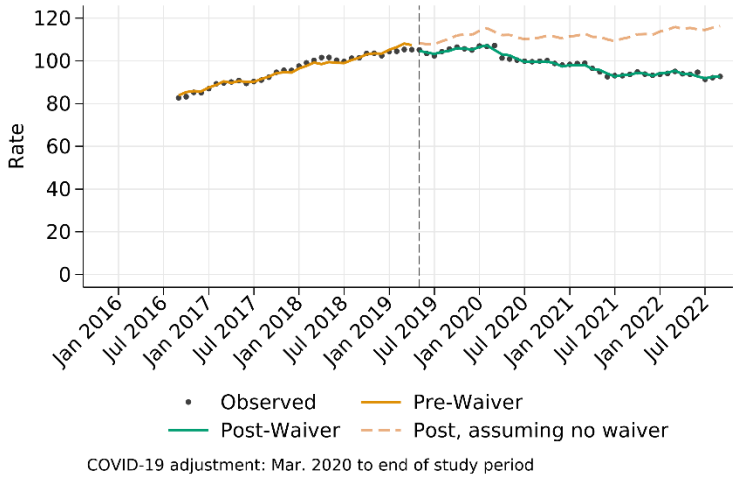
	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	7517.64* (7398.07, 7637.22)	7174.82* (7108.48, 7241.16)	-342.83* (-463.68, -221.98)
Slope	54.96* (50.94, 58.97)	18.75* (5.44, 32.06)	-36.20* (-50.90, -21.51)
N	84		

*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation slope is the sum of the baseline slope and the slope change during the implementation period. Baseline and SUD Waiver Implementation means are the means of the unadjusted outcomes.*

We examined the number of providers who had an active contract with Medicaid each month and a behavioral health (mental health or substance use) taxonomy (specialty) code. At the beginning of the study period, there were just over 5000 behavioral health providers with a Medicaid contract. Before the implementation of the SUD waiver, this number had risen to just over 7000 providers statewide and was increasing by 55 providers per month. The number dropped by an average of 343 providers during SUD waiver implementation, and the rate began to flatten out, with an estimated increase of 18.75 additional providers per month during implementation in contrast with the baseline increase of 55 providers per month. We therefore estimate that the level of behavioral health provider participation had declined after SUD waiver implementation. We note three important caveats for this metric: these estimates do not factor in the limited capacity of behavioral health providers in the state (that is, Medicaid cannot contract with more providers than are licensed and practicing in the state), the number of contracted providers is not adjusted for the size of the beneficiary population with SUD, and not all providers with a Medicaid contract provide services to Medicaid beneficiaries. The last two limitations are explored in the next set of metrics.

3.1.11 Behavioral health providers per capita with a contract with NC Medicaid declined during the SUD waiver implementation.

Figure 3.1.11. Trends in the ratio of behavioral health providers with a contract with NC Medicaid per 1000 Medicaid beneficiaries with SUD



Notes: Baseline and SUD Waiver Implementation trends are predictions from the multivariate interrupted time series model described in Methods. "Post, assuming no waiver" is a prediction from the same ITS model, setting the post-waiver incremental intercept and slope to zero but including trends due to COVID or changing beneficiary characteristics.

Table 3.1.11. Interrupted time series estimates: the ratio of behavioral health providers with a contract with NC Medicaid per 1000 Medicaid beneficiaries with SUD

	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	107.82 (106.50, 109.14)	104.3 (105.61, 108.99)	-3.50* (-5.09, -1.90)
Slope	0.74* (0.68, 0.80)	0.23* (0.057, 0.41)	-0.501* (-0.687, -0.316)
N	73		

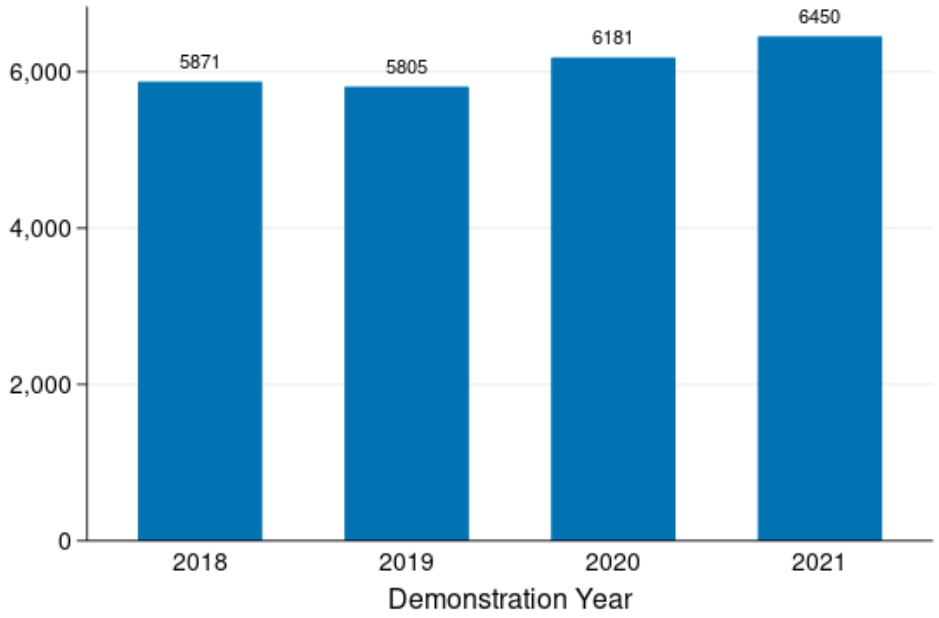
*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation slope is the sum of the baseline slope and the slope change during the implementation period. Baseline and SUD Waiver Implementation means are the means of the unadjusted outcomes.*

We divided the number of behavioral health providers with a contract with Medicaid by the size of the Medicaid population with a SUD diagnosis due to the rapid growth in the size of the beneficiary population during the PHE. The number of contracted behavioral health providers per capita grew from

80 to over 100 per 1000 beneficiaries during the baseline period, flattened out during the first year of SUD waiver implementation, then showed a gradual decline beginning around the time of the PHE. Overall, we estimate that 3.5 fewer BH providers per 1000 population had a contract with Medicaid after implementation and that the trend in this ratio declined during SUD implementation by 0.5 fewer BH providers per 1000 beneficiaries per month.

3.1.12 The number of providers providing SUD services to Medicaid beneficiaries has grown since the start of the demonstration.

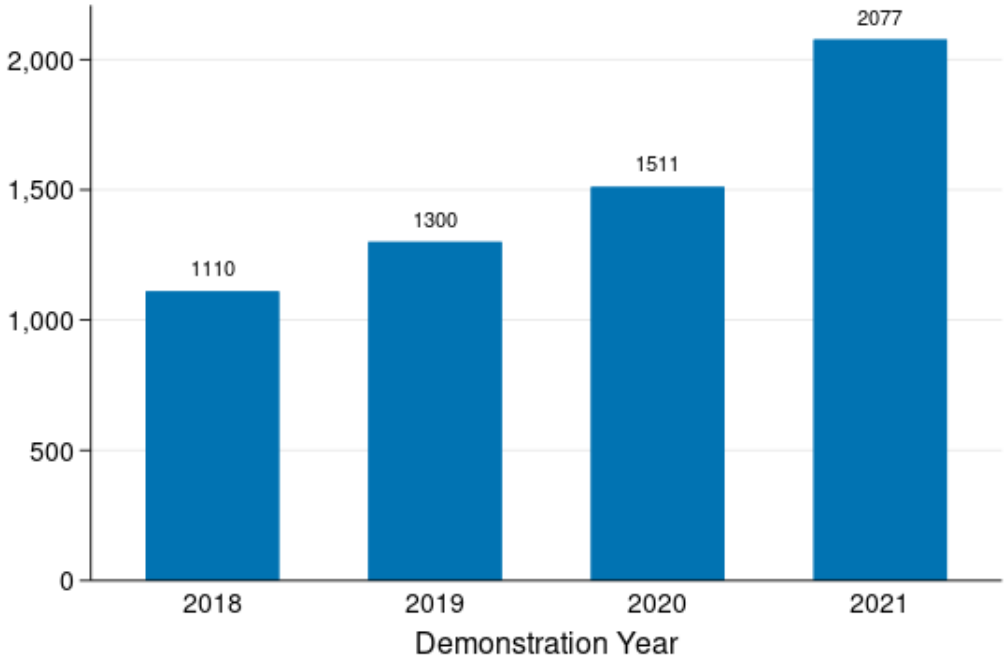
Figure 3.1.12. Trends in annual provider availability.



The number of providers who were enrolled in Medicaid and delivered SUD services to beneficiaries during the demonstration year has generally increased over time since the implementation of the waiver. This metric is different than the prior two metrics in that it counts providers delivering SUD services regardless of provider specialty, while the prior two metrics were based only on BH provider specialists. There was a slight (1%) decrease in the number of providers from Demonstration year 2018 (November 1, 2018 – October 31, 2019) to DY 2019, but then a relatively large annual increase to DY 2020 (6.5%) and DY 2021 (4.4%).

3.1.13 The number of providers providing MOUD to Medicaid beneficiaries has increased substantially since the start of the SUD waiver.

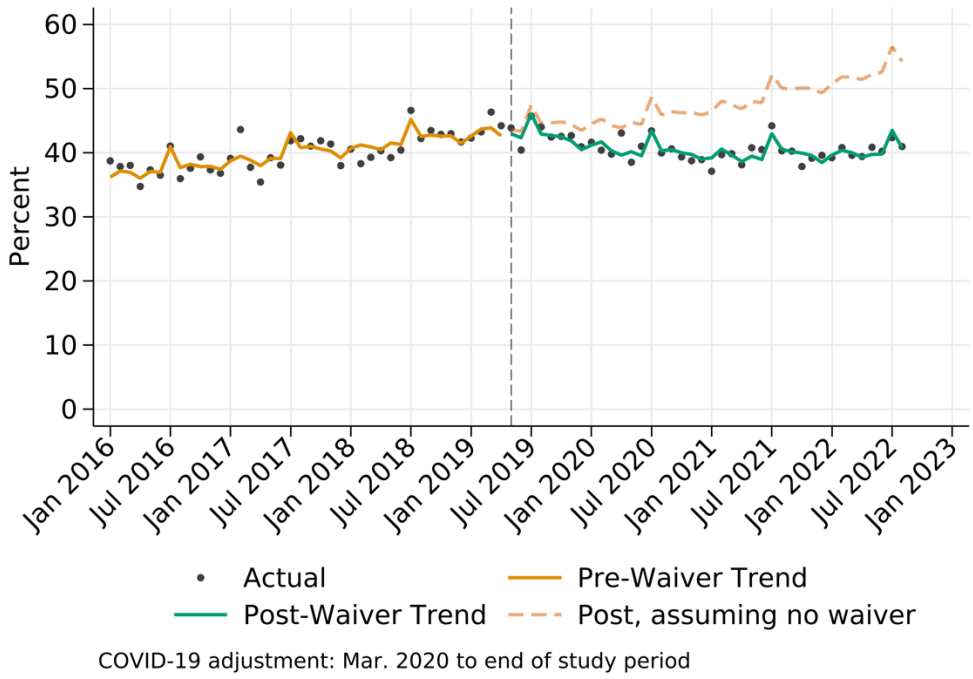
Figure 3.1.13. Trends in annual provider availability for MOUD



The number of providers who were enrolled in Medicaid and prescribed or delivered MOUD has also grown since the baseline period. There were significant increases over time in this measure (17.1% increase from DY 2018 to DY2019; 16.2% increase from DY2019 – DY2020; and 37.5% increase from DY2020 – DY2021).

3.1.14 The rate of initiation of care for Alcohol Use Disorder (AUD) is above the national median but has decreased over time during the SUD waiver.

Figure 3.1.14. Trends in the rate of initiation of care for Alcohol Use Disorder (AUD) over time



Notes: Baseline and SUD Waiver Implementation trends are predictions from the multivariate interrupted time series model described in Methods. "Post, assuming no waiver" is a prediction from the same ITS model, setting the post-waiver incremental intercept and slope to zero but including trends due to COVID or changing beneficiary characteristics.

Table 3.1.14. Interrupted time series estimates: the rate of initiation of care for Alcohol Use Disorder (AUD)

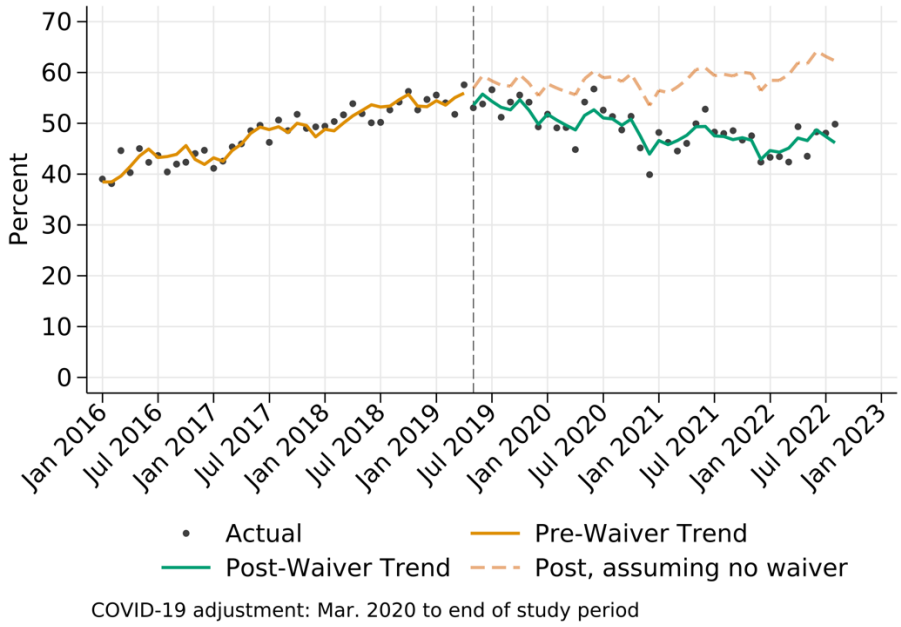
	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	43.64* (42.69, 44.59)	42.98* (41.30, 44.66)	-0.66 (-2.55, 1.23)
Slope	0.18* (0.14, 0.22)	-0.15 (-0.47, 0.17)	-0.33* (-0.65, -0.002)
N	101,348		

*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation slope is the sum of the baseline slope and the slope change during the implementation period. Baseline and SUD Waiver Implementation means are the means of the unadjusted outcomes.*

The initiation of care for alcohol use disorder (AUD) reflects the percent of beneficiaries with an AUD diagnosis who initiate treatment through use of an inpatient admission, outpatient visit, intensive outpatient encounter or partial hospitalization, telehealth, or medication treatment within 14 days of an initial diagnosis during the measurement period, after a 60-day wash-out period. The initiation rate has been about 40% during the study period, increasing slightly during the baseline period but then decreasing during SUD waiver implementation. The ITS model predicts a higher initiation rate in the absence of the waiver based on the upward trend in the baseline period. The initiation rate for NC is above the national median (40.8%) for this measure for states reporting data in the CMS Medicaid Scorecard.[8]

3.1.15 The rate of initiation of care for Opioid Use Disorder (OUD) is above the national median but has decreased over time during the SUD waiver.

Figure 3.15: Trends in the rate of initiation of care for Opioid Use Disorder (OUD) over time



Notes: Baseline and SUD Waiver Implementation trends are predictions from the multivariate interrupted time series model described in Methods. "Post, assuming no waiver" is a prediction from the same ITS model, setting the post-waiver incremental intercept and slope to zero but including trends due to COVID or changing beneficiary characteristics.

[8] https://www.medicaid.gov/state-overviews/scorecard/initiation-engagement-alcohol-drug-dependence-treatment/index.html

Table 3.1.15: Interrupted time series estimates: the rate of initiation of care for Opioid Use Disorder (OUD)

	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	56.57* (55.51, 57.63)	53.24* (51.38, 55.09)	-3.33* (-5.42, -1.24)
Slope	0.43* (0.39, 0.48)	0.11 (-0.24, 0.46)	-0.33 (-0.68, 0.03)
N	85,895		

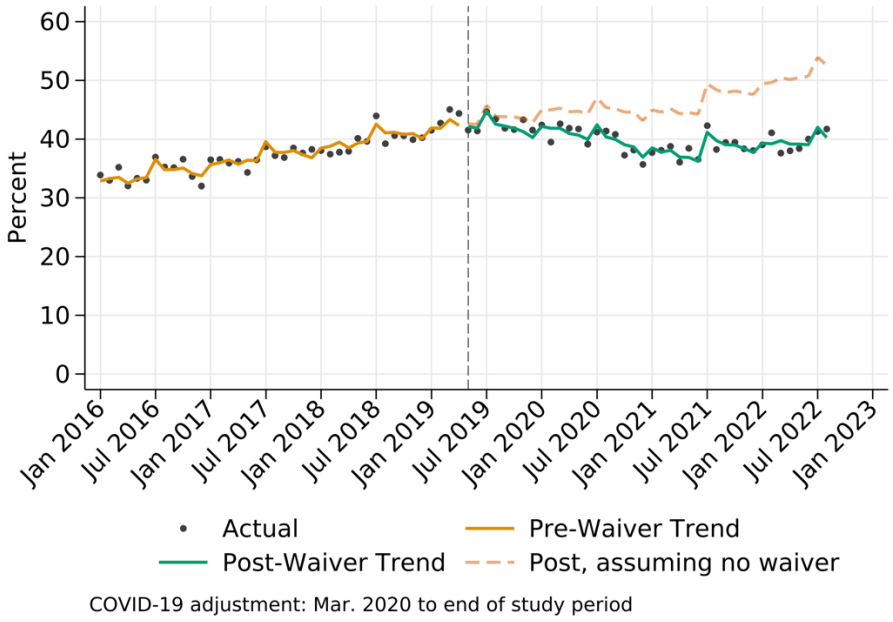
*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation slope is the sum of the baseline slope and the slope change during the implementation period. Baseline and SUD Waiver Implementation means are the means of the unadjusted outcomes.*

The initiation of care for OUD reflects the percent of beneficiaries with an OUD diagnosis who initiate treatment through use of an inpatient admission, outpatient visit, intensive outpatient encounter or partial hospitalization, telehealth, or medication treatment within 14 days of an initial diagnosis during the measurement period, after a 60-day wash-out period. The initiation rate increased from about 40% to almost 60% during the baseline period. The rate dropped by 3.3% points during waiver implementation. The ITS model predicts a higher initiation rate in the absence of the waiver based on the higher upward trend in the baseline period. The initiation rate for NC is above the national median (54.9%) for this measure for states reporting data in the CMS Medicaid Scorecard.[9]

[9] https://www.medicaid.gov/state-overviews/scorecard/initiation-engagement-alcohol-drug-dependence-treatment/index.html

3.1.16 The rate of initiation of care for drug use disorders excluding alcohol and opioid use disorder is above the national median but has decreased over time during the SUD waiver.

Figure 3.1.16. Trends in the rate of initiation of care for other drug use disorders (excluding alcohol and opioid use disorder) over time.



Notes: Baseline and SUD Waiver Implementation trends are predictions from the multivariate interrupted time series model described in Methods. "Post, assuming no waiver" is a prediction from the same ITS model, setting the post-waiver incremental intercept and slope to zero but including trends due to COVID or changing beneficiary characteristics.

Table 3.1.16. Interrupted time series estimates: the rate of initiation of care for other drug use disorders (excluding alcohol and opioid use disorder)

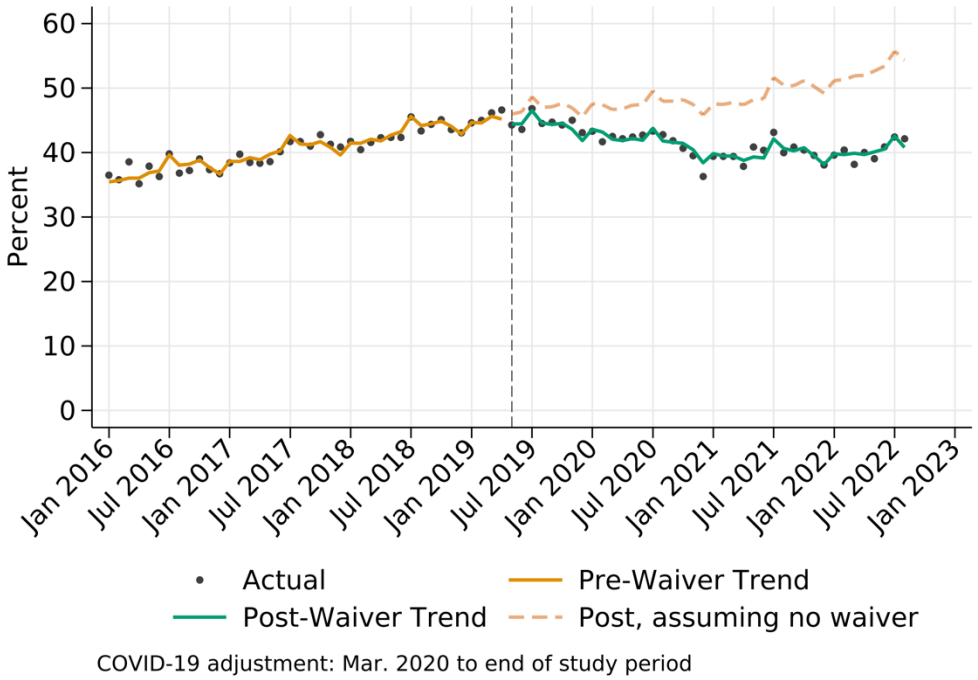
	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	42.69* (41.97, 43.41)	42.29* (41.00, 43.58)	-0.40 (-1.87, 1.07)
Slope	0.26* (0.23, 0.29)	-0.05 (-0.29, 0.20)	-0.30* (-0.55, -0.06)
N	169,183		

*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation slope is the sum of the baseline slope and the slope change during the implementation period. Baseline and SUD Waiver Implementation means are the means of the unadjusted outcomes.*

The initiation of care for drug use disorders excluding alcohol and opioid use disorders reflects the percent of beneficiaries who initiate treatment through use of an inpatient admission, outpatient visit, intensive outpatient encounter or partial hospitalization, telehealth, or medication treatment within 14 days of an initial diagnosis during the measurement period, after a 60-day wash-out period. The initiation rate increased from just over 30% to about 45% during the baseline period. There was no immediate change in the rate of initiation during the SUD implementation period, but the initiation rate decreased by 0.3% points each month during the post period. The ITS model predicts a higher initiation rate in the absence of the waiver based on the upward trend in the baseline period. The initiation rate for NC is above the national median (40.5%) for this measure for states reporting data in the CMS Medicaid Scorecard.[10]

3.1.17 The rate of initiation of care for any substance use disorder is above the national median but decreased over time during the SUD waiver.

Figure 3.1.17. Trends in the rate of initiation of care for any SUD over time



[10] https://www.medicaid.gov/state-overviews/scorecard/initiation-engagement-alcohol-drug-dependence-treatment/index.html

Notes: Baseline and SUD Waiver Implementation trends are predictions from the multivariate interrupted time series model described in Methods. "Post, assuming no waiver" is a prediction from the same ITS model, setting the post-waiver incremental intercept and slope to zero but including trends due to COVID or changing beneficiary characteristics.

Table 3.1.17. Interrupted time series estimates: the rate of initiation of care for any alcohol or drug use disorder

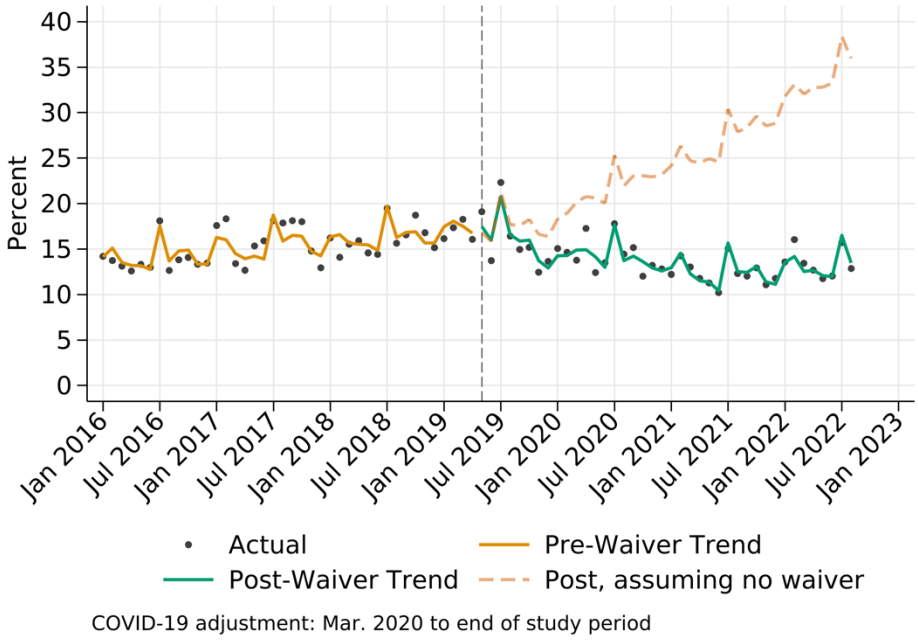
	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	46.02* (45.48, 46.56)	44.49* (43.54, 45.45)	-1.53* (-2.61, -0.45)
Slope	0.26* (0.24, 0.28)	-0.05 (-0.23, 0.14)	-0.31* (-0.49, -0.12)
N	323,695		

*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation slope is the sum of the baseline slope and the slope change during the implementation period. Baseline and SUD Waiver Implementation means are the means of the unadjusted outcomes.*

The initiation of care for any SUD diagnosis combines people with SUD diagnoses from the prior three metrics and reflects the percent of beneficiaries with any type of SUD diagnosis who initiate treatment through use of an inpatient admission, outpatient visit, intensive outpatient encounter or partial hospitalization, telehealth, or medication treatment within 14 days of an initial diagnosis during the measurement period, after a 60-day wash-out period. The initiation rate increased from about 35% to almost 45% during the baseline period. The rate dropped on average by about 1.5% points during SUD waiver implementation and decreased over time, by 0.3% points per month. The ITS model predicts a higher initiation rate in the absence of the waiver based on the higher upward trend in the baseline period. The initiation rate for NC is above the national median (42.7%) for this measure for states

3.1.18 The rate of engagement in care for Alcohol Use Disorder (AUD) was above the national median but has decreased over time during the SUD waiver.

Figure 3.1.18. Trends in the rate of engagement in care for Alcohol Use Disorder (AUD) over time



Notes: Baseline and SUD Waiver Implementation trends are predictions from the multivariate interrupted time series model described in Methods. "Post, assuming no waiver" is a prediction from the same ITS model, setting the post-waiver incremental intercept and slope to zero but including trends due to COVID or changing beneficiary characteristics.

Table 3.1.18. Interrupted time series estimates: the rate of engagement in care for Alcohol Use Disorder (AUD)

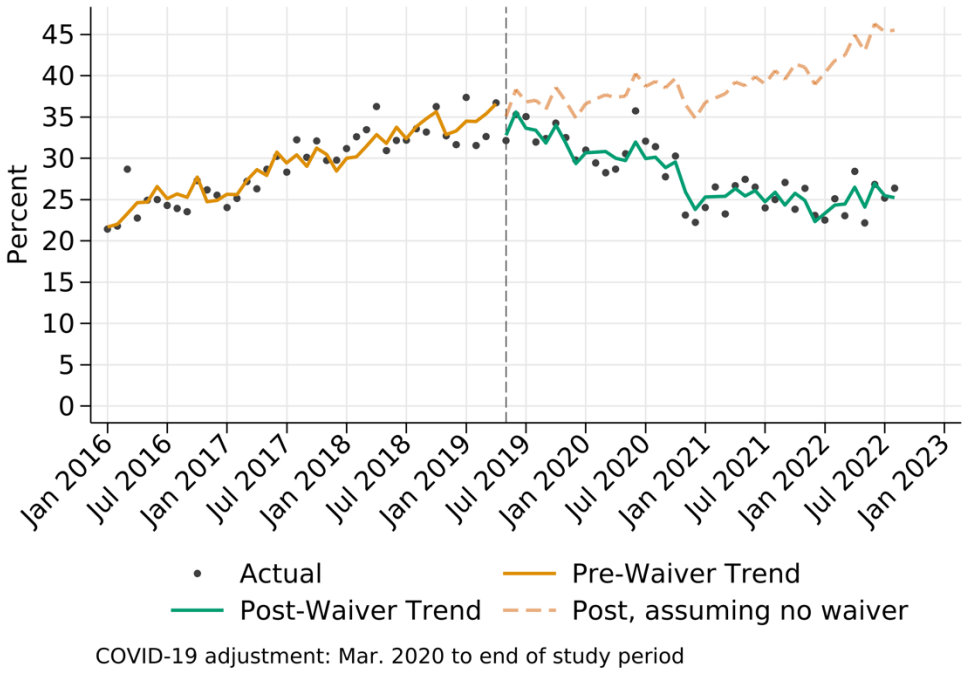
	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	17.33* (16.65, 18.01)	18.01* (16.77, 19.24)	0.68 (-0.71, 2.07)
Slope	0.10* (0.07, 0.13)	-0.50* (-0.73, -0.26)	-0.59* (-0.83, -0.36)
N	101,348		

*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation slope is the sum of the baseline slope and the slope change during the implementation period. Baseline and SUD Waiver Implementation means are the means of the unadjusted outcomes.*

Engagement in care for AUD reflects the percent of beneficiaries that had initiated treatment and were engaged in on-going AUD treatment within 34 days of the initiation visit. The engagement rate increased from under 15% to 18% during the baseline period. There was no average change in the engagement rate during the SUD waiver implementation period, but the trend in the engagement rate decreased by 0.6% point each month during the post period. The ITS model predicts a higher engagement rate in the absence of the waiver based on the upward trend in the baseline period and the substantial decline during the initial implementation period prior to the PHE. The engagement rate for NC is generally above the national median (12.5%) for this measure for states reporting data in the CMS Medicaid Scorecard.[11]

3.1.19 The rate of engagement in care for Opioid Use Disorder (OUD) was above the national median but has decreased over time during the SUD waiver.

Figure 3.1.19. Trends in the rate of engagement in care for Opioid Use Disorder (OUD) over time



Notes: Baseline and SUD Waiver Implementation trends are predictions from the multivariate interrupted time series model described in Methods. "Post, assuming no waiver" is a prediction from the same ITS model, setting the post-waiver incremental intercept and slope to zero but including trends due to COVID or changing beneficiary characteristics.

[11] https://www.medicaid.gov/state-overviews/scorecard/initiation-engagement-alcohol-drug-dependence-treatment/index.html

Table 3.1.19. Interrupted time series estimates: the rate of engagement in care for Opioid Use Disorder (OUD)

	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	36.40* (35.45, 37.34)	34.13* (32.41, 35.86)	-2.26* (-4.20, -0.32)
Slope	0.35* (0.32, 0.39)	-0.11 (-0.43, 0.22)	-0.46* (-0.79, -0.14)
N	85,895		

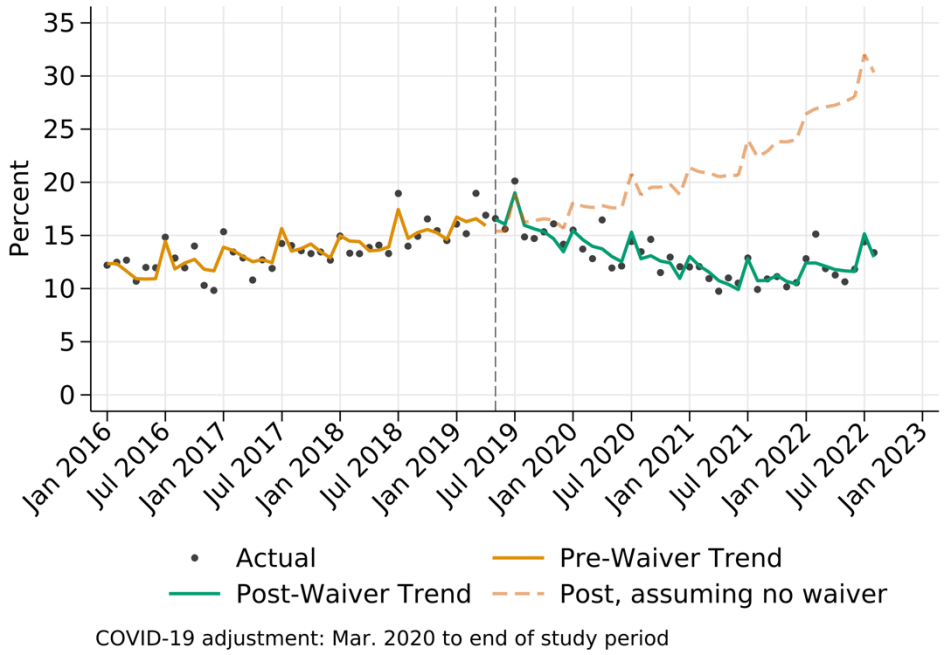
*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation slope is the sum of the baseline slope and the slope change during the implementation period. Baseline and SUD Waiver Implementation means are the means of the unadjusted outcomes.*

Engagement in care for OUD reflects the percent of beneficiaries with OUD who had initiated treatment and were engaged in on-going OUD treatment within 34 days of the initiation visit. The engagement rate increased substantially from just over 20% to almost 40% during the baseline period. We estimate that on average, the engagement rate declined by 2.3% points SUD implementation, and the OUD engagement rate continued to decreased by 0.5% points each month. The ITS model predicts a substantially higher engagement rate in the absence of the waiver based on the upward trend in the baseline period. The engagement rate for OUD in NC was above the national median (30.1%) prior to SUD implementation for this measure for states reporting data in the CMS Medicaid Scorecard.[12]

[12] https://www.medicaid.gov/state-overviews/scorecard/initiation-engagement-alcohol-drug-dependence-treatment/index.html

3.1.20 The rate of engagement in care for drug use disorders excluding alcohol use and opioid use disorders is above the national median but has decreased over time during the SUD waiver.

Figure 3.1.20. Trends in the rate of engagement in care for other drug use disorders (excluding alcohol use and opioid use disorders) over time.



Notes: Baseline and SUD Waiver Implementation trends are predictions from the multivariate interrupted time series model described in Methods. "Post, assuming no waiver" is a prediction from the same ITS model, setting the post-waiver incremental intercept and slope to zero but including trends due to COVID or changing beneficiary characteristics.

Table 3.1.20. Interrupted time series estimates: the rate of engagement in care for other drug use disorders (excluding alcohol and opioid use disorder)

	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	16.19* (15.68, 16.70)	17.30* (16.37, 18.24)	1.12* (0.06, 2.18)
Slope	0.13* (0.11, 0.15)	-0.34* (-0.52, -0.17)	-0.47* (-0.65, -0.30)
N	169,183		

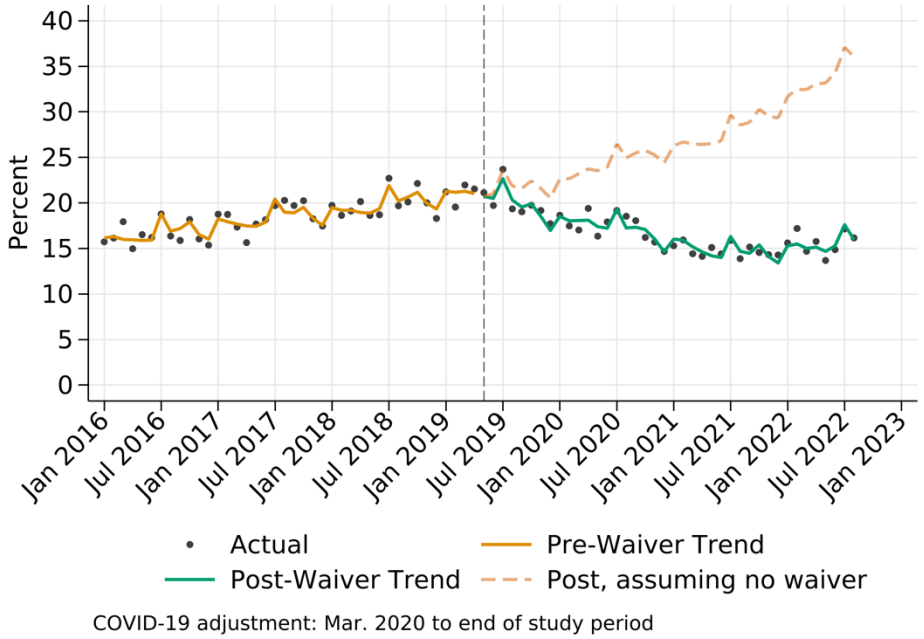
*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in*

slopes between the two periods. The SUD Waiver Implementation slope is the sum of the baseline slope and the slope change during the implementation period. Baseline and SUD Waiver Implementation means are the means of the unadjusted outcomes.

Engagement in care for drug use disorders other than alcohol and opioid use disorder reflects the percent of beneficiaries with these disorders who initiated treatment and engaged in on-going treatment within 34 days of the initiation visit. The engagement rate increased from just over 10% to just over 15% during the baseline period. The engagement rate increased on average by 1.1% point during the SUD waiver implementation period, but began trending downward by 0.47% point each month during the post period. The ITS model predicts a substantially higher engagement rate in the absence of the waiver based on the upward trend in the baseline period. The engagement rate for NC was above the national median (12.5%) for this measure for states reporting data in the CMS Medicaid Scorecard prior to the PHE.[13]

3.1.21 The rate of engagement in care for any substance use disorder was above the national median but has decreased over time during the SUD waiver.

Figure 3.1.21. Trends in the rate of engagement in care for any alcohol or drug (AOD) over time



[13] https://www.medicaid.gov/state-overviews/scorecard/initiation-engagement-alcohol-drug-dependence-treatment/index.html

Notes: Baseline and SUD Waiver Implementation trends are predictions from the multivariate interrupted time series model described in Methods. "Post, assuming no waiver" is a prediction from the same ITS model, setting the post-waiver incremental intercept and slope to zero but including trends due to COVID or changing beneficiary characteristics.

Table 3.1.21. Interrupted time series estimates: the rate of engagement in care for any alcohol or drug use disorder

	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	21.64* (21.22, 22.06)	21.65* (20.90, 22.41)	0.01 (-0.84, 0.86)
Slope	0.15* (0.14, 0.17)	-0.36* (-0.50, -0.22)	-0.51* (-0.66, -0.37)
N	322,695		

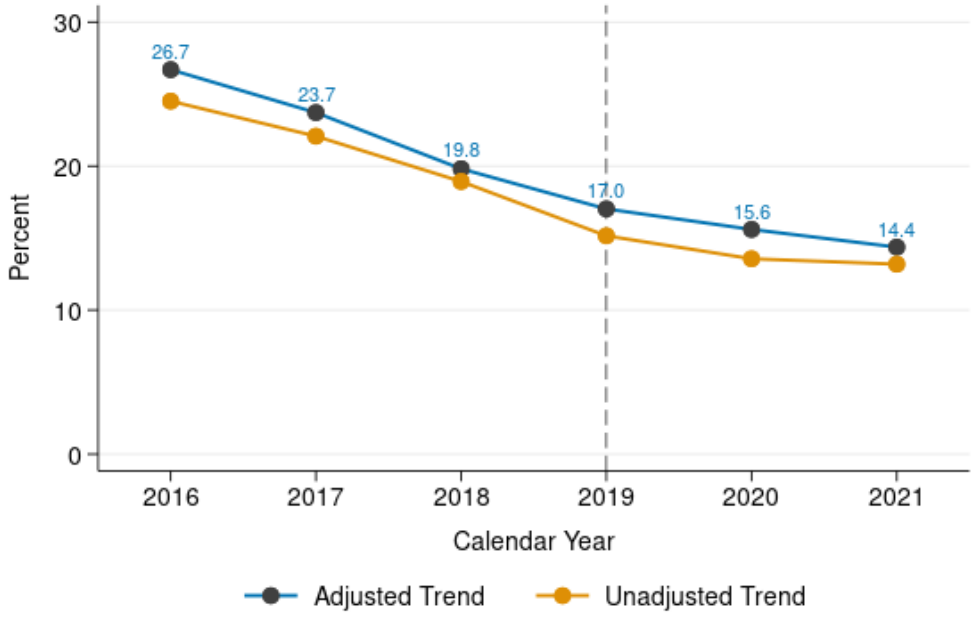
*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation slope is the sum of the baseline slope and the slope change during the implementation period. Baseline and SUD Waiver Implementation means are the means of the unadjusted outcomes.*

Engagement in care for any substance use disorder combines the prior three metrics and reflects the percent of beneficiaries with a SUD diagnosis who had initiated treatment and engaged in on-going care within 34 days of the initiation visit. The engagement rate increased from 15% to just over 20% during the baseline period. There was no overall change in the engagement rate during the SUD waiver implementation period, but the engagement rate for any type of SUD service decreased by 0.5% points each month during the post period. The ITS model predicts a higher engagement rate in the absence of the waiver based on the upward trend in the baseline period. The rate of engagement in any type of SUD treatment was higher than the national median (16.0%) reported in the CMS Medicaid Scorecard.[14]

[14] https://www.medicaid.gov/state-overviews/scorecard/initiation-engagement-alcohol-drug-dependence-treatment/index.html

3.1.22 Concurrent Use of Opioids and Benzodiazepines have decreased substantially since the beginning of the baseline period.

Figure 3.1.22. Trends in the Concurrent Use of Opioids and Benzodiazepines.



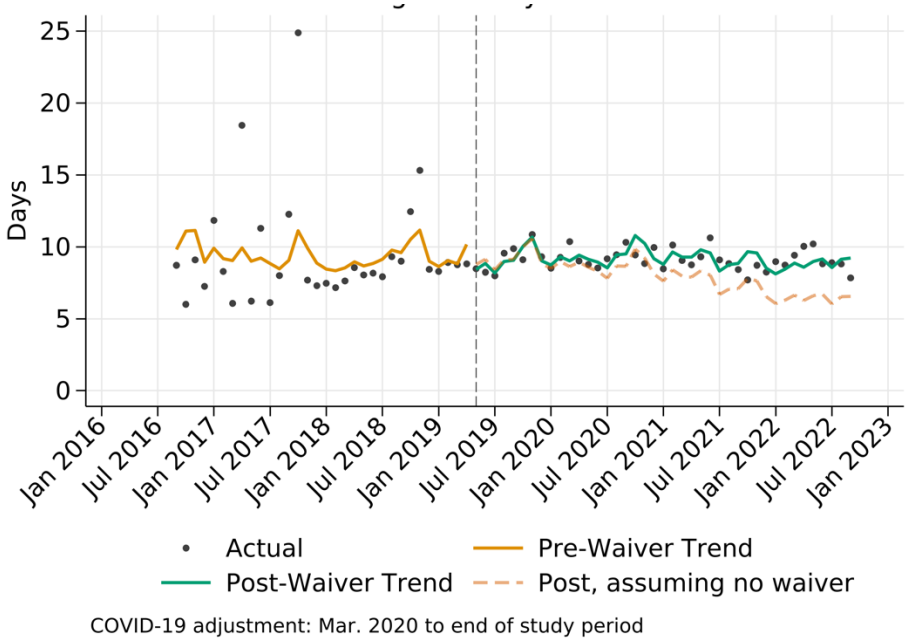
Notes: Adjusted model includes age (quadratic), sex, urban location, race specific indicator variables and the Chronic Illness and Disability Payment System (CDPS + Rx) risk adjustment scores.

The above figure shows that the percent of beneficiaries age 18 and older with concurrent use of prescription opioids and benzodiazepines has decreased substantially among Medicaid beneficiaries with prescription opioid use, excluding beneficiaries with a cancer diagnosis or in hospice. The annual unadjusted rate at the start of the baseline period (2016) indicates that about a quarter of those with a prescription for opioids also had one or more prescriptions for benzodiazepines over the same time period. In 2018, before the SUD waiver was implemented, this rate had decreased to 19.8%. By the end of 2021, the rate had declined to 14%. This decline in this metric is moving in the intended direction, but because the rate of decline is slower since the SUD waiver was implemented, it is hard to determine how much of the decline can be attributed to the waiver. The Medicaid Outcomes Distributed Research Network (MODRN) study tracking medication treatment across 11 states between 2014 and 2018 provides evidence of trends similar to what we observe in NC. Across those 11 states, the measure for

any benzodiazepine fill decreased from 33% to 22% between 2014 and 2018.[15]

3.1.23 The length of stay in Institutes for Mental Disease (IMDs) remained low.

Figure 3.1.23. Trends in the length of stay in IMDs



Notes: Baseline and SUD Waiver Implementation trends are predictions from the multivariate interrupted time series model described in Methods. "Post, assuming no waiver" is a prediction from the same ITS model, setting the post-waiver incremental intercept and slope to zero but including trends due to COVID or changing beneficiary characteristics.

Table 3.1.23. Interrupted time series estimates of the length of time in IMDs

	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	9.14 (8.17, 10.12)	8.79 (8.04, 9.53)	-0.36 (-1.59, 0.88)
Slope	-0.02 (-0.11, 0.08)	0.06 (-0.09, 0.21)	0.08 (-0.09, 0.25)
N	3,822		

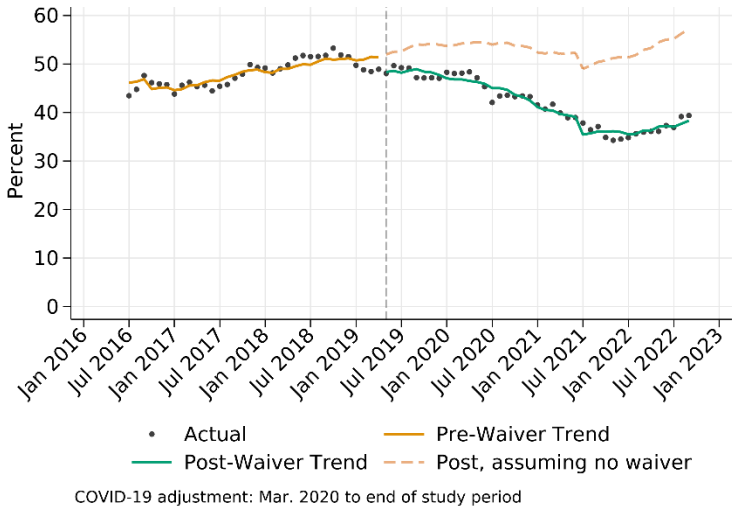
[15] The Medicaid Outcomes Distributed Research Network (MODRN) (2021). Use of Medications for Treatment of Opioid Use Disorder Among US Medicaid Enrollees in 11 States, 2014-2018. JAMA, 326(2), 154-164. doi:10.1001/jama.2021.7374

*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation slope is the sum of the baseline slope and the slope change during the implementation period. Baseline and SUD Waiver Implementation means are the means of the unadjusted outcomes.*

The average length of stay among those with IMD use remained low among NC Medicaid beneficiaries, at about 9 days throughout the study period, as seen in Figure 3.22. There was no evidence of a change in the level or the trend in length of study during the SUD implementation period. The average LOS in IMDs is substantially lower than CMS's goal of <30 days.

3.1.24 Behavioral health use among beneficiaries receiving medications for OUD declined considerably during SUD implementation.

Figure 3.1.24 Trends in behavioral health use among individuals receiving medications for OUD (MOUD)



Notes: Baseline and SUD Waiver Implementation trends are predictions from the multivariate interrupted time series model described in Methods. "Post, assuming no waiver" is a prediction from the same ITS model, setting the post-waiver incremental intercept and slope to zero but including trends due to COVID or changing beneficiary characteristics.

Table 3.1.24: Interrupted time series estimates of the receipt of behavioral health services by beneficiaries receiving MOUD

	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	52.59 (51.15, 54.04)	49.00 (47.18, 50.81)	-3.60* (-5.61, -1.58)
Slope	0.24* (0.17, 0.32)	-0.14 (-0.45, 0.17)	-0.383* (-0.712, -0.055)
N	237,076		

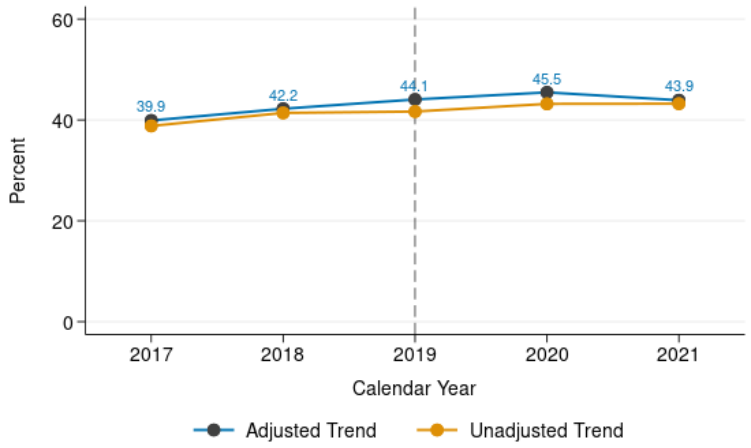
*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation slope is the sum of the baseline slope and the slope change during the implementation period. Baseline and SUD Waiver Implementation means are the means of the unadjusted outcomes.*

The evaluation team worked with the NC Division of Health Benefits' (DHB) subject matter experts to develop a measure of access to psychosocial services for beneficiaries newly prescribed medications for opioid use disorder (MOUD). This measure indicates whether beneficiaries in their first 12 months of an MOUD treatment episode received psychosocial services, including those delivered via telehealth.[16] This rate averaged just under 48% in the baseline period but declined by 3.6% points immediately at the start of the SUD implementation period. In addition, the monthly rate has been declining by 0.4% points per month. The difference between the projected trend in the absence of the waiver and the trend during the SUD waiver period, even controlling for COVID, is striking, with a considerable declining trend in use during the waiver.

[16] Psychosocial services generally follows the approach of Busch and colleagues (2020); "Outpatient Care for Opioid Use Disorder among the Commercially Insured: Use of Medication and Psychosocial Treatment." Journal of Substance Abuse Treatment 115: 108040. https://doi.org/10.1016/j.jsat.2020.108040) with updates to modifiers codes used in NC and excluding MAT.

3.1.25 The continuity of pharmacotherapy for Opioid Use Disorder increased through 2020 but declined in 2021

Figure 3.1.25. Trends in the continuity of pharmacotherapy for opioid use disorder over time



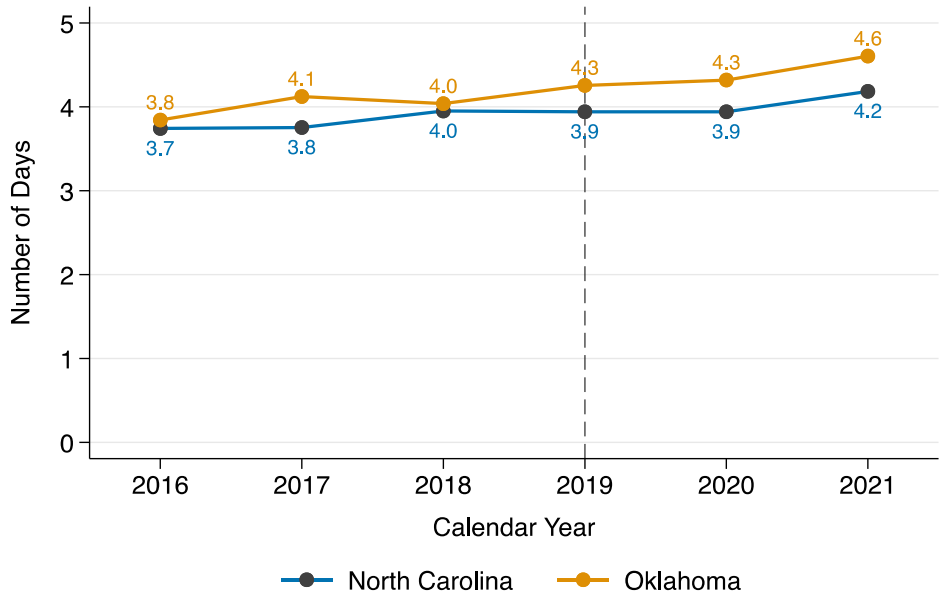
Notes: Adjusted model includes age (quadratic), sex, urban location, race specific indicator variables and the Chronic Illness and Disability Payment System (CDPS + Rx) risk adjustment scores.

The percentage of adult beneficiaries who used pharmacotherapy for OUD and had at least 180 days of continuous treatment increased during the study period from 39.9% in 2017 to 45.5% in 2020. There was a slight decrease in the level for 2021, to 43.9%. The Medicaid Outcomes Distributed Research Network (MODRN) study tracking medication treatment across 11 states between 2014 and 2018 cites the average levels in the region of 56-58% in that period with a variability in trends across individual states.[17]

[17] The Medicaid Outcomes Distributed Research Network (MODRN) (2021). Use of Medications for Treatment of Opioid Use Disorder Among US Medicaid Enrollees in 11 States, 2014-2018. JAMA, 326(2), 154-164. doi:10.1001/jama.2021.7374

3.1.26 The number of reported poor mental health days increased since 2019 but shows a similar pattern as the comparison state

Figure 3.1.26. Trends in the number of poor mental health days in the last 30 days



Notes: Poor mental health days records the response to the following question: "Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?"

Source: BRFSS.

Table 3.1.26. Difference-in-differences estimates of the number of poor mental health days in the last 30 days

	North Carolina			Oklahoma			Difference-in-Differences	
	Baseline Waiver	Post-Waiver	Within-group Difference	Baseline Waiver	Post-Waiver	Within-group Difference	Unadjusted	Adjusted
Poor mental health	3.84	4.05	0.21	4.02	4.56	0.54	-0.32 *	-0.18

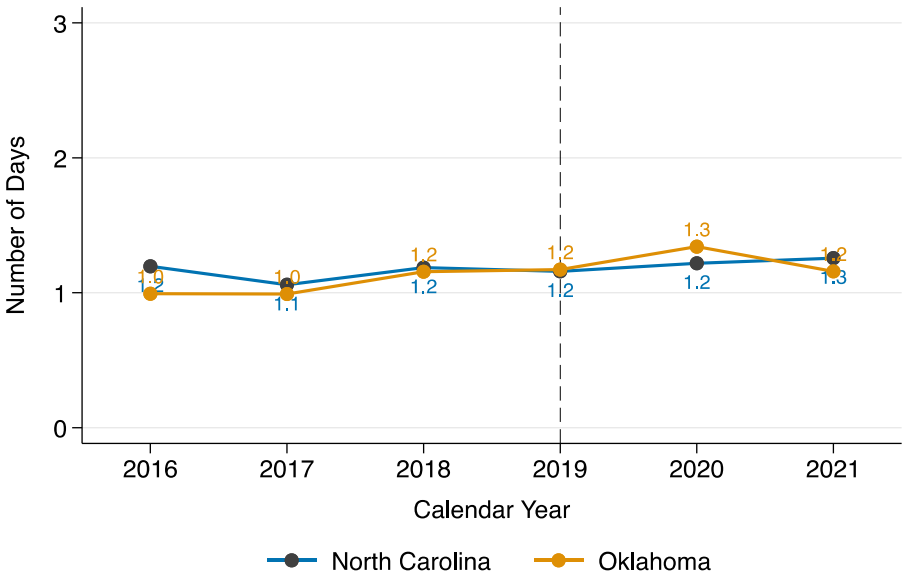
Notes: Adjusted model includes sex, age groups, employment, educational and marital status variables as well as year and state fixed effects. The sample consists of individuals who resided either in North Carolina or Oklahoma and had a valid response to a question (N=62,991). Due to small sample size issues, we did not restrict the sample to only Medicaid beneficiaries. Observations with missing values for covariates were excluded from the sample.

** 0.05*

Using respondents from Oklahoma (OK) to control for other national trends during the study period, we find that the number of poor mental health days increased in both states but more slowly in NC than OK. However, once we controlled for other covariates that may affect the rates of poor mental health, we found no statistically significant difference from Oklahoma.

3.1.27 The number of days binge drinking remained relatively flat in NC.

Figure 3.1.27. Trends in the number of days of binge drinking in the last 30 days



Notes: Binge drinking days records the response to the following question: "Considering all types of alcoholic beverages, how many times during the past 30 days did you have 5 or more drinks for men or 4 or more drinks for women on an occasion?"

Source: BRFSS.

Table 3.1.27. Difference-in-differences estimates of the number of days of binge drinking in the last 30 days

	North Carolina			Oklahoma			Difference-in-Differences	
	Baseline Waiver	Post-Waiver	Within-group Difference	Baseline Waiver	Post-Waiver	Within-group Difference	Unadjusted	Adjusted
Binge drinking	1.137	1.264	0.127	1.053	1.292	0.238	-0.111	-0.078

Notes: Adjusted model includes sex, age groups, employment, educational and marital status variables as well as year and state fixed effects. The sample consists of individuals who resided either in North Carolina or Oklahoma and had a valid response to a question (N=25,280). Due to small sample size issues, we did not restrict the sample to only Medicaid beneficiaries. Observations with missing values for covariates were excluded from the sample.

Using respondents from OK to control for other trends during the study period, we find that the number of binge drinking days in NC was constant from 2018 – 2020 then increased slightly in 2021 but showed no statistically significant difference from OK, controlling for trends from the baseline period.

Hypothesis 3.2: Expanding coverage of SUD services will increase the use of MOUD and other appropriate opioid treatment services and decrease the long-term use of prescription opioids.

We examined the trends in 16 additional metrics reflecting medication and other treatments for OUD and long-term use of opioids in order to test Hypothesis 3.2 (Table 1). Four of the metrics demonstrated appreciable progress since the SUD waiver implementation, one demonstrated no change, and the remaining 11 moved in the opposite direction as the waiver goals. The metrics that indicated appreciable progress during the SUD waiver implementation period included the use of pharmacotherapy for OUD, 30-day follow up after ED visit for mental health among beneficiaries with SUD diagnoses; two metrics reflecting the receipt of opioids from multiple providers. The use of non-medication services for OUD did not change. The eleven metrics that did not demonstrate progress included metrics reflect follow up care after emergency and hospital visits for SUD, use of opioids at high doses, and the rate of ED and inpatient use per 1000 beneficiaries with SUD.

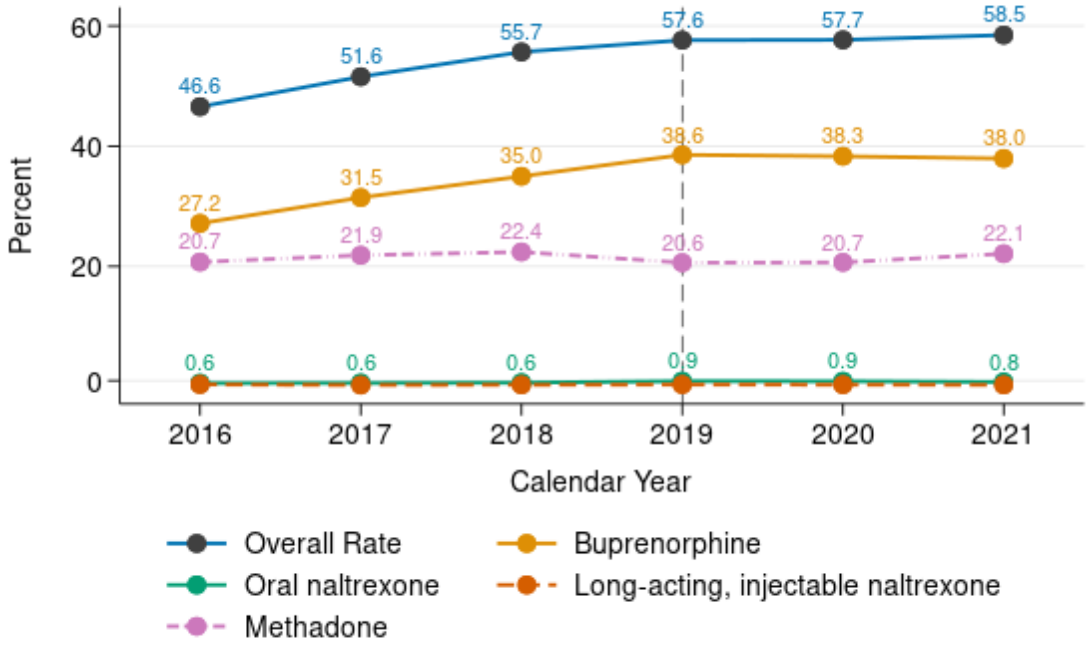
Table 3. Summary of SUD Metric Results for Hypothesis 3.2

#	Measure (Metric abbreviation)	State's demonstration target	Directionality at mid-point (Oct 2021)	Adjusted waiver effects at Sept 2022	Progress * (Yes/No)
3.2.1	Use of Pharmacotherapy for OUD	Increase	NI	Increased	Yes
3.2.2	Follow-Up After Emergency Department Visit for Alcohol and Other Drug Abuse or Dependence (M17.1)	Increase	7-day decreased	7-day decreased	No
3.2.3	Follow-Up After Emergency Department Visit for Alcohol and Other Drug Abuse or Dependence (M17.1)	Increase	30-day increased	30-day decreased	No
3.2.4	Follow-Up After Emergency Department Visit for Mental Illness (M17.2)	Increase	7-day increased	7-day decreased	No

#	Measure (Metric abbreviation)	State's demonstration target	Directionality at mid-point (Oct 2021)	Adjusted waiver effects at Sept 2022	Progress * (Yes/No)
3.2.5	Follow-Up After Emergency Department Visit for Mental Illness (M17.2)	Increase	30-day increased	30-day increased	Yes
3.2.6	Use of Opioids at High Dosage in Persons without Cancer (M18)	Decrease	Decrease	Increase	No
3.2.7	Use of Opioids from Multiple Providers in Persons Without Cancer (M19)	Decrease	NI	Decrease	Yes
3.2.8	Use of Opioids at High Dosage and from Multiple Providers in Persons Without Cancer (M20)	Decrease	NI	Decrease	Yes
3.2.9	Percent of Enrollees Diagnosed with OUD Receiving Non-medication Opioid Treatment Services	Increase	NI	--	--
3.2.10	Emergency Department Utilization for SUD per 1000 beneficiaries (M23)	Decrease	Increase	Increase	No
3.2.11	Inpatient Stays for SUD per 1000 beneficiaries (M24)	Decrease	NI	Increase change	No

3.2.1 The use of medications for OUD increased during the study period.

Figure 3.2.1. Trends in the use of medications for OUD, by type of medication



Notes: Adjusted model includes age (quadratic), sex, urban location, race specific indicator variables and the Chronic Illness and Disability Payment System (CDPS + Rx) risk adjustment scores.

Figure 3.2.1 plots the percentage of Medicaid beneficiaries ages 18 to 64 with an opioid use disorder diagnosis who filled a prescription for or were administered or dispensed an FDA-approved medication for the disorder during the measurement year. The MOUD treatment rate reached almost 59% of Medicaid beneficiaries with OUD in 2021. The Medicaid Outcomes Distributed Research Network (MODRN) study tracking medication treatment across 11 states between 2014 and 2018 provides evidence of trends similar to what we observe in NC. The study authors similarly found that the overall share of enrollees with OUD receiving medication treatment increased from 47.8% to 57.1%, which was largely driven by buprenorphine and naltrexone.[18]

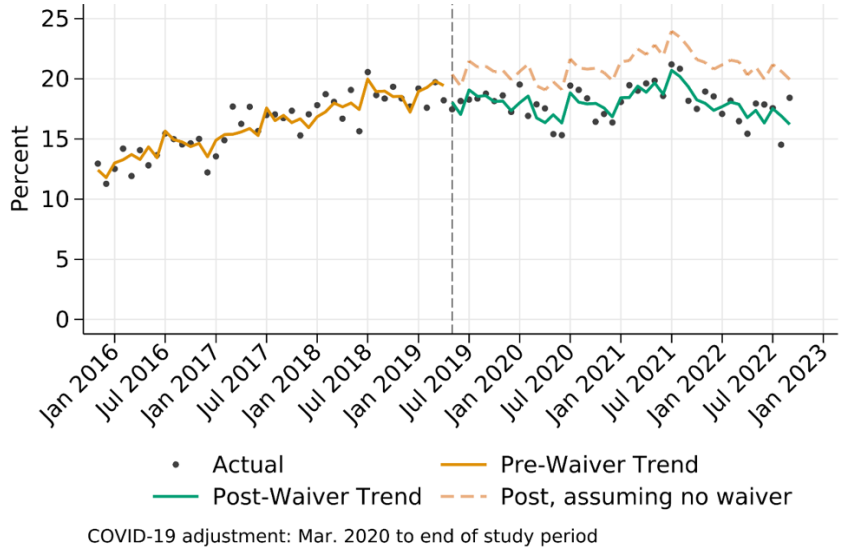
Buprenorphine, typically prescribed by outpatient providers and dispensed in retail pharmacies, comprised more than half of the use of MOUD in NC, although its use has not grown as a percent of

[18] The Medicaid Outcomes Distributed Research Network (MODRN) (2021). Use of Medications for Treatment of Opioid Use Disorder Among US Medicaid Enrollees in 11 States, 2014-2018. JAMA, 326(2), 154-164. doi:10.1001/jama.2021.7374

people with OUD since 2018, remaining at just over 38% use rate. Methadone use had declined from 2018 to 2019-2020, but began to increase again in 2021, possibly due to the additional policy flexibilities granted during the PHE that allowed small amounts of take-home methadone. Naltrexone continues to be seldom used, with fewer than 1% of Medicaid beneficiaries with OUD having a prescription for naltrexone. The results of another study from the MODRN team provide medication-specific prevalence estimates for Medicaid beneficiaries across 11 states in 2016-2017 period among those using MOUD: buprenorphine or buprenorphine/naloxone (59.2% of MOUD users), methadone (27.6%), oral naltrexone (5.9%), naltrexone, intramuscular injection (7.3%).[19]

3.2.2 Follow up care within seven days after emergency department visits for SUD increased during the baseline period but decreased during the SUD implementation period.

Figure 3.2.2. Trends in Follow up care within seven days after emergency department visits for SUD



Notes: Baseline and SUD Waiver Implementation trends are predictions from the multivariate interrupted time series model described in Methods. "Post, assuming no waiver" is a prediction from the same ITS model, setting the post-waiver incremental intercept and slope to zero but including trends due to COVID or changing beneficiary characteristics.

Table 3.2.2. Interrupted time series estimates of the length of follow-up within seven days after an

[19] Burns, M., Tang, L., Chang, C. H., Kim, J. Y., Ahrens, K., Allen, L., Cunningham, P., Gordon, A. J., Jarlenski, M. P., Lanier, P., Mauk, R., McDuffie, M. J., Mohamoud, S., Talbert, J., Zivin, K., & Donohue, J. (2022). Duration of medication treatment for opioid-use disorder and risk of overdose among Medicaid enrollees in 11 states: A retrospective cohort study. *Addiction*, *117*(12), 3079-3088. https://doi.org/10.1111/add.15959

emergency department visit for SUD

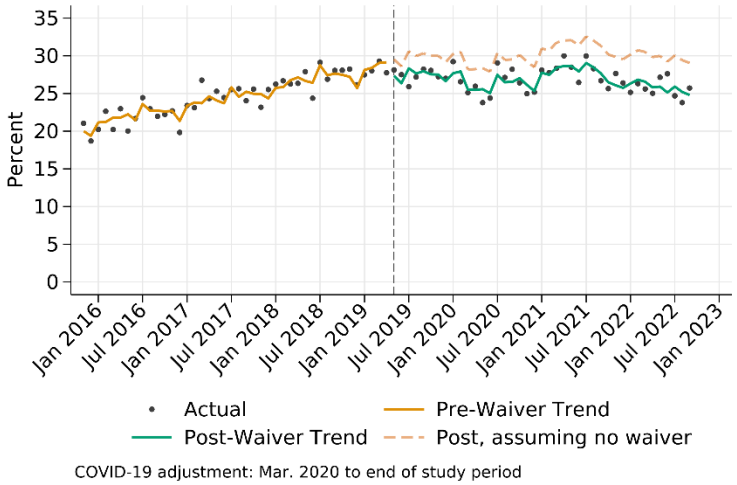
	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	19.81 (19.02, 20.61)	17.50 (16.05, 18.96)	-2.31* (-3.94, -0.69)
Slope	0.16* (0.13, 0.19)	0.13 (-0.15, 0.41)	-0.036* (-0.317, -0.246)
N	83,037		

*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation slope is the sum of the baseline slope and the slope change during the implementation period. Baseline and SUD Waiver Implementation means are the means of the unadjusted outcomes.*

The rate of follow up with a community provider within seven days after an emergency department visit grew substantially during the baseline period, from 12% to 18%. It decreased on average by 2.3% points after SUD implementation and the trend flattened out. The rate of follow-up within seven days can be seen in the figure to increase between January and July 2021 and then decline, which could be due to the initial launch of Standard Plans; this issue will be examined further in Chapter 5. Overall, the rate of follow-up within seven days of an emergency department visit for SUD is lower than we would expect in the absence of the waiver.

3.2.3 Follow up care within 30 days after emergency department visits for SUD increased during the baseline period but decreased and flattened out during SUD implementation.

Figure 3.2.3. Trends in Follow up care within 30 days after emergency department visits for SUD



Notes: Baseline and SUD Waiver Implementation trends are predictions from the multivariate interrupted time series model described in Methods. "Post, assuming no waiver" is a prediction from the same ITS model, setting the post-waiver incremental intercept and slope to zero but including trends due to COVID or changing beneficiary characteristics.

Table 3.2.3. Interrupted time series estimates of follow-up care within 30 days after an emergency department visit for SUD

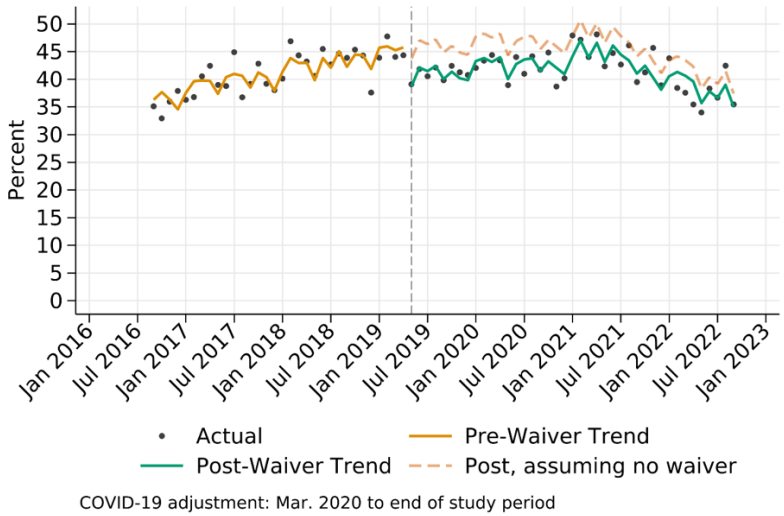
	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	28.94 (28.01, 29.88)	26.77 (25.06, 28.47)	-2.17* (-4.08, -0.27)
Slope	0.20* (0.16, 0.23)	0.15 (-0.18, 0.47)	-0.052 (-0.384, 0.280)
N	83,037		

*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation slope is the sum of the baseline slope and the slope change during the implementation period. Baseline and SUD Waiver Implementation means are the means of the unadjusted outcomes.*

The rate of follow up with a community provider within 30 days after an emergency department visit grew substantially during the baseline period, from 20% to almost 30%. It decreased by 2.2% points after SUD implementation and flattened out. Overall, the rate of follow-up within 30 days of an emergency department visit for SUD is lower than we would expect in the absence of the waiver.

3.2.4 Follow up care within seven days after emergency department visits for mental illness among beneficiaries with a SUD increased during the baseline period but declined on average during the SUD implementation period.

Figure 3.2.4. Trends in Follow up care within seven days after emergency department visits for mental illness by beneficiaries with SUD



Notes: Baseline and SUD Waiver Implementation trends are predictions from the multivariate interrupted time series model described in Methods. "Post, assuming no waiver" is a prediction from the same ITS model, setting the post-waiver incremental intercept and slope to zero but including trends due to COVID or changing beneficiary characteristics.

Table 3.2.4. Interrupted time series estimates of follow-up within seven days after an emergency department visit for mental illness among beneficiaries with SUD

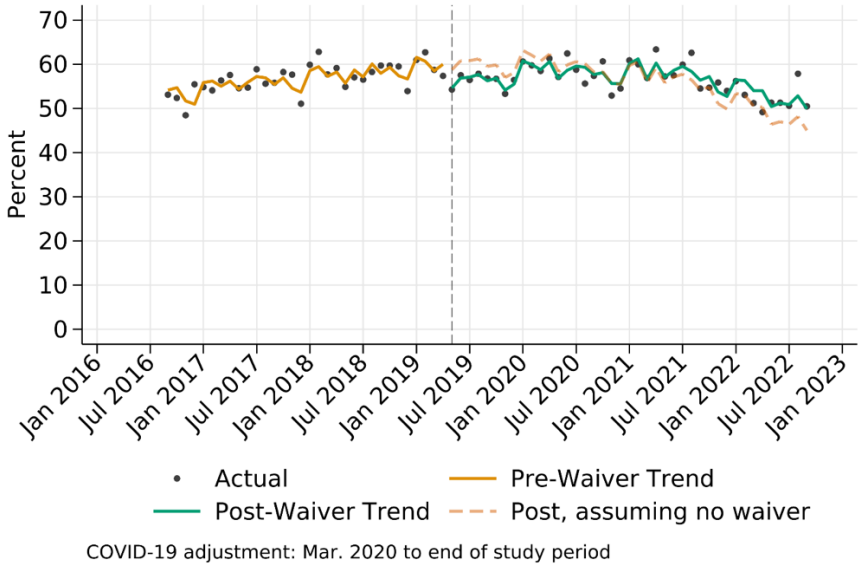
	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	45.02 (43.46, 46.84)	39.99 (38.76, 42.44)	-5.03* (-8.19, -1.88)
Slope	0.23* (0.15, 0.32)	0.30* (0.03, 0.28)	0.067 (-0.466, 0.599)
N	32,184		

*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation slope is the sum of the baseline slope and the slope change during the implementation period. Baseline and SUD Waiver Implementation means are the means of the unadjusted outcomes.*

The rate of follow up with a community provider within seven days after an emergency department visit for mental illness grew during the baseline period, from 35% to 45%. It decreased substantially, by 4.6% points after SUD implementation and actually increased slightly faster during SUD implementation than during baseline. Overall, the rate of follow-up within seven days of an emergency department visit for mental illness is lower than we would expect in the absence of the waiver.

3.2.5 Follow up care within 30 days after emergency department visits for mental illness among beneficiaries with a SUD was relatively flat but declined slightly at SUD implementation.

Figure 3.2.5. Trends in Follow up care within 30 days after emergency department visits for mental illness by beneficiaries with SUD



Notes: Baseline and SUD Waiver Implementation trends are predictions from the multivariate interrupted time series model described in Methods. "Post, assuming no waiver" is a prediction from the same ITS model, setting the post-waiver incremental intercept and slope to zero but including trends due to COVID or changing beneficiary characteristics.

Table 3.2.5. Interrupted time series estimates of follow-up within 30 days after an emergency department visit for mental illness among beneficiaries with SUD

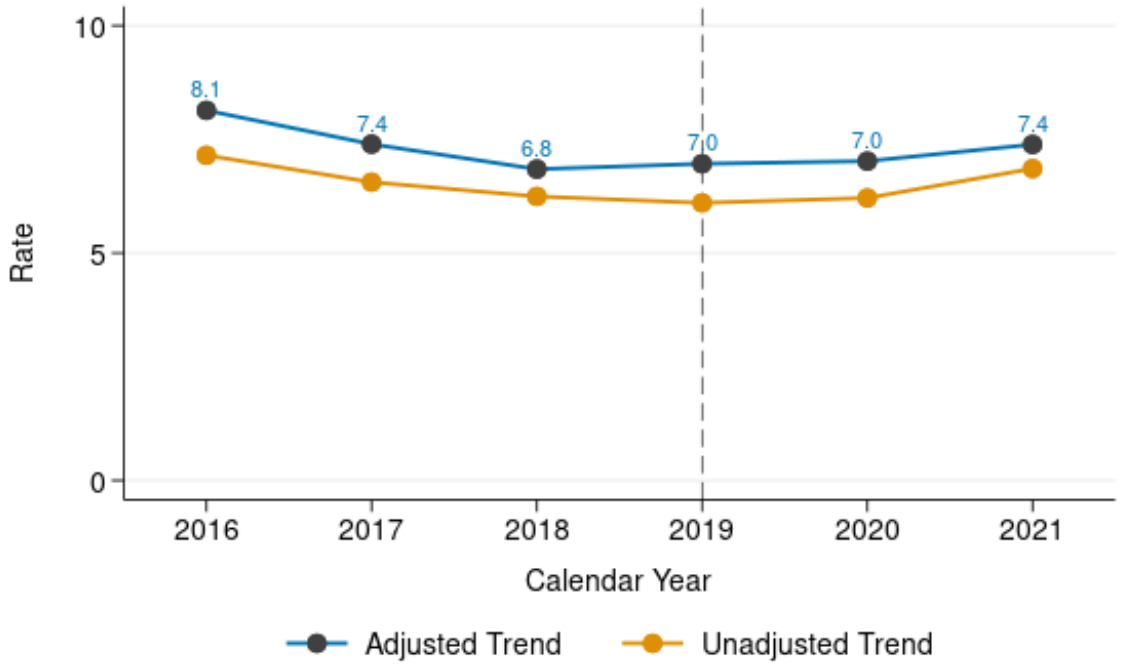
	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	59.29 (57.61, 60.96)	55.10 (52.38, 57.82)	-4.19* (-7.35, -1.02)
Slope	0.15* (0.061, 0.24)	0.38 (-0.15, 0.90)	0.23 (-0.30, 0.76)
N	32,184		

*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation slope is the sum of the baseline slope and the slope change during the implementation period. Baseline and SUD Waiver Implementation means are the means of the unadjusted outcomes.*

The rate of follow up with a community provider within 30 days after an emergency department visit for mental illness grew during the baseline period from just over 50% to almost 60%. It decreased by 4.2% points after SUD implementation, then remained flat on average during the SUD implementation period but has been declining since the launch of SPs. Overall, the rate of follow-up within thirty days of an emergency department visit for mental illness is currently slightly higher than we would expect in the absence of the waiver.

3.2.6 The Use of Opioids at High Dosage in Persons without Cancer declined during the baseline period but started increasing during SUD implementation.

Figure 3.2.6: Trends in the Use of Opioids at High Dosage in Persons without Cancer

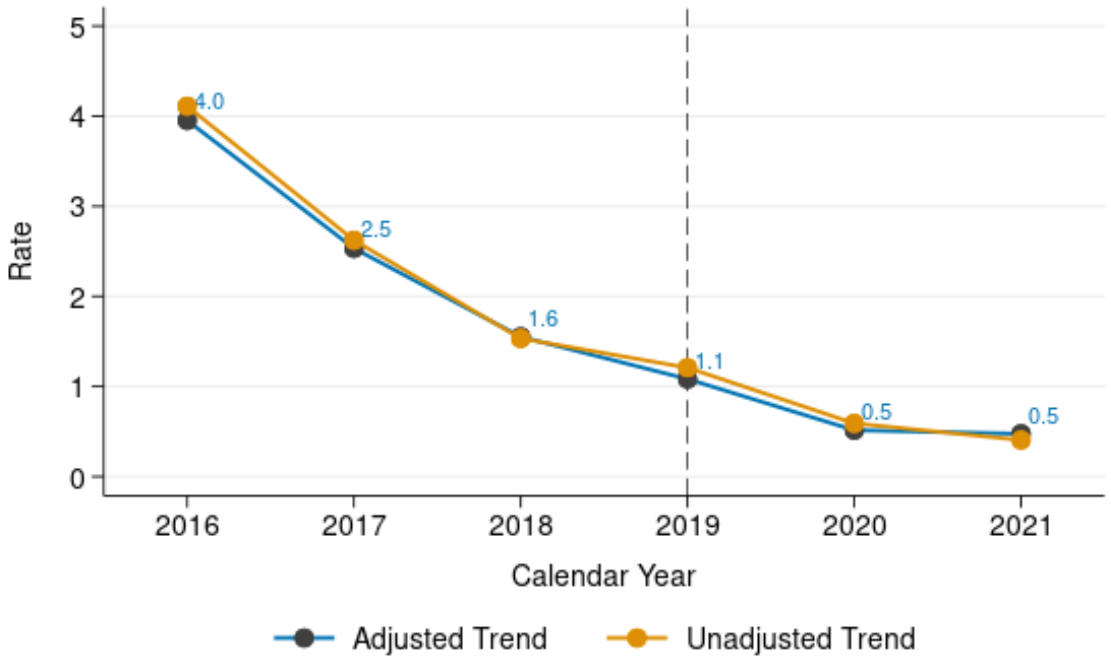


Notes: The adjusted model includes age (quadratic), sex, urban location, race specific indicator variables and the Chronic Illness and Disability Payment System (CDPS + Rx) risk adjustment scores.

The Use of Opioids at High Dosage in Persons without Cancer tracks the percent of beneficiaries aged 18 and older without a diagnosis of cancer who received prescriptions for opioids with a daily dosage greater than 120 morphine milligram equivalents for 90 consecutive days or longer. Beneficiaries with a cancer diagnosis or in hospice are excluded. The rate declined from 8.1% of beneficiaries in 2016 to 7.0% in 2019. The rate started climbing after implementation, with the 2021 rate returning to the level in 2017, at 7.4 per 1000.

3.2.7 The Use of Opioids from Multiple Providers in Persons without Cancer declined substantially during the study period.

Figure 3.2.7. Trends in the Use of Opioids from Multiple Providers in Persons without Cancer

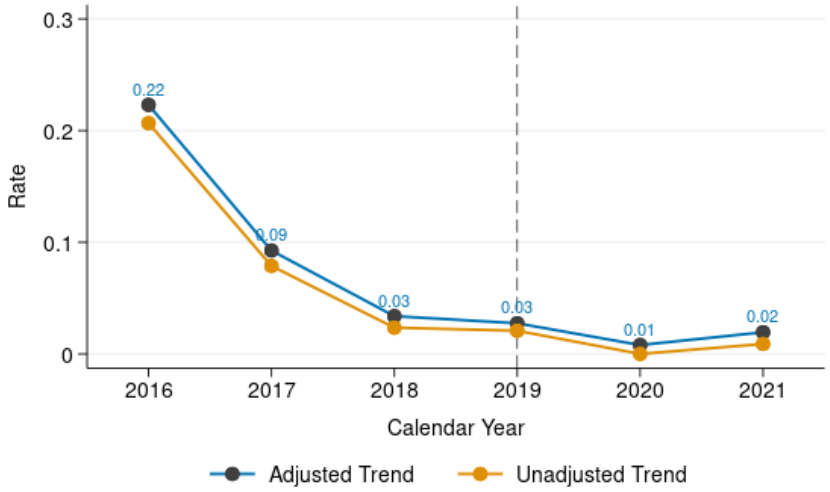


Notes: The adjusted model includes age (quadratic), sex, urban location, race specific indicator variables and the Chronic Illness and Disability Payment System (CDPS + Rx) risk adjustment scores.

The Use of Opioids at from Multiple Providers in Persons without Cancer tracks the rate per 1,000 beneficiaries without cancer who received prescriptions for opioids from four or more prescribers and four or more pharmacies during the measurement year. The rate declined considerably during the baseline period, possibly due to North Carolina's lock-in program, the STOP ACT, the increased use of CSRS or other factors not examined here, and continued to decline to 1 person per 2000 beneficiaries, even during a time with known increases in opioid use during the pandemic.

3.2.8 The Use of Opioids at High Dosage from Multiple Providers in Persons without Cancer declined substantially during the baseline period and remained low.

Figure 3.2.8. Trends in the Use of Opioids at High Dosage from Multiple Providers in Persons without Cancer

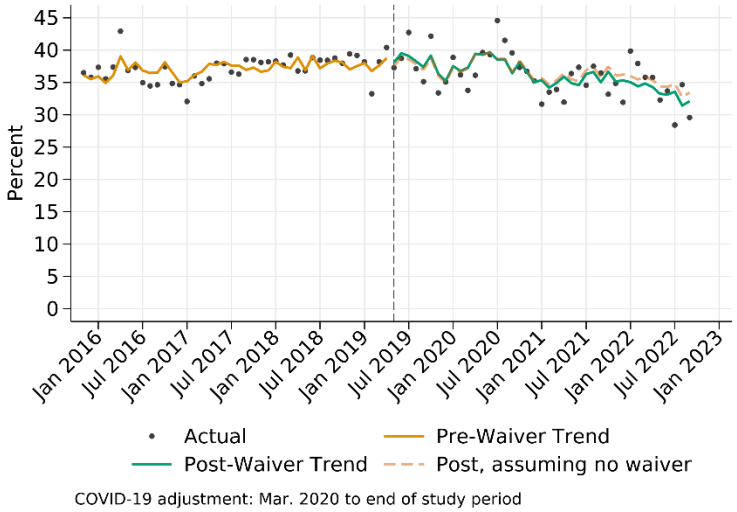


Notes: Adjusted model includes age (quadratic), sex, urban location, race specific indicator variables and the Chronic Illness and Disability Payment System (CDPS + Rx) risk adjustment scores.

The Use of Opioids at High Dosage from Multiple Providers in Persons without Cancer tracks the rate per 1,000 beneficiaries aged 18 and older without a diagnosis of cancer who received prescriptions for opioids with a daily dosage greater than 120 morphine milligram equivalents for 90 consecutive days or longer, from four or more prescribers and four or more pharmacies. Beneficiaries with a cancer diagnosis or in hospice are excluded. The rate declined from 2.2 beneficiaries per 10,000 in 2016 to 3.0 per 10,000 in 2019. The rate in 2020 and 2021 remained below the 2019 levels.

3.2.9 The use of non-medication opioid treatment services for those with an OUD diagnosis increased slightly during the SUD waiver, but then trended downward.

Figure 3.2.9. Trends in the receipt of non-medication opioid treatment services



Notes: Baseline and SUD Waiver Implementation trends are predictions from the multivariate interrupted time series model described in Methods. "Post, assuming no waiver" is a prediction from the same ITS model, setting the post-waiver incremental intercept and slope to zero but including trends due to COVID or changing beneficiary characteristics.

Table 3.2.9. Interrupted time series estimates of non-medication opioid treatment services

	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	38.72 (37.76, 39.67)	39.33 (37.30, 41.37)	0.61 (-1.63, 2.86)
Slope	0.082* (0.047, 0.116)	0.0325 (-0.353, 0.418)	-0.049* (-0.436, -0.339)
N	80,775		

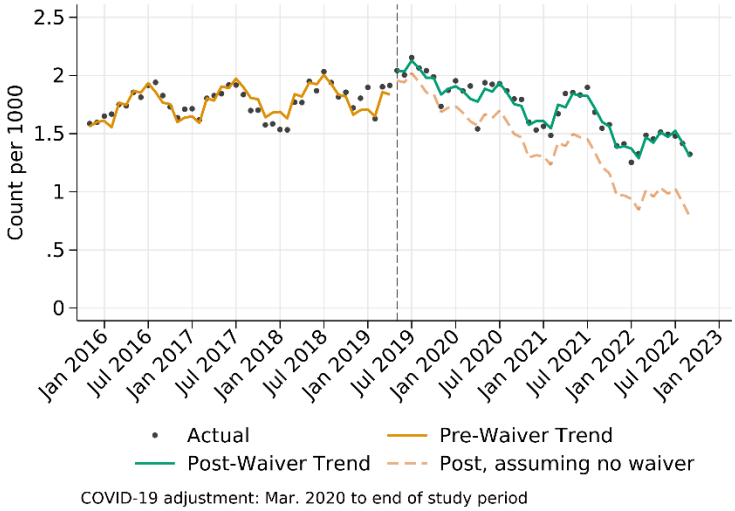
*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation slope is the sum of the baseline slope and the slope change during the implementation period. Baseline and SUD Waiver Implementation means are the means of the unadjusted outcomes.*

The percent of adult beneficiaries with opioid use disorder who received non-medication treatment services remained practically unchanged during the baseline period. The average did not change during SUD implementation but the trend declined slightly by 0.05% points per month. By the end of the study period for this report, the rate of non-medication treatment service use was indistinguishable from the

level predicted in the absence of the waiver. The Medicaid Outcomes Distributed Research Network (MODRN) study tracking medication treatment across 11 states between 2014 and 2018 found that the prevalence of any behavioral health counseling (e.g., alcohol or drug counseling, individual psychotherapy) among Medicaid beneficiaries with opioid use disorder diagnosis was on average around 74-84% during the study period with individual states reporting levels in the range between 39% and 90%.[20]

3.2.10 The rate of ED visits for SUD increased during SUD waiver implementation.

Figure 3.2.10. Trends in the rate of ED visits for SUD per 1000 beneficiaries



Notes: Baseline and SUD Waiver Implementation trends are predictions from the multivariate interrupted time series model described in Methods. "Post, assuming no waiver" is a prediction from the same ITS model, setting the post-waiver incremental intercept and slope to zero but including trends due to COVID or changing beneficiary characteristics.

[20] The Medicaid Outcomes Distributed Research Network (MODRN) (2021). Use of Medications for Treatment of Opioid Use Disorder Among US Medicaid Enrollees in 11 States, 2014-2018. JAMA, 326(2), 154-164. doi:10.1001/jama.2021.7374

Table 3.2.10. Interrupted time series estimates of the rate of ED visits for SUD per 1000 Beneficiaries

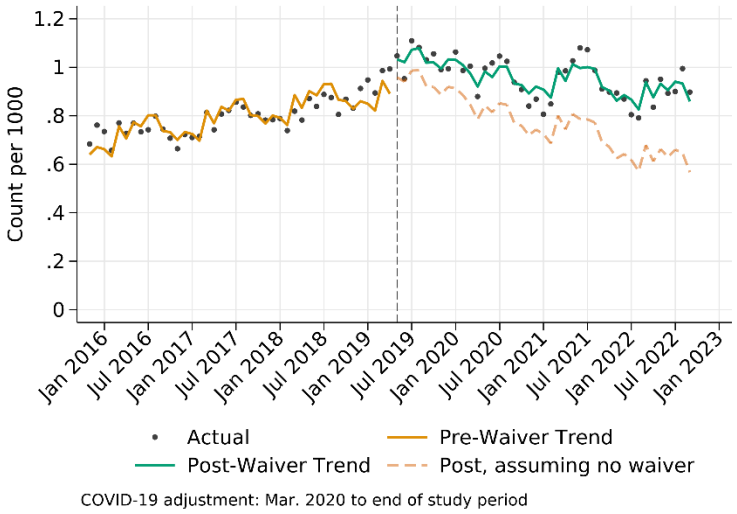
	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	1.83 (1.78, 1.88)	1.92 (1.85, 1.98)	0.086* (0.021, 0.150)
Slope	0.0016* (0.0001, 0.0032)	0.0125* (0.0022, 0.0229)	0.0109* (0.0002, 0.0215)
N	164,573,205		

*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation slope is the sum of the baseline slope and the slope change during the implementation period. Baseline and SUD Waiver Implementation means are the means of the unadjusted outcomes.*

The rate of ED visits for substance use disorder (SUD) was generally flat during the baseline period, with predictable summertime peaks each year. The rate increased by 8.6 visits per 100,000 beneficiaries overall and started trending upward SUD implementation period, controlling for the PHE and SP launch. Because hospital visits have still not returned to normal as of September 2022, the model attributes a substantial decline in use due to COVID-19, yielding a prediction that the level of ED visits for SUD is higher than it would be without the waiver.

3.2.11 The rate of inpatient hospital stays for SUD initially increased at SUD waiver implementation but trended downward.

Figure 3.2.11. Trends in the rate of Inpatient stays for SUD per 1000 beneficiaries



Notes: Baseline and SUD Waiver Implementation trends are predictions from the multivariate interrupted time series model described in Methods. "Post, assuming no waiver" is a prediction from the same ITS model, setting the post-waiver incremental intercept and slope to zero but including trends due to COVID or changing beneficiary characteristics.

Table 3.2.11. Interrupted time series estimates of the rate of Inpatient stays for SUD per 1000 Beneficiaries

	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	0.90 (0.88, 0.92)	0.98 (0.94, 1.01)	0.075* (0.040, 0.110)
Slope	0.0044* (0.0038, 0.0051)	0.0099 (-0.0041, 0.0156)	0.0054 (-0.0004, 0.0113)
N	164,573,205		

*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation slope is the sum of the baseline slope and the slope change during the implementation period. Baseline and SUD Waiver Implementation means are the means of the unadjusted outcomes.*

The rate of inpatient stays for substance use disorder (SUD) was slowly trending upwards during the baseline period, from about 6 stays per 10,000 beneficiaries in late 2015 to just under 10 stays per 10,000 beneficiaries just before waiver implementation. The rate increased by 7.5 visits per 100,000 beneficiaries initially, then remained relatively flat. By the end of the study period, SUD waiver implementation is associated with a substantial increase in the rate of inpatient stays for SUD.

Hypothesis 3.3: Expanding coverage of SUD services will result in no changes in total Medicaid and out-of-pocket costs for people with SUD diagnoses and increases in Medicaid costs on SUD IMD services.

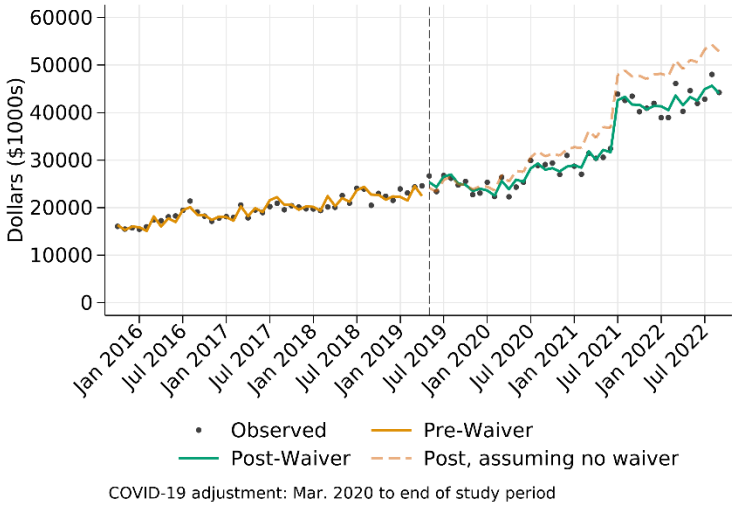
We examined six measures reflecting total spending, per beneficiary spending, and out-of-pocket costs overall for SUD services and specifically for IMD services. We found that total spending on SUD services increased after SUD waiver implementation, as expected. This reflects both the greater number of beneficiaries receiving benefits, especially after the start of the PHE, but also greater spending per capita, even after controlling for changes in case mix. Spending on SUD services in IMDs remained stable, although per capita spending on SUD services in IMDs grew slightly. A somewhat greater percent of beneficiaries with SUD had out-of-pocket spending after the waiver was implemented, affecting 2% of beneficiaries with SUD. However, the average copay among beneficiaries with some out-of-pocket spending declined during the SUD implementation period.

Table 4. Summary of SUD Metric Results for Hypothesis 3.3

#	Measure (Metric abbreviation)	State's demonstration target	Directionality at mid-point (Oct 2021)	Adjusted waiver effects at Sept 2022	Progress * (Yes/No)
3.3.1	Total spending on SUD services (M28)	Increase	NI	Increase	Yes
3.3.2	Total spending on SUD services within IMDs (M29)	Decrease	NI	No change	No
3.3.3	Per capita SUD spending (M30)	Increase	NI	Increase	Yes
3.3.4	Per capita SUD spending within IMDs (M31)	Decrease	NI	Increase	No
3.3.5	Probability of Out-of-pocket Costs to Medicaid Enrollees	No change	NI	Increase	No
3.3.6	Total Amount of Out-of-pocket Costs to Medicaid Enrollees	No change	NI	Increase	No

3.3.1 Total SUD spending grew during the study period but saw no appreciable change during SUD waiver implementation.

Figure 3.3.1. Trends in Total spending on SUD services



Notes: Baseline and SUD Waiver Implementation trends are predictions from the multivariate interrupted time series model described in Methods. "Post, assuming no waiver" is a prediction from the same ITS model, setting the post-waiver incremental intercept and slope to zero but including trends due to COVID or changing beneficiary characteristics.

Table 3.3.1. Interrupted Time Series estimates of total spending on SUD services (in thousands of dollars)

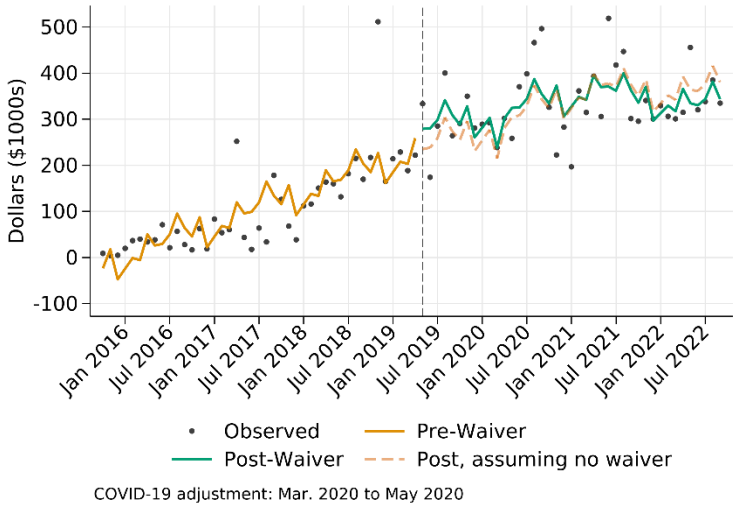
	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	$23,972.13 (22,980.53, 24,603.72)	$25,005.77 (22,584.97, 26,426.58)	$1,213.65 (-1595.11, 743.84)
Slope	$177.63* (149.50, 205.75)	-$74.32 (-361.42, 212.78)	-$251.94 (-542.08, 38.19)
N	84		

*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation slope is the sum of the baseline slope and the slope change during the implementation period. Baseline and SUD Waiver Implementation means are the means of the unadjusted outcomes.*

Medicaid total spending on SUD services was about $15M per month at the start of the study period, with a steady increase of $177,630 per month. As per the CMS technical specifications, this measure presents nominal spending, unadjusted for inflation. This measure also does not explicitly control for the increase in the number of beneficiaries during the PHE nor in the intensity of services use; per capita spending is presented below. In addition, SP implementation appears to have substantially affected spending, with an increase to over $40M per month. There was no significant immediate spending change or slope change attributable to the SUD components of the waiver, although SP implementation is associated with a reduction in spending.

3.3.2 Total SUD spending on care in Institutes for Mental Disease consistently grew but was not escalated by the SUD waiver.

Figure 3.3.2. Trends in total spending on care in Institutes for Mental Disease



Notes: Baseline and SUD Waiver Implementation trends are predictions from the multivariate interrupted time series model described in Methods. "Post, assuming no waiver" is a prediction from the same ITS model, setting the post-waiver incremental intercept and slope to zero but including trends due to COVID or changing beneficiary characteristics.

Table 3.3.2. Interrupted Time Series estimates of total care in Institutes for Mental Disease

	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	236.86 (180.30, 293.42)	280.43 (225.38, 335.48)	43.57 (-38.40, 125.53)
Slope	5.80 (3.88, 7.73)	3.80 (-0.93, 8.52)	-2.01 (-6.99, 2.97)
N	84		

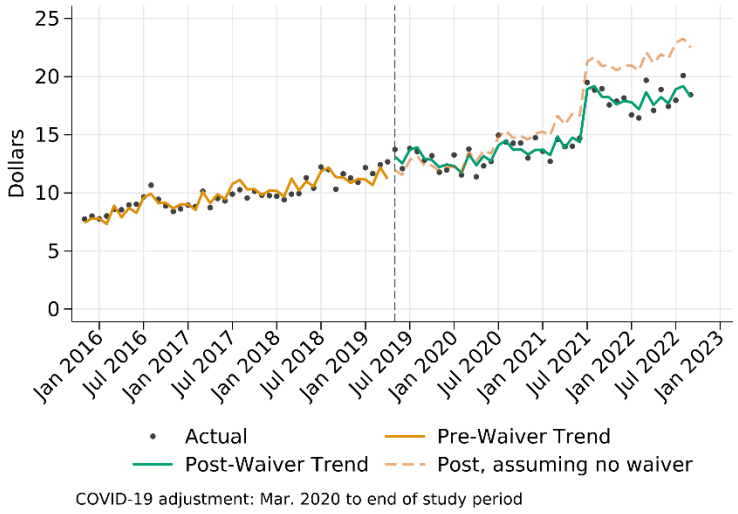
*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation slope is the sum of the baseline slope and the slope change during the implementation period. Baseline and SUD Waiver Implementation means are the means of the unadjusted outcomes.*

Total Medicaid spending on SUD services delivered by institutes for mental disease (IMD), the traditional name for state psychiatric hospitals and residential treatment facilities with 16 or more beds, was relatively low prior to the waiver initiation, largely due to the prohibition on using federal dollars from Medicaid to pay for these services from non-elderly adults. Spending after waiver implementation was

just over $200,000 per month prior to SUD waiver implementation. We find no evidence of a difference in the level of spending or the rate of spending growth associated with the SUD waiver.

3.3.3 Per beneficiary spending on SUD services saw an increase then a declining trend associated with the SUD waiver implementation.

Figure 3.3.3. Trends in per capita spending on SUD services (M30)



Notes: Baseline and SUD Waiver Implementation trends are predictions from the multivariate interrupted time series model described in Methods. "Post, assuming no waiver" is a prediction from the same ITS model, setting the post-waiver incremental intercept and slope to zero but including trends due to COVID or changing beneficiary characteristics.

Table 3.3.3. Interrupted Time Series estimates of per capita spending on SUD services

	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	11.94 (11.71, 12.18)	13.08 (12.46, 13.71)	1.14* (0.49, 1.79)
Slope	0.087* (0.079, 0.095)	-0.048 (-0.15, 0.057)	-0.135* (-0.24, -0.029)
N	164,573,205		

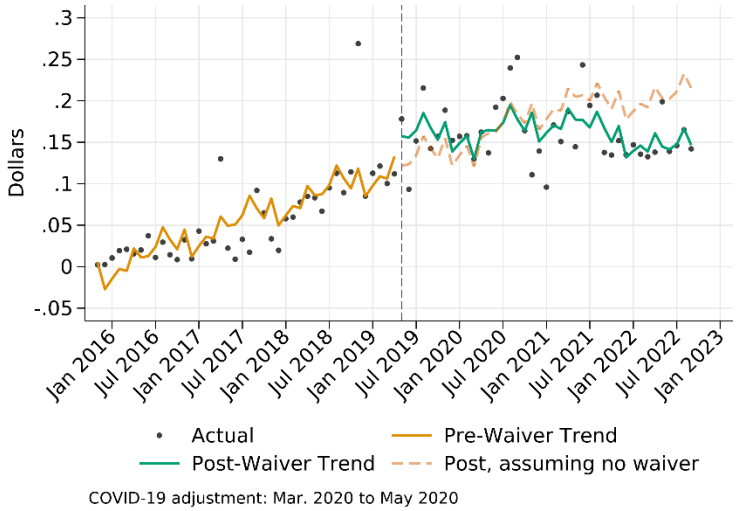
*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation slope is the sum of the baseline slope and the slope change during the implementation period. Baseline and SUD Waiver Implementation means are the means of the unadjusted outcomes.*

Average spending on SUD services per Medicaid beneficiary was about $8 at the start of the study period and grew steadily to $13 per person before the waiver. Per capita spending increased by more

than $1 per member per month during the implementation period, with a decreasing trend over time. We again see a relatively large increase in per capita spending with the launch of managed care, but the rate levels out afterwards. Per capita SUD spending is substantially lower than it is predicted to have been in the absence of the SUD waiver.

3.3.4 Per capita SUD spending on care in Institutes for Mental Disease increased then leveled out during the study period

Figure 3.3.4. Trends in per capita spending on care in Institutes for Mental Disease



Notes: Baseline and SUD Waiver Implementation trends are predictions from the multivariate interrupted time series model described in Methods. "Post, assuming no waiver" is a prediction from the same ITS model, setting the post-waiver incremental intercept and slope to zero but including trends due to COVID or changing beneficiary characteristics.

Table 3.3.4. Interrupted Time Series estimates of per capita spending on Institutes for Mental Disease

	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	0.13 (0.10, 0.15)	0.16 (0.14, 0.18)	0.0352* (0.0023, 0.0068)
Slope	0.0031* (0.0022, 0.0040)	0.0005 (-0.0009, 0.0019)	-0.0026* (-0.0042, -0.0010)
N	164,573,205		

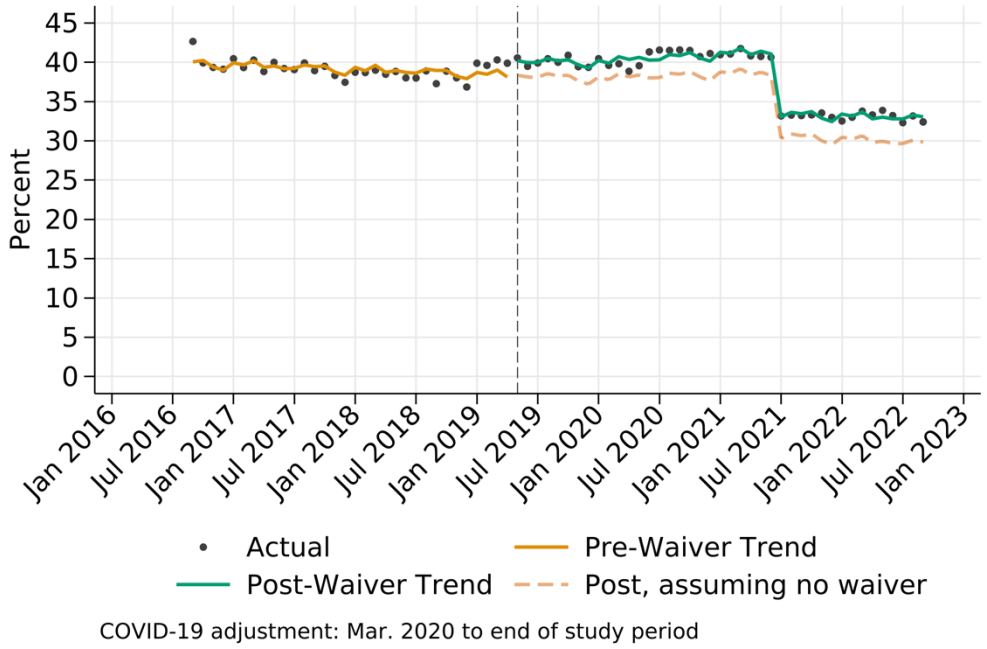
*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation slope is the sum of the baseline slope and the slope change*

during the implementation period. Baseline and SUD Waiver Implementation means are the means of the unadjusted outcomes.

Per capita spending on IMD services is a miniscule part of Medicaid spending. Prior to the SUD waiver, IMD spending was only $0.13 per beneficiary. After waiver implementation, per beneficiary IMD spending rose to $0.16, a relatively large increase. This rate has been declining during the implementation period by less than $0.01 per beneficiary per month. Per beneficiary IMD spending is currently lower with the waiver than it is predicted to be without it.

3.3.5 The probability of out-of-pocket costs for beneficiaries with SUD increased during waiver implementation

Figure 3.3.5. Trends in the percent of beneficiaries with SUD with any out-of-pocket costs



Notes: Baseline and SUD Waiver Implementation trends are predictions from the multivariate interrupted time series model described in Methods. "Post, assuming no waiver" is a prediction from the same ITS model, setting the post-waiver incremental intercept and slope to zero but including trends due to COVID or changing beneficiary characteristics.

Table 3.3.5. Interrupted Time Series estimates of the probability of having any out-of-pocket costs for Medicaid beneficiaries with SUD diagnoses

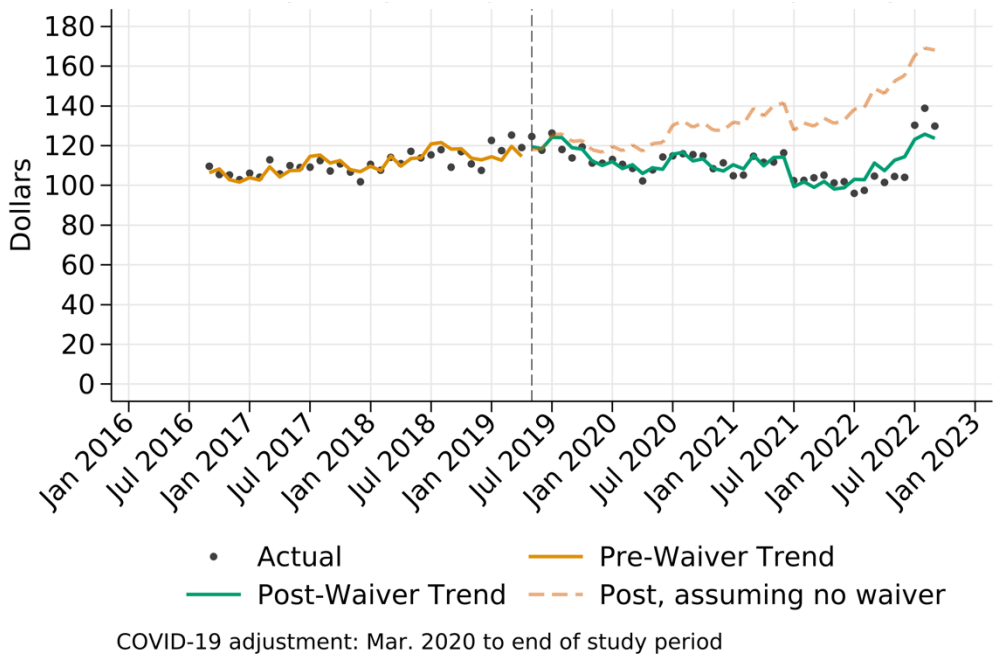
	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	38.47 (38.14, 38.80)	40.28 (39.92, 40.65)	1.82* (1.46, 2.17)
Slope	-0.05* (-0.06, -0.03)	-0.01 (-0.07, 0.04)	0.03 (-0.02, 0.09)
N	3,719,652		

*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation slope is the sum of the baseline slope and the slope change during the implementation period. Baseline and SUD Waiver Implementation means are the means of the unadjusted outcomes.*

The percent of beneficiaries with a SUD diagnosis that incurred any out-of-pocket expenses was stable at approximately 40% during the baseline period. This rate jumped up by almost 2 percentage points during the SUD implementation period but remained flat. There was a large decrease in this percentage when SPs were implemented in July 2021, and the rate has stayed closer to 35% since then. It is unclear at this time whether that is due to an explicit policy in the SPs or a limitation in the data source, or even due to an event entirely unrelated to SP implementation. The percent of Medicaid beneficiaries with SUD is projected to be higher with the waiver than it would have been without it.

3.3.6 The total amount of out-of-pocket spending for beneficiaries with SUD among those with copays began trending down during SUD waiver implementation

Figure 3.3.6. Trends in the total amount of out-of-pocket spending for beneficiaries with SUD among those with copays



Notes: Baseline and SUD Waiver Implementation trends are predictions from the multivariate interrupted time series model described in Methods. "Post, assuming no waiver" is a prediction from the same ITS model, setting the post-waiver incremental intercept and slope to zero but including trends due to COVID or changing beneficiary characteristics.

Table 3.3.6. Interrupted Time Series estimates of the total amount of out-of-pocket spending for beneficiaries with SUD among those with copays

	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	116.83 (115.49, 118.16)	118.20 (116.04, 120.36)	1.38 (-0.85, 3.61)
Slope	0.33* (0.27, 0.40)	-0.81* (-1.18, -0.45)	-1.15* (-1.52, -0.77)
N	1,424,251		

*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in*

slopes between the two periods. The SUD Waiver Implementation slope is the sum of the baseline slope and the slope change during the implementation period. Baseline and SUD Waiver Implementation means are the means of the unadjusted outcomes.

Beneficiaries with SUD diagnoses and some out-of-pocket costs paid an average of $118 per month in spending. This level remained relatively flat during the baseline period and trended down by an average of $0.70 per month after waiver implementation. This amount is estimated to be lower than it would have been without the SUD waiver.

Additional Hypotheses 4.1: The implementation of the SUD waiver will increase access to health care and improve the quality of care and health outcomes.

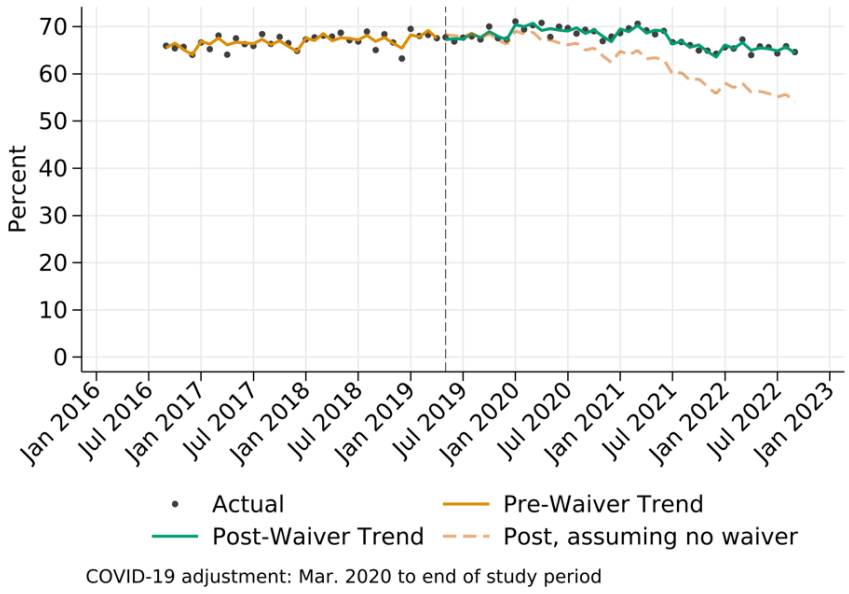
We examined eight measures reflecting general health care quality and health outcomes in order to test the effect of the SUD waiver implementation on overall health. We note that the largest component of the SUD waiver intended to improve overall health among beneficiaries with SUD, Tailored Plans, were intended to launch earlier in the waiver, but have not yet launched, and thus the mechanisms for improving overall health outcomes for people with SUD are not strong. In this set of analyses, we found an improvement in one measure of care – access to ambulatory / preventative visits. We found that three of the measures did not have a measurable effect of the SUD waiver, and four of the measures showed worse outcomes associated with the SUD waiver implementation.

Table 5. Summary of SUD Metric Results for Hypothesis 4.1

#	Measure (Metric abbreviation)	State's demonstration target	Directionality at mid-point (Oct 2021)	Adjusted waiver effects at Sept 2022	Progress * (Yes/No)
4.1.1	Access to Preventive/Ambulatory Health Services for Adult Medicaid Beneficiaries with SUD (M32)	Increase	NI	Increase	Yes
4.1.2	Avoidable or Preventable Emergency Department Visits	Decrease	NI	Increase	No
4.1.3	Readmissions Among Beneficiaries with SUD (M25)	Decrease	Decrease	Increase	No
4.1.4	Connecting Primary Care to SUD Service Offerings (Q2)	Increase	NI	No change	No
4.1.5	Rate of Screening for Pregnancy Risk	Increase	NI	Decrease	No
4.1.6	Annual Dental Visits (ADV)	NA	NI	No change	No
4.1.7	Breast Cancer Screening (BCS)	Increase	NI	No change	No
4.1.8	Cervical Cancer Screening (CCS)	Increase	NI	Decrease	No

4.1.1 Access to Preventative Health Services by people with a SUD diagnosis grew slightly faster during the waiver period.

Figure 4.1.1. Trends in the rate of access to preventative health services



Notes: Baseline and SUD Waiver Implementation trends are predictions from the multivariate interrupted time series model described in Methods. "Post, assuming no waiver" is a prediction from the same ITS model, setting the post-waiver incremental intercept and slope to zero but including trends due to COVID or changing beneficiary characteristics.

Table 4.1.1. Interrupted time series estimates: access to preventative health services

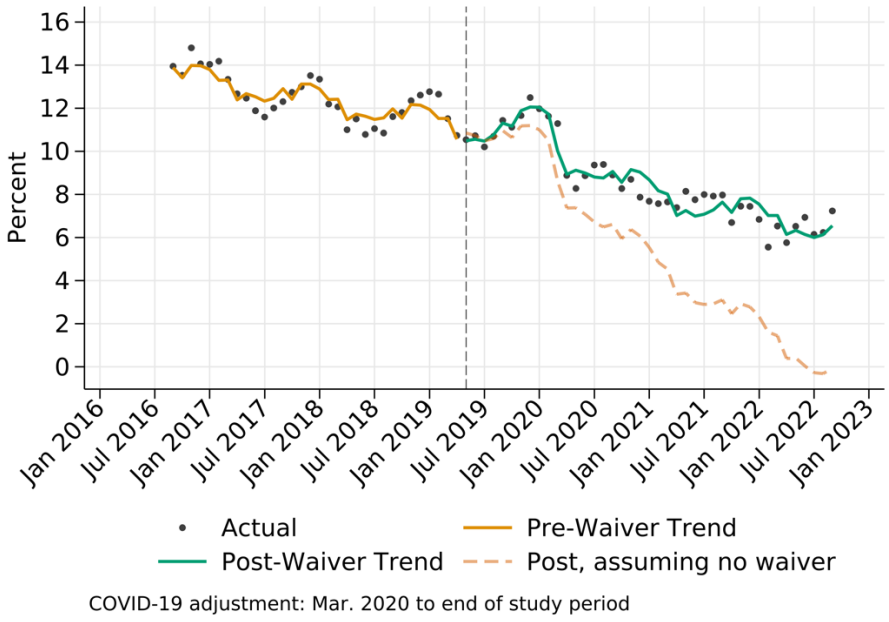
	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	67.68 (67.29, 68.08)	66.71 (66.24, 67.17)	-0.98* (-1.44, -0.51)
Slope	0.03* (0.01, 0.05)	0.31* (0.24, 0.38)	0.28* (0.21, 0.36)
N	1,775,250		

*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation slope is the sum of the baseline slope and the slope change during the implementation period. Baseline and SUD Waiver Implementation means are the means of the unadjusted outcomes.*

The rate of preventative care service use was relatively high during both the baseline and SUD implementation period, averaging 68% in both periods. The rate dropped by almost 1% point during SUD implementation but began trending upward by almost 0.3% points per month. Access to preventative care services is estimated to be higher than it would have been without the SUD waiver.

4.1.2 Avoidable emergency department visits continued steady decline.

Figure 4.1.2. Trends in avoidable emergency department visits



Notes: Baseline and SUD Waiver Implementation trends are predictions from the multivariate interrupted time series model described in Methods. "Post, assuming no waiver" is a prediction from the same ITS model, setting the post-waiver incremental intercept and slope to zero but including trends due to COVID or changing beneficiary characteristics.

Table 4.1.2. Interrupted time series estimates of avoidable emergency department visits

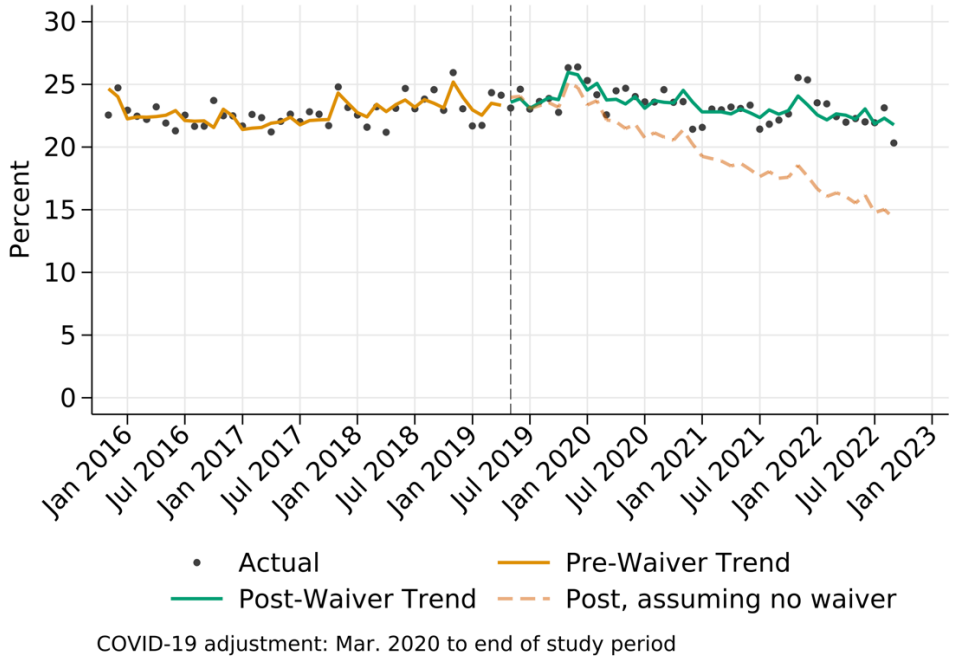
	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	11.18 (10.92, 11.44)	10.83 (10.43, 11.23)	-0.35 (-0.81, 0.12)
Slope	-0.07* (-0.09, -0.06)	0.10* (0.03, 0.18)	0.17* (0.10, 0.25)
N	712,557		

*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation slope is the sum of the baseline slope and the slope change during the implementation period. Baseline and SUD Waiver Implementation means are the means of the unadjusted outcomes.*

The percentage of emergency department visits classified as avoidable declined markedly during the study period. In 2016, 14% of ED visits were classified as avoidable, while just prior to the PHE this had declined to 12%. A decline occurred during the initial months of the pandemic, which has been subsequently sustained. Our graph shows the model estimates a substantially lower level of avoidable ED visits would have occurred without the waiver, even trending down to zero in 2022, but we do not report this with a great deal of confidence.

4.1.3 All-cause Hospital readmissions for beneficiaries with SUD remained very stable during the full study period.

Figure 4.1.3. Trends in All-cause Hospital readmissions for beneficiaries with SUD



Notes: Baseline and SUD Waiver Implementation trends are predictions from the multivariate interrupted time series model described in Methods. "Post, assuming no waiver" is a prediction from the same ITS model, setting the post-waiver incremental intercept and slope to zero but including trends due to COVID or changing beneficiary characteristics.

Table 4.1.3. Interrupted Time Series estimates of all-cause Hospital readmissions for beneficiaries with SUD

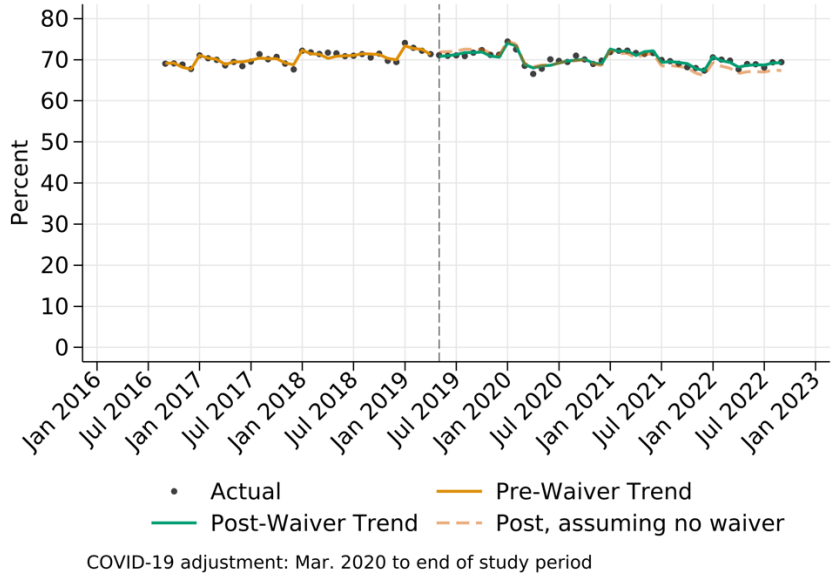
	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	23.27 (22.51, 24.03)	22.90 (21.77, 24.03)	-0.37 (-1.61, 0.86)
Slope	0.05* (0.02, 0.08)	0.25* (0.05, 0.45)	0.20 (-0.01, 0.40)
N	225,920		

*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation slope is the sum of the baseline slope and the slope change during the implementation period. Baseline and SUD Waiver Implementation means are the means of the unadjusted outcomes.*

The all-cause readmission rate was very stable at 23% of hospitalizations resulting in a readmission within 30 days among Medicaid beneficiaries with SUD diagnoses. There was no effect of the SUD waiver on either the rate or trends in the rate during the implementation period. Because of a higher upward trend observed prior to the PHE, the model predictions that the readmission rate for people with SUD diagnosis is higher waiver than it would have been without it.

4.1.4 Access to primary care visits within 30 days of using a SUD service was high but declined slightly during the SUD implementation period.

Figure 4.1.4. Trends in primary care visits within 30 days of using a SUD service



Notes: Baseline and SUD Waiver Implementation trends are predictions from the multivariate interrupted time series model described in Methods. "Post, assuming no waiver" is a prediction from the same ITS model, setting the post-waiver incremental intercept and slope to zero but including trends due to COVID or changing beneficiary characteristics.

Table 4.1.4. Interrupted Time Series estimates of the rate of primary care visits within 30 days of using a SUD service

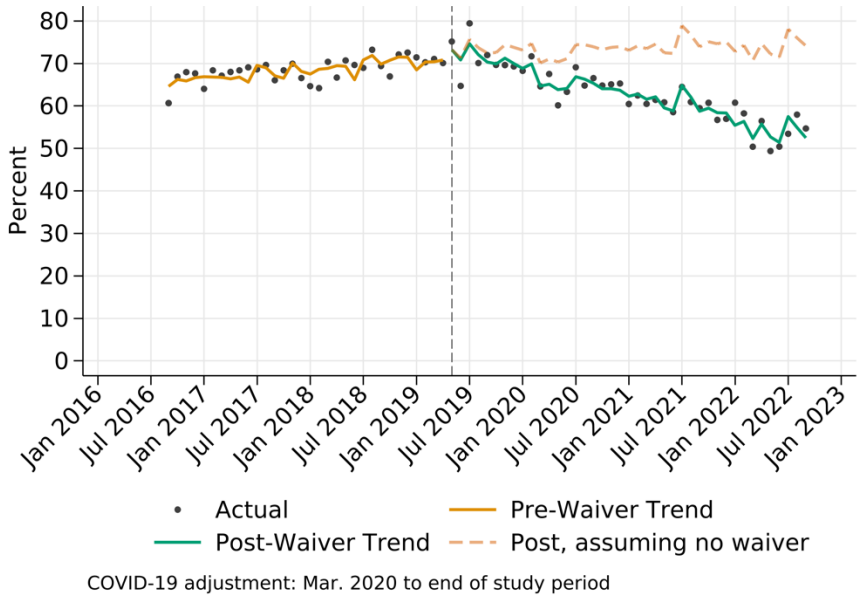
	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	71.92 (71.53, 72.30)	70.86 (70.39, 71.34)	-1.05* (-1.53, -0.57)
Slope	0.07* (0.05, 0.08)	0.14* (0.06, 0.21)	0.07 (-0.01, 0.15)
N	1,693,475		

*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation slope is the sum of the baseline slope and the slope change during the implementation period. Baseline and SUD Waiver Implementation means are the means of the unadjusted outcomes.*

Approximately 70% of SUD visits had a follow up within 30 days with a primary care provider, a potential indicator of connectedness between primary care and specialty addiction services. This rate declined by about 1.1% points during SUD waiver implementation overall with no change in trend during the implementation period.

4.1.5 Pregnancy risk screening among people with a SUD diagnosis declined during SUD waiver implementation but the limited sample size makes it difficult to attribute to the waiver over other events.

Figure 4.1.5. Trends in rate of screening for pregnancy risk.



Notes: Baseline and SUD Waiver Implementation trends are predictions from the multivariate interrupted time series model described in Methods. "Post, assuming no waiver" is a prediction from the same ITS model, setting the post-waiver incremental intercept and slope to zero but including trends due to COVID or changing beneficiary characteristics.

Table 4.1.5. Interrupted Time Series estimates of screening for pregnancy risk

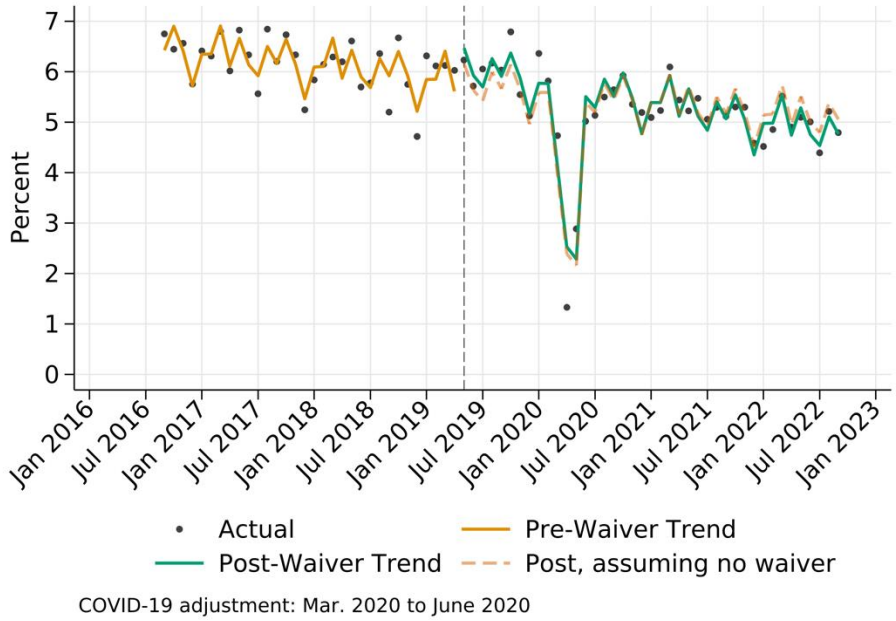
	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	71.57 (69.81, 73.33)	71.61 (68.56, 74.67)	0.05 (-3.54, 3.63)
Slope	0.16* (0.07, 0.26)	-0.38 (-0.97, 0.22)	-0.54 (-1.14, 0.05)
N	22,243		

*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation slope is the sum of the baseline slope and the slope change during the implementation period. Baseline and SUD Waiver Implementation means are the means of the unadjusted outcomes.*

Approximately 68% of pregnant Medicaid beneficiaries with SUD were screened for pregnancy risk using a standardized tool prior to SUD waiver implementation as determined from claims and encounter data. There was no immediate change in this rate upon SUD waiver implementation, but the screening rate has been declining by 5.4 people screened per 1000 pregnancy beneficiaries with SUD each month since waiver implementation, although this trend was not statistically different from the trend during baseline. The current screening rate is substantially below what our model predicts would have occurred in the absence of the waiver.

4.1.6 The rate of dental use by people with SUD diagnoses continued to decline, unaffected by SUD waiver services.

Figure 4.1.6. Trends in Annual Dental Visits among beneficiaries with SUD diagnoses



Notes: Baseline and SUD Waiver Implementation trends are predictions from the multivariate interrupted time series model described in Methods. "Post, assuming no waiver" is a prediction from the same ITS model, setting the post-waiver incremental intercept and slope to zero but including trends due to COVID or changing beneficiary characteristics.

Table 4.1.6. Interrupted Time Series estimates of the rate of primary care visits within 30 days of using a SUD service

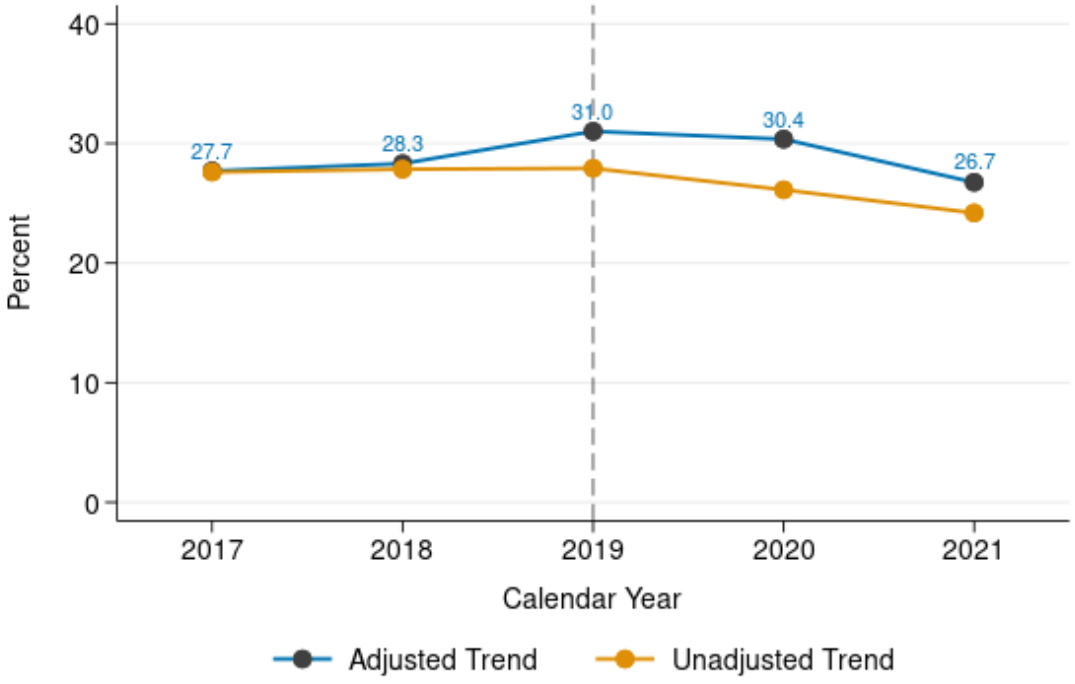
	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	5.82 (5.73, 5.92)	6.13 (6.03, 6.23)	0.30* (0.18, 0.43)
Slope	-0.02* (-0.03, -0.02)	-0.03* (-0.04, -0.03)	-0.01* (-0.02, -0.01)
N	5,244,429		

*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation slope is the sum of the baseline slope and the slope change during the implementation period. Baseline and SUD Waiver Implementation means are the means of the unadjusted outcomes.*

Even though NC Medicaid covers dental services, fewer than 7% of beneficiaries with SUD diagnoses received Medicaid-paid dental services during the study period. This rate began declining before SUD waiver implementation and continued its decline during the full study period. We estimated that about 3 people per 1000 beneficiaries with SUD had increased access to dental services after waiver implementation, but the rate of decline has also accelerated. Overall, we find no difference between the rate of Medicaid-paid dental service use for beneficiaries with SUD diagnoses due to the SUD waiver.

4.1.7 The rate of breast cancer screening among female beneficiaries with SUD diagnoses increased during the first two years of the waiver and then declined in 2021.

Figure 4.1.7. Trends in the annual rate of breast cancer screening among female beneficiaries with SUD

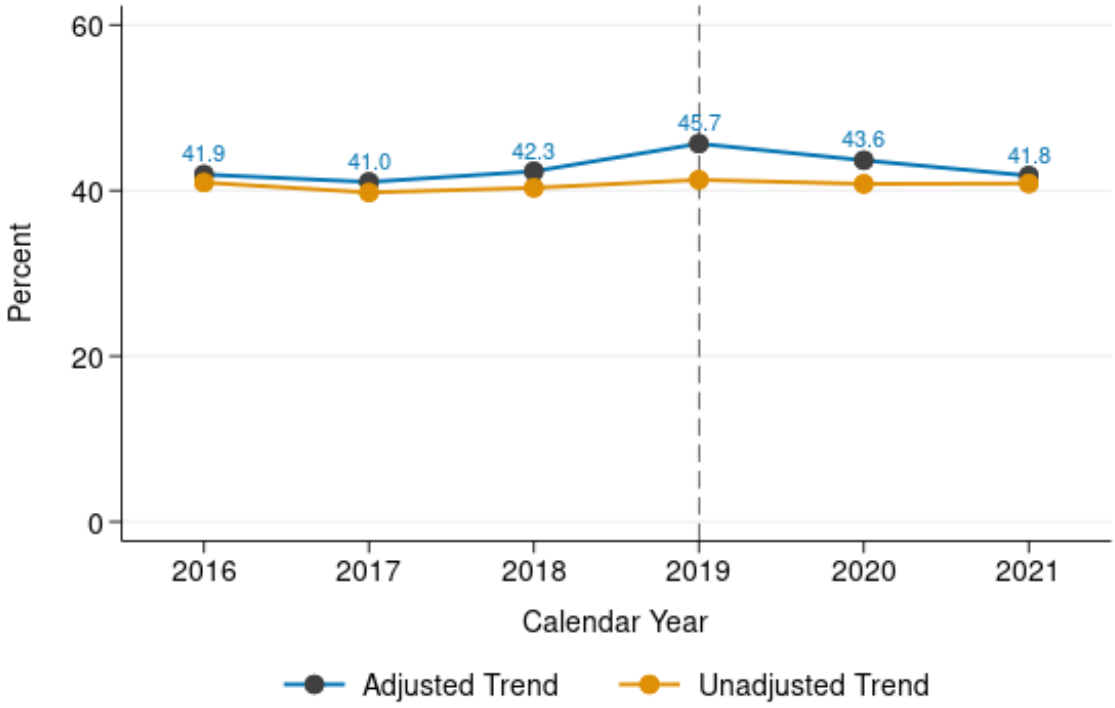


Notes: Adjusted model includes age (quadratic), urban location, race specific indicator variables and the Chronic Illness and Disability Payment System (CDPS + Rx) risk adjustment scores.

Among women ages 50 to 74 with SUD diagnoses, less than one-third had a mammogram to screen for breast cancer throughout the entire study period. The rate increased from 2018 to 2019, but then started trending back down.

4.1.8 The rate of cervical cancer screening among women with SUD diagnoses increased in 2019, then began to decline in 2020 and 2021.

Figure 4.1.8. Trends in the rate of cervical cancer screening among women with SUD diagnoses



Notes: Adjusted model includes age (quadratic), sex, urban location, race specific indicator variables and the Chronic" "Illness and Disability Payment System (CDPS + Rx) risk adjustment scores.

Just over 40% of women ages 24 to 64 with SUD diagnoses were screened (using cervical cytology or hrHPV test among those age 30 or older) for cervical cancer during the study period. This rate trended upward before SUD implementation and reached a peak in 2019. It began trending downward in 2020 and continued to decline in 2021.

Additional Hypothesis 4.2: The implementation of Medicaid managed care will increase the rate of use of behavioral health services at the appropriate level of care and improve the quality of behavioral health care received.

This section mostly focuses on the impact of the SUD waiver on mental health measures. A high proportion of people with substance use disorders also qualify for mental health diagnoses. We tested hypothesis 4.2

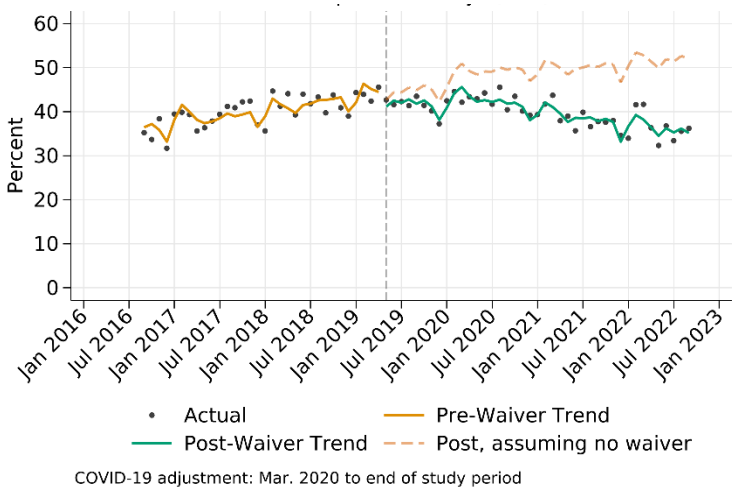
on access to and quality of behavioral health care for beneficiaries with SUD diagnoses using 18 measures, including 13 that had been used in prior hypotheses (see Table 1). One of the measures was unaffected by the Medicaid SUD transformation (antidepressant management during the acute phase), while all remaining 17 measures declined during SUD implementation. These estimates attempt to control for trends observed during the COVID-19 PHE in the Medicaid beneficiary population without SUD and not transitioned to standard plans, but these adjustments are not without limitations due to the differences in these populations.

Table 6. Summary of SUD Metric Results for Hypothesis 1.2

	Measure (Metric abbreviation)	State's demonstration target or expected outome	Directionality at mid-point (Oct 2021)	Adjusted waiver effects at Sept 2022	Progress * (Yes/No)
4.2.1	Follow-up After Hospitalization for Mental Illness (FUH): 7 days after discharge	Increase	NI	Decrease	No
4.2.2	Follow-up After Hospitalization for Mental Illness (FUH): 30 days after discharge	Increase	NI	Increase	Yes
4.2.3	Use of Behavioral Health Care for People with SMI/SUD/SED	Increase	NI	No change	No
4.2.4	Antidepressant Medication Management During Acute Phase (AMM)	Increase	NI	No change	No
4.2.5	Antidepressant Medication Management During Continuation Phase (AMM)	Increase	NI	No change	No

4.2.1 The rate of follow-up within 7 days of a hospitalization for mental illness by people with a SUD diagnosis had been increasing during baseline but declined during the SUD waiver implementation.

Figure 4.2.1. Trends in the rate of follow-up within 7 days after a hospitalization for mental illness by people with a SUD diagnosis



Notes: Baseline and SUD Waiver Implementation trends are predictions from the multivariate interrupted time series model described in Methods. "Post, assuming no waiver" is a prediction from the same ITS model, setting the post-waiver incremental intercept and slope to zero but including trends due to COVID or changing beneficiary characteristics.

Table 4.2.1. Interrupted time series estimates of the rate of follow-up within 7 days after a hospitalization for mental illness by people with a SUD diagnosis

	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	44.02 (42.47, 45.57)	42.51 (40.21, 44.81)	-1.51 (-4.29, 1.26)
Slope	0.25* (0.17, 0.33)	-0.14* (-0.58, 0.31)	-0.38* (-0.84, 0.071)
N	44,519		

*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation slope is the sum of the baseline slope and the slope change during the implementation period. Baseline and SUD Waiver Implementation means are the means of the unadjusted outcomes.*

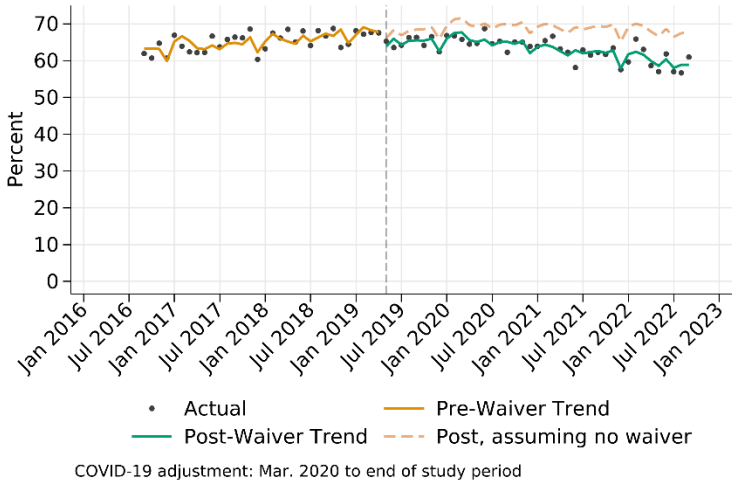
The rate of follow-up within seven days with a mental health specialist, a primary care provider, or through the receipt of enhanced behavioral health services after discharge from a psychiatric hospitalization had been slowly increasing during the baseline period, ranging from 30% to 45%. We do not find evidence of immediate changes from the SUD waiver implementation, but the rate began trending downward during SUD waiver implementation. The current rate of follow up returned to the levels observed in 2016-2017. Overall, we estimate that the rate of follow-up within 7 days was lower during the waiver than it would have been without it. While we do not report age-stratified results, the latest available data on the CMS Medicaid Scorecard indicates that the national median for a similar measure is 45.6% and 33.1% for children (ages 6 to 17) and adults (ages 18 and older), respectively.[21] Using a modified version of the measure and data from 2018-2019, researchers from the Medicaid Outcomes Distributed Research Network (MODRN) found that the rate of follow-up within a 7-day period was 16.6% across 10 states.[22]

[21] https://www.medicaid.gov/state-overviews/scorecard/follow-up-after-hospitalization-mental-illness-age-18/index.html

[22] Cole, E. S., Allen, L., Austin, A., Barnes, A., Chang, C. H., Clark, S., Crane, D., Cunningham, P., Fry, C. E., Gordon, A. J., Hammerslag, L., Idala, D., Kennedy, S., Kim, J. Y., Krishnan, S., Lanier, P., Mahakalanda, S., Mauk, R., McDuffie, M. J., … Donohue, J. M. (2022). Outpatient follow-up and use of medications for opioid use disorder after residential treatment among Medicaid enrollees in 10 states. *Drug and Alcohol Dependence*, *241*, 109670. https://doi.org/10.1016/j.drugalcdep.2022.109670

4.2.2 The rate of follow-up within 30 days of a hospitalization for mental illness by people with a SUD diagnosis remained stable during the SUD implementation period.

Figure 4.2.2. Trends in the rate of follow-up within 30 days after a hospitalization for mental illness by people with a SUD diagnosis



Notes: Baseline and SUD Waiver Implementation trends are predictions from the multivariate interrupted time series model described in Methods. "Post, assuming no waiver" is a prediction from the same ITS model, setting the post-waiver incremental intercept and slope to zero but including trends due to COVID or changing beneficiary characteristics.

Table 4.2.2. Interrupted time series estimates of the rate of follow-up within 30 days after a hospitalization for mental illness by people with a SUD diagnosis

	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	67.57 (66.09, 69.05)	65.32 (63.09, 67.55)	-2.25 (-4.93, 0.44)
Slope	0.160* (0.081, 0.243)	-0.0007 (-0.4312, 0.4298)	-0.16 (-0.60, 0.27)
N	44,519		

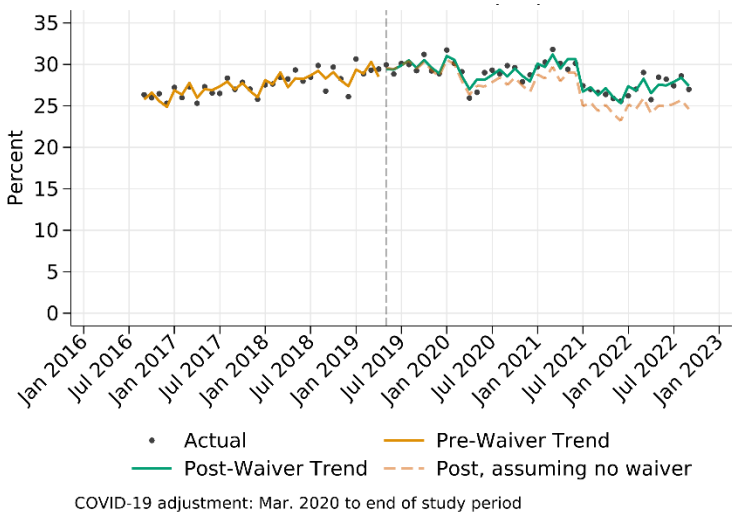
*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation slope is the sum of the baseline slope and the slope change during the implementation period. Baseline and SUD Waiver Implementation means are the means of the unadjusted outcomes.*

The rate of follow-up within 30 days with a mental health specialist, a primary care provider, or through the receipt of enhanced behavioral health services after discharge from a psychiatric hospitalization showed a similar but flatter trend as the 7-day follow up. The rate of follow up ranges between 60-70% at baseline.

We again do not find evidence of immediate changes from the SUD waiver implementation. While we do not report age-stratified results, the latest available data on the CMS Medicaid Scorecard for a similar measure indicates that the national median for this measure is 66.0% and 54.7% for children (ages 6 to 17) and adults (ages 18 and older), respectively.[23] Using a modified version of the measure and data from 2018-2019, researchers from the Medicaid Outcomes Distributed Research Network (MODRN) found that the rate of follow-up within a 30-day period was 16.8% across 10 states.[24]

4.2.3 The behavioral health services used by people with SUD diagnosis has grown since baseline and the rate of growth increased after SUD implementation.

Figure 4.2.3. Trends in the use of behavioral health care services for beneficiaries with SUD diagnoses



Notes: Baseline and SUD Waiver Implementation trends are predictions from the multivariate interrupted time series model described in Methods. "Post, assuming no waiver" is a prediction from the same ITS model, setting the post-waiver incremental intercept and slope to zero but including trends due to COVID or changing beneficiary characteristics.

[23] https://www.medicaid.gov/state-overviews/scorecard/follow-up-after-hospitalization-mental-illness-age-18/index.html

[24] Cole, E. S., Allen, L., Austin, A., Barnes, A., Chang, C. H., Clark, S., Crane, D., Cunningham, P., Fry, C. E., Gordon, A. J., Hammerslag, L., Idala, D., Kennedy, S., Kim, J. Y., Krishnan, S., Lanier, P., Mahakalanda, S., Mauk, R., McDuffie, M. J., … Donohue, J. M. (2022). Outpatient follow-up and use of medications for opioid use disorder after residential treatment among Medicaid enrollees in 10 states. *Drug and Alcohol Dependence*, *241*, 109670. https://doi.org/10.1016/j.drugalcdep.2022.109670

Table 4.2.3. Interrupted Time Series Estimates of behavioral health services by people with SUD

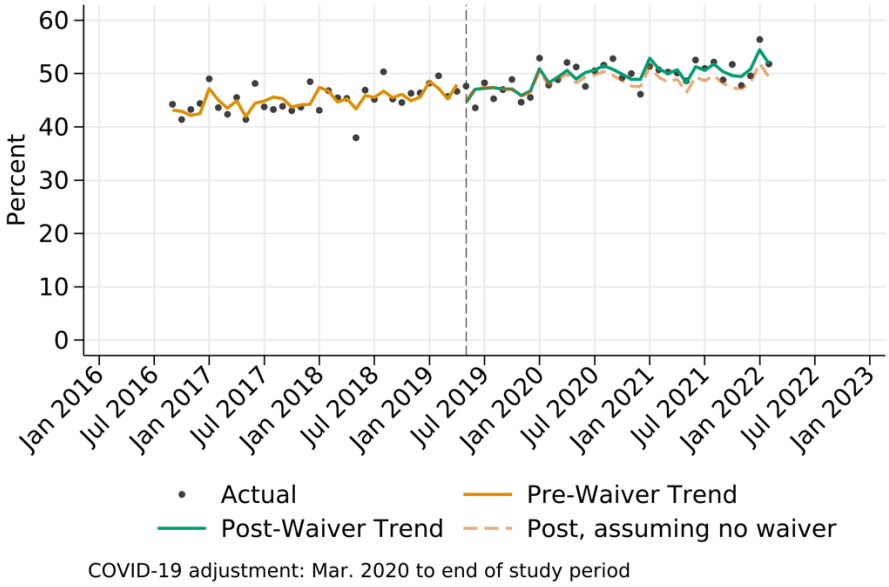
	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	29.30 (29.04, 29.56)	29.15 (28.85, 29.45)	-0.15 (-0.44, 0.15)
Slope	0.104* (0.092, 0.115)	0.18* (0.13, 0.22)	0.073* (0.026, 0.121)
N	5,074,019		

*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation slope is the sum of the baseline slope and the slope change during the implementation period. Baseline and SUD Waiver Implementation means are the means of the unadjusted outcomes.*

The use of behavioral health services by people with SUD diagnoses grew during the baseline period from 25-30%. We estimate that there was no overall difference in this rate after SUD waiver implementation but rate is trending upward faster than it was during the baseline period.

4.2.4 Antidepressant management during the acute phase of treatment has been slowly increasing but was not affected by the SUD waiver.

Figure 4.2.4. Trends in the Rate of Antidepressant Medication Management during Acute Phase Treatment



Notes: Baseline and SUD Waiver Implementation trends are predictions from the multivariate interrupted time series model described in Methods. "Post, assuming no waiver" is a prediction from the same ITS model, setting the post-waiver incremental intercept and slope to zero but including trends due to COVID or changing beneficiary characteristics.

Table 4.2.4. Interrupted Time Series estimates of the Rate of Antidepressant Medication Management during Acute Phase Treatment

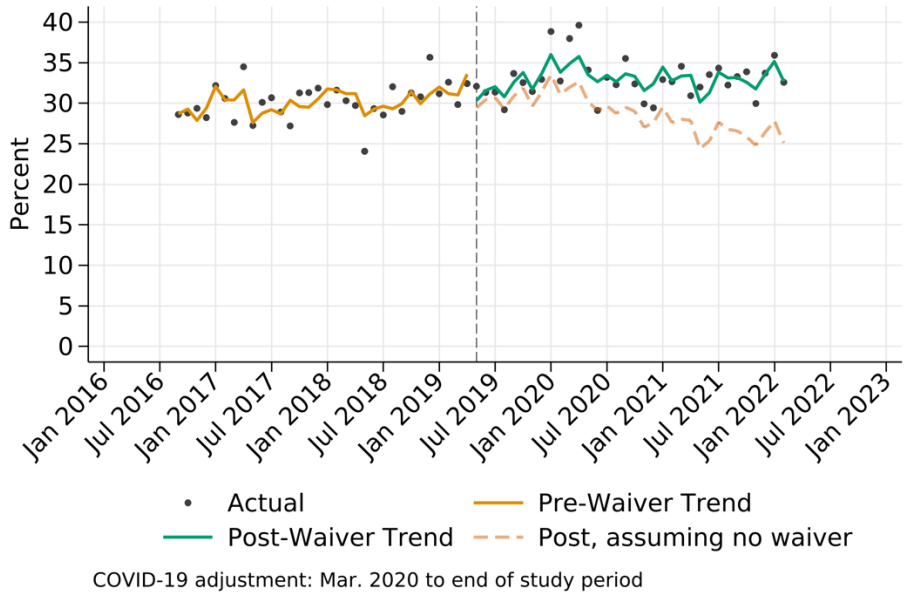
	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	46.32* (44.57, 48.07)	45.98* (43.26, 48.70)	-0.34 (-3.60, 2.92)
Slope	0.08 (-0.01, 0.17)	0.17 (-0.37, 0.71)	0.09 (-0.46, 0.64)
N	31,871		

*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation slope is the sum of the baseline slope and the slope change during the implementation period. Baseline and SUD Waiver Implementation means are the means of the unadjusted outcomes.*

The percent of adult Medicaid beneficiaries newly prescribed antidepressants who remained on those medications for at least 84 days has been increasing steadily throughout the study period, from just over 40% to over 50% in 2022. We find no evidence that the SUD waiver implementation affected this measure of antidepressant management during the acute phase of treatment.

4.2.5 Antidepressant management during the continuation phase of treatment has been slowly increasing but was not affected by the SUD waiver.

Figure 4.2.5. Trends in the Rate of Antidepressant Medication Management during Continuation Phase Treatment



Notes: Baseline and SUD Waiver Implementation trends are predictions from the multivariate interrupted time series model described in Methods. "Post, assuming no waiver" is a prediction from the same ITS model, setting the post-waiver incremental intercept and slope to zero but including trends due to COVID or changing beneficiary characteristics.

Table 4.2.5. Interrupted Time Series estimates of the Rate of Antidepressant Medication Management during Continuation Phase Treatment

	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	30.26 (28.66, 31.86)	31.16 (28.64, 33.68)	0.90 (-2.11, 3.91)
Slope	0.03 (-0.05, 0.11)	0.23 (-0.27, 0.74)	0.20 (-0.31, 0.71)
N	31,871		

*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation slope is the sum of the baseline slope and the slope change during the implementation period. Baseline and SUD Waiver Implementation means are the means of the unadjusted outcomes.*

The percent of adult Medicaid beneficiaries newly prescribed antidepressants who remained on those medications for at least six months, referred to as the continuation phase, remained relatively constant throughout the study period, ranging from 30% to 35%. We find no evidence that the SUD waiver implementation affected this measure of antidepressant management during continuation phase of treatment.

Chapter 4: Disparities in care across subpopulations

In this chapter, we present subgroup ITS analyses for selected metrics to assess the effect of the SUD waiver on health equity for NC Medicaid beneficiaries with SUD. We assess differences in waiver effects by age group (<18, 18-64, 65+), sex, race, ethnicity, rurality, and disability status.

We extend the ITS models discussed in Chapter 2 by sequentially interacting each subgroup variable with the SUD implementation variable and the SUD implementation/time trend interaction. Each level of the subgroup variable can be associated with a distinct immediate effect and time trend effect of the SUD waiver, and we test for differences in these effects by subgroup membership. We also test the hypothesis that the SUD waiver had no differential effect by subgroup on the outcome in the last study period (September 2022 for most metrics). We use the modal category for each metric as reference. We summarize the metrics analyzed and the presence of differences in the effects of the SUD waiver by subgroups in the table below, followed by a presentation of results for each metric. The effect reported is a difference in SUD waiver effects in September 2022.

4.1 Medicaid Beneficiaries with SUD Diagnosis (M3)

The first metric we examined by stratified group is the proportion of beneficiaries of each subgroup that had received a diagnosis of SUD in the past 12 months. Each row in the table below presents the results of a model where we test the hypothesis of no difference in the impact of SUD waiver implementation on the overall rate of diagnosis and on changes in the trend in the SUD diagnosis rate. Below the table we present figures that show the stratified trends by subgroups.

For this metric, we find:

- The two groups with the largest positive effect of the waiver were AIAN (versus not-AIAN) and non-elderly adults versus children. For both groups we estimate that SUD waiver implementation was

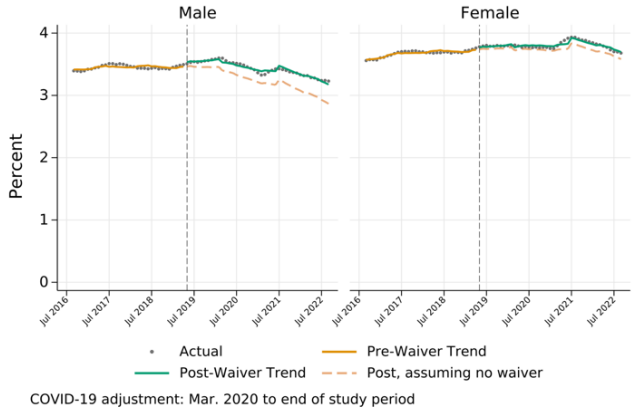
associated with about a 0.5% point increase in the rate of diagnoses in contrast with their referent group.

- We also see greater effects in non-White (vs. White) beneficiaries and disabled vs non-disabled populations.
- We estimate that the trends in the rate of diagnoses are increasing faster in men vs women, elderly adults vs kids, kids vs. non-elderly adults, Hispanic vs not-Hispanic, not-AIAN vs AIAN, and not disabled vs disabled populations.
- Overall, we estimate that the difference in the rate of diagnosis is greater on September 2022 for men vs. women, kids vs. non-elderly adults, elderly beneficiaries vs kids, and Hispanic vs not-Hispanic.

Table 4.1 Medicaid Beneficiaries with SUD Diagnosis

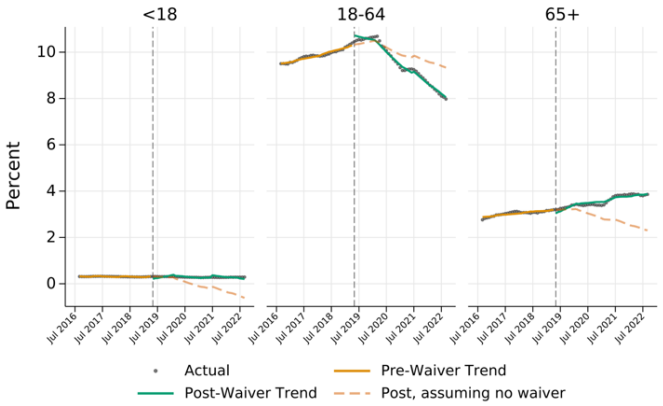
Comparison groups	Difference in the overall effect of the SUD waiver	Difference in the Trend by subpopulations	Avg. Outcome, Sept 2022 (Diff.)
Male vs. Female	0.0412 (-0.0076, 0.0900)	0.0039* (0.0008, 0.0069)	0.1957* (0.0587, 0.3327)
18-64 vs. <18	0.50* (0.42, 0.57)	-0.065* (-0.069, -0.060)	-2.10* (-2.30, -1.90)
65+ vs. <18	-0.06 (-0.15, 0.04)	0.020* (0.014, 0.026)	0.76* (0.49, 1.03)
Hispanic vs. Not Hispanic	-0.0495 (-0.0895, -0.0095)	0.0041* (0.0016, 0.0065)	0.1127* (0.0021, 0.2234)
Not White vs. White	0.068* (0.018, 0.117)	-0.0024 (-0.0055, 0.0006)	-0.03 (-0.17, 0.11)
Black vs. Not Black	0.0276 (-0.022, 0.077)	-0.0011 (-0.0042, 0.0019)	-0.02 (-0.16, 0.12)
AAPI vs. Not AAPI	-0.051 (-0.130, 0.028)	-0.0039 (-0.0086, 0.0008)	-0.2065 (-0.4198, 0.0068)
AIAN vs. Not AIAN	0.49* (0.28, 0.70)	-0.0185* (-0.0313, -0.0057)	-0.249 (-0.8295, 0.3314)
Disabled vs. Not Disabled	0.25* (0.14, 0.35)	-0.0077* (-0.0142, -0.0012)	-0.06 (-0.35, 0.23)
Rural vs. Urban	0.030 (-0.020, 0.080)	0.0019 (-0.0011, 0.0050)	0.107 (-0.033, 0.247)

Sex



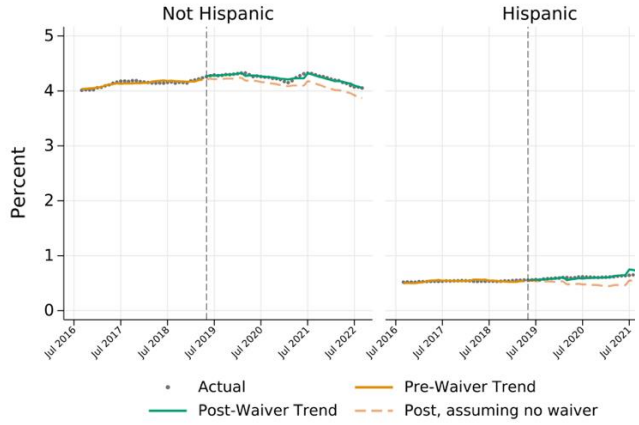
COVID-19 adjustment: Mar. 2020 to end of study period

Age

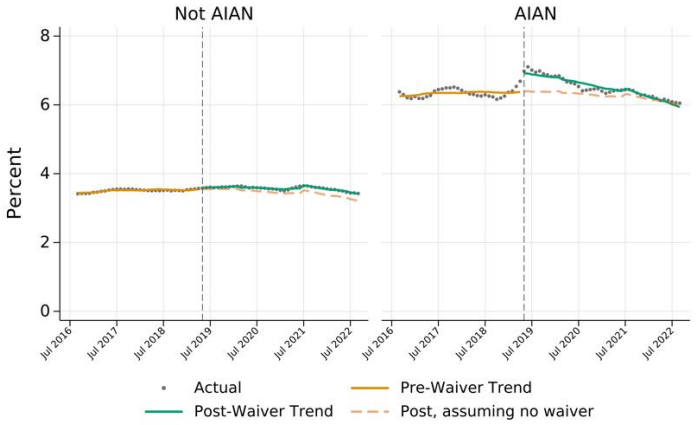


COVID-19 adjustment: Mar. 2020 to end of study period

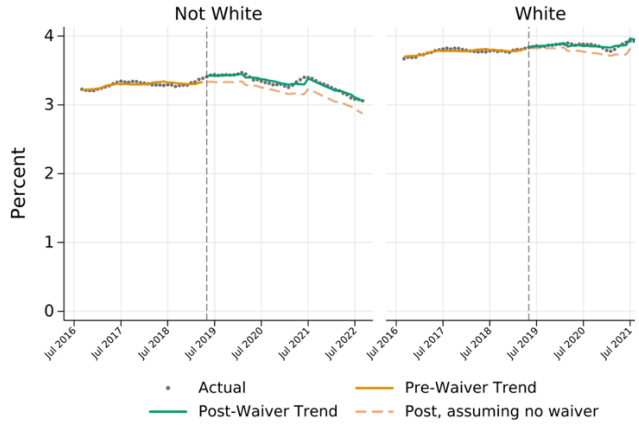
Race/Ethnicity



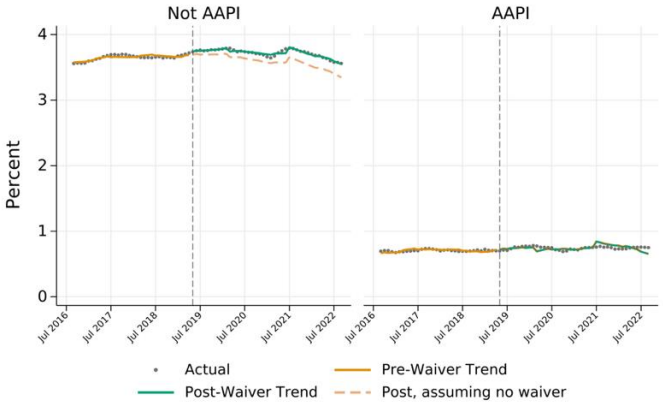
COVID-19 adjustment: Mar. 2020 to end of study period



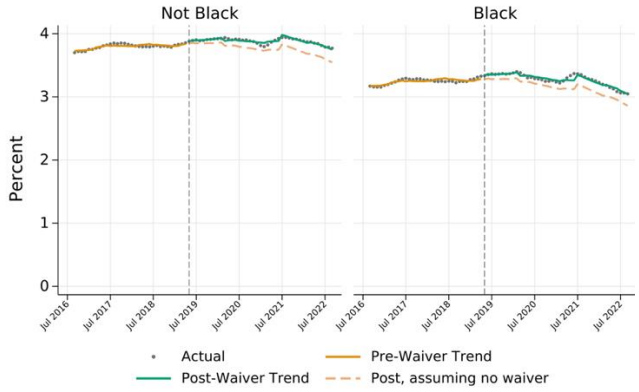
COVID-19 adjustment: Mar. 2020 to end of study period



COVID-19 adjustment: Mar. 2020 to end of study period

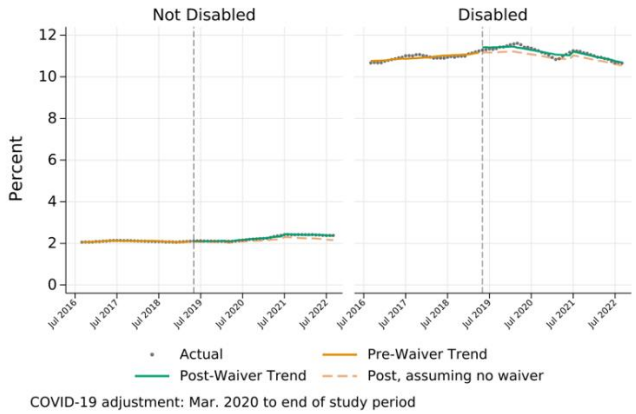


COVID-19 adjustment: Mar. 2020 to end of study period

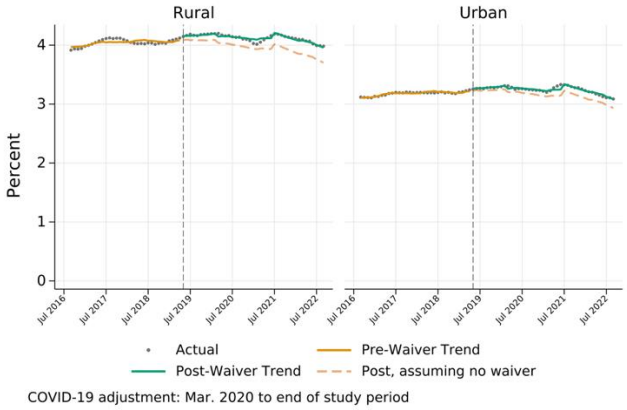


COVID-19 adjustment: Mar. 2020 to end of study period

Disability



Urban/Rural



4.1 Percent Medicaid Beneficiaries with a SUD Diagnosis who receive any type of SUD treatment

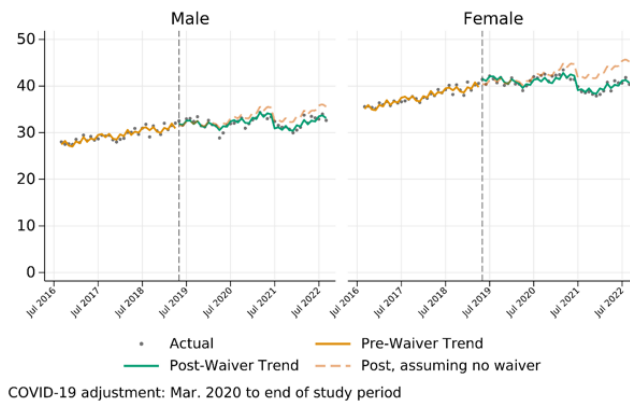
In examining the effect of the SUD waiver implementation on the percent of beneficiaries diagnosed with SUD who receive any treatment, we find:

- The two groups with the largest positive effect of the waiver were non-elderly adults versus children and women versus men. We estimate that SUD waiver implementation was associated with a 3.2%-point increase in the treatment rate for non-elderly adults versus children. We also estimate that the SUD waiver was associated with an increase of 0.72% points for women vs. men.
- None of the other subgroups showed any statistically significant differences in overall effects of the waiver.
- We find several groups where there were differences in the relative trends in the treatment rate since the SUD waiver was implemented. We find greater increases in the treatment rate for men vs women, children vs non-elderly adults, elderly adults vs non-elderly adults, non-White racial groups vs White race, Black vs. non-Black, and disabled vs. non-disabled beneficiaries with SUD.
- Overall, we estimate that the difference in the treatment rate is greater on September 2022 for men vs. women, kids vs. non-elderly adults, elderly beneficiaries vs non-elderly adults, non-White vs White, Black vs. non-Black, and disabled vs. non-disabled beneficiaries.

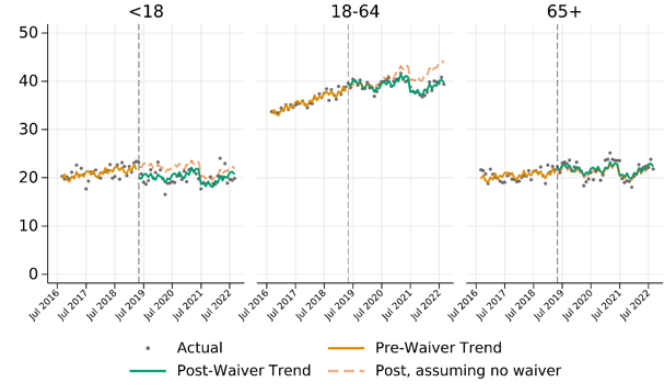
Table 4.2 Percent Medicaid Beneficiaries with a SUD Diagnosis who receive any type of SUD treatment

Comparison groups	Difference in the overall effect of the SUD waiver	Difference in the Trend by subpopulations	Avg. Outcome, Sept 2022 (Diff.)
Male vs. Female	-0.72* (-1.27, -0.17)	0.070* (0.039, 0.102)	2.09* (0.63, 3.55)
<18 vs. 18-64	-3.18* (-4.28, -2.08)	0.15* (0.10, 0.21)	2.93* (0.17, 5.70)
65+ vs. 18-64	-0.36 (-1.30, 0.58)	0.12* (0.06, 0.17)	4.42* (1.87, 6.98)
Hispanic vs. Not Hispanic	0.01 (-1.68, 1.70)	-0.02 (-0.11, 0.07)	-0.88 (-5.21, 3.44)
Not White vs. White	0.39 (-0.16, 0.93)	0.12* (0.09, 0.15)	5.10* (3.67, 6.53)
Black vs. Not Black	0.50 (-0.05, 1.05)	0.13* (0.10, 0.16)	5.59* (4.16, 7.02)
AAPI vs. Not AAPI	-0.60 (-4.34, 3.15)	0.09 (-0.13, 0.32)	3.17 (-7.24, 13.58)
AIAN vs. Not AIAN	-0.59 (-1.98, 0.79)	-0.019 (-0.098, 0.060)	-1.35 (-5.05, 2.34)
Disabled vs. Not Disabled	-0.91 (-1.47, -0.35)	0.12* (0.09, 0.15)	3.83* (2.35, 5.32)
Rural vs. Urban	-0.53 (-1.08, 0.03)	0.007 (-0.025, 0.039)	-0.26 (-1.74, 1.22)

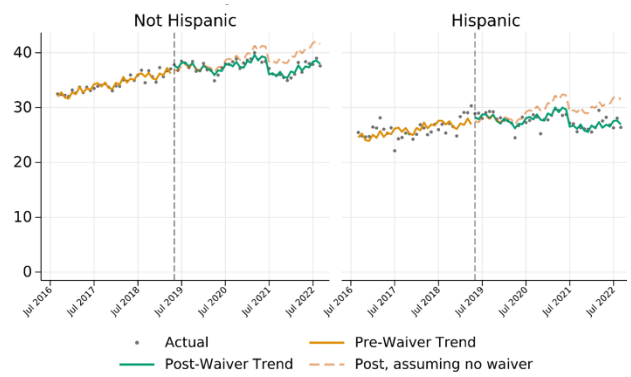
Sex



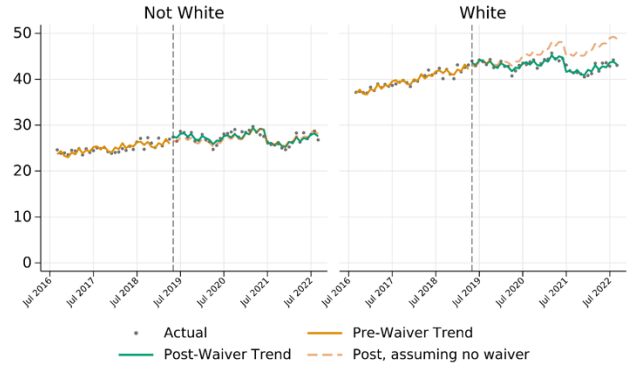
Age



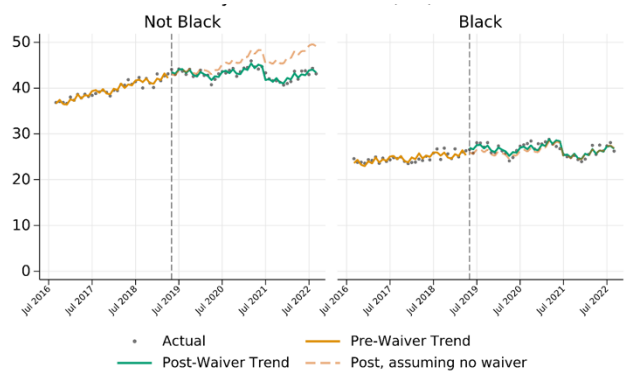
Race/Ethnicity



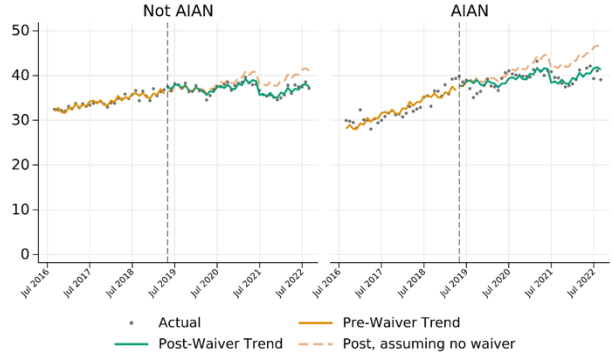
COVID-19 adjustment: Mar. 2020 to end of study period



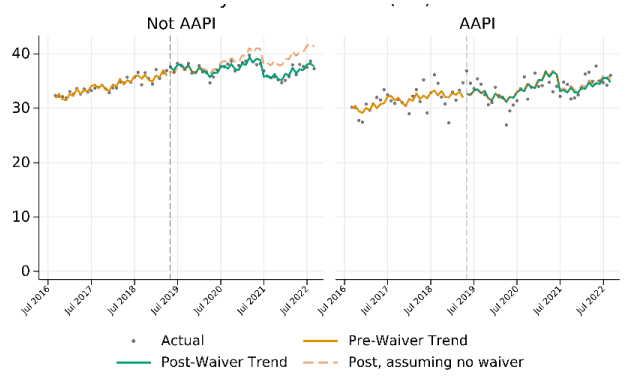
COVID-19 adjustment: Mar. 2020 to end of study period



COVID-19 adjustment: Mar. 2020 to end of study period

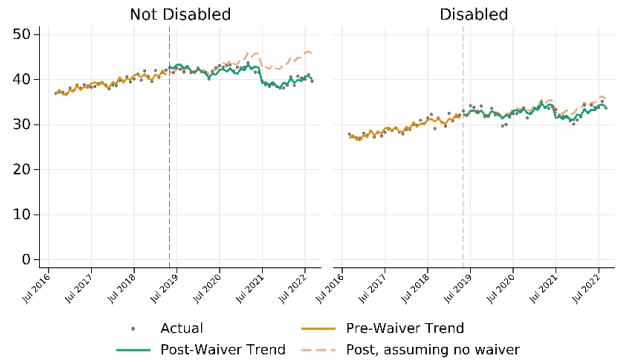


COVID-19 adjustment: Mar. 2020 to end of study period



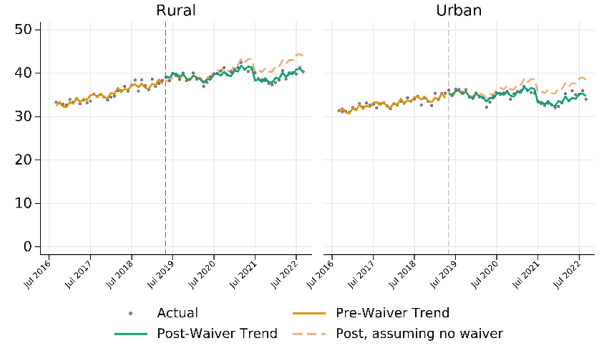
COVID-19 adjustment: Mar. 2020 to end of study period

Disability



COVID-19 adjustment: Mar. 2020 to end of study period

Urban/Rural



COVID-19 adjustment: Mar. 2020 to end of study period

4.3 Outpatient Services for SUD (M8)

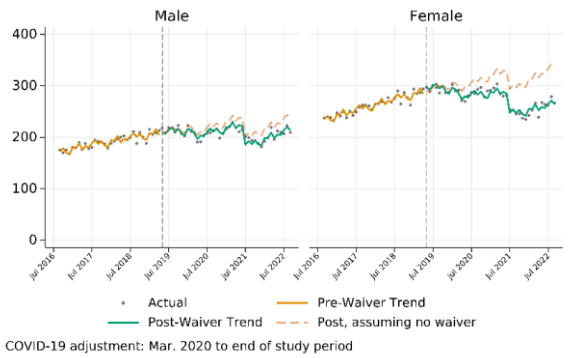
We examined differences in the effect of SUD waiver implementation on the percent of beneficiaries diagnosed with SUD who receive outpatient services. We found:

- Relatively large differences in the effects of the SUD waiver between men and women, by age group and by urban vs rural location, but few differences by race, ethnicity or disability.
- We estimate that SUD waiver implementation was associated with a 6.4% point higher rate of outpatient treatment for women over men, and greater outpatient treatment rates for non-elderly adults vs either children or elderly beneficiaries. We also estimate that the SUD waiver had a 10.6% point greater effect for urban beneficiaries over their rural counterparts.
- None of the other subgroups showed any statistically significant differences in overall effects of the waiver.
- We find several groups where there were differences in the relative trends in the outpatient treatment rate since the SUD waiver was implemented. We find greater increases in the treatment rate for men vs women, children vs non-elderly adults, elderly adults vs non-elderly adults, non-White racial groups vs White race, Black vs. non-Black, and disabled vs. non-disabled beneficiaries with SUD.
- Combining these results, we estimate that the difference in the outpatient treatment rate is proportionately greater on September 2022 for men vs. women, kids vs. non-elderly adults, elderly beneficiaries vs non-elderly adults, non-White vs White, Black vs. non-Black, and disabled vs. non-disabled beneficiaries.

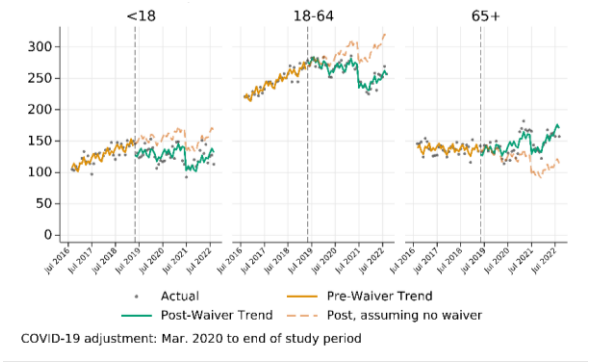
Table 4.3 Outpatient Services for SUD

Comparison groups	Difference in the overall effect of the SUD waiver	Difference in the Trend by subpopulations	Avg. Outcome, Sept 2022 (Diff.)
Male vs. Female	-6.35* (-11.38, -1.32)	1.38* (1.09, 1.68)	48.94* (35.35, 62.52)
<18 vs. 18-64	-26.36* (-35.83, -16.88)	1.32* (0.81, 1.82)	26.34* (2.48, 50.21)
65+ vs. 18-64	-12.87* (-20.98, -4.76)	3.24* (2.75, 3.72)	116.58* (93.97, 139.19)
Hispanic vs. Not Hispanic	-5.95 (-20.89, 8.98)	0.14 (-0.70, 0.98)	-0.18 (-39.63, 39.27)
Not White vs. White	0.83 (-4.13, 5.79)	2.65* (2.36, 2.94)	106.88* (93.61, 120.16)
Black vs. Not Black	0.83 (-4.12, 5.77)	2.66* (2.38, 2.95)	107.37* (94.14, 120.60)
AAPI vs. Not AAPI	-2.56 (-36.06, 30.93)	0.24 (-1.75, 2.23)	6.98 (-86.55, 100.50)
AIAN vs. Not AIAN	1.79 (-11.36, 14.95)	0.67 (-0.08, 1.43)	28.77 (-6.24, 63.79)
Disabled vs. Not Disabled	-4.18 (-9.32, 0.96)	2.47* (2.16, 2.77)	94.43* (80.54, 108.33)
Rural vs. Urban	-10.64* (-15.75, -5.53)	0.07 (-0.23, 0.37)	-7.75 (-21.54, 6.05)

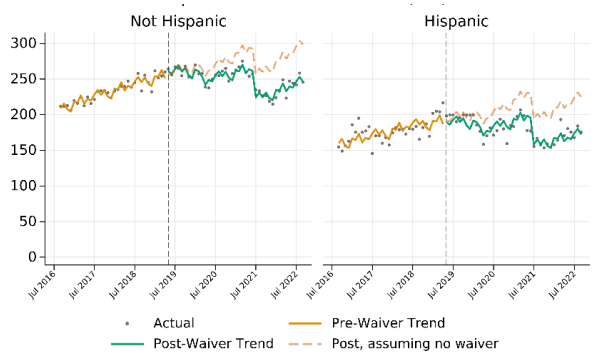
Sex



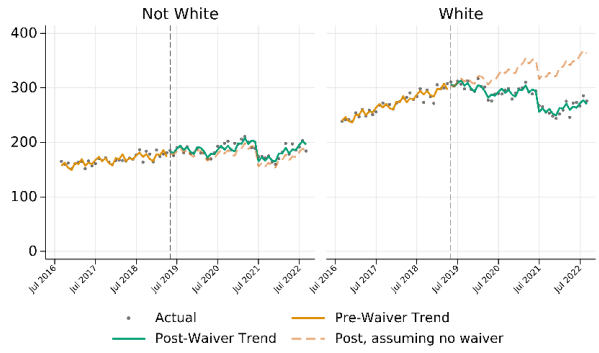
Age



Race/Ethnicity



COVID-19 adjustment: Mar. 2020 to end of study period



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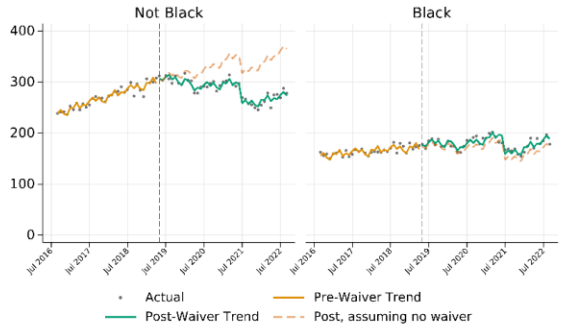

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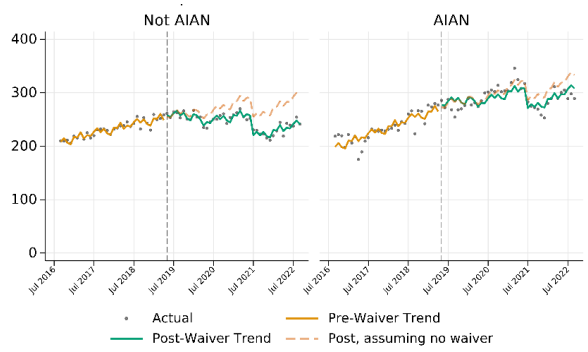

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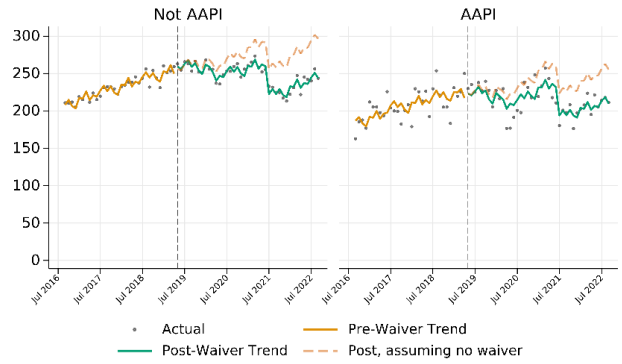
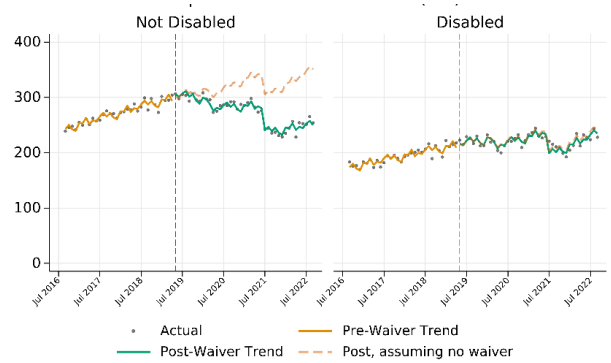


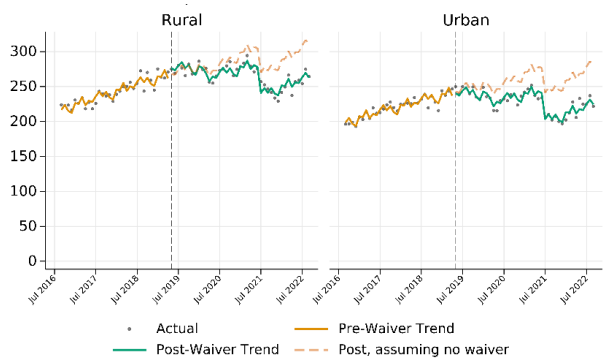
COVID-19 adjustment: Mar. 2020 to end of study period

Disability



COVID-19 adjustment: Mar. 2020 to end of study period

Urban/Rural



COVID-19 adjustment: Mar. 2020 to end of study period

4.4 Medication-Assisted Treatment (M12)

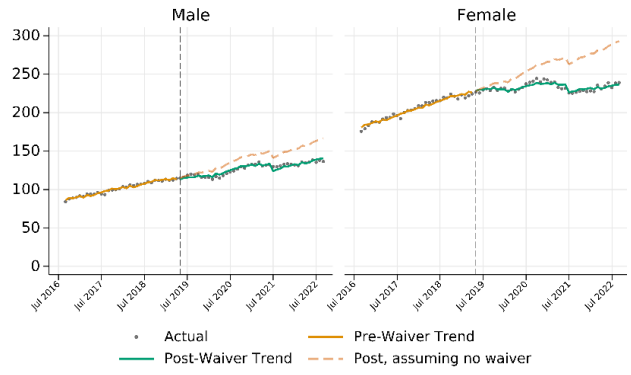
We examined differences in the effect of SUD waiver implementation on the percent of beneficiaries diagnosed with SUD who receive MAT. We found:

- SUD waiver implementation was associated with a larger effects on MAT non-elderly adults vs children (9.0% point difference) and non-disabled over disabled beneficiaries (6.0% points) or elderly beneficiaries.
- None of the other subgroups showed any statistically significant differences in overall effects of the waiver.
- We find several groups with differences in relative trends in MAT since the SUD waiver was implemented. We find greater increases in the treatment rate for men vs women, children vs non-elderly adults, non-White vs White, Black vs. non-Black, non-AIAN vs. AIAN, disabled vs. non-disabled, and rural vs. urban beneficiaries with SUD.
- Combining these results, we estimate that the difference in MAT is proportionately greater on September 2022 for men vs. women, kids vs. non-elderly adults, non-White vs White, Black vs. non-Black, non-AIAN vs AIAN, and disabled vs. non-disabled beneficiaries.

Table 4.4 Medication-Assisted Treatment

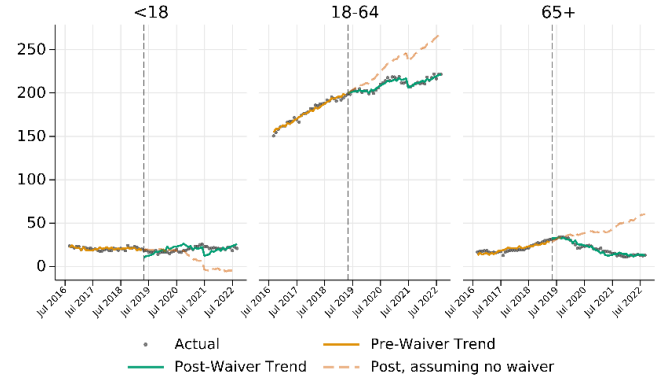
Comparison groups	Difference in the overall effect of the SUD waiver	Difference in the Trend by subpopulations	Avg. Outcome, Sept 2022 (Diff.)
Male vs. Female	-2.17 (-6.49, 2.14)	0.83* (0.55, 1.11)	30.91* (18.35, 43.46)
<18 vs. 18-64	-8.97* (-15.08, -2.86)	2.16* (1.78, 2.55)	77.56* (59.76, 95.37)
65+ vs. 18-64	3.63 (-1.83, 9.08)	-0.10 (-0.49, 0.28)	-0.53 (-17.18, 16.12)
Hispanic vs. Not Hispanic	5.64 (-6.81, 18.10)	-0.25 (-1.01, 0.50)	-4.53 (-39.36, 30.30)
Not White vs. White	-0.47 (-4.46, 3.52)	0.97* (0.71, 1.23)	38.29* (26.74, 49.84)
Black vs. Not Black	0.18 (-3.75, 4.11)	1.19* (0.94, 1.45)	47.90* (36.54, 59.27)
AAPI vs. Not AAPI	12.71 (-17.63, 43.06)	0.30 (-1.54, 2.15)	24.75 (-59.06, 108.57)
AIAN vs. Not AIAN	-5.62 (-17.04, 5.80)	-1.38* (-2.11, -0.65)	-60.68* (-93.38, -27.99)
Disabled vs. Not Disabled	-5.97* (-10.52, -1.42)	1.42* (1.13, 1.71)	50.91* (37.76, 64.05)
Rural vs. Urban	-3.97 (-8.47, 0.53)	0.33* (0.04, 0.62)	9.31 (-3.74, 22.36)

Sex



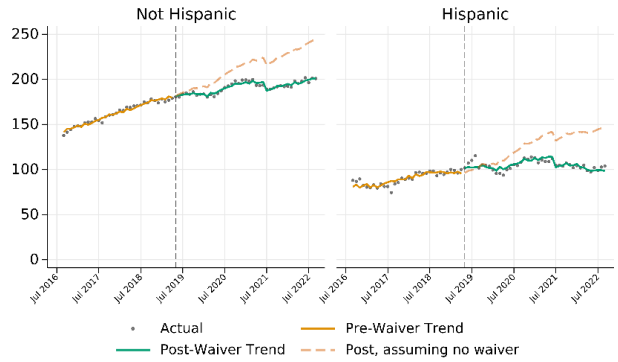
COVID-19 adjustment: Mar. 2020 to end of study period

Age

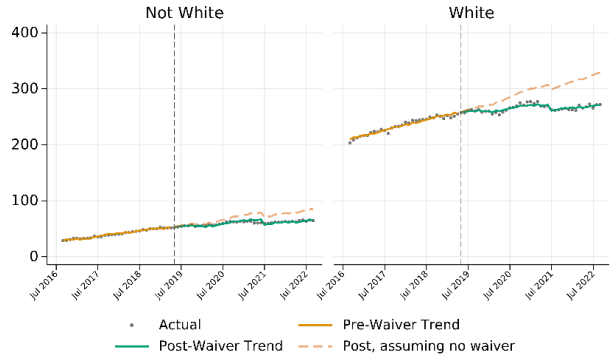


COVID-19 adjustment: Mar. 2020 to end of study period

Race/Ethnicity



COVID-19 adjustment: Mar. 2020 to end of study period



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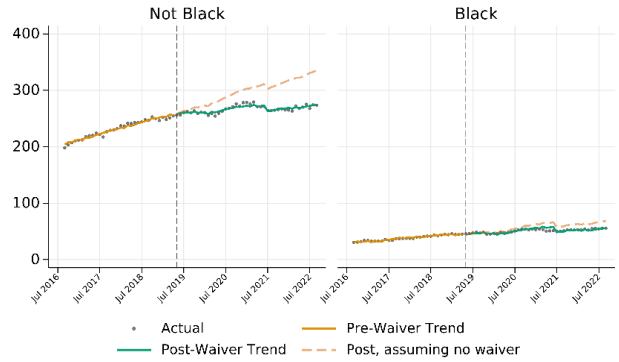

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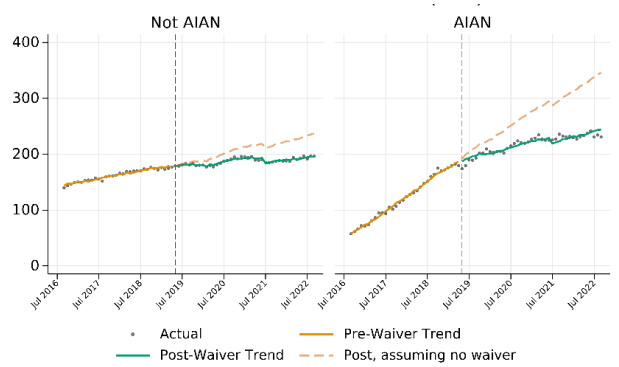

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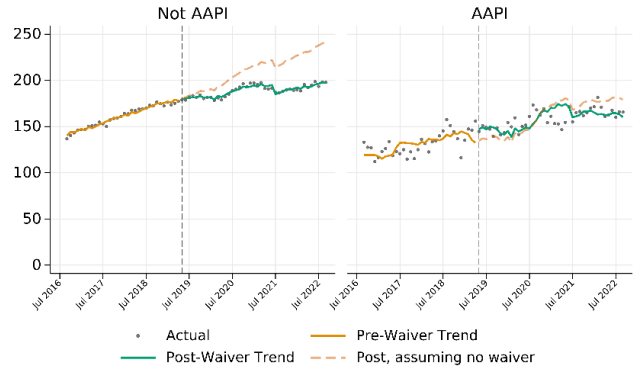
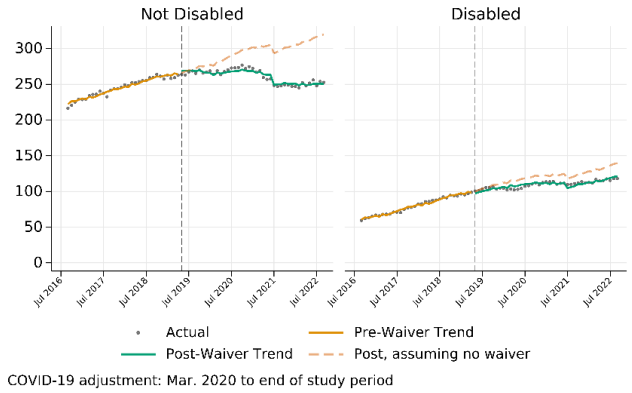


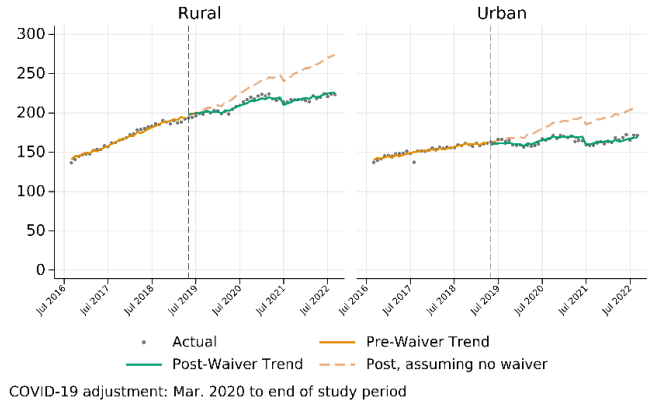
COVID-19 adjustment: Mar. 2020 to end of study period

Disability



COVID-19 adjustment: Mar. 2020 to end of study period

Urban/Rural



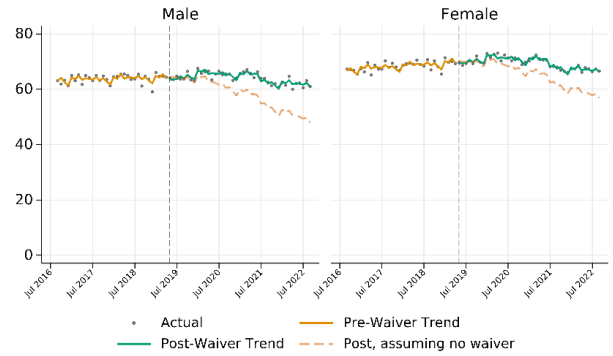
COVID-19 adjustment: Mar. 2020 to end of study period

4.5 Access to Preventive/Ambulatory Health Services for Adult Medicaid Beneficiaries with SUD (M32)

Table 4.5 Access to Preventive/Ambulatory Health Services for Adult Medicaid Beneficiaries with SUD

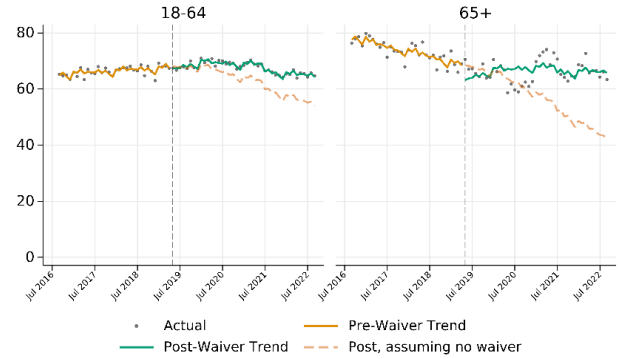
Comparison groups	Difference in the overall effect of the SUD waiver	Difference in the Trend by subpopulations	Avg. Outcome, Sept 2022 (Diff.)
Male vs. Female	-0.3296 (-1.1288, 0.4696)	0.1012 (0.0520, 0.1504)	3.7165 (1.4503, 5.9826)
<18 vs. 18-64			
65+ vs. 18-64	-4.4938 (-6.3329, -2.6548)	0.4527 (0.3423, 0.5631)	13.6138 (8.5278, 18.6998)
Hispanic vs. Not Hispanic	0.8856 (-2.2740, 4.0452)	0.0007 (-0.1877, 0.1892)	0.9154 (-7.8624, 9.6932)
Not White vs. White	-1.5508 (-2.3949, -0.7067)	0.3262 (0.2756, 0.3768)	11.4982 (9.1649, 13.8316)
Black vs. Not Black	-1.7968 (-2.6531, -0.9406)	0.2918 (0.2407, 0.3429)	9.8759 (7.5207, 12.2310)
AAPI vs. Not AAPI	-3.8149 (-9.4038, 1.7740)	-0.3447 (-0.6595, -0.0299)	-17.6041 (-31.7033, -3.5049)
AIAN vs. Not AIAN	1.8945 (-0.0414, 3.8303)	0.2917 (0.1717, 0.4117)	13.5624 (7.9873, 19.1374)
Disabled vs. Not Disabled	-1.0427 (-1.8115, -0.2740)	0.3133 (0.2661, 0.3605)	11.4894 (9.3156, 13.6631)
Rural vs. Urban	-0.5156 (-1.2904, 0.2591)	0.0392 (-0.0085, 0.0870)	1.0543 (-1.1447, 3.2533)

Sex



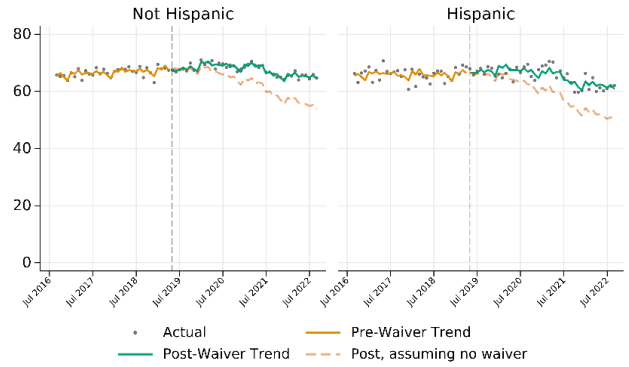
COVID-19 adjustment: Mar. 2020 to end of study period

Age

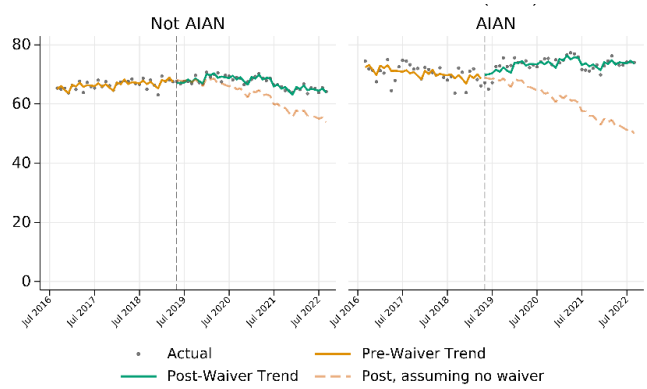


COVID-19 adjustment: Mar. 2020 to end of study period

Race/Ethnicity



COVID-19 adjustment: Mar. 2020 to end of study period



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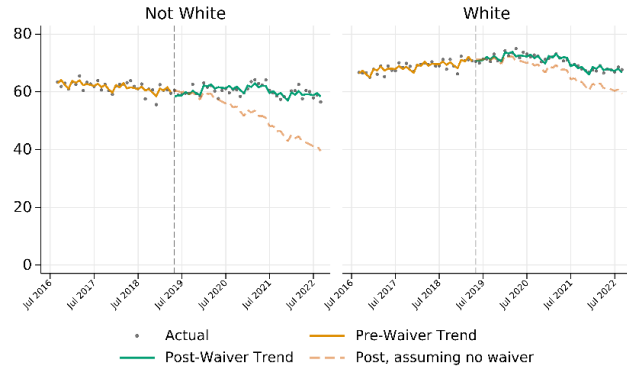
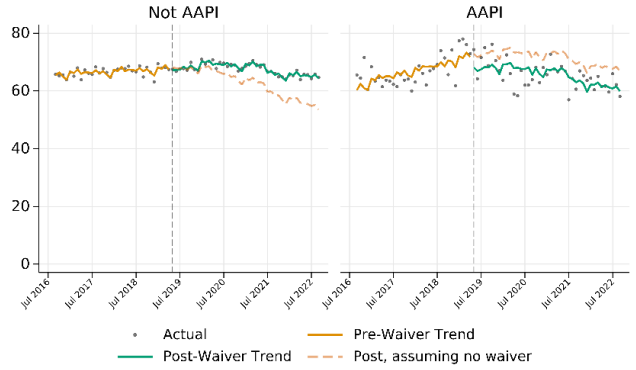


COVID-19 adjustment: Mar. 2020 to end of study period



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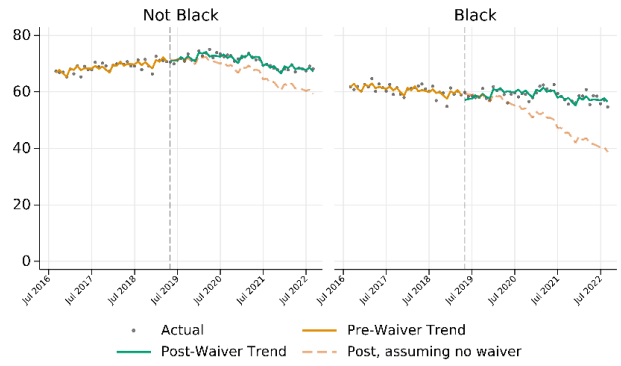
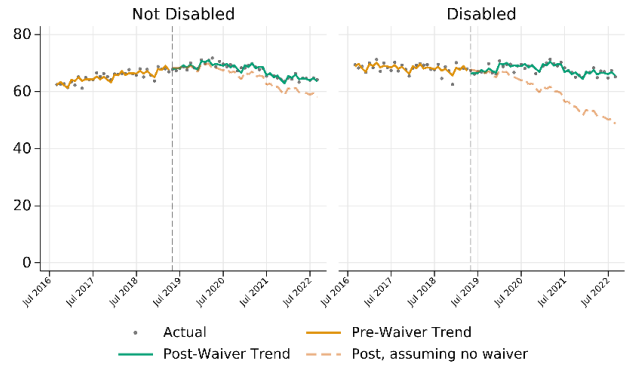


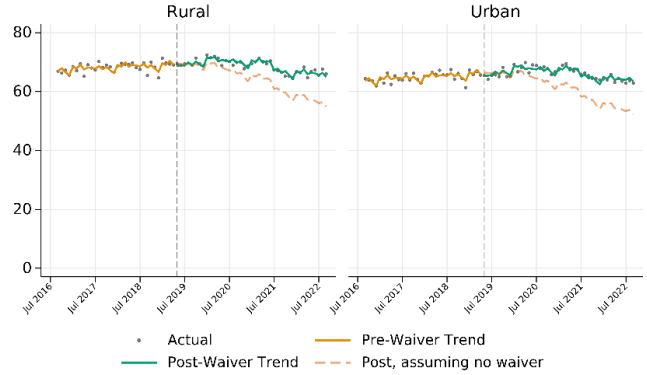
COVID-19 adjustment: Mar. 2020 to end of study period

Disability



COVID-19 adjustment: Mar. 2020 to end of study period

Urban/Rural



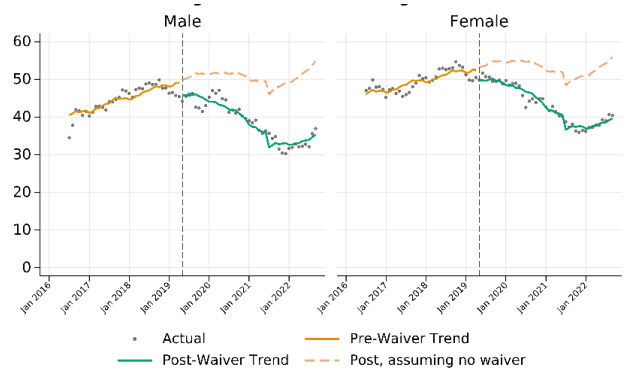
COVID-19 adjustment: Mar. 2020 to end of study period

4.6 Percent of Individuals Receiving MOUD who are also Receiving Counseling and Behavioral Therapies to Treat Substance Use Disorders (Q3)

Table 4.6 Percent of Individuals Receiving MOUD who are also Receiving Counseling and Behavioral Therapies to Treat Substance Use Disorders

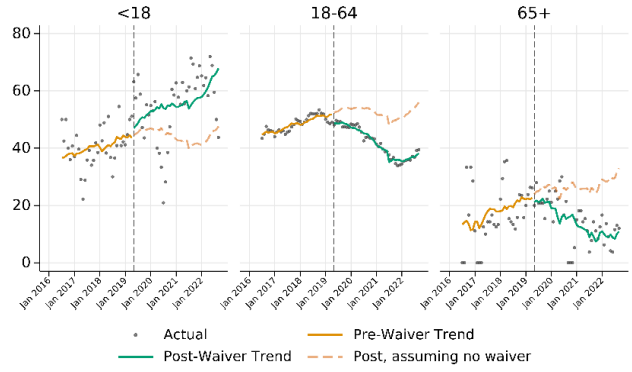
Comparison groups	Difference in the overall effect of the SUD waiver	Difference in the Trend by subpopulations	Avg. Outcome, Sept 2022 (Diff.)
Male vs. Female	-0.6507 (-4.4706, 3.1692)	-0.063 (-0.2716, 0.1456)	-3.1715 (-13.0986, 6.7555)
<18 vs. 18-64	5.9957 (-7.3913, 19.3828)	0.8016 (0.0921, 1.5112)	38.0608 (6.0480, 70.0736)
65+ vs. 18-64	0.9204 (-15.4977, 17.3385)	-0.1305 (-1.1877, 0.9268)	-4.2976 (-55.1835, 46.5882)
Hispanic vs. Not Hispanic	4.5339 (-10.3844, 19.4522)	-0.2327 (-0.9544, 0.4890)	-4.7744 (-40.6858, 31.1371)
Not White vs. White	2.2624 (-2.5256, 7.0503)	0.002 (-0.2691, 0.2731)	2.3437 (-10.4926, 15.1800)
Black vs. Not Black	1.0433 (-4.1728, 6.2593)	-0.0189 (-0.3102, 0.2723)	0.2853 (-13.5167, 14.0873)
AAPI vs. Not AAPI	2.9405 (-23.0115, 28.8926)	-0.0751 (-1.5583, 1.4080)	-0.0646 (-72.6209, 72.4917)
AIAN vs. Not AIAN	2.5871 (-4.7082, 9.8825)	-0.1757 (-0.6127, 0.2613)	-4.4404 (-25.1079, 16.2271)
Disabled vs. Not Disabled	-1.2609 (-4.9563, 2.4344)	-0.034 (-0.2394, 0.1714)	-2.6208 (-12.3228, 7.0812)
Rural vs. Urban	-4.5336 (-8.1165, -0.9507)	-0.361 (-0.5533, -0.1687)	-18.972 (-28.1074, -9.8367)

Sex



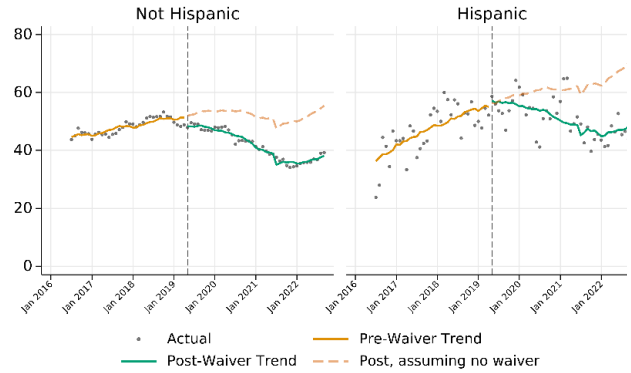
COVID-19 adjustment: Mar. 2020 to end of study period

Age

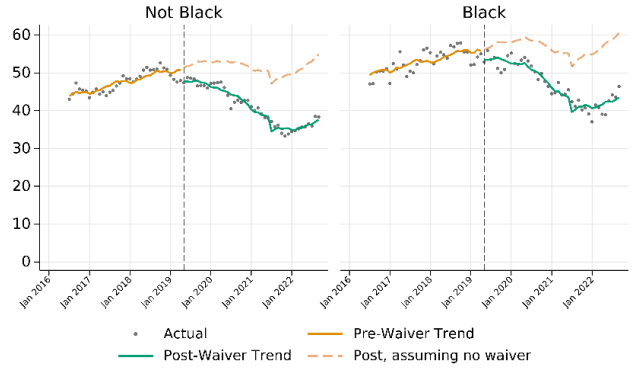


COVID-19 adjustment: Mar. 2020 to end of study period

Race/Ethnicity



COVID-19 adjustment: Mar. 2020 to end of study period



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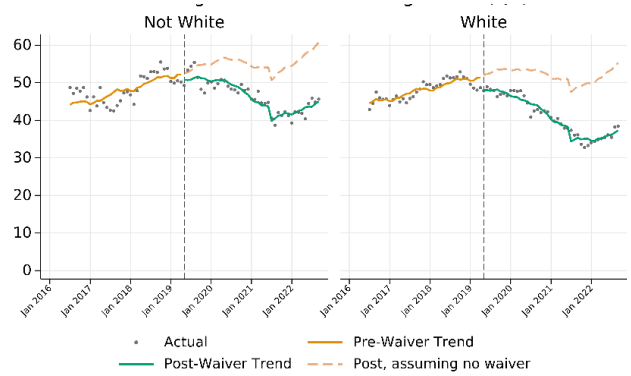
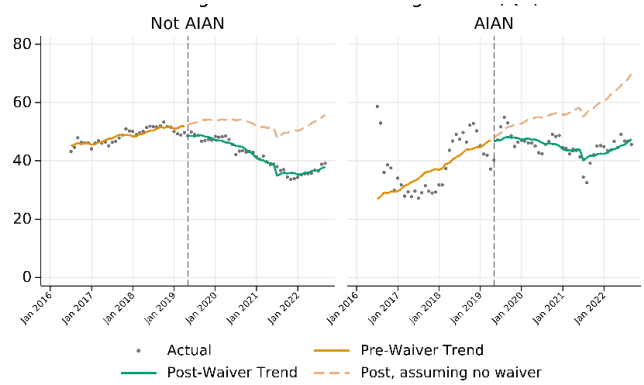


COVID-19 adjustment: Mar. 2020 to end of study period



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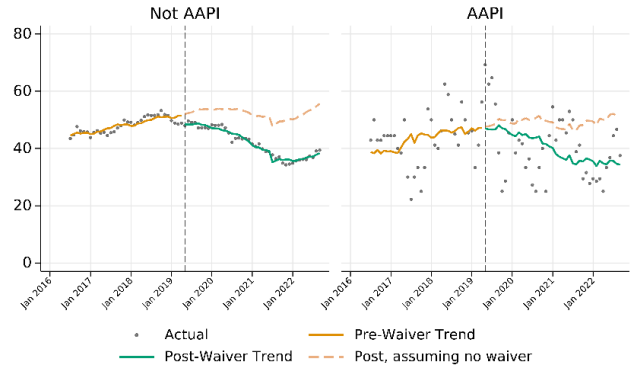
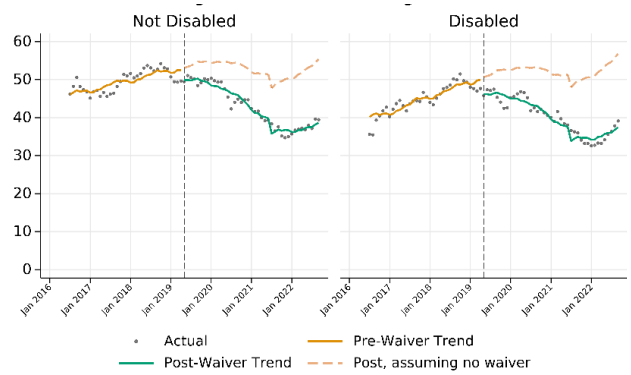


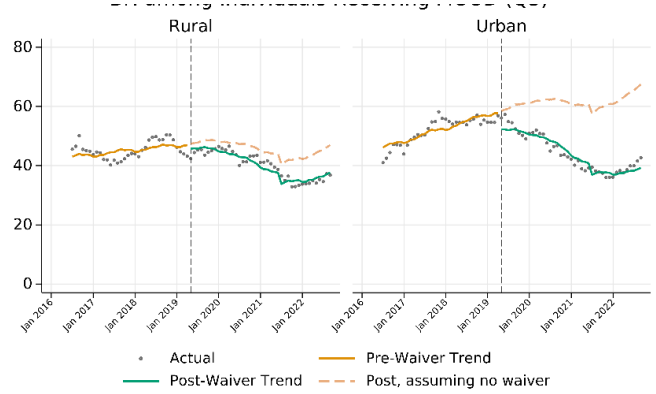
COVID-19 adjustment: Mar. 2020 to end of study period

Disability



COVID-19 adjustment: Mar. 2020 to end of study period

Urban/Rural



COVID-19 adjustment: Mar. 2020 to end of study period

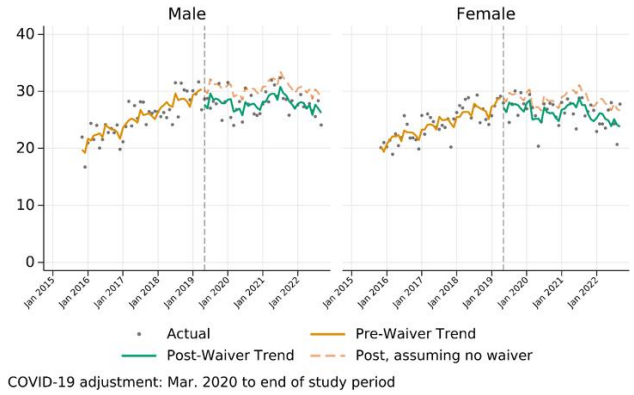
4.7 30-Day Follow-Up After Emergency Department Visit for Alcohol and Other Drug Abuse or Dependence (M17.1)

Table 4.7 30-Day Follow-Up After Emergency Department Visit for Alcohol and Other Drug Abuse or Dependence

Comparison groups	Difference in the overall effect of the SUD waiver	Difference in the Trend by subpopulations	Avg. Outcome, Sept 2022 (Diff.)
Male vs. Female	0.8845 (-1.6798, 3.4489)	-0.0234 (-0.1360, 0.0892)	-0.0516 (-5.1275, 5.0243)
Hispanic vs. Not Hispanic	2.4605 (-5.6664, 10.5875)	-0.0925 (-0.4612, 0.2762)	-1.2389 (-19.3342, 16.8564)
Not White vs. White	-0.6315 (-3.1937, 1.9307)	0.0476 (-0.0659, 0.1611)	1.2724 (-3.8414, 6.3861)

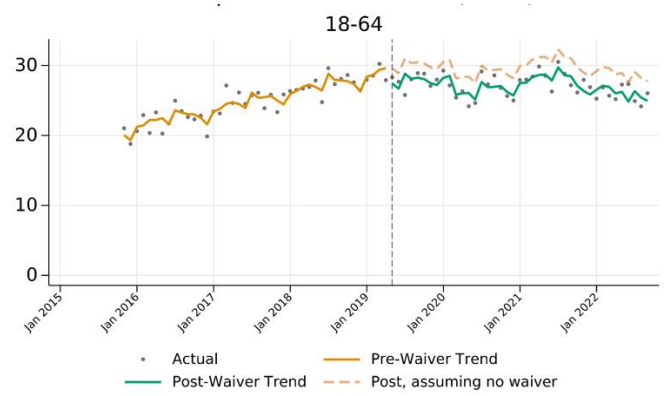
Comparison groups	Difference in the overall effect of the SUD waiver	Difference in the Trend by subpopulations	Avg. Outcome, Sept 2022 (Diff.)
Black vs. Not Black	-0.8669 (-3.4346, 1.7007)	-0.0474 (-0.1609, 0.0660)	-2.7638 (-7.8897, 2.3622)
AAPI vs. Not AAPI	17.9758 (-0.2371, 36.1888)	0.1235 (-0.6361, 0.8831)	22.9145 (-13.5987, 59.4277)
AIAN vs. Not AIAN	-4.2858 (-10.5341, 1.9626)	0.4584 (0.1803, 0.7365)	14.0492 (1.6945, 26.4039)
Disabled vs. Not Disabled	0.8493 (-1.7879, 3.4864)	0.097 (-0.0169, 0.2108)	4.7276 (-0.4279, 9.8831)
Rural vs. Urban	0.1706 (-2.3904, 2.7315)	0.2302 (0.1184, 0.3421)	9.3805 (4.3407, 14.4203)

Sex



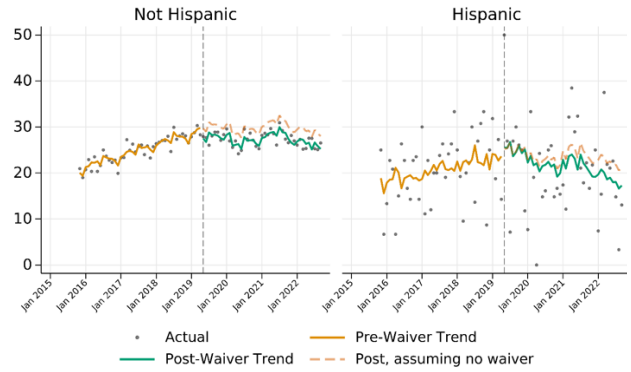
COVID-19 adjustment: Mar. 2020 to end of study period

Age

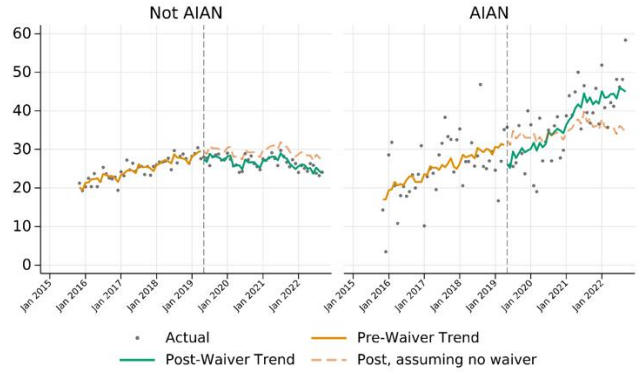


COVID-19 adjustment: Mar. 2020 to end of study period

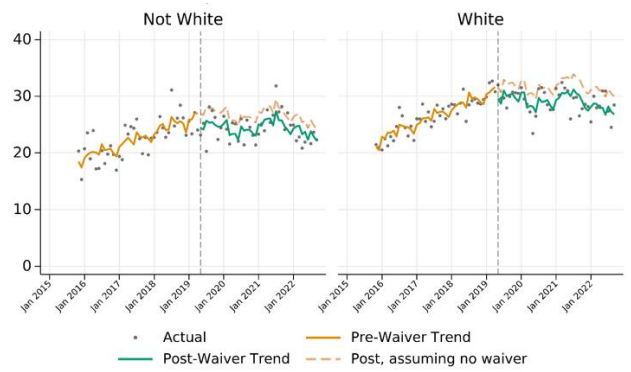
Race/Ethnicity



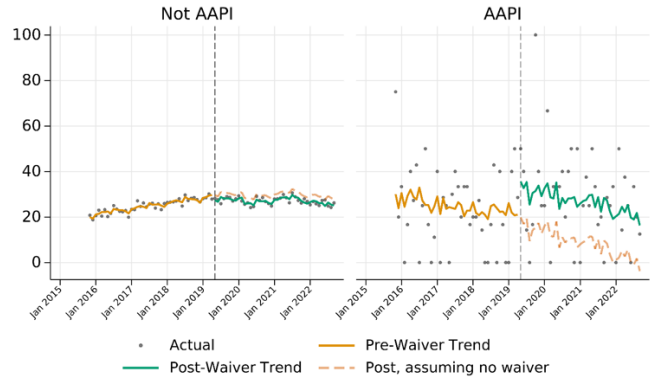
COVID-19 adjustment: Mar. 2020 to end of study period



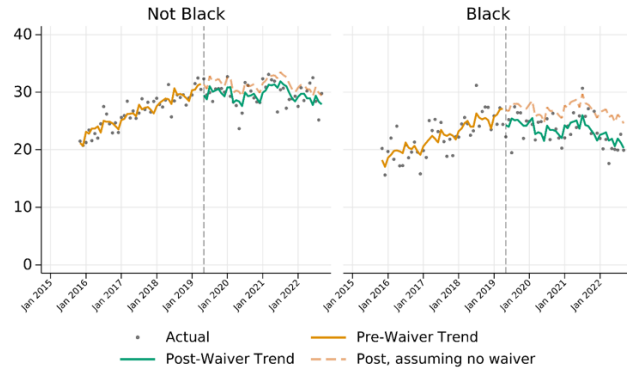
COVID-19 adjustment: Mar. 2020 to end of study period



COVID-19 adjustment: Mar. 2020 to end of study period

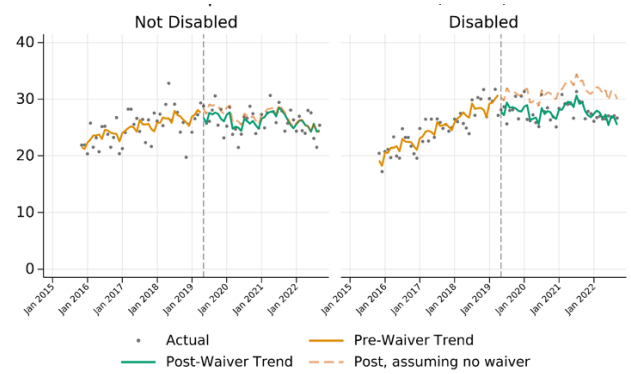


COVID-19 adjustment: Mar. 2020 to end of study period



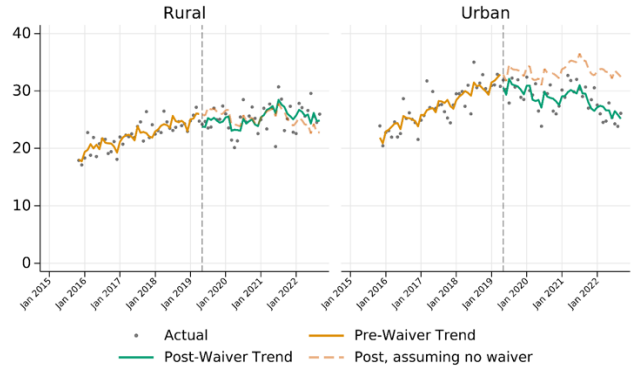
COVID-19 adjustment: Mar. 2020 to end of study period

Disability



COVID-19 adjustment: Mar. 2020 to end of study period

Urban/Rural



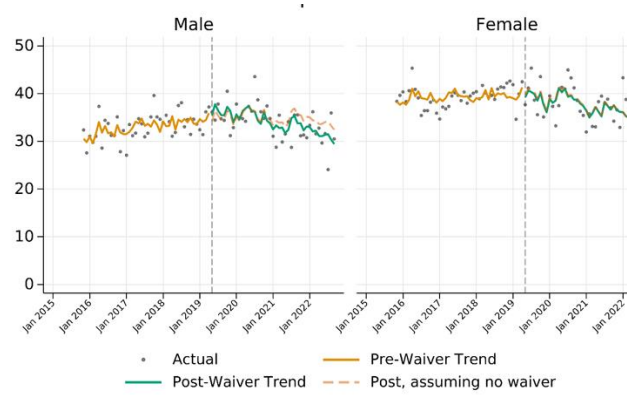
COVID-19 adjustment: Mar. 2020 to end of study period

4.8 Percent of Enrollees Diagnosed with OUD Receiving Non-medication Opioid Treatment Services

Table 4.8 Percent of Enrollees Diagnosed with OUD Receiving Non-medication Opioid Treatment Services

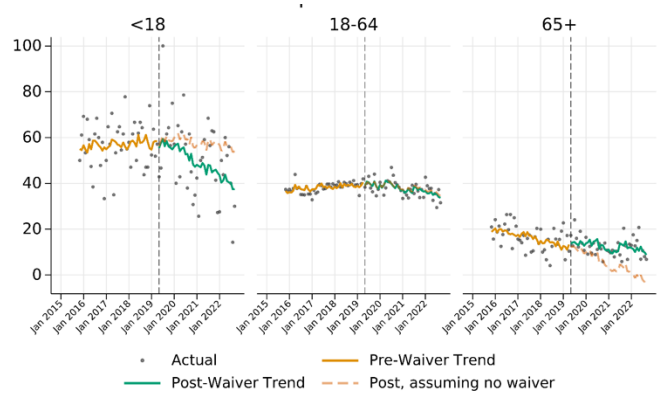
Comparison groups	Difference in the overall effect of the SUD waiver	Difference in the Trend by subpopulations	Avg. Outcome, Sept 2022 (Diff.)
Male vs. Female	1.7842 (-1.1102, 4.6785)	-0.1215 (-0.2377, -0.0054)	-3.0769 (-8.2062, 2.0525)
<18 vs. 18-64	-0.8301 (-10.5421, 8.8819)	-0.3697 (-0.7635, 0.0240)	-15.6188 (-33.7099, 2.4723)
65+ vs. 18-64	1.259 (-3.0016, 5.5196)	0.32 (0.1466, 0.4934)	14.0593 (6.1739, 21.9448)
Hispanic vs. Not Hispanic	0.8755 (-9.5280, 11.2791)	-0.1127 (-0.5210, 0.2956)	-3.6322 (-22.4732, 15.2088)
Not White vs. White	-2.3465 (-5.5308, 0.8378)	-0.2101 (-0.3383, -0.0820)	-10.7519 (-16.4660, -5.0379)
Black vs. Not Black	-3.1669 (-6.4502, 0.1165)	-0.1764 (-0.3083, -0.0445)	-10.2242 (-16.1282, -4.3201)
AAPI vs. Not AAPI	-11.1346 (-30.4283, 8.1590)	0.2472 (-0.5282, 1.0226)	-1.2462 (-37.2424, 34.7499)
AIAN vs. Not AIAN	3.0002 (-3.5983, 9.5986)	-0.2609 (-0.5350, 0.0132)	-7.4358 (-19.4682, 4.5966)
Disabled vs. Not Disabled	-0.5439 (-3.3471, 2.2592)	-0.0847 (-0.1976, 0.0283)	-3.9315 (-8.8868, 1.0238)
Rural vs. Urban	-5.7272 (-8.5489, -2.9055)	0.0288 (-0.0844, 0.1420)	-4.5736 (-9.5725, 0.4253)

Sex



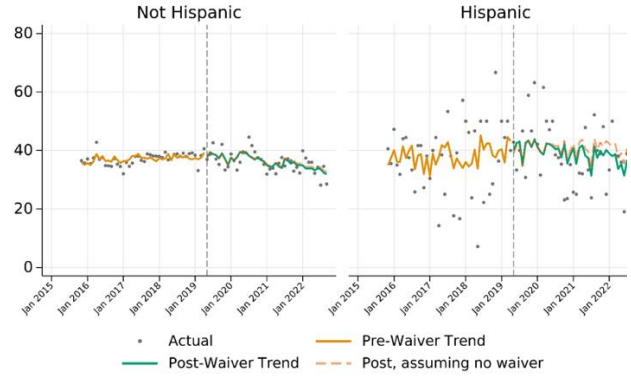
COVID-19 adjustment: Mar. 2020 to end of study period

Age

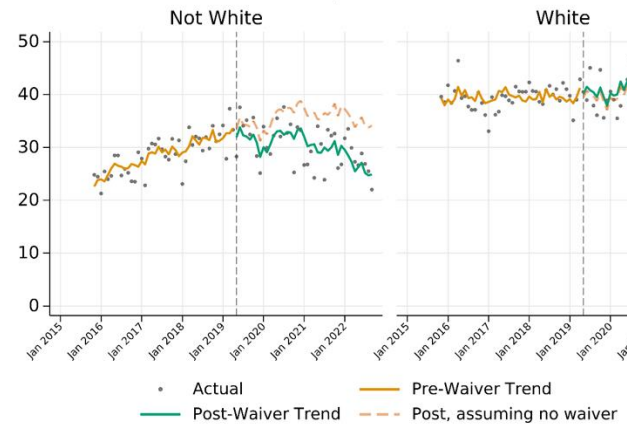


COVID-19 adjustment: Mar. 2020 to end of study period

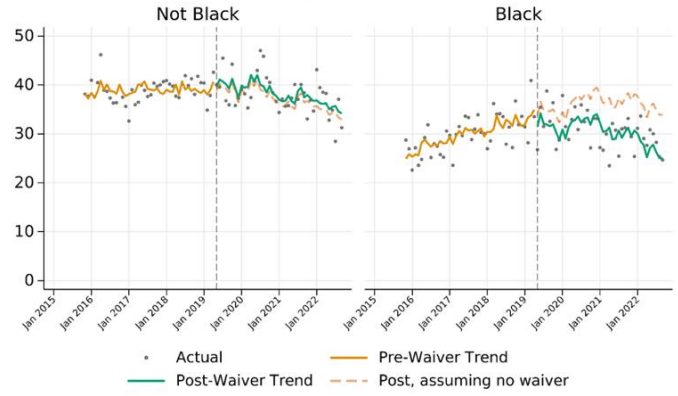
Race/Ethnicity



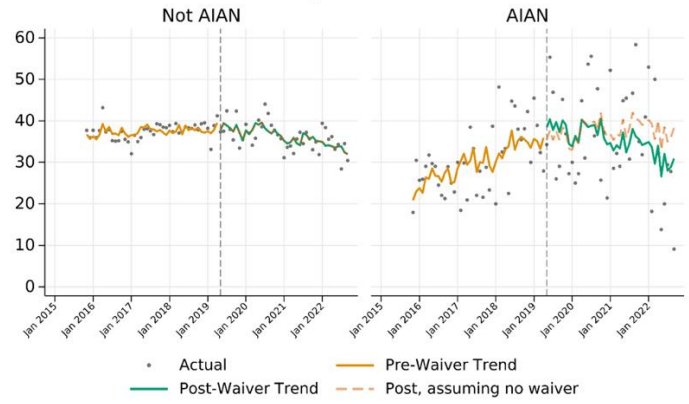
COVID-19 adjustment: Mar. 2020 to end of study period



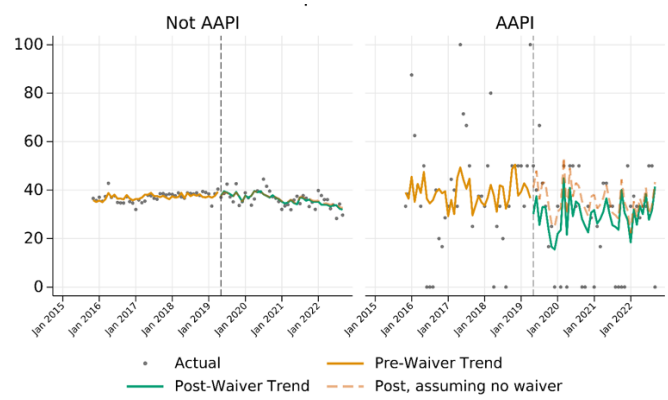
COVID-19 adjustment: Mar. 2020 to end of study period



COVID-19 adjustment: Mar. 2020 to end of study period

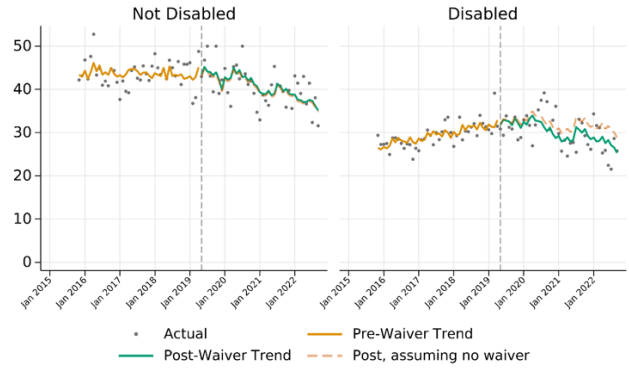


COVID-19 adjustment: Mar. 2020 to end of study period



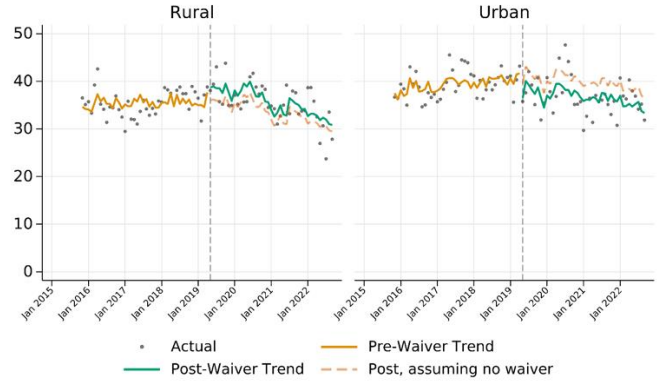
COVID-19 adjustment: Mar. 2020 to end of study period

Disability



COVID-19 adjustment: Mar. 2020 to end of study period

Urban/Rural



COVID-19 adjustment: Mar. 2020 to end of study period

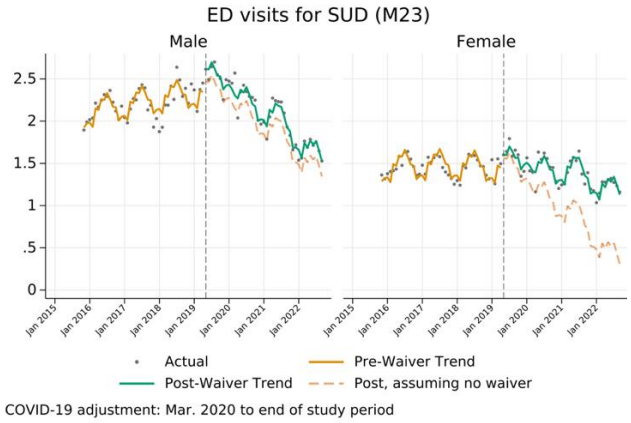
4.9 Emergency Department Utilization for SUD per 1000 beneficiaries (M23)

Table 4.9 Emergency Department Utilization for SUD per 1000 beneficiaries

Comparison groups	Difference in the overall effect of the SUD waiver	Difference in the Trend by subpopulations	Avg. Outcome, Sept 2022 (Diff.)
Male vs. Female	0.1187 (0.0155, 0.2219)	-0.0191 (-0.0241, -0.0141)	-0.6457 (-0.8809, -0.4106)
<18 vs. 18-64	0.6328 (0.4828, 0.7829)	-0.0672 (-0.0742, -0.0602)	-2.0557 (-2.3863, -1.7250)
65+ vs. 18-64	0.1065 (-0.0183, 0.2314)	-0.0024 (-0.0085, 0.0037)	0.0109 (-0.2616, 0.2833)
Hispanic vs. Not Hispanic	-0.2154 (-0.2870, -0.1438)	0.0182 (0.0148, 0.0215)	0.5117 (0.3538, 0.6695)
Not White vs. White	-0.0079 (-0.1066, 0.0908)	-0.0066 (-0.0114, -0.0018)	-0.272 (-0.4940, -0.0500)

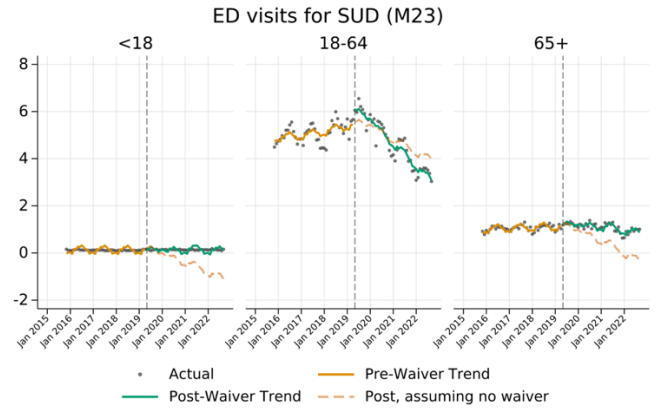
Comparison groups	Difference in the overall effect of the SUD waiver	Difference in the Trend by subpopulations	Avg. Outcome, Sept 2022 (Diff.)
Black vs. Not Black	0.0066 (-0.0923, 0.1055)	-0.0077 (-0.0126, -0.0029)	-0.3031 (-0.5254, -0.0808)
AAPI vs. Not AAPI	-0.2542 (-0.4444, -0.0640)	0.0077 (-0.0017, 0.0171)	0.0547 (-0.4495, 0.5590)
AIAN vs. Not AIAN	-0.1846 (-0.5610, 0.1917)	0.0028 (-0.0145, 0.0201)	-0.0723 (-0.8245, 0.6799)
Disabled vs. Not Disabled	0.6659 (0.4060, 0.9257)	-0.085 (-0.0978, -0.0722)	-2.7343 (-3.3319, -2.1367)
Rural vs. Urban	-0.062 (-0.1568, 0.0328)	0.0171 (0.0124, 0.0217)	0.6206 (0.4059, 0.8353)

Sex



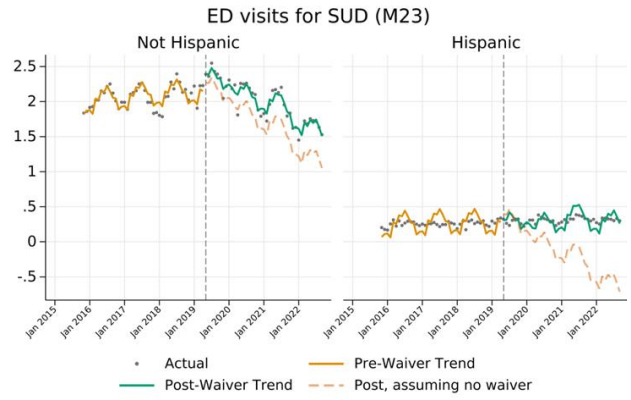
COVID-19 adjustment: Mar. 2020 to end of study period

Age

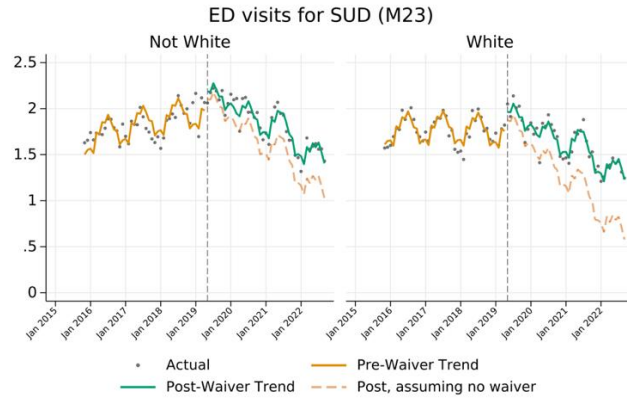


COVID-19 adjustment: Mar. 2020 to end of study period

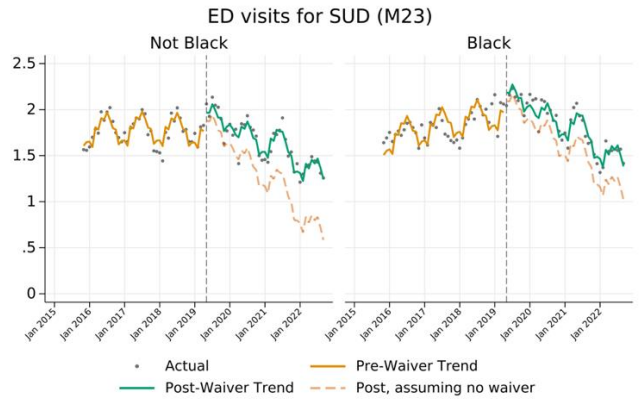
Race/Ethnicity



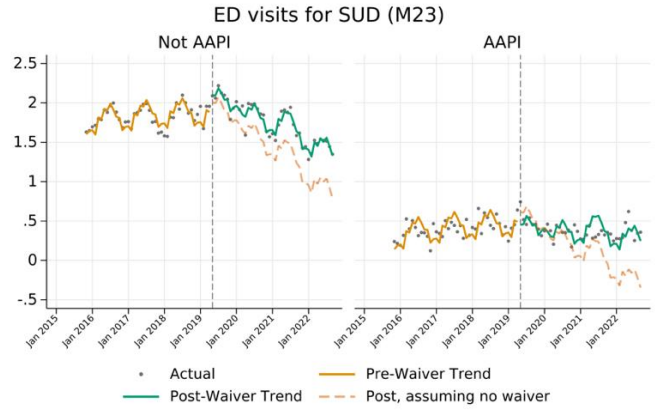
COVID-19 adjustment: Mar. 2020 to end of study period



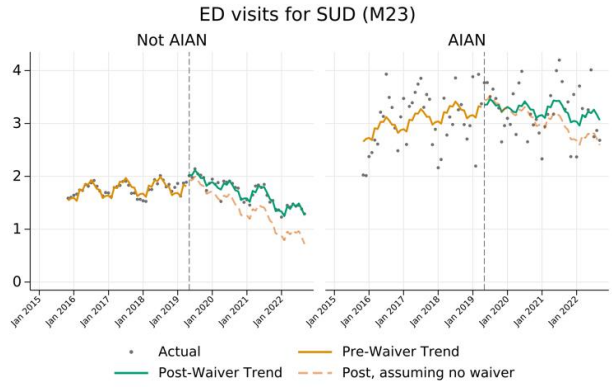
COVID-19 adjustment: Mar. 2020 to end of study period



COVID-19 adjustment: Mar. 2020 to end of study period

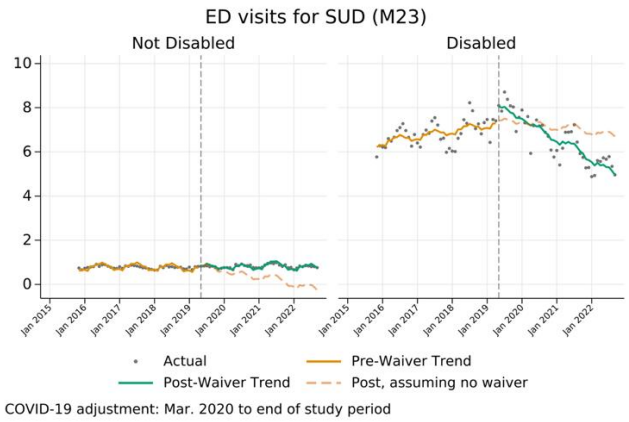


COVID-19 adjustment: Mar. 2020 to end of study period

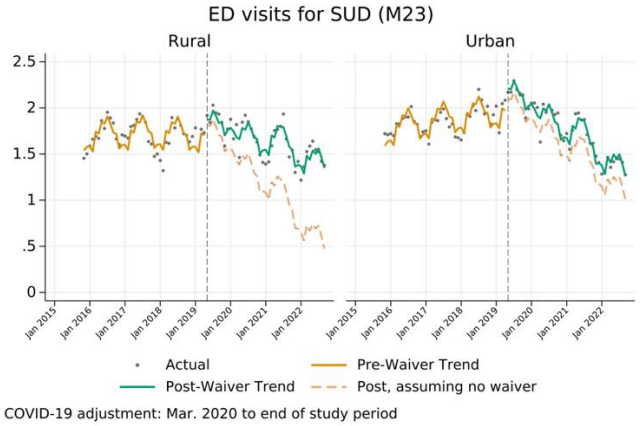


COVID-19 adjustment: Mar. 2020 to end of study period

Disability



Urban/Rural

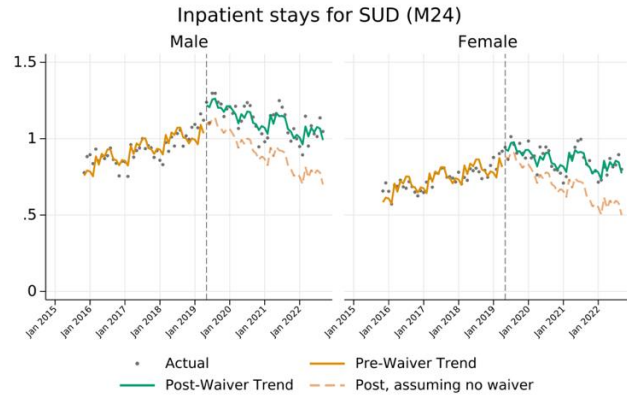


4.10 Inpatient Stays for SUD per 1000 beneficiaries (M24)

Table 4.10

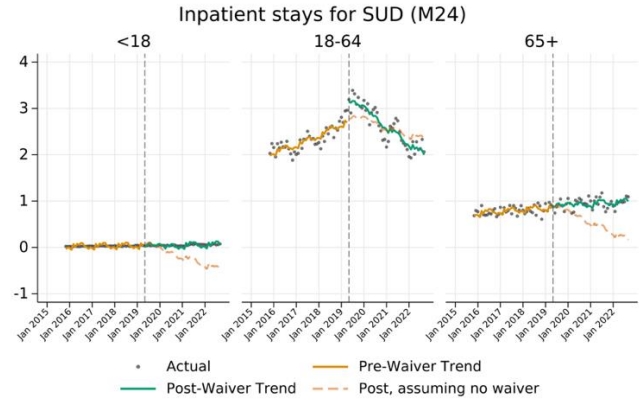
Comparison groups	Difference in the overall effect of the SUD waiver	Difference in the Trend by subpopulations	Avg. Outcome, Sept 2022 (Diff.)
Male vs. Female	0.0643 (0.0162, 0.1124)	-0.0011 (-0.0033, 0.0011)	0.0192 (-0.0770, 0.1154)
<18 vs. 18-64	0.4237 (0.3522, 0.4953)	-0.0328 (-0.0359, -0.0296)	-0.8872 (-1.0265, -0.7480)
65+ vs. 18-64	0.035 (-0.0402, 0.1102)	0.006 (0.0026, 0.0094)	0.2743 (0.1228, 0.4258)
Hispanic vs. Not Hispanic	-0.1072 (-0.1411, -0.0733)	0.0068 (0.0053, 0.0084)	0.1662 (0.0968, 0.2357)
Not White vs. White	-0.0239 (-0.0715, 0.0237)	0.0008 (-0.0014, 0.0029)	0.0065 (-0.0879, 0.1009)
Black vs. Not Black	-0.0241 (-0.0718, 0.0237)	0.0008 (-0.0014, 0.0030)	0.0077 (-0.0873, 0.1026)
AAPI vs. Not AAPI	-0.0584 (-0.1371, 0.0203)	0.0043 (0.0010, 0.0077)	0.1155 (-0.0325, 0.2635)
AIAN vs. Not AIAN	-0.0723 (-0.2703, 0.1256)	-0.005 (-0.0133, 0.0033)	-0.272 (-0.6441, 0.1001)
Disabled vs. Not Disabled	0.3384 (0.2201, 0.4566)	-0.0188 (-0.0244, -0.0133)	-0.415 (-0.6548, -0.1753)
Rural vs. Urban	-0.0203 (-0.0673, 0.0266)	0.0058 (0.0036, 0.0079)	0.2099 (0.1160, 0.3037)

Sex



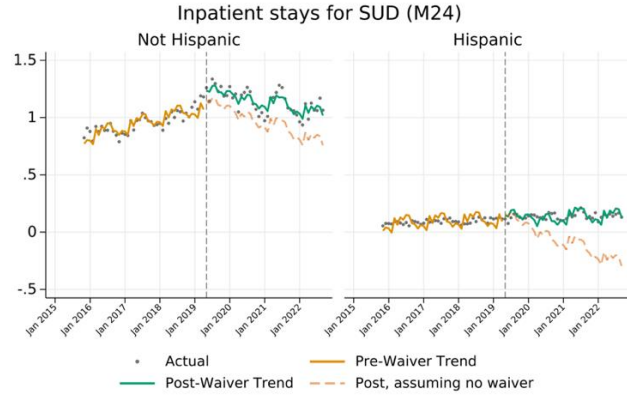
COVID-19 adjustment: Mar. 2020 to end of study period

Age

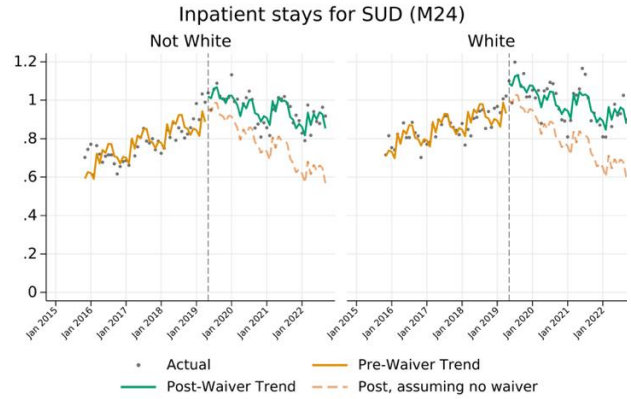


COVID-19 adjustment: Mar. 2020 to end of study period

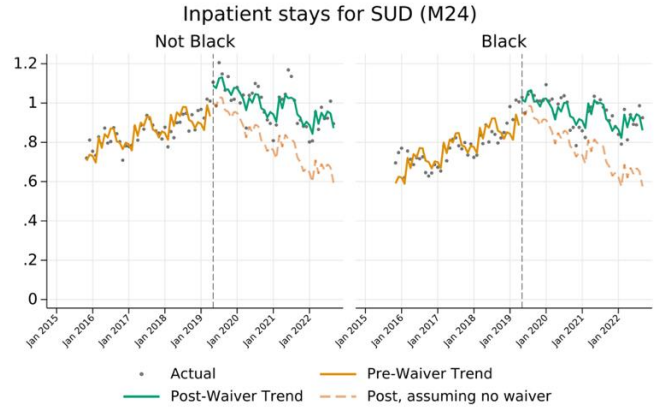
Race/Ethnicity



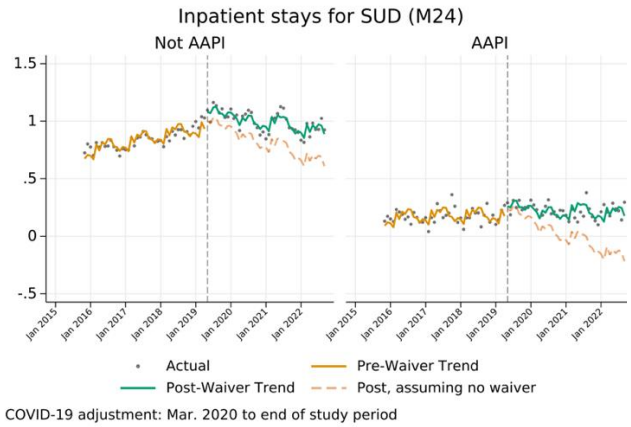
COVID-19 adjustment: Mar. 2020 to end of study period



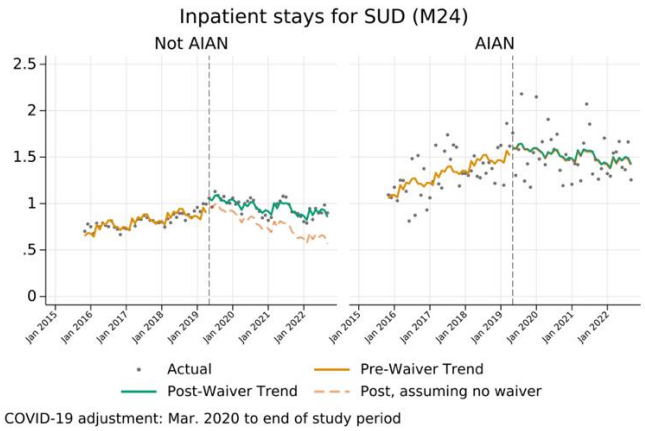
COVID-19 adjustment: Mar. 2020 to end of study period



COVID-19 adjustment: Mar. 2020 to end of study period

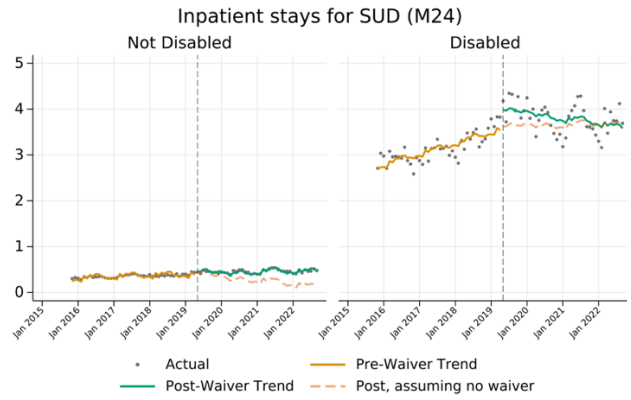


COVID-19 adjustment: Mar. 2020 to end of study period



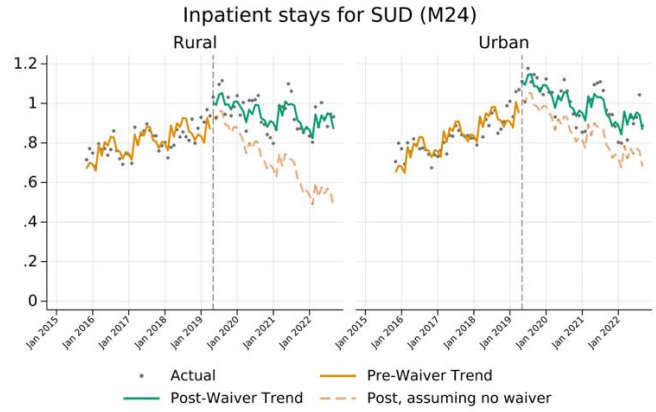
COVID-19 adjustment: Mar. 2020 to end of study period

Disability



COVID-19 adjustment: Mar. 2020 to end of study period

Urban/Rural



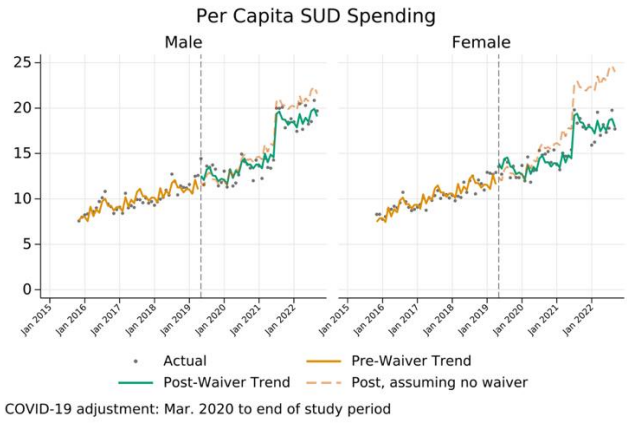
COVID-19 adjustment: Mar. 2020 to end of study period

4.11 Per capita SUD spending (M30)

Table 4.11

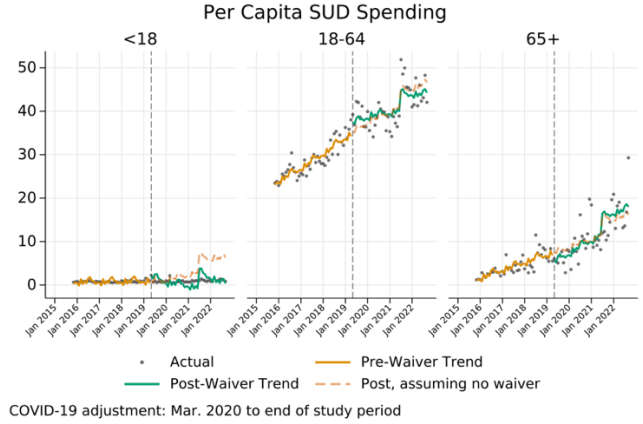
Comparison groups	Difference in the overall effect of the SUD waiver	Difference in the Trend by subpopulations	Avg. Outcome, Sept 2022 (Diff.)
Male vs. Female	-0.7783 (-1.4864, -0.0701)	0.1086 (0.0744, 0.1428)	3.5655 (2.2556, 4.8753)
<18 vs. 18-64	1.1899 (0.3874, 1.9924)	0.0606 (0.0228, 0.0983)	3.6122 (2.0565, 5.1680)
65+ vs. 18-64	-3.0552 (-5.1545, -0.9560)	0.2698 (0.1459, 0.3936)	7.7349 (3.3519, 12.1179)
Hispanic vs. Not Hispanic	0.3603 (-0.3593, 1.0800)	-0.1337 (-0.1632, -0.1041)	-4.986 (-6.5243, -3.4478)
Not White vs. White	0.1841 (-0.4977, 0.8660)	0.071 (0.0374, 0.1047)	3.0258 (1.7213, 4.3302)
Black vs. Not Black	0.0224 (-0.6675, 0.7124)	0.0826 (0.0488, 0.1164)	3.3254 (2.0045, 4.6463)
AAPI vs. Not AAPI	0.3917 (-0.4460, 1.2293)	-0.114 (-0.1575, -0.0705)	-4.1674 (-5.9835, -2.3512)
AIAN vs. Not AIAN	0.0987 (-2.4159, 2.6133)	-0.0358 (-0.1634, 0.0917)	-1.3346 (-6.2617, 3.5925)
Disabled vs. Not Disabled	-3.9894 (-5.4698, -2.5090)	0.7146 (0.6416, 0.7876)	24.5937 (21.6010, 27.5865)
Rural vs. Urban	1.1495 (0.4687, 1.8303)	0.0755 (0.0424, 0.1086)	4.171 (2.8912, 5.4508)

Sex



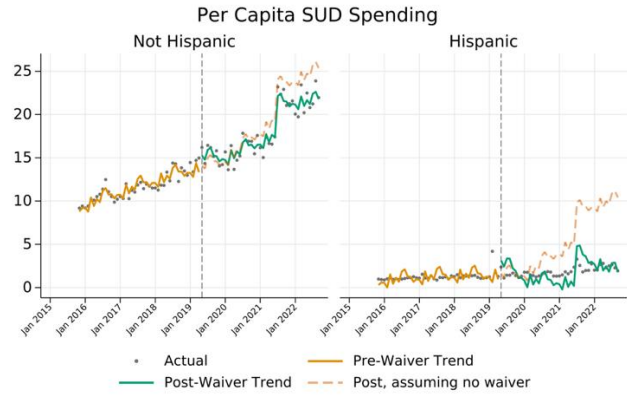
COVID-19 adjustment: Mar. 2020 to end of study period

Age

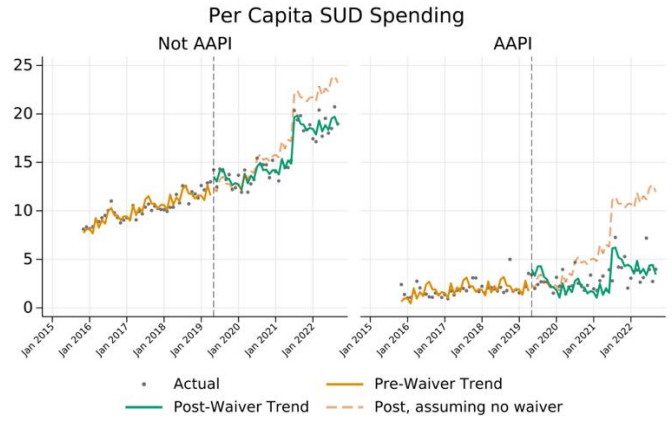


COVID-19 adjustment: Mar. 2020 to end of study period

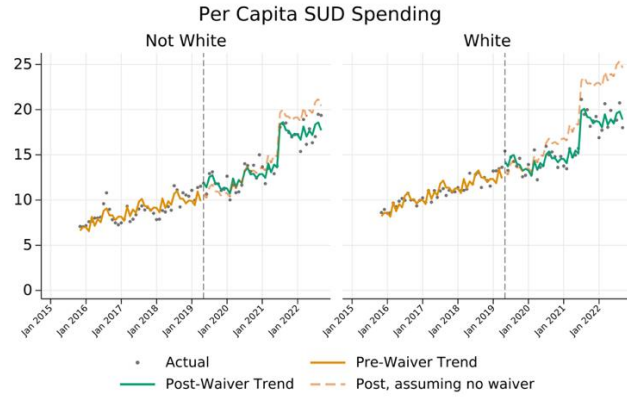
Race/Ethnicity



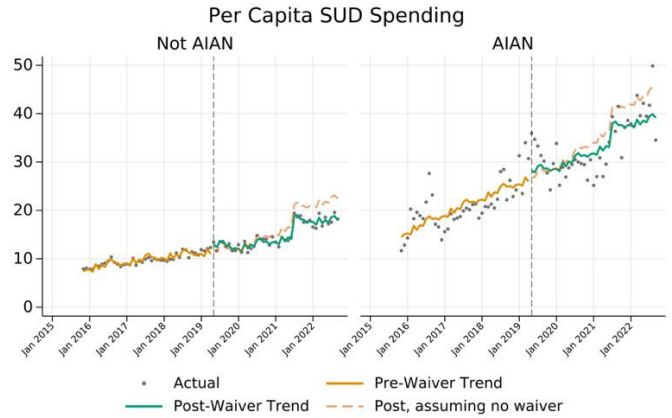
COVID-19 adjustment: Mar. 2020 to end of study period



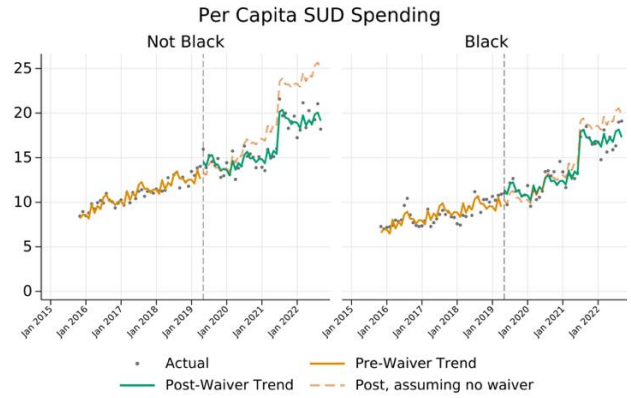
COVID-19 adjustment: Mar. 2020 to end of study period



COVID-19 adjustment: Mar. 2020 to end of study period

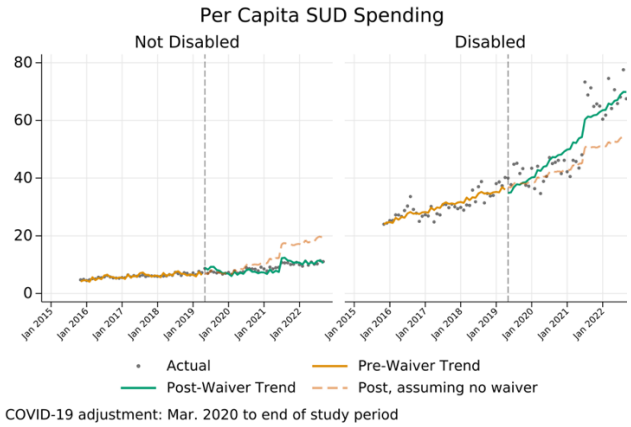


COVID-19 adjustment: Mar. 2020 to end of study period

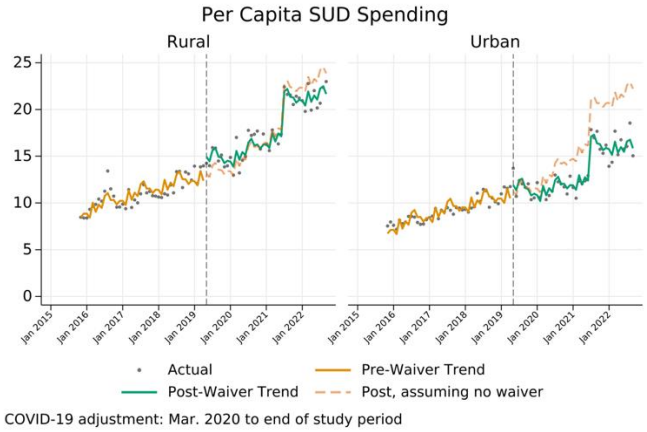


COVID-19 adjustment: Mar. 2020 to end of study period

Disability



Urban/Rural

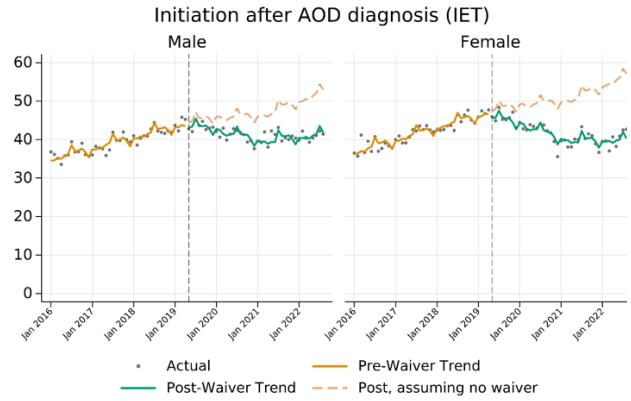


4.12 Initiation in care (IET/M15) (combined SUD only)

Table 4.12

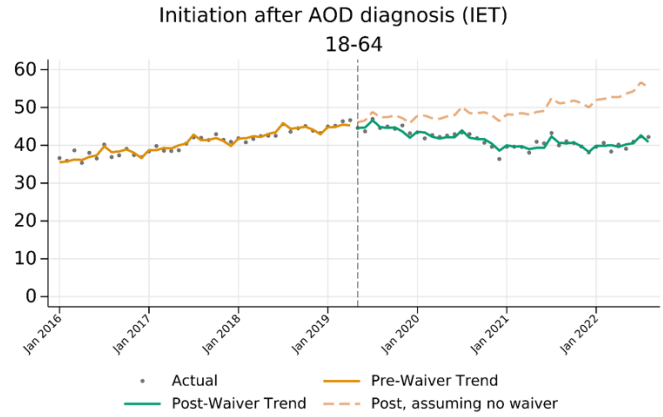
Comparison groups	Difference in the overall effect of the SUD waiver	Difference in the Trend by subpopulations	Avg. Outcome, Sept 2022 (Diff.)
Male vs. Female	0.6079 (-0.8086, 2.0244)	0.1309 (0.0677, 0.1941)	5.7115 (2.8326, 8.5904)
<18 vs. 18-64			
65+ vs. 18-64			
Hispanic vs. Not Hispanic	2.7114 (-2.0502, 7.4730)	0.1138 (-0.0867, 0.3143)	7.1493 (-2.3478, 16.6465)
Not White vs. White	0.0078 (-1.4080, 1.4235)	-0.1469 (-0.2099, -0.0839)	-5.7222 (-8.5975, -2.8469)
Black vs. Not Black	0.5282 (-0.8933, 1.9496)	-0.0215 (-0.0848, 0.0419)	-0.3085 (-3.1994, 2.5824)
AAPI vs. Not AAPI	7.9188 (-2.2305, 18.0680)	0.0296 (-0.3892, 0.4485)	9.0748 (-10.4952, 28.6449)
AIAN vs. Not AIAN	-3.4406 (-6.7302, -0.1511)	-0.7581 (-0.9033, -0.6129)	-33.0051 (-39.5779, -26.4322)
Disabled vs. Not Disabled	0.2875 (-1.1275, 1.7025)	-0.165 (-0.2276, -0.1025)	-6.1494 (-8.9997, -3.2992)
Rural vs. Urban	2.6124 (1.2093, 4.0154)	-0.0402 (-0.1025, 0.0222)	1.0462 (-1.7956, 3.8880)

Sex



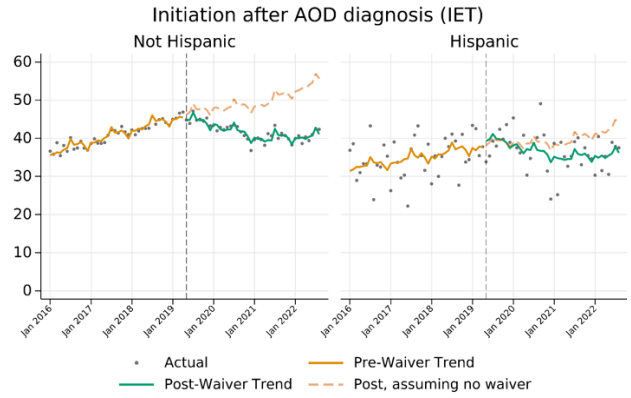
COVID-19 adjustment: Mar. 2020 to end of study period

Age

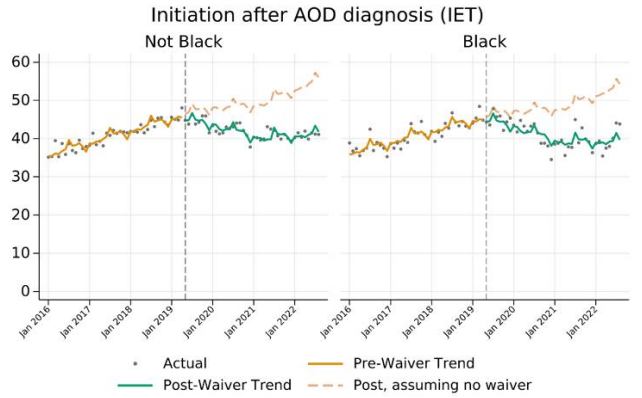


COVID-19 adjustment: Mar. 2020 to end of study period

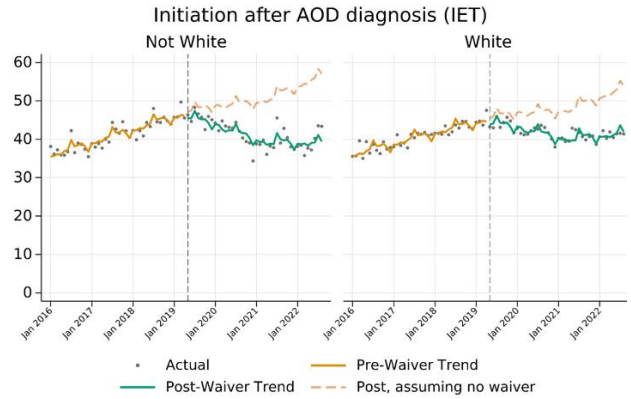
Race/Ethnicity



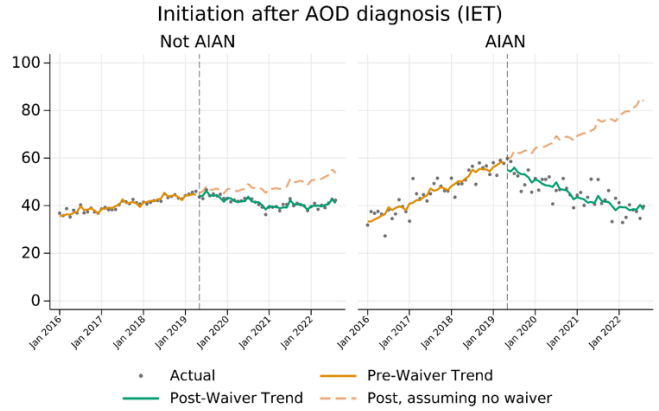
COVID-19 adjustment: Mar. 2020 to end of study period



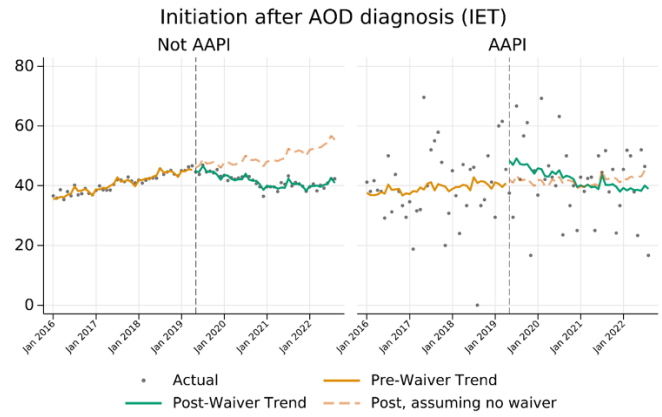
COVID-19 adjustment: Mar. 2020 to end of study period



COVID-19 adjustment: Mar. 2020 to end of study period

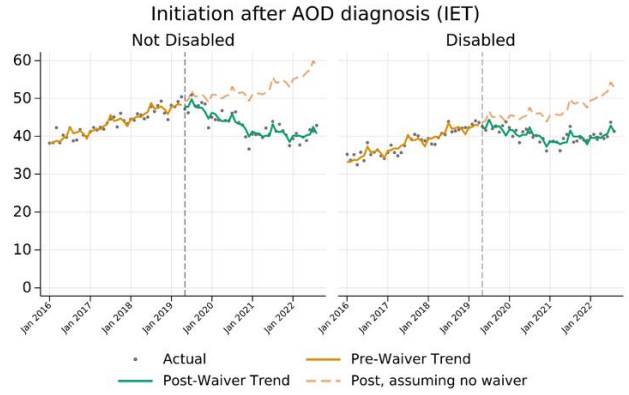


COVID-19 adjustment: Mar. 2020 to end of study period



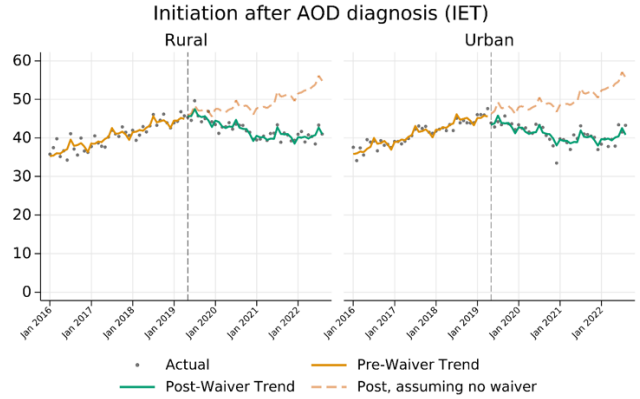
COVID-19 adjustment: Mar. 2020 to end of study period

Disability



COVID-19 adjustment: Mar. 2020 to end of study period

Urban/Rural



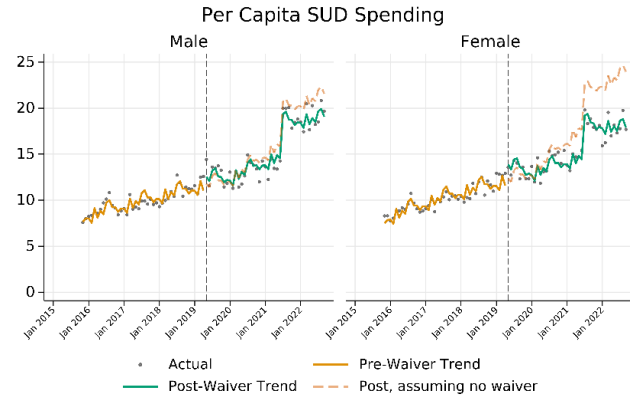
COVID-19 adjustment: Mar. 2020 to end of study period

4.13 Out-of-pocket costs to Medicaid Enrollees (All services)

Table 4.13

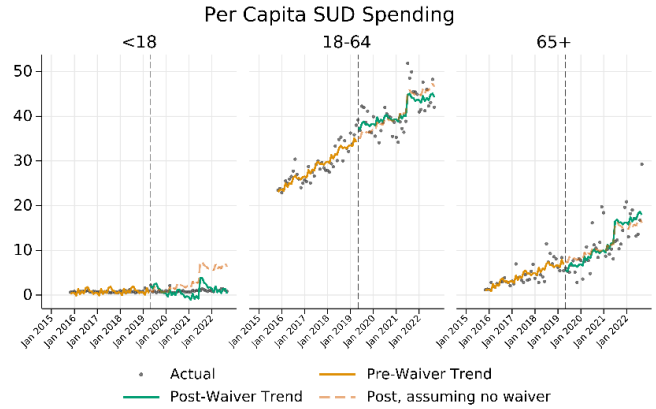
Comparison groups	Difference in the overall effect of the SUD waiver	Difference in the Trend by subpopulations	Avg. Outcome, Sept 2022 (Diff.)
Male vs. Female	-0.7783 (-1.4864, -0.0701)	0.1086 (0.0744, 0.1428)	3.5655 (2.2556, 4.8753)
<18 vs. 18-64	1.1899 (0.3874, 1.9924)	0.0606 (0.0228, 0.0983)	3.6122 (2.0565, 5.1680)
65+ vs. 18-64	-3.0552 (-5.1545, -0.9560)	0.2698 (0.1459, 0.3936)	7.7349 (3.3519, 12.1179)
Hispanic vs. Not Hispanic	0.3603 (-0.3593, 1.0800)	-0.1337 (-0.1632, -0.1041)	-4.986 (-6.5243, -3.4478)
Not White vs. White	0.1841 (-0.4977, 0.8660)	0.071 (0.0374, 0.1047)	3.0258 (1.7213, 4.3302)
Black vs. Not Black	0.0224 (-0.6675, 0.7124)	0.0826 (0.0488, 0.1164)	3.3254 (2.0045, 4.6463)
AAPI vs. Not AAPI	0.3917 (-0.4460, 1.2293)	-0.114 (-0.1575, -0.0705)	-4.1674 (-5.9835, -2.3512)
AIAN vs. Not AIAN	0.0987 (-2.4159, 2.6133)	-0.0358 (-0.1634, 0.0917)	-1.3346 (-6.2617, 3.5925)
Disabled vs. Not Disabled	-3.9894 (-5.4698, -2.5090)	0.7146 (0.6416, 0.7876)	24.5937 (21.6010, 27.5865)
Rural vs. Urban	1.1495 (0.4687, 1.8303)	0.0755 (0.0424, 0.1086)	4.171 (2.8912, 5.4508)

Sex



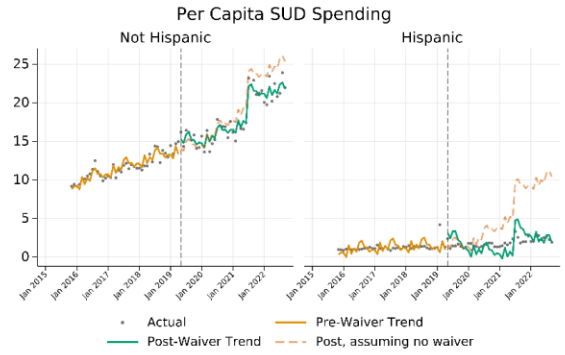
COVID-19 adjustment: Mar. 2020 to end of study period

Age

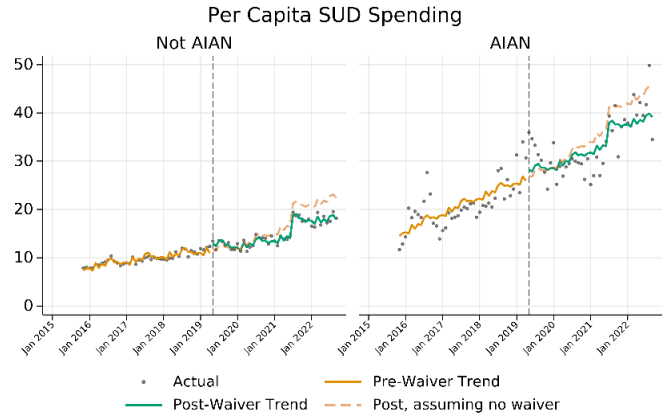


COVID-19 adjustment: Mar. 2020 to end of study period

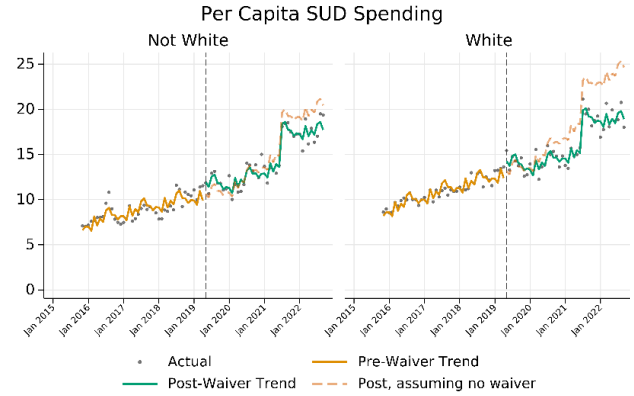
Race/Ethnicity



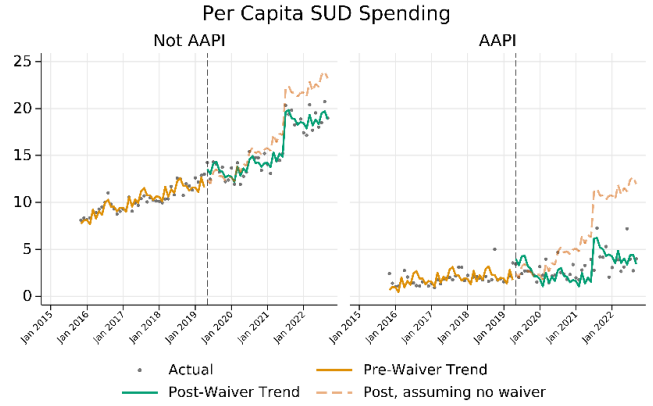
COVID-19 adjustment: Mar. 2020 to end of study period



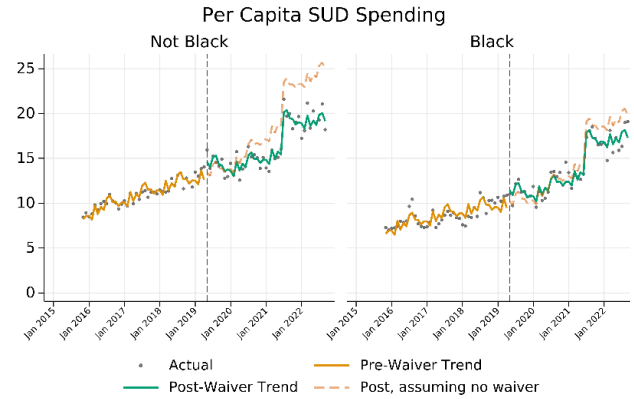
COVID-19 adjustment: Mar. 2020 to end of study period



COVID-19 adjustment: Mar. 2020 to end of study period

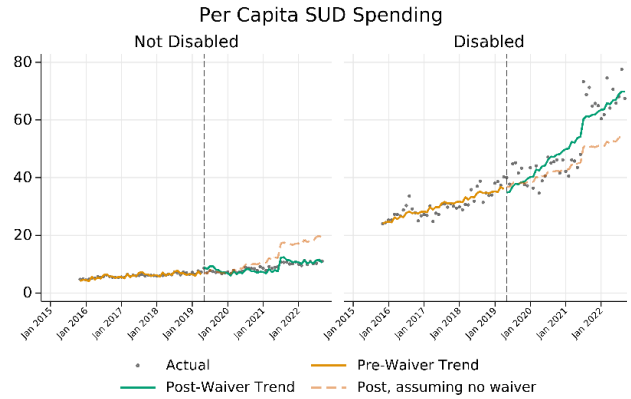


COVID-19 adjustment: Mar. 2020 to end of study period



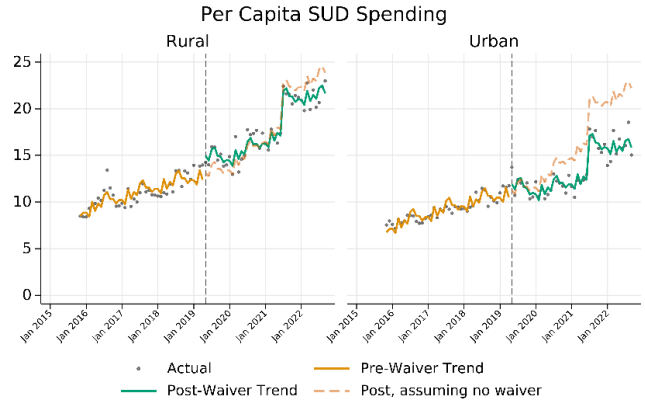
COVID-19 adjustment: Mar. 2020 to end of study period

Disability



COVID-19 adjustment: Mar. 2020 to end of study period

Urban/Rural



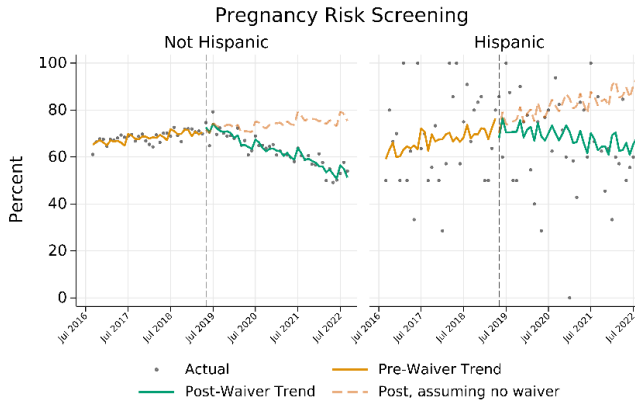
COVID-19 adjustment: Mar. 2020 to end of study period

4.14 Rate of Screening for Pregnancy Risk

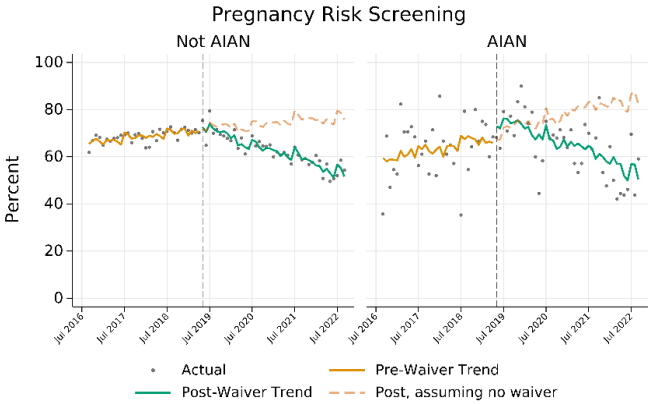
Table 4.14

Comparison groups	Difference in the overall effect of the SUD waiver	Difference in the Trend by subpopulations	Avg. Outcome, Sept 2022 (Diff.)
Hispanic vs. Not Hispanic	-3.0489 (-18.2251, 12.1272)	0.0276 (-0.7273, 0.7825)	-1.9455 (-38.8001, 34.9091)
Not White vs. White	-0.2832 (-5.3040, 4.7376)	-0.1345 (-0.3939, 0.1249)	-5.6637 (-18.1126, 6.7851)
Black vs. Not Black	-3.4763 (-8.4997, 1.5471)	-0.1407 (-0.3992, 0.1178)	-9.1048 (-21.4498, 3.2402)
AAPI vs. Not AAPI	-19.7316 (-52.9921, 13.5289)	-0.7881 (-2.6718, 1.0957)	-51.2546 (-1.4e+02, 34.2805)
AIAN vs. Not AIAN	5.3083 (-4.3104, 14.9269)	-0.3244 (-0.8431, 0.1942)	-7.6695 (-33.3326, 17.9936)
Disabled vs. Not Disabled	1.4109 (-8.8526, 11.6743)	-0.3116 (-0.8606, 0.2374)	-11.0534 (-36.5211, 14.4144)
Rural vs. Urban	-7.2268 (-11.9536, -2.5001)	0.2076 (-0.0336, 0.4488)	1.0788 (-10.4913, 12.6488)

Race/Ethnicity



COVID-19 adjustment: Mar. 2020 to end of study period



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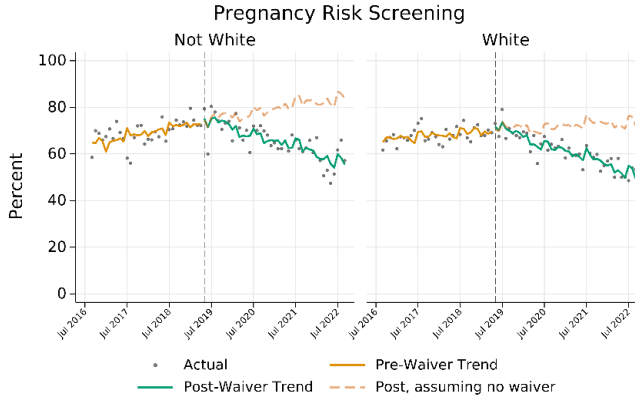

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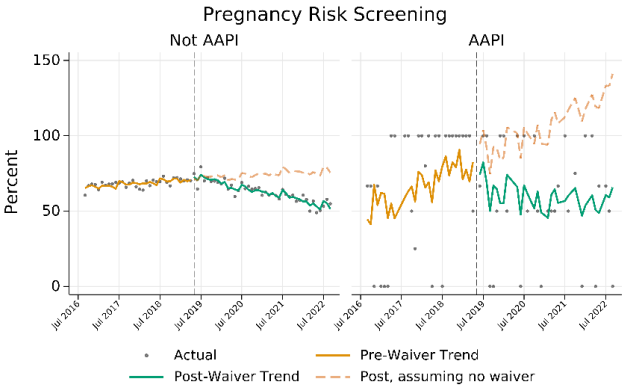

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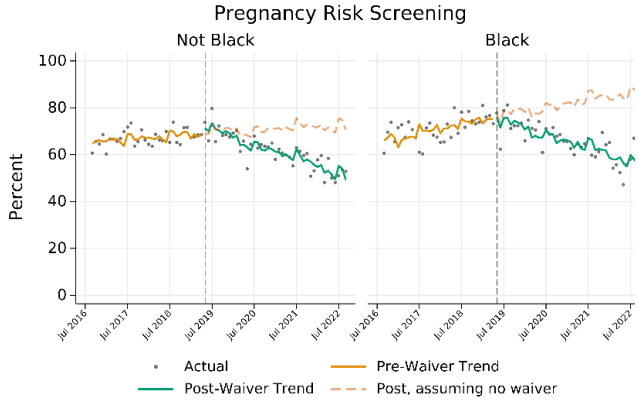
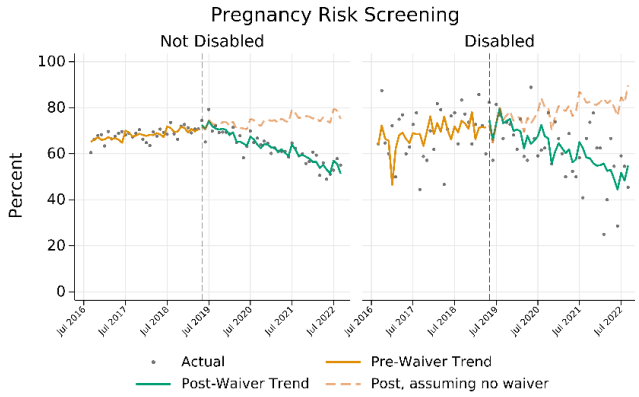
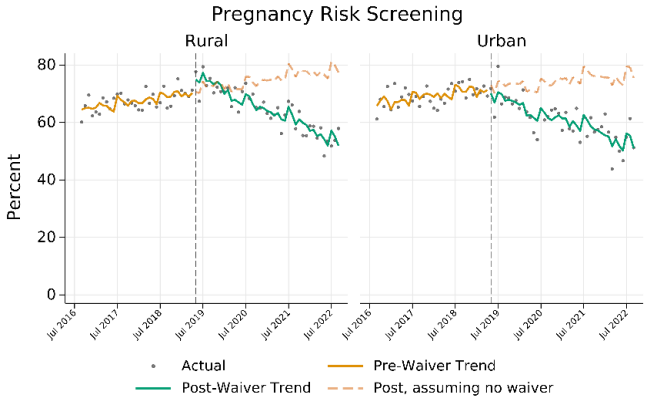


COVID-19 adjustment: Mar. 2020 to end of study period

Disability



Urban/Rural

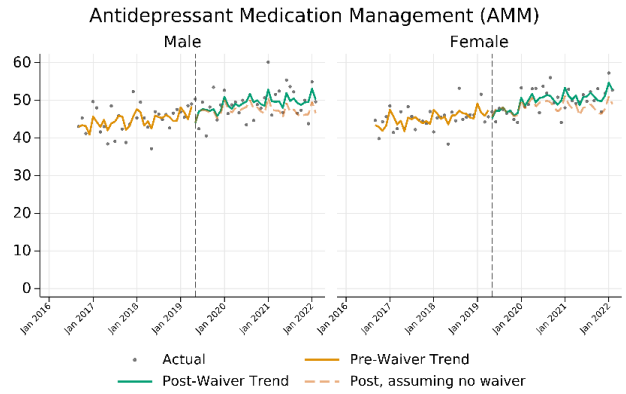


4.15 Antidepressant Medication Management – Acute Phase (AMM)

Table 4.15

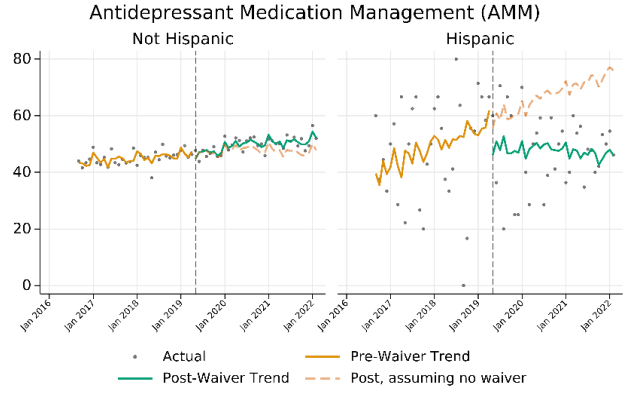
Comparison groups	Difference in the overall effect of the SUD waiver	Difference in the Trend by subpopulations	Avg. Outcome, Sept 2022 (Diff.)
Male vs. Female	0.3654 (-4.4044, 5.1352)	-0.0178 (-0.2710, 0.2355)	-0.2207 (-10.5142, 10.0729)
Hispanic vs. Not Hispanic	-9.2449 (-24.5321, 6.0424)	-0.7588 (-1.5635, 0.0459)	-34.2853 (-67.5660, -1.0046)
Not White vs. White	-1.9777 (-6.6737, 2.7183)	0.1656 (-0.0830, 0.4141)	3.4867 (-6.6278, 13.6012)
Black vs. Not Black	-3.0025 (-7.7182, 1.7133)	0.1743 (-0.0751, 0.4238)	2.7508 (-7.3975, 12.8992)
AAPI vs. Not AAPI	-4.2871 (-36.4642, 27.8900)	-0.1579 (-1.8685, 1.5528)	-9.4971 (-79.2118, 60.2175)
AIAN vs. Not AIAN	10.4454 (-1.1005, 21.9913)	0.1753 (-0.4446, 0.7952)	16.2313 (-9.1628, 41.6253)
Disabled vs. Not Disabled	-2.0461 (-6.5066, 2.4143)	0.1522 (-0.0845, 0.3889)	2.9769 (-6.6208, 12.5746)
Rural vs. Urban	2.2526 (-2.1946, 6.6998)	0.0741 (-0.1605, 0.3086)	4.6965 (-4.8577, 14.2507)

Sex

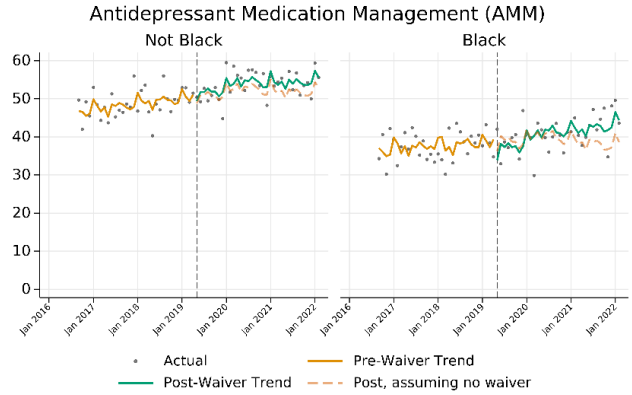


COVID-19 adjustment: Mar. 2020 to end of study period

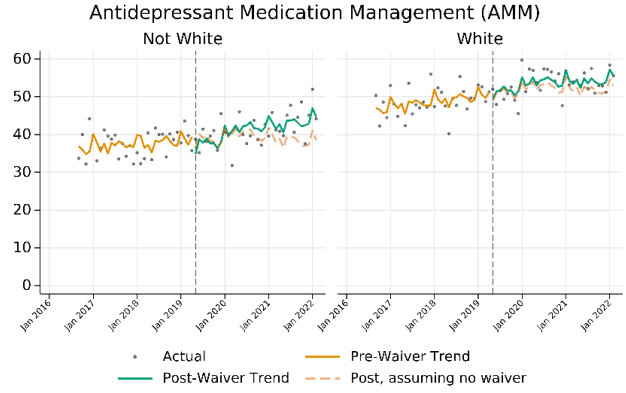
Race/Ethnicity



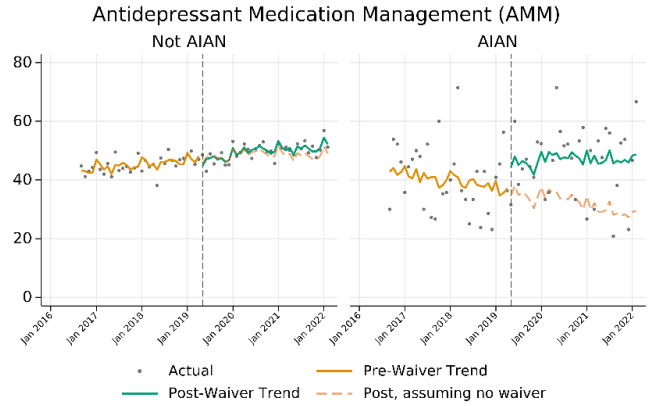
COVID-19 adjustment: Mar. 2020 to end of study period



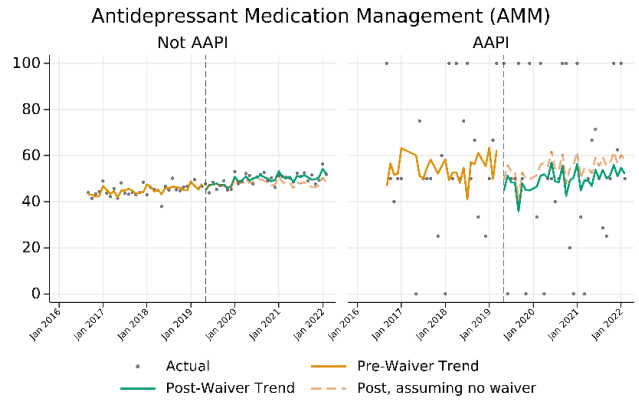
COVID-19 adjustment: Mar. 2020 to end of study period



COVID-19 adjustment: Mar. 2020 to end of study period

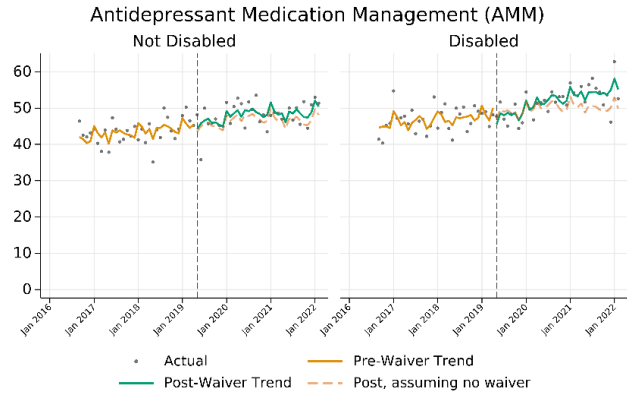


COVID-19 adjustment: Mar. 2020 to end of study period



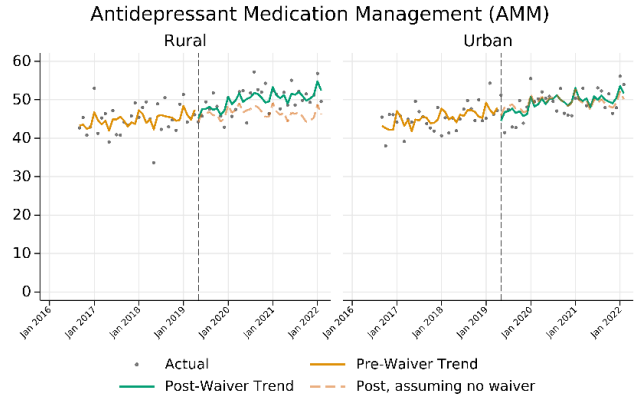
COVID-19 adjustment: Mar. 2020 to end of study period

Disability



COVID-19 adjustment: Mar. 2020 to end of study period

Urban/Rural



COVID-19 adjustment: Mar. 2020 to end of study period

Chapter 5: Analyses by Standard Plan Enrollment

Although this report focuses on the effect of the implementation of SUD components of North Carolina's 1115 demonstration waiver on outcomes related to substance use disorder, as described in the methods section, we do control for the effect that standard care plans may have had on outcomes beginning on July 1, 2021 because those changes would otherwise confound the estimates of the effect of SUD waiver implementation. Those results are not specifically presented in this report in order to retain the focus on SUD implementation. However, several of the figures presented above showed a decided change in the trends and levels of some of the outcome variables around SP launch. This could happen for at least two reasons, which we will refer to as *direct effects* and *indirect effects*. First, SPs may have changed patterns of care for beneficiaries enrolled in those plans, such as through care management, changes in benefit design or practice patterns, different provider networks or other factors. Direct effects should occur only among SP enrollees, which were about 25% of the population with SUD. Indirect effects, in contrast, could have affected all beneficiaries with SUD and could be due externalities in the health system from SP launch, such as changes in provider capacity to treat Medicaid beneficiaries, or confusion about enrollment or benefit design. Because SP launch occurred during the COVID-19 PHE, the indirect effects could also be picking up changes due to a new phase of the PHE that had nothing to do with SPs but occurred disproportionately on or after SP launch.

In this chapter, we compare a selected set of outcomes for beneficiaries who were who were enrolled in SPs compared with beneficiaries never enrolled in SPs during the study period. We focus on the effect of SP launch on changes in the average level of the outcome as well as changes in the trend for the never/ever-SP subpopulations. Never-SP beneficiaries should only be affected by indirect effects, whereas ever-SP beneficiaries could be affected by either direct or indirect effects. We test whether the effects of SP launch were different by these two groups in terms of changes in the level and trend of each outcome. We report these results in brief here. The Interim Managed Care Evaluation Report will focus in much more detail on the effects of SP launch.

Medicaid Beneficiaries with SUD Diagnosis (M3)

We provide detailed results of this metric to aid in interpretation of the other metrics, which are summarized briefly below. From the figure below, we can see that those in SPs had much lower SUD diagnosis rates than those never in SPs by design, since the never-SP subpopulation includes beneficiaries who have severe SUD and are TP-eligible. We can also see that the trends in SUD diagnosis were very different even before SP launch, possibly due to changes from the SUD components of the waiver and other factors. The ITS model predicts that SP launch is associated with a small increase in the rate of SUD diagnoses in the ever SP population such that the diagnosis rate is slightly above what it would have been without SP launch (green line is above the dotted brown line on the right panel below). In the never SP group, however, we see that SP launch is associated with a substantial downturn in the diagnosis rate, which must be due to indirect effects, although we note that this trend is striking. These results are confirmed in the first row of the table below the figure. SP launch is associated with a slightly greater

increase in the SUD diagnosis rate in the ever-SP group than the never-SP group, and a larger increase in the trend, since the diagnosis rate in the never-SP group began trending downward.

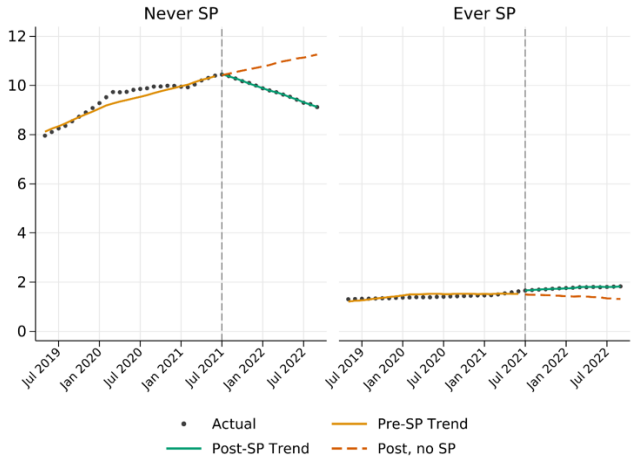


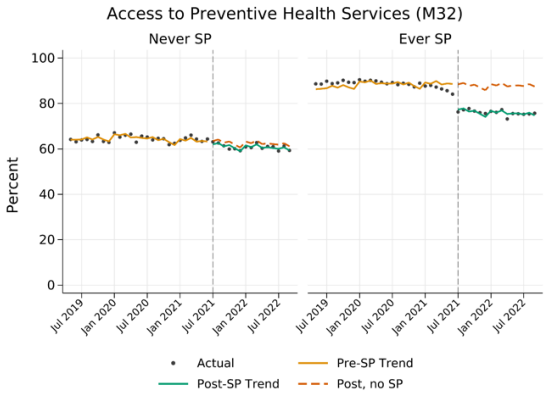
Table 5.1

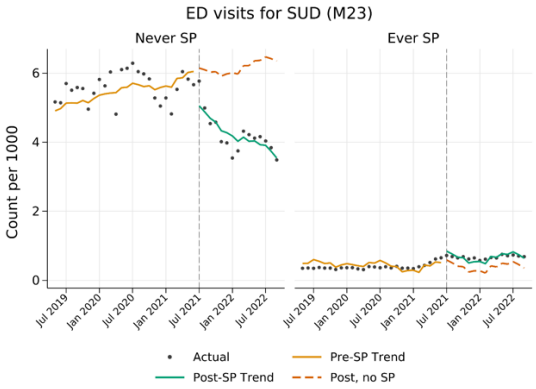
Ever SP vs. Never SP	Intercept Change (Diff.)	Slope Change (Diff.)	Avg. Outcome, Sept 2022 (Diff.)
Percent of beneficiaries with a SUD diagnosis (M3)	0.12* (0.05, 0.19)	0.18* (0.17, 0.19)	2.64* (2.54, 2.74)
Treatment rate (M6)	-13.97* (-14.58, -13.37)	0.0655* (0.0051, 0.1259)	-13.06* (-13.92, -12.19)
Use of outpatient treatments (M8)	-130.77* (-136.46, -125.09)	0.90* (0.37, 1.43)	-118.17* (-126.56, -109.78)
Use of MAT (M12)	-92.61* (-97.71, -87.51)	2.38* (1.92, 2.84)	-59.32* (-67.38, -51.25)
Access to Preventive/Ambulatory Health Services for Adult Medicaid Beneficiaries with SUD (M32)	-9.57* (-10.39, -8.75)	-0.099* (-0.18, -0.01)	-10.95* (-12.05, -9.84)
Percent of Individuals Receiving MOUD who are also Receiving Counseling and Behavioral Therapies to Treat Substance Use Disorders (Q3)	-5.37* (-9.14, -1.60)	0.55* (0.18, 0.91)	2.26* (-3.54, 8.06)
Emergency Department Utilization for SUD per 1000 beneficiaries (M23)	1.35* (1.18, 1.51)	0.12* (0.11, 0.14)	3.09* (2.91, 3.28)
Inpatient Stays for SUD per 1000 beneficiaries (M24)	0.50* (0.41, 0.60)	0.027* (0.017, 0.037)	0.87* (0.77, 0.98)
Per capita SUD spending (M30)	-7.28* (-9.12, -5.44)	0.41* (0.15, 0.67)	-1.48 (-3.98, 1.01)
Initiation of SUD care (IET)	4.69* (2.86, 6.51)	0.14 (-0.04, 0.33)	6.56* (4.47, 8.66)

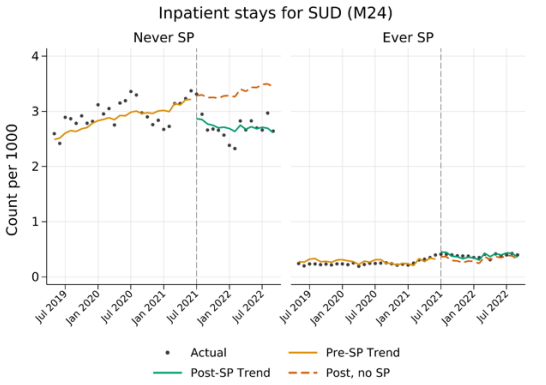
Out-of-pocket costs to Medicaid Enrollees with SUD (All services)	-28.96* (-30.93, -26.99)	-0.38* (-0.57, -0.18)	-34.23* (-36.78, -31.67)

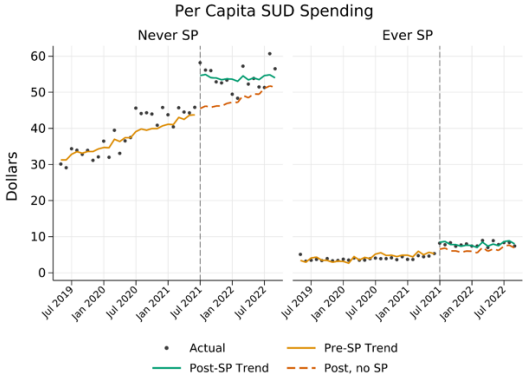
We similar examined several other outcomes to examine whether SP launch had differential effects between ever-SP beneficiaries and never-SP beneficiaries. Below is a summary of these findings and some of the figures are provided below the summary:

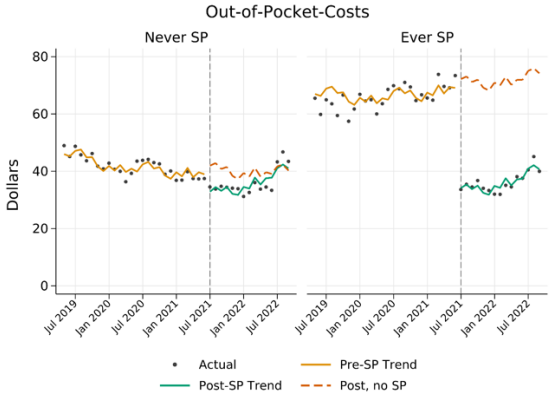
- All metrics examined had a statistically significant difference between the effect of SP launch on Ever-SP vs Never-SP populations.
- Most of the average effects of SP launch were negative, generally indicating the effect of SP implementation was larger and negative in the Ever-SP population than the Never-SP population. The larger effects indicate that the direct effects appear to dominate the indirect effects, at least for these measures, and the negative effect indicate that SP launch moved in the direction of reducing these measures, most of which were measures we would want to see increased (exceptions are ED- and IP-use per 1000 and out-of-pocket costs).
- The percent of beneficiaries with a SUD diagnosis, ED use for SUD per 1000, IP stays per 1000, and initiation of SUD care all had positive effects of SP launch, indicating that these measures increased more for SP enrollees than Never-SP enrollees, or moved in opposite directions.
- The trends were generally positive and significant, indicating that the rate of increase is larger for the SP than the never-SP population. The two exceptions were for trends in access to preventative care services and out-of-pocket costs.
- The average total effect of SP launch in September 2022 (combining the average change in the level of the metric with the change in the trend) was positive for five metrics, indicating that the SP launch had greater effects in the Ever-SP population than the Never-SP population on the Percent of beneficiaries with a SUD diagnosis; percent of beneficiaries on MOUD who received psychosocial services; ED visits per 1000; IP stays per 1000; and initiation of care for SUD. Five metrics had a negative effect, indicating that the effect was lower for SP enrollees than for the Never-SP population: the treatment rate, the outpatient treatment rate, the use of MAT; and out-of-pocket costs for beneficiaries with a SUD diagnosis. There was no difference in the effect of SP launch on per capita SUD spending between the Ever- SP and never-SP populations.

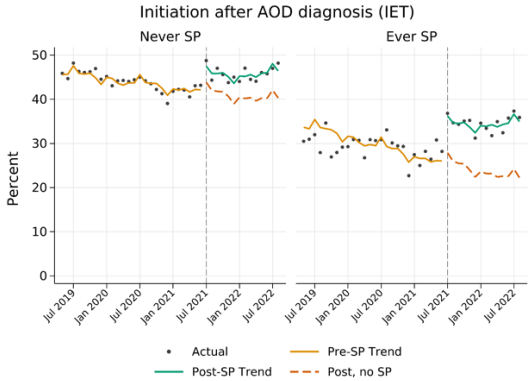

Access to Preventive Health Services (M32)
Never SP
Ever SP
Percent
0
20
40
60
80
100
Jul 2019
Jan 2020
Jul 2020
Jan 2021
Jul 2021
Jan 2022
Jul 2022
Actual
Pre-SP Trend
Post-SP Trend
Post, no SP


ED visits for SUD (M23)
Never SP
Ever SP
Count per 1000
0
2
4
6
Jul 2019
Jan 2020
Jul 2020
Jan 2021
Jul 2021
Jan 2022
Jul 2022
Actual
Pre-SP Trend
Post-SP Trend
Post, no SP


Inpatient stays for SUD (M24)
Never SP
Ever SP
Count per 1000
0
1
2
3
4
Jul 2019
Jan 2020
Jul 2020
Jan 2021
Jul 2021
Jan 2022
Jul 2022
Actual
Pre-SP Trend
Post-SP Trend
Post, no SP


Per Capita SUD Spending
Never SP
Ever SP
Dollars
0
10
20
30
40
50
60
Jul 2019
Jan 2020
Jul 2020
Jan 2021
Jul 2021
Jan 2022
Jul 2022
Actual
Pre-SP Trend
Post-SP Trend
Post, no SP


Out-of-Pocket-Costs
Never SP
Ever SP
Dollars
0
20
40
60
80
Jul 2019
Jan 2020
Jul 2020
Jan 2021
Jul 2021
Jan 2022
Jul 2022
Actual
Pre-SP Trend
Post-SP Trend
Post, no SP


Initiation after AOD diagnosis (IET)
Never SP
Ever SP
Percent
0
10
20
30
40
50
Jul 2019
Jan 2020
Jul 2020
Jan 2021
Jul 2021
Jan 2022
Jul 2022
Actual
Pre-SP Trend
Post-SP Trend
Post, no SP

Chapter 6: Conclusions, Policy Implications, and Lessons Learned

The results from this report are consistent with the tremendous losses and pivots that North Carolina, like virtually all other states, had to make during the COVID-19 PHE. The SUD components of the waiver were only beginning to gain traction as the PHE began, having been implemented only 10 months before its start. Most NC DHHS staff and providers worked under extraordinary conditions, that lasted longer than anyone imagined. The findings in this report do not in any way detract from the dedication of the thousands of dedicated public health professionals that accomplished daily miracles during this time.

The SUD waiver is the most challenging waiver component to evaluate because it is not a discrete event, like managed care launch, but comprised of multitudes of policy changes and approvals, many of which are still in progress. Many of the clinical coverage policies in behavioral health had some revisions during SUD implementation, but many other policy changes are still in progress. For example, although the state had budget authority to pay for SUD services in an IMD and as of July 1, 2021, SPs could use IMDs as covered services, nothing is listed in the Revision Information for the Inpatient Behavioral Health clinical coverage policy. Other SUD policy changes already implemented expand the types of providers who can bill for services and line many SUD services up with ASAM's Levels of Care. Tailored Plan launch has been postponed several times compromising the momentum of SUD implementation and has not yet been implemented.

There are some bright spots in this report: the number of people using evidence-based medication treatments for opioid use disorder is increasing, the continuity of pharmaceutical care for OUD is increasing, more providers are available to provide SUD services to beneficiaries, fewer beneficiaries without cancer are receiving opioid prescriptions from multiple providers, and beneficiaries with SUD diagnoses are accessing more ambulatory and preventative care. In addition, the stratified analyses reported in Chapter 4 show an improvement in health equity for a number of important SUD metrics.

In no uncertain terms, however, we have identified serious lack of access to many essential services for people with substance use disorders, even after the implementation of many of the components of the SUD waiver. Most of the SUD metrics required by CMS for SUD 1115 waivers declined rather than improved during the waiver implementation. The percent of beneficiaries with SUD receiving any type of care has stagnated at 35-40% of the population identified for treatment. This statistic alone indicates that more than 60% of people in the target population are not receiving any type of service in a given month. The percent of beneficiaries with a diagnosed SUD condition receiving outpatient SUD services has dropped to

levels below those experienced during the initial months of the PHE when the state was under stay-at-home orders. These levels indicate that in a typical month almost 75% of the eligible population is not receiving a single outpatient service. Finally, over 40% of non-elderly adults with opioid use disorder are not accessing evidence-based medication treatments for opioid use disorder, an essential tool the provider community has to fight this deadly condition.

While the Interim report uses much more sophisticated tools and a broader array of metrics than the Mid-point Assessment (MPA), which was conducted over a year ago, it is worthwhile to compare the findings from these two reports, as we did in the prior tables. It should be noted that the standards use in the two reports give different assessments, even for the same metrics. The approach required by CMS for the MPA is a simple comparison of two time points and doesn't account for any other trends. The ITS approach we used compares trends during the entire baseline (pre-SUD implementation) period to trends after implementation, controlling for many observable characteristics, such as burden of chronic disease in beneficiaries, demographic factors, seasonal trends, the COVID PHE, and other characteristics. Even if a metric is improving, if its improvement is at a slower rate than before the beginning of the SUD waiver, we note this as a deficiency, since the waiver was designed to escalate improvements in care for people with SUD.

As can be seen below (Table 5), few metrics demonstrate progress by this standard. Only five metrics that were improving at the time of the MPA continued to improve at this writing. Those were the percent of beneficiaries with SUD diagnoses, reductions in the concurrent use of opioids and benzodiazepines, spending on SUD services, per beneficiary spending on services, and access to ambulatory and preventative health services. The State was successfully able to turn around the measure of continuity of MOUD, which had decreased by the MPA, but now has increased.

Table 5. Summary of SUD Metric Results by Milestone

Measure (Metric abbreviation)	State's demonstration target	Directionality at mid-point (Oct 2021)	Adjusted waiver effects at Sept 2022	Progress * (Yes/No)
Assessment of Need and Qualification for SUD Treatment Services				
Medicaid Beneficiaries with SUD Diagnosis (M3)	Increase then decrease	Increase	Increase	Yes
Milestone 1: Access to critical levels of care for SUD				
Any SUD treatment (M6)	Increase	NI	Decrease	No

Early Intervention for SUD (M7)	Increase	Decrease	--	--
Outpatient Services for SUD (M8)	Increase	Increase	Decrease	No
Intensive Outpatient and Partial Hospitalization Services (M9)	Increase	Decrease	Decrease	No
Residential and Inpatient Services (M10)	Increase	Decrease	Decrease	No
Withdrawal Management (M11)	Increase	Increase	Decrease	No
Medication-Assisted Treatment (M12)	Increase	Increase	Decrease	No
Continuity of Pharmacotherapy for OUD (M22)	Increase	Decrease	Increase[+]	Yes[+]
Milestone 2: Use of Evidence-Based SUD-Specific Patient Placement Criteria				
Medicaid Beneficiaries Treated in an IMD for SUD (M5)	Increase	Increase	Decrease	No
Average Length of Stay in IMDs (M36)	Decrease	Increase	No change	Yes[1]
Milestone 4: Sufficient Provider Capacity at Critical Levels of Care, including for Medication-Assisted Treatment for Opioid Use Disorder				
SUD Provider availability (M13)	Increase	NI	Increase	Yes
SUD Provider availability for MAT (M14)	Increase	NI	Increase	Yes
Milestone 5: Implementation of Comprehensive Strategies to Address Prescription Drug Abuse and Opioid Use Disorders				
Use of Opioids at High Dosage in Persons without Cancer (M18)	Decrease	Decrease	Increase	No
Use of Opioids from Multiple Providers in Persons Without Cancer (M19)	Decrease	NI	Decrease	Yes
Use of Opioids at High Dosage and from Multiple Providers in Persons Without Cancer (M20)	Decrease	NI	Decrease	Yes
Concurrent Use of Opioids and Benzodiazepines (M21/COB)	Decrease	Decrease	--	--
Emergency Department Utilization for SUD per 1000 beneficiaries (M23)	Decrease	Increase	Increase	No
Milestone 6: Improved Care Coordination and Transitions Between Levels of Care				
Initiation and Engagement of Alcohol Abuse or Dependence Treatment (IET/M15)	Increase	--	Initiation: Decrease Engagement: Decrease	No No
Initiation and Engagement of OUD Treatment (IET/M15)	Increase	--	Initiation: Decrease Engagement: Decrease	No No

Initiation and Engagement of other Drug Abuse or Dependence Treatment (IET/M15)	Increase	--	Initiation: Decrease Engagement: Decrease	No No
Initiation and Engagement of any Drug Abuse or Dependence Treatment (IET/M15)	Increase	Initiation: Increase Engagement: Decrease	Initiation: Decrease Engagement: Decrease	No No
Follow-Up After Emergency Department Visit for Alcohol and Other Drug Abuse or Dependence (M17.1)	Increase	7-day decreased 30-day increased	7-day decreased 30-day decreased	No No
Follow-Up After Emergency Department Visit for Mental Illness (M17.2)	Increase	7-day increased 30-day increased	7-day decreased 30-day increased	No Yes
Readmissions Among Beneficiaries with SUD (M25)	Decrease	Decrease	No change	No
Other SUD Metrics				
Inpatient Stays for SUD per 1000 beneficiaries (M24)	Decrease	NI	No change	No
Total spending on SUD services (M28)	Increase	NI	Increase	Yes
Total spending on SUD services within IMDs (M29)	Decrease	NI	No change	No
Per capita SUD spending (M30)	Increase	NI	Increase	Yes
Per capita SUD spending within IMDs (M31)	Decrease	NI	Increase	No
Access to Preventive/Ambulatory Health Services for Adult Medicaid Beneficiaries with SUD (M32)	Increase	NI	Increase	Yes
State-specified Metrics (Health IT)				
Connecting Primary Care to SUD Service Offerings (Q2)	Increase	NI	Decrease	No
Percent of Individuals Receiving MOUD who are also Receiving Counseling and Behavioral Therapies to Treat Substance Use Disorders (Q3)	Increase	NI	Decrease	No

*Notes: * Progress here indicates that by the end of the study period (typically September 2022), the level of the metric was at least as good (high or low) as we estimate it would have been without the SUD waiver (but still with the COVID PHE and SP implementation).*
-- = counts were too small to reliably project trends
NI = Not included in the mid-point assessment

+ = metric is annual only. The small number of data points make it difficult to tell whether the change was due to the waiver implementation.

1 = While the average LOS in IMDs did not change during the study period, it was already substantially below the CMS goal of <30 days, so we believe progress was already made in this metric.

We offer some new suggestions and reinforce others made previously in the MPA.

1. ***Allow competition for Tailored Plans to facilitate TP launch***: The delayed implementation of the Tailored Plans has been a big setback of the SUD waiver implementation. By re-integrating medical and surgical care back into a single PHP (capitated health plan), the state has the opportunity to improve behavioral health and medical care for a population that has considerable unmet needs. However, the design of Tailored Plans contrasts dramatically with Standard Plans in that TPs are set up to be regional monopolies initially, which could partially explain why these plans haven't launched to date. Allowing managed competition across health plans for TP eligible beneficiaries from the start could facilitate TP launch and potentially improve outcomes for beneficiaries for both medical and behavioral health.
2. **Use the metrics to mount an adaptive response***:* We reiterate the importance of careful monitoring of these metrics and assigning accountability for improvements. Many of the metrics demonstrated here are in one of the dashboards that the Sheps Center provides to DHHS and are updated monthly[25]. Identifying the metrics most in need of improvement, in the places most in need of improvement, can help prioritize spending and service expansions.
3. ***Ensure that the provider community is aware of the IMD waiver***: The IMD waiver is not widely recognized in the provider community (results from the MPA) and has not been widely implemented. SUD services in an IMD can offer an institutional option that may not be appropriate for many people with SUD, but can provide an additional care option for those in inpatient settings. This option does not seem to be widely described as a new service offering to providers through the Division of Mental Health's website and we do not find much change in the use of IMD services for SUD.
4. ***Identify opportunities to engage beneficiaries in treatment at critical moments***: Follow up after hospital and emergency department use remain low, despite tremendous advances in infrastructure through EHRs and other platforms. Initiation in treatment after a diagnosis and engagement in treatment after initiation are on the decline for all four types of substance use disorders examined

[25] We note that the SUD dashboard has been available for many years but the newer behavioral health dashboard which contains many new measures reflecting mental health and substance use care, has only recently been made available with regular updates to NC DHHS.

here. Incentivizing providers to achieve improvements in care at these critical moments could help move the needle on many of these metrics.

Appendix 1: COVID-19 Period Estimation

Introduction

Detection of the effects of policy changes over the last several years is complicated by the onset of the COVID-19 pandemic, which caused a lockdown beginning in March 2020 in North Carolina and most other states. COVID-19 affected schooling, employment, and health service use in a multitude of ways that are still being assessed. The period during which COVID-19 can be expected to affect the health service use outcomes measured in this report is not immediately clear, since different types of health care faced distinct shocks and demands (for example, variation in ease of switching to telehealth as a primary service delivery mode). Ideally, the impact of the SUD 1115 Waiver could be isolated from the effects of COVID-19. In this brief, we present the novel method we developed and implemented to detect the period during which COVID-19 could be reasonably expected to affect service use patterns, confounding estimates of SUD 1115 Waiver effects. In addition, Standard Plans were implemented on July 1, 2021, capitating care for most Medicaid beneficiaries through separate managed care plans, which may have further affected patterns of care. The key idea we used to identify these separate effects was to measure distinct types of service use among a population exposed to COVID-19 but not exposed to either the SUD components of the 1115 Waiver nor to Standard Plans: NC Medicaid beneficiaries never diagnosed with SUD and not enrolled in Standard Plans. We recognize that this population may not be entirely similar to those beneficiaries who were affected by the SUD components of the waiver, at least definitionally, they lack SUD diagnoses. However, we used broad categories of care in order to create typical packages of services that could be used by all beneficiaries.

Methods

Analytic sample: We limited the first stage of the analysis to adult NC Medicaid beneficiaries never diagnosed with SUD and never enrolled in Standard Plans, which were implemented on July 1,2021. This transition is a major component of the overall NC Medicaid 1115 Waiver governing the transition to managed care and it affected the claim submission process, the data available to the Sheps Center, and the patterns of service use among Medicaid beneficiaries enrolled in the new plans. To isolate service use changes due to COVID-19 from changes due to the SPs, we restricted the sample to those never enrolled in SPs. For pharmacy utilization, we excluded Dual eligible Medicare/Medicaid beneficiaries.

Outcomes: We defined five types of general care utilization relevant to the monitoring metrics: inpatient utilization, evaluation and monitoring (E&M) outpatient visits, prescription drug fills, emergency department visits, and dental appointments. For each of these, we defined the numerator as "any care in this setting during the month" and the denominator as defined in the *analytic sample* section.

Model specification: To forecast expected utilization in the absence of COVID-19, we specified a model with a linear, quadratic, or cubic time trend (determined via the Akaike Information Criterion measure of model fit) and month fixed effects to account for seasonality. We estimated the model using Newey-West standard errors to account for autocorrelation. We forecasted means and 95% confidence intervals beginning in March 2020 through September 2022 and then compared the observed utilization with these intervals. When actual utilization fell outside of predicted utilization, this was defined as the preliminary COVID-19 period (as can be seen below, this never occurred before the COVID-19 PHE). When actual utilization remained within the predicted utilization bounds for 3 or more months within a 6-month period, we defined a date at which utilization "returned to normal" (RTN), or systematically returned to the forecasted utilization. We then incorporate the RTN date in the interrupted time series (ITS) models used in this report, adjusting for a COVID-19-specific intercept and slope in the period between March 2020 and the month before the return to normal.

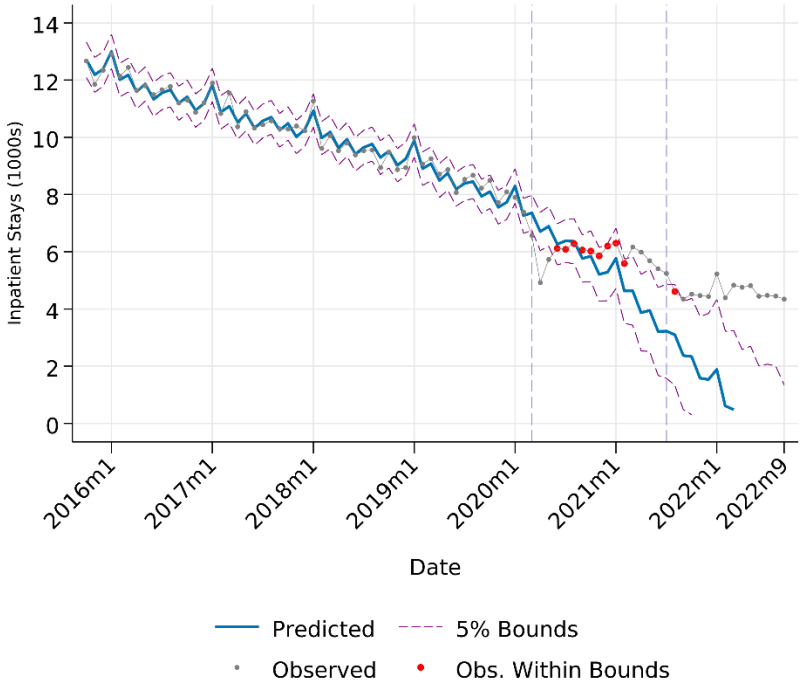
Results

The table provides the estimated COVID-19 period for each utilization type, while the figures show forecast and actual utilization for each of the 5 utilization types and the 2 measures (count vs. rate). Metrics that aggregate multiple service types together (such as spending metrics and overall behavioral health provider participation) use the most common end of COVID-19 period, which was September 2022 (the end of the study period). Unlike other metrics, prescriptions did not show an immediate COVID-19 effect but diverged slowly from pre-COVID trends starting in March 2020, so the COVID-19 time period for pharmacy metrics was defined as March 2020 to September 2022.

Service Type	Measure	End of COVID-19 Period	Monitoring Metrics Using This Period
Inpatient	Count	May 2020	M29
	Rate	N/A	M5, M10, M24, M25, M31, M36
Outpatient (E&M)	Count	May 2020	N/A
	Rate	N/A	M3, M6, M7, M8, M9, M11, M12, M15, M17(1), M17(2), M32, Q2, Q3, FUH, non-MOUD, OOP, BH Care
Emergency department	Count	May 2020	N/A
	Rate	N/A	M23, Avoidable ED
Prescriptions	Count	N/A	N/A
	Rate	N/A	AMM
Dental visits	Count	May 2020	N/A
	Rate	June 2020	ADV
Multiple	N/A	N/A	M28, M30, BH provider participation

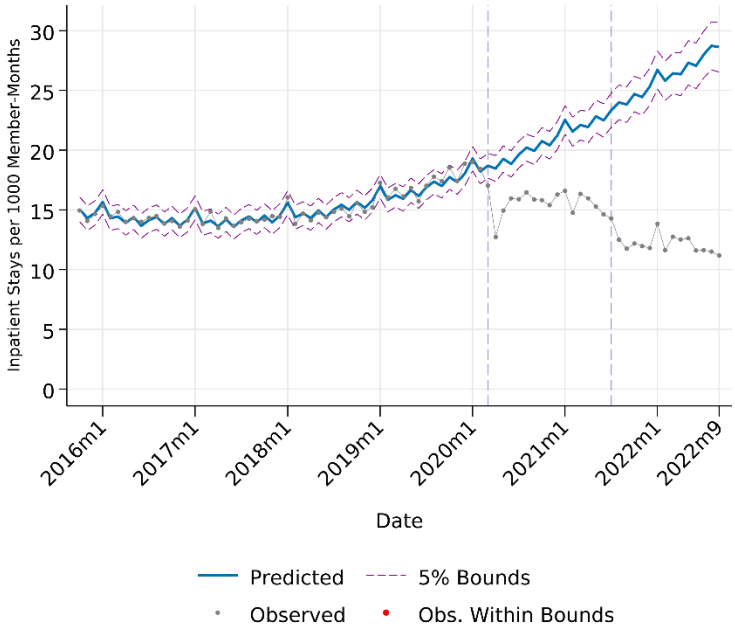
The following figures show utilization trends for each of the different service types and the forecasted utilization in the absence of COVID-19.

Appendix Figure 1. Count of Inpatient Visits.



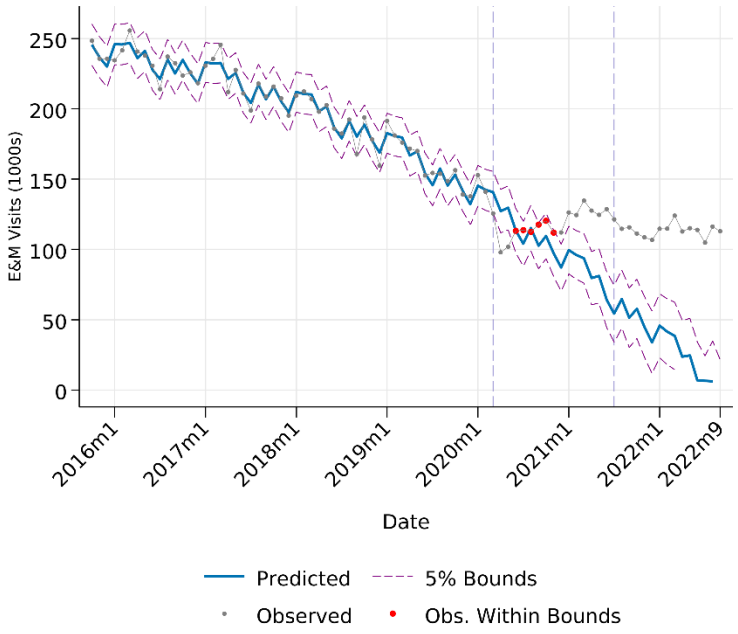
Population: fully-eligible beneficiaries without SUD who remained in Medicaid Direct.
The vertical dotted lines shown the onset of the COVID-19 pandemic in NC (March 2020) and the Standard Plan launch (July 2021), respectively.
Predictions less than 0 are omitted.

Appendix Figure 2. Rate of Inpatient Visits



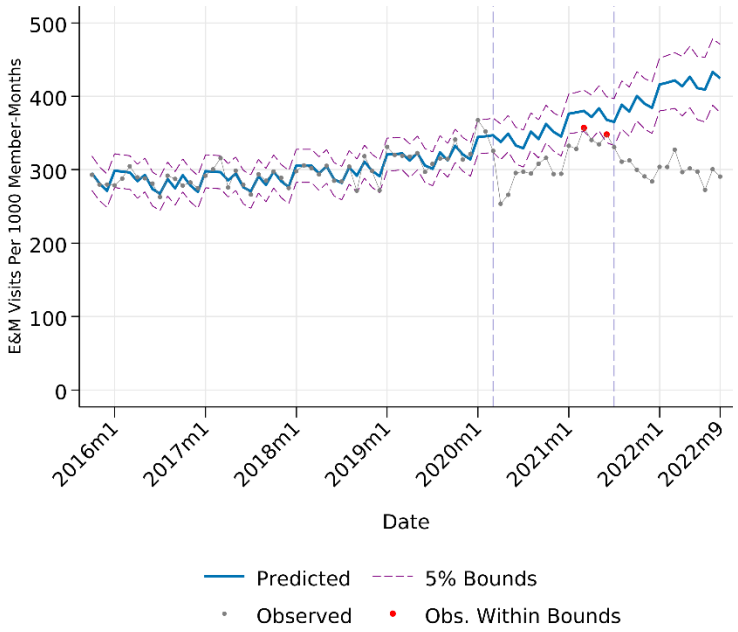
Population: fully-eligible beneficiaries without SUD who remained in Medicaid Direct.
The vertical dotted lines shown the onset of the COVID-19 pandemic in NC (March 2020) and the Standard Plan launch (July 2021), respectively.
Predictions less than 0 are omitted.

Appendix Figure 3. Count of Evaluation and Management Visits.



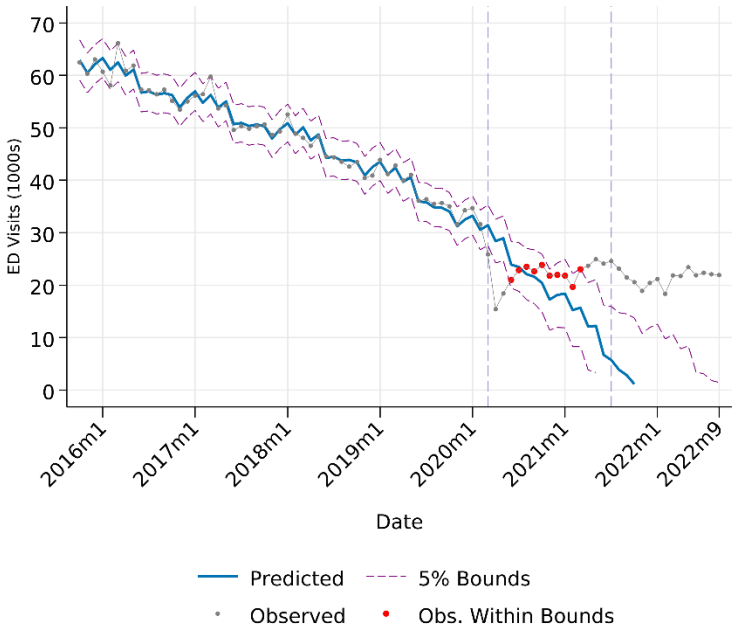
Population: fully-eligible beneficiaries without SUD who remained in Medicaid Direct.
The vertical dotted lines shown the onset of the COVID-19 pandemic in NC (March 2020) and the Standard Plan launch (July 2021), respectively.
Predictions less than 0 are omitted.

Appendix Figure 4. Rate of Evaluation and Management Visits



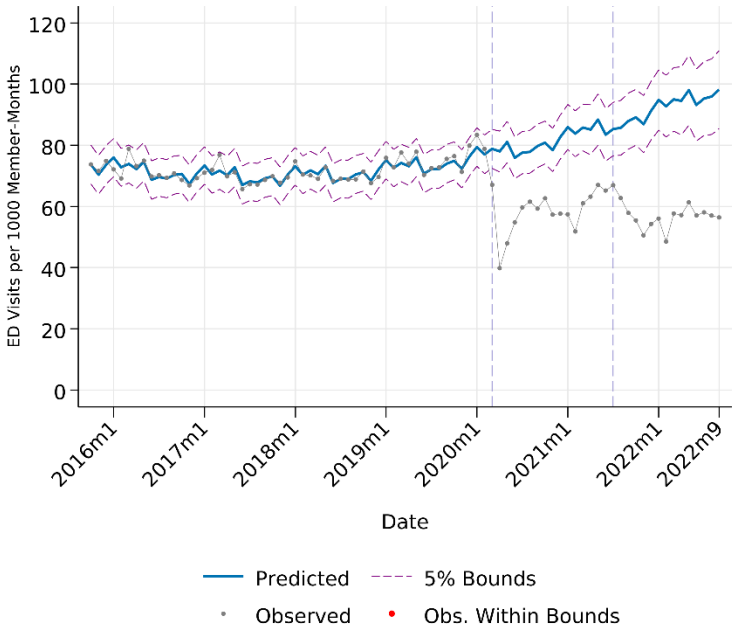
Population: fully-eligible beneficiaries without SUD who remained in Medicaid Direct.
The vertical dotted lines shown the onset of the COVID-19 pandemic in NC (March 2020) and the Standard Plan launch (July 2021), respectively.
Predictions less than 0 are omitted.

Appendix Figure 5. Count of ED Visits.



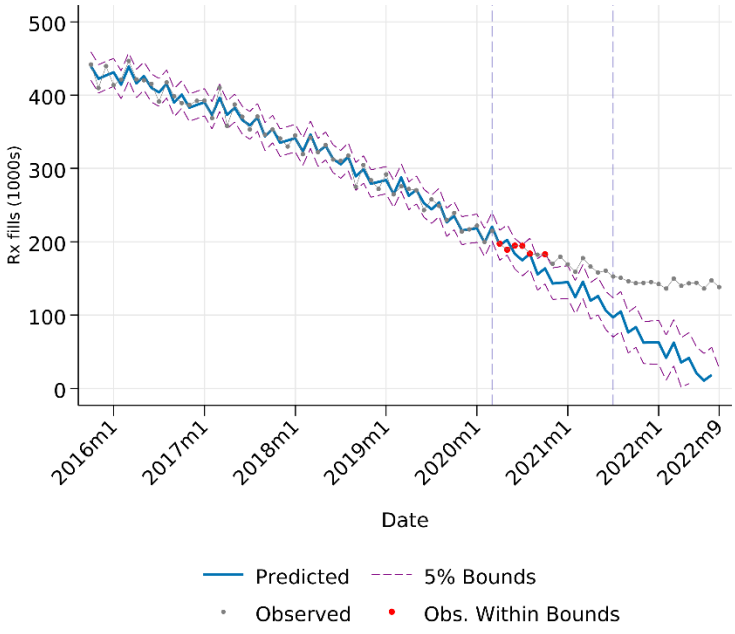
Population: fully-eligible beneficiaries without SUD who remained in Medicaid Direct.
The vertical dotted lines shown the onset of the COVID-19 pandemic in NC (March 2020) and the Standard Plan launch (July 2021), respectively.
Predictions less than 0 are omitted.

Appendix Figure 6. Rate of ED Visits.



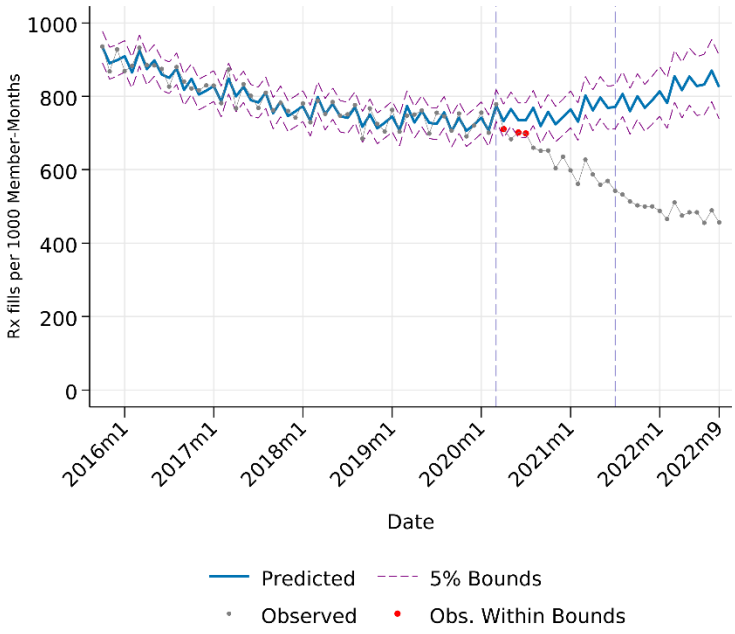
Population: fully-eligible beneficiaries without SUD who remained in Medicaid Direct.
The vertical dotted lines shown the onset of the COVID-19 pandemic in NC (March 2020) and the Standard Plan launch (July 2021), respectively.
Predictions less than 0 are omitted.

Appendix Figure 7. Count of Prescription Fills.



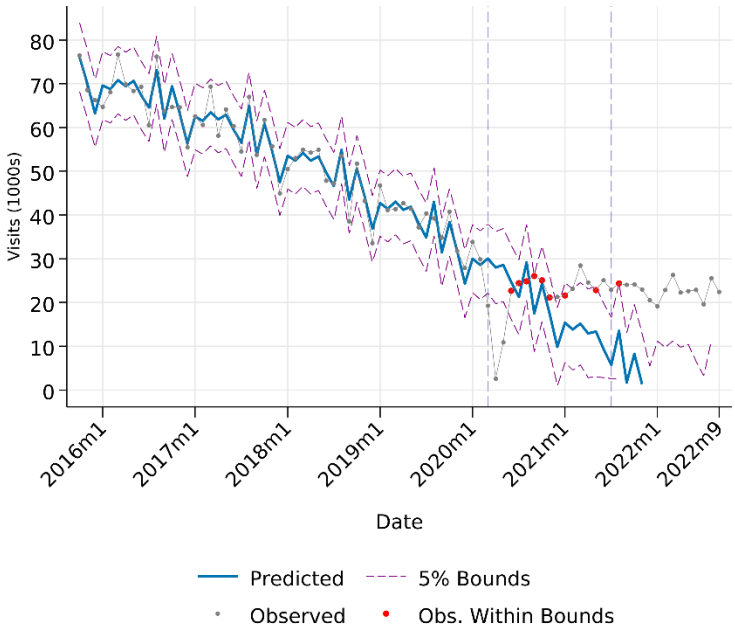
Population: fully-eligible beneficiaries without SUD who remained in Medicaid Direct.
The vertical dotted lines shown the onset of the COVID-19 pandemic in NC (March 2020) and the Standard Plan launch (July 2021), respectively.
Predictions less than 0 are omitted.

Appendix Figure 8. Rate of Prescription Fills.



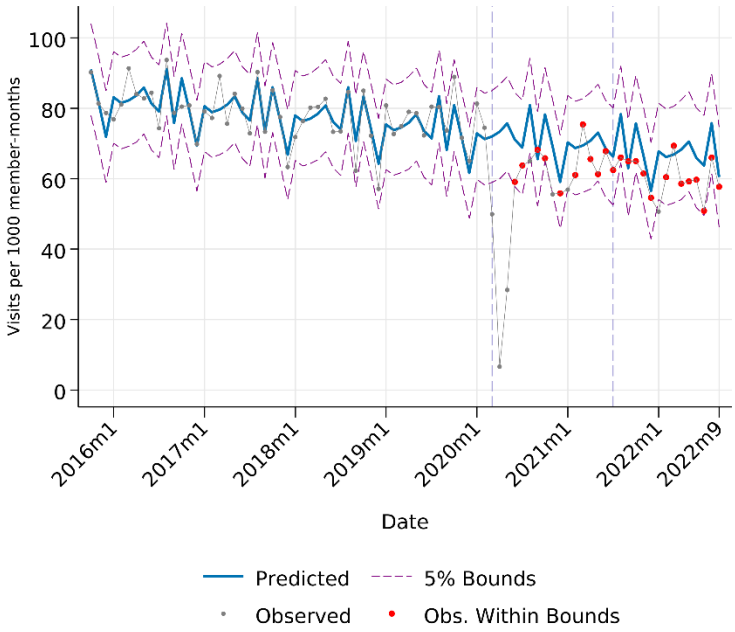
Population: fully-eligible beneficiaries without SUD who remained in Medicaid Direct.
The vertical dotted lines shown the onset of the COVID-19 pandemic in NC (March 2020) and the Standard Plan launch (July 2021), respectively.
Predictions less than 0 are omitted.

Appendix Figure 9. Count of Dental Visits.



Population: fully-eligible beneficiaries without SUD who remained in Medicaid Direct.
The vertical dotted lines shown the onset of the COVID-19 pandemic in NC (March 2020) and the Standard Plan launch (July 2021), respectively.
Predictions less than 0 are omitted.

Appendix Figure 10. Rate of Dental Visits.



Population: fully-eligible beneficiaries without SUD who remained in Medicaid Direct.
The vertical dotted lines shown the onset of the COVID-19 pandemic in NC (March 2020) and the Standard Plan launch (July 2021), respectively.
Predictions less than 0 are omitted.

RAPID CYCLE ASSESSMENT 1

NC Healthy Opportunities Pilots

March 24th, 2023

Prepared by: Cecil G. Sheps Center for Health Services Research
Commissioned for: North Carolina Department of Health and Human Services – Division of Health Benefits

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Executive Summary

Health is affected by many factors beyond the medical care provided within the walls of a hospital or clinic. As such, the North Carolina Healthy Opportunities Pilots are testing evidence-based, non-medical interventions for their direct impact on North Carolina's Medicaid beneficiaries' health outcomes and healthcare costs.

North Carolina's Section 1115 Medicaid Demonstration Waiver entitled "North Carolina Medicaid Reform" was approved to cover the period November 1, 2019 through October 31, 2024. One aspect of that Demonstration Waiver is the State of North Carolina's Enhanced Case Management and Other Services Pilot (ECM), which is more commonly referred to as the Healthy Opportunities Pilots (abbreviated as the 'Pilots' or 'HOP'). Owing to the national context of the COVID-19 pandemic and local context such as the delay in transition to Medicaid managed care, the Pilots did not begin providing services until March 15, 2022. Thus the Pilots have been actively delivering services for only a relatively short time.

The purpose of this first Rapid Cycle Assessment is to provide information to guide continued service delivery and programmatic adjustments for the Pilots. This assessment includes data regarding preparations for service delivery and delivery of services from March 15, 2022 to November 30, 2022. All data used in this assessment were received by January 4, 2023. This report is specific to the Pilots and does not cover other elements of the 1115 Waiver. It is also not meant to be as comprehensive as subsequent interim or final evaluations.

The Pilots aim to test evidence-based, non-medical interventions for their direct impact on North Carolina's Medicaid beneficiaries' health outcomes and healthcare costs, with the purpose of incorporating findings into the Medicaid program. As part of NCDHHS' commitment to promote health equity by building a well-coordinated system that "buys health", as well as healthcare, the Pilots require Prepaid Health Plans (PHPs) to cover federally approved, evidence-based interventions that address social needs in four domains: housing instability, transportation insecurity, food insecurity, and interpersonal violence/toxic stress for qualifying Medicaid beneficiaries. PHPs and their care managers are responsible for determining who is eligible to receive the services and which services they will receive.

HOP services are delivered through innovative regional networks of community-based organizations and social services agencies (collectively called 'human service organizations' [HSOs]) to address needs across all domains. Each regional network is established, managed and overseen by

Network Leads (NLs) (previously referred to as Lead Pilot Entities or LPEs), organizations that serve as the essential connection between PHPs and HSOs, along with clinical care teams when appropriate. Network Leads are local organizations, embedded in the communities they serve. On May 27, 2021, following a competitive procurement process, NCDHHS announced the selection of three NLs to contract with the PHPs to develop, manage and oversee a network of HSOs providing pilot services to their eligible enrollees: Access East, Inc., Community Care of the Lower Cape Fear, and Impact Health/Dogwood Health Trust. Regions selected included rural communities, and communities where members experience health inequity.

Pilot services began with a phased launch—first offering food services on March 15, 2022, followed by housing and transportation services on May 1, 2022, and toxic stress and cross-domain services on June 15, 2022. Interpersonal violence (IPV)-related services are scheduled to begin in April 2023 and were not delivered during this assessment period.

This assessment primarily covers two principal topics related to the Pilots, corresponding to Evaluation Question 1 ("Effective Delivery of Pilot Services") and Evaluation Question 3 ("Improved Social Risk Factors") in the approved Evaluation Design. In brief, these topics address Pilot program operations, including development of the necessary infrastructure to deliver services in the Pilots and how receipt of those services may affect health-related social needs, such as food, housing, and transportation. In this reporting period, the assessment focused on Pilot operations, and did not make comparisons between those receiving Pilot services and other Medicaid beneficiaries.

Several methods were used for this Rapid Cycle Assessment. To better understand how NLs and HSOs were preparing to deliver Pilot services, we surveyed and conducted qualitative interviews with NL and HSO staff in the lead up to full implementation of the Pilots' services. Further, we analyzed operational data regarding enrollments in the Pilots, assessment of health-related social needs, delivery of services, and amounts invoiced for services. In addition, we conducted individual-level interrupted time series regression analyses to investigate how the total number of health-related social needs and risk for specific health-related social needs changed over time in response to Pilots participation. Finally, we investigated whether specific services, such as delivered meals, had differential impact on risk for the needs they were meant to address.

The findings of the assessment are largely positive, but also suggest some clear areas of emphasis where current activities may need to be modified in order to better achieve the goals the state of North Carolina has set for the Pilots.

North Carolina's goal of establishing effective multi-sector collaboration between the state, PHPs, healthcare systems, and HSOs has been achieved. Although there are always areas of operations that can be improved, this was a major undertaking completed in a relatively compressed timeframe after unavoidable disruption due to the COVID-19 pandemic. In preparation to deliver services, staff at NLs and HSOs interviewed expressed concern about the scale of the task and the differences between the structure of the Pilots and their usual methods of operation, including interfacing with the Medicaid regulatory environment. NLs and HSOs began by collaborating with a core group of other organizations they had previously worked with, but substantially grew their collaborations so that a wide array of Pilot services could be offered.

From the perspective of NLs and HSOs, benefits of participating in HOP include building networks of collaboration, supporting growth of HSOs, and improving community health and wellness. Components of HOP that NLs and HSOs thought were key to success included support for capacity building, facilitating of communication between PHPs, NLs, and HSOs, and detailed planning for the complicated logistics of delivery Pilot services to a large number of participants.

Operational data reveals that despite challenges, Pilot services are being delivered successfully. As of November 30, 2022, 2,705 unique individuals have been enrolled, and 14,427 services have been delivered across many different intervention types by 84 HSOs. Initial assessments of social needs occur quickly (most commonly at the time of enrollment). Within the data used for this report, 63% of those who enrolled—1,713 out 2,705 Pilot participants—had received at least one invoiced service, with more participants in the pipeline to receive services as time progresses. Further, there can be a lag between service delivery and invoicing for services. Services delivered typically began quickly--over 75% of services had a start of service date within 2 weeks of enrollment in the Pilots. The rate of service receipt varied across need types. 68% of individuals reporting a food need received an invoiced food service during this period, while 40% of those reporting a housing need received an invoiced housing service, and 16% of those reporting a transportation need received an invoiced transportation service. This difference may reflect both the phased rollout of services, with food services preceding all other services, and the complexity of delivering services to address the varying needs. For example, housing shortages are common in many communities served by the Pilots, and the availability of transportation resources varies across communities as well. Very few cross-domain services were invoiced during this period, and no toxic stress services were invoiced during this evaluation period. Further, no IPV-related

services were invoiced, as these services are not yet offered. Food services constituted the majority (90%) of services delivered.

Invoices for services were paid in a timely fashion. 56.2% of invoices were paid within 30 days, 90.3% within 60 days, and 97.9% within 90 days. This is important as a major goal of the Pilots was to ensure that HSOs, many of which historically depend on grant funding received prior to delivery of services, could operate successfully with a financing model that includes payments made after services were delivered.

Overall, the evidence regarding the effectiveness of Pilot services at addressing social needs was mixed. As anticipated, we observed an initial increase in recorded needs as needs are identified by detailed assessments around the time of enrolling in the Pilots, followed by a decrease in needs as Pilot services address them. However, the magnitude of the decrease in needs was small and may not be clinically meaningful. For example, we estimated that soon after enrollment in the Pilots, individuals reported an average of 1.73 needs, which declined to 1.68 needs at 90 days after enrollment. While statistically significant, whether a decrease of this magnitude is likely to improve health, healthcare utilization, or healthcare cost is unclear. Although prior studies have shown that improvements in social needs can be seen within 90 days, this is still a very brief time period for assessment, and greater changes may become evident over longer periods of observation. At present, there have not been enough individuals with longer Pilot participation to examine needs at 180 or 365 days. Such analyses will be reported in subsequent assessments.

When examining specific needs, we estimated that the probability of an individual reporting a food need at 90 days after Pilot enrollment (0.85) was almost identical to the probability around the time of enrollment (0.86). Similarly, the probability of reporting a housing need was 0.55 around the time of enrollment and still 0.55 at 90 days after Pilot enrollment, and the probability of reporting a transportation need was 0.31 around the time of enrollment and 0.29 at 90 days after Pilot enrollment. IPV-related and toxic stress needs were not reported very frequently during this evaluation period, so we cannot draw conclusions about changes in those need types (and again, IPV-related services were not yet available in this time period. Two key limitations in interpreting these findings, however, are the relatively short enrollment time for most Pilot participants, and the possibility of bias owing to differential reassessment such that those whose needs went unmet were reassessed more frequently than those whose needs were met and required less contact with Pilot staff.

We observed interesting findings regarding specific services. A key rationale for conducting and evaluating the Pilots is that there are often different services that might plausibly address a need, without sufficient comparative effectiveness evidence to choose one over another. For example, both a food subsidy (such as a fruit and vegetable prescription) and delivery of healthy meals might address food needs, but which is more effective is not clear. We did find suggestions of variations across intervention types. Healthy meal delivery was associated with lower probability of reporting a food need at 90 days of enrollment in the Pilots than other food services offered within the Pilots like fruit and vegetable prescriptions and food boxes, and these differences were large enough that they may be clinically meaningful. For example, the probability of reporting a food need at 90 days was 0.08 lower (95% Confidence Interval [CI]: 0.12 lower to 0.02 lower, p = .001) with delivered meals compared with fruit and vegetable prescriptions. Similarly, with regard to housing services, tenancy support and sustaining services (which provide one-to-one case management and/or educational services to prepare an enrollee for stable, long-term housing) were associated with lower probability of reporting a housing need after 90 days of Pilot enrollment than other types of housing services.

These findings thus support the rationale of using the Pilots to develop evidence on the comparative effectiveness of social needs interventions, so that the State of North Carolina can make an evidence-informed decision as to what services to offer for all Medicaid beneficiaries in subsequent years. However, these findings should also be interpreted cautiously at this time, as receipt of services was not randomly assigned, and thus the association observed may be confounded. Subsequent stages of the evaluation will be better able to address this potential threat to the validity of the findings.

There are several key findings of this first Rapid Cycle Assessment. First, the major achievement is the establishment of the infrastructure necessary for the Pilots to function. This included necessary information technology platforms, the legal and regulatory agreements necessary for the state of North Carolina, prepaid health plans, network leads, human services organizations, and healthcare organizations to collaborate, integrating HSOs into the healthcare ecosystem, and the interpersonal work of making these relationships productive. The successful accomplishment of this undertaking has allowed for large-scale delivery of Pilot services across three regions of the state.

Next, the ability to address some questions of interest in this assessment was hindered by the number of individuals enrolled in the Pilots. The Pilots were designed to ramp up during this assessment period, and so the enrollment numbers may reflect that. Another explanatory factor could be that methods of social need assessment and enrollment require iteration. In any event, working to increase

enrollment in the Pilots is a major goal going forward. Next, delivery of services to those who enrolled in the Pilots has had both bright spots and limitations. Around two-thirds of those who enrolled in the Pilots have received invoiced services to date. This includes almost half of those reporting a housing need receiving housing services, which is a notoriously difficult need to address. It is likely that this percentage will rise as services that have already been delivered are invoiced, and those in the pipeline to receive services receive them. At the same time, working to ensure as high a percentage of individuals who enroll in the Pilots as possible receive services is another major goal. Strategies to boost this number could include making modifications to the selection of services available and/or the process for Pilot participants to receive services.

Next, reports of social needs followed an expected pattern. Needs were highest around the time of Pilot enrollment and decreased over time. However, the magnitude of the decrease observed has been small so far. This deserves attention, as decreasing needs is a key channel through which the Pilots can achieve the overall goal of improving health, healthcare utilization, and healthcare cost. Nevertheless, it is important to recognize that this may be due to the relatively short period of time most individuals have been in the Pilots. Finally, we observed potential variation in the effectiveness of different interventions, which is consistent with a key justification for the overall approach taken by the Pilots of generating comparative effectiveness data for evaluation.

The results of this assessment have led to the following 4 recommendations:

1. Continue to Accelerate Enrollment in the Healthy Opportunities Pilots. This assessment period coincided with a planned ramp-up of Pilot services, which meant lower enrollment earlier in the period, and growing enrollment later in the assessment period. In subsequent assessment periods, greater enrollment in the Pilots is likely to be beneficial both for Medicaid beneficiaries and for the purposes of evaluation. If Medicaid beneficiaries who could benefit from Pilot services are not enrolled, it could leave them in need. Greater enrollment would also help increase the power of evaluation activities, and permit evaluation of a broader set of questions. This is particularly important for detecting differences in response to services across groups, and for more in-depth analysis of groups that are of interest to the state of North Carolina, but are less common among Pilot participants, such as pregnant individuals. Without adequate numbers of individuals from categories of interest, there will be substantial uncertainty in any conclusions drawn from evaluation activities.

2. Ensure High Rates of Service Delivery. We found that around one third of individuals who enrolled in the Pilots did not have an invoice for Pilot services at time of the evaluation. This does not necessarily mean these individuals will not receive any Pilot services—this observation could reflect a lag in data from delivery of services to invoicing for them, or simply reflect the time needed for services to be arranged after enrollment in the Pilots. However, ensuring that as many individuals who enroll in the Pilots as possible do receive services is an important goal for the Pilots. Continuing to monitor service delivery will be important in subsequent periods.
3. Collect Repeated Needs Assessments. As of this report, the short duration of participation for many individuals in the Pilots means that sufficient time for repeated needs assessments to occur may not yet have elapsed. However, ensuring these assessments do occur in subsequent periods is an important goal. A key feature of the Pilots is the use of needs assessments to help determine whether Pilot services are having their intended effect. If the services are not reducing needs, it is less likely that they will improve health, healthcare utilization, or healthcare spending. Finding that needs persist despite receiving services means that alternative services could be offered. On the other hand, if needs are being met, this would suggest that services are working and should be continued, if the Pilot participant so desires. In addition, repeated assessments can serve to evaluate whether Pilot services are having their intended effect and suggest whether course corrections in service delivery are needed, which may increase the likelihood of achieving hoped-for effects in the summative phase of the evaluation. Thus, repeated assessment of needs periodically throughout Pilot participation is an important part of the program—both for participants and for NLs and HSOs who want to ensure the services being delivered are working as intended. As time goes on, it will be important to ensure processes for routine collection of health-related social needs information are implemented with fidelity.
4. We Do Not Recommend Changes to Services at This Time. In this initial Rapid Cycle Assessment, we noted interesting signals that some services may be more effective at reducing needs than others. However, these should be interpreted as preliminary findings at this time. The associations observed may be confounded, and the sample sizes are small. Thus, we believe the best course of action is to continue delivering services to more Pilot participants, in order to collect more data. When more data are in hand, informed decisions about which services to continue, modify, or discontinue can be made. Although we do not recommend changes to specific services offered by the Pilots at this time, we do recommend that the State of North

Carolina continue with the efforts it is making for operational improvements to the Pilots. Such planned improvements include those related to capacity building funding, streamlining the process of Pilot enrollment, and making the NCCARE360 data platform more user friendly. These improvements that the State of North Carolina plans to make are in accord with feedback provided by NLs and HSOs in surveys and qualitative interviews.

General Background Information

Health is affected by many factors beyond the medical care provided within the walls of a hospital or clinic. While access to high-quality medical care is critical, social and environmental factors and the behaviors that emerge as a result are also important determinants of health.[1,2] A substantial body of research has established that having an unmet resource need—including experiencing housing instability[3], food insecurity[4], unmet transportation needs[5], and interpersonal violence or toxic stress[6,7]—can significantly and negatively impact health and well-being, as well as increase healthcare utilization and costs.[1,8–11] Addressing those needs can potentially improve health and healthcare utilization, which in turn can lower healthcare costs. For example, research indicates that providing housing assistance to adults who have physical and/or behavioral co-morbidities and are experiencing homelessness decreases unnecessary use of hospital care and associated healthcare costs.[12–14] Similarly, reducing the presence of asthma triggers (such as moldy carpets and broken air conditioners) in a child's home can reduce hospital visits and related costs[15,16], and nutritional assistance interventions have been associated with lower healthcare costs for food insecure individuals.[17,18] Notably, however, much of the research conducted to date has evaluated discrete interventions for specific, high-need populations, leaving unanswered critical questions regarding whether— and how—to scale and sustainably fund the integration of non-medical services into the healthcare system on a population-wide basis.

As such, the North Carolina Healthy Opportunities Pilots are testing evidence-based non-medical interventions for their direct impact on North Carolina Medicaid beneficiaries' health outcomes and healthcare costs.

North Carolina's Section 1115 Medicaid Demonstration Waiver entitled "North Carolina Medicaid Reform" was approved to cover the period November 1, 2019 through October 31, 2024. The University of North Carolina at Chapel Hill Cecil G. Sheps Center for Health Services Research (the Sheps Center) was selected by NCDHHS (The North Carolina Department of Health and Human Services), Division of Health Benefits (External Evaluation Services Contract #30-2021-017-DHB) to evaluate one aspect of that Demonstration Waiver, the State of North Carolina's Enhanced Case Management and Other Services Pilot (ECM), now more commonly referred to as the Healthy Opportunities Pilots ('HOP' or the 'Pilots'). The ECM evaluation design approved by the Centers for Medicare & Medicaid Services (CMS) on August 15, 2019, is included as an Attachment. This report analyzes data about Pilot activities beginning prior to the commencement of service delivery on March 15, 2022, and continuing to include

all data received by January 4, 2023. This report is specific to the Pilots and does not cover other elements of the 1115 waiver.

Planned implementation of the Pilots was affected by both the COVID-19 pandemic nationally, and the delay of implementing Medicaid managed care in the state of North Carolina. This has meant that Pilot services have only been delivered for a relatively brief period of time to date.

HOP Program Overview: Buying Health with Regional Collaboration

North Carolina designed the Pilots to test evidence-based, non-medical interventions for their direct impact on North Carolina Medicaid beneficiaries' health outcomes and healthcare costs, with the purpose of incorporating findings into the Medicaid program. NC Medicaid's vision is to "to improve health through an equitable, innovative, whole-person centered and well-coordinated system of care that addresses the medical and non-medical drivers of health." To help fulfill this vision, the Pilots require Prepaid Health Plans (PHPs) to cover evidence-based interventions that address four domains: housing instability, transportation insecurity, food insecurity, and interpersonal violence/toxic stress for a subset of Medicaid beneficiaries. PHPs and their care managers are responsible for determining who is eligible to receive the services and which services they will receive.

HOP services are delivered through innovative regional networks of community-based organizations and social services agencies (collectively called 'human service organizations' [HSOs]) to address needs across all domains. Each regional network is established, managed, and overseen by Network Leads (NLs) (previously referred to as Lead Pilot Entities or LPEs), organizations that serve as the essential connection between PHPs and HSOs, along with clinical care teams when appropriate. Network Leads are local organizations, embedded in the communities they serve. On May 27, 2021, following a competitive procurement process, NCDHHS announced the selection of three NLs to contract with the PHPs to develop, manage and oversee a network of HSOs providing pilot services to their eligible enrollees (see **Figure 1**).

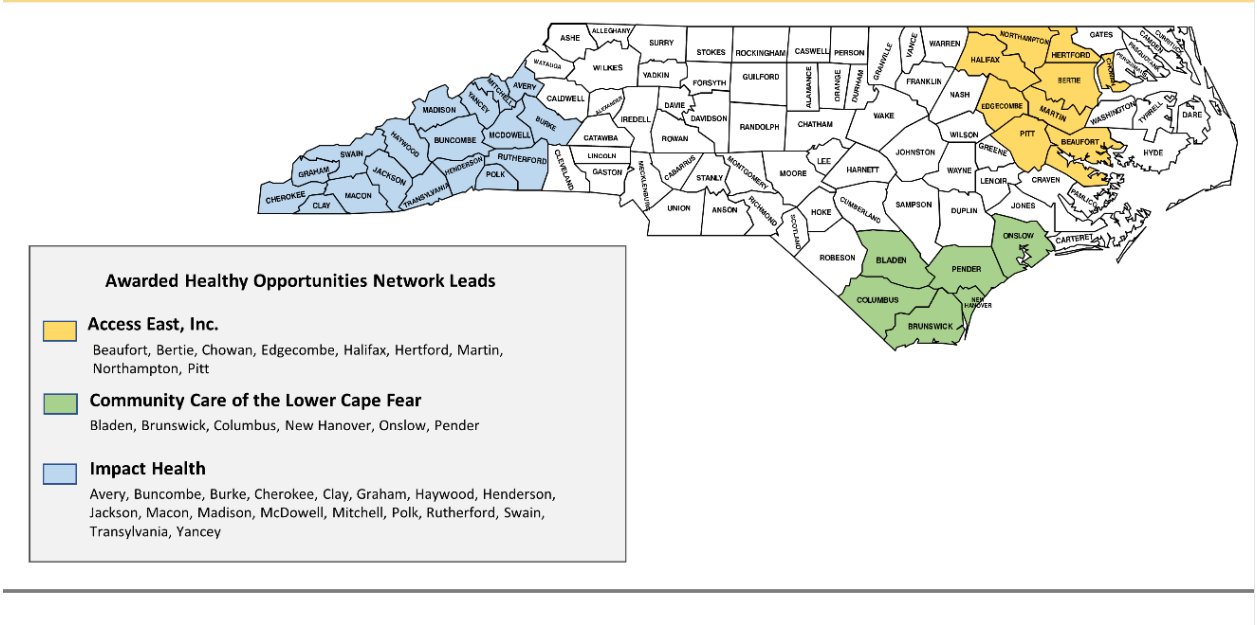


Figure 1: Pilot Regions (source NCDHHS)

Coordination among these entities, and infrastructure necessary to support it, are intended to help address beneficiaries' non-medical needs in a way that conventional healthcare has not been able to do. Relationships between entities are depicted in **Figure 2.**

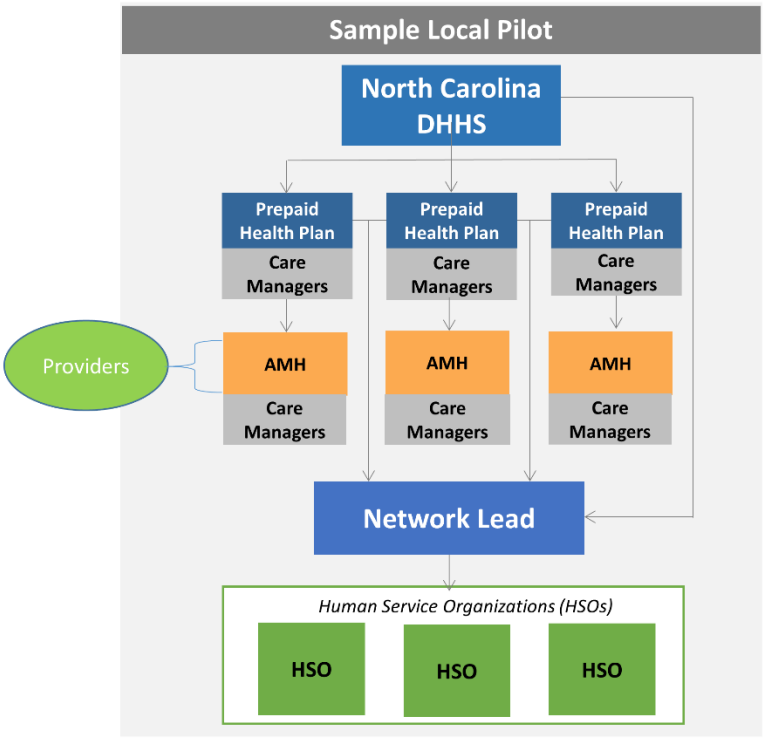


Figure 2: Schematic of Pilot Organization (Source: NCDHHS)

The primary responsibilities of the entities involved in delivering Pilot services across PHPs, Care Managers, NLs, and HSOs are depicted in **Figure 3**. Care Managers can be embedded within PHPs, or

within local Tier 3 Advanced Medical Homes (AMH) (which provide primary care) or their affiliated Clinically Integrated Networks (CIN).

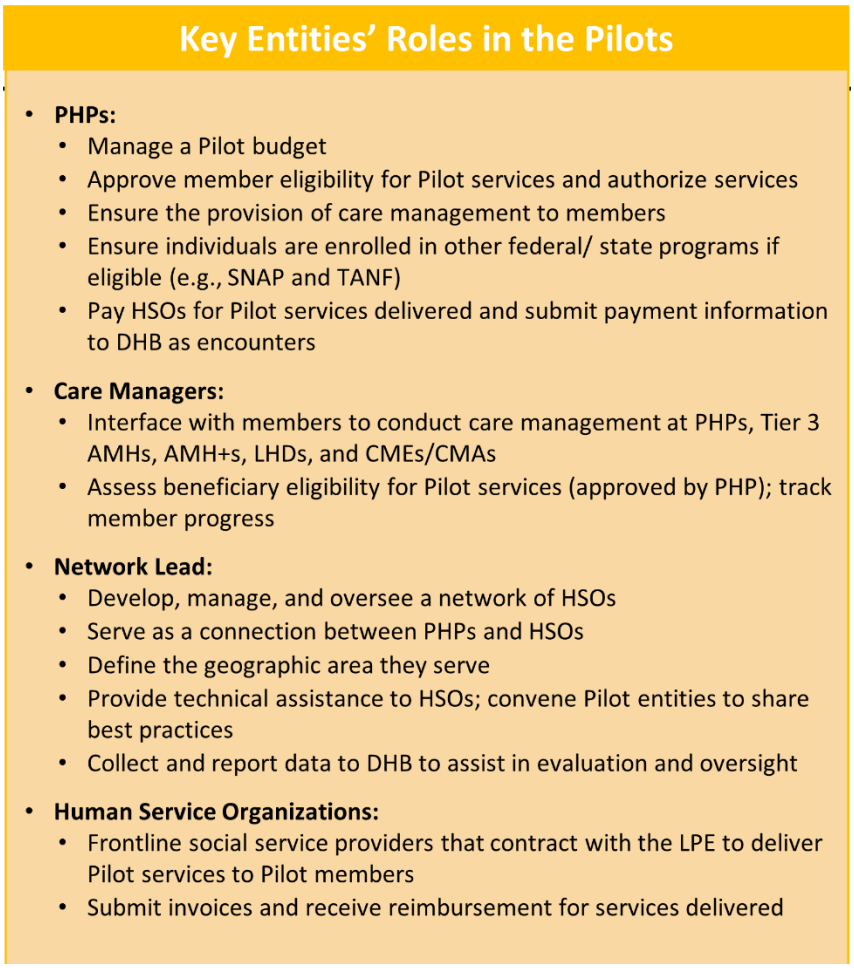


Figure 3: Roles of Entities in the Pilots (Source: NCDHHS)

HOP Implementation Timeline & Services Domains

On March 15, 2022, delivery of food service launched in all three Pilot regions, followed by housing and transportation on May 1, 2022. Cross-domain and toxic stress services became available on June 15, 2022. Delivery of IPV-related services is planned to begin in April 2023. These services were not available during this assessment period. Examples of Pilot services are presented in **Figure 4**. The Healthy

Opportunities Pilots Fee Schedule, which provides a more complete description of the services, is provided as an attachment.

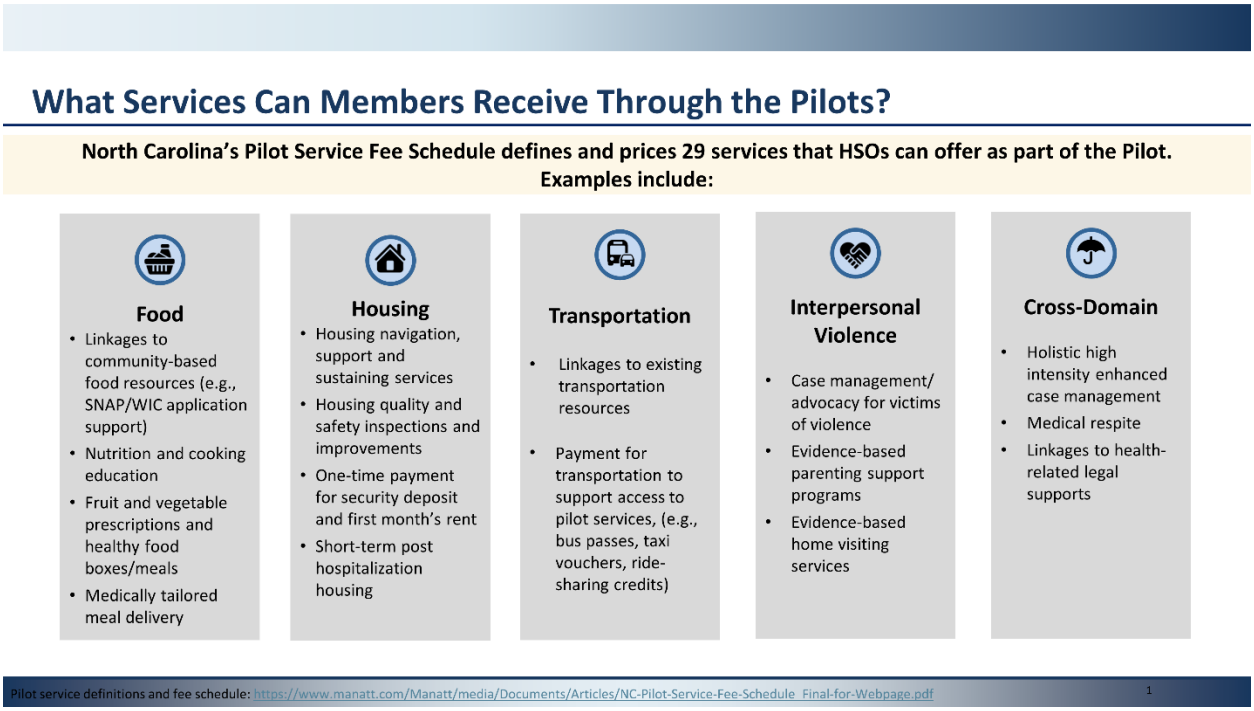


Figure 4: Example Pilot Services (Source: NCDHHS)

Populations Served: Health Needs & Social Risk Factors

The Pilots provide services for certain high-risk, high-need individuals who live in a Pilot region and meet criteria for physical/behavioral health and social risk factors. The physical/behavioral health criteria as approved in the Evaluation Design are presented in **Table 1**, and the health-related social needs that serve as social risk factors as approved in the 1115 Waiver revision are presented in **Table 2**. We note that although changes to the physical/behavioral health factors were approved as part of an 1115 Waiver revision, these were not implemented during the assessment period, and so **Table 1** reflects the relevant criteria for this assessment period.

Table 1: Physical/Behavioral Health Needs -Based Criteria

Eligibility Category	Age	Needs-Based Criteria (at least one, per eligibility category)
Adults	≥21	• 2 or more chronic conditions. Chronic conditions that qualify an individual for pilot enrollment include: BMI over 25, blindness, chronic cardiovascular disease, chronic pulmonary disease, congenital anomalies, chronic disease of the alimentary system, substance use disorder, chronic endocrine and cognitive conditions, chronic musculoskeletal conditions, chronic neurological disease and chronic renal failure, in accordance with Social Security Act section 1945(h)(2). • Repeated incidents of emergency department use (defined as more than four visits per year) or hospital admissions (≥1 in past year).
Pregnant Individuals	Any	• Multifetal gestation • Chronic condition likely to complicate pregnancy, including hypertension and mental illness • Current or recent (month prior to learning of pregnancy) use of drugs or heavy alcohol • Adolescent ≤ 15 years of age • Advanced maternal age, ≥ 40 years of age • Less than one year since last delivery • History of poor birth outcome including: preterm birth, low birthweight, fetal death, neonatal death
Children	0-3	• Neonatal intensive care unit graduate • Neonatal Abstinence Syndrome • Prematurity, defined by births that occur at or before 36 completed weeks gestation • Low birth weight, defined as weighing less than 2500 grams or 5 pounds 8 ounces upon birth • Positive maternal depression screen at an infant well-visit
	0-21	• One or more significant uncontrolled chronic conditions or one or more controlled chronic conditions that have a high risk of becoming uncontrolled due to unmet social need, including: asthma, diabetes, underweight or overweight/obesity as defined by having a BMI of <5th or >85th %ile for age and gender, developmental delay, cognitive impairment, substance use disorder, behavioral/mental health diagnosis (including a diagnosis under DC: 0-5), attention- deficit/hyperactivity disorder, and learning disorders • Experiencing three or more categories of adverse childhood experiences (e.g. Psychological, Physical, or Sexual Abuse, or Household dysfunction related to substance abuse, mental illness, parental violence, criminal behavioral in household)

Table 1: Physical/Behavioral Health Needs -Based Criteria

Eligibility Category	Age	Needs-Based Criteria (at least one, per eligibility category)
		• Enrolled in North Carolina's foster care or kinship placement system

Table 2: Social Risk Factors

Risk Factor	Definition
Homelessness or housing insecurity	Homelessness, as defined in 42 C.F.R. § 254b(h)(5)(A), or housing insecurity, as defined based on the principles in the questions used to establish housing insecurity in the Accountable Health Communities Health Related Screening Tool or the North Carolina Social Determinants of Health (SDOH) screening tool.
Food Insecurity	As defined by the US Department of Agriculture commissioned report on Food Insecurity in America: • Low Food Security: reports of reduced quality, variety, or desirability of diet. Little or no indication of reduced food intake. • Very low food security: Reports of multiple indications of disrupted eating patterns and reduced food intake • Or food insecure as defined based on the principles in the questions used to establish food insecurity in the North Carolina Social Determinants of Health (SDOH) screening tool.
Transportation Insecurity	Defined based on the principles in the questions used to establish transportation insecurities in the Accountable Health Communities Health Related Screening Tool or the North Carolina SDOH screening tool.
At risk of, witnessing, or experiencing interpersonal violence	Defined based on the principles in the questions used to establish interpersonal violence in the Accountable Health Communities Health Related Screening Tool or the North Carolina SDOH screening tool.

Member Participation: Screening & Care Management

During this assessment period, outreach to Medicaid Managed Care members living in Pilot regions was led by PHPs and their care management teams, with support from NLs and HSOs. PHP HOP Care Managers use the standardized Pilot Eligibility and Service Assessment (PESA) tool in NCCARE360, NC's statewide resource and referral platform, to guide and document initial Pilot eligibility determination,

service mix review every three months, and continuing eligibility determination every six months. DHHS leadership consistently articulated a "no wrong door" approach (see **Figure 5**) to support members to get screened and connected to services using various referral pathways.

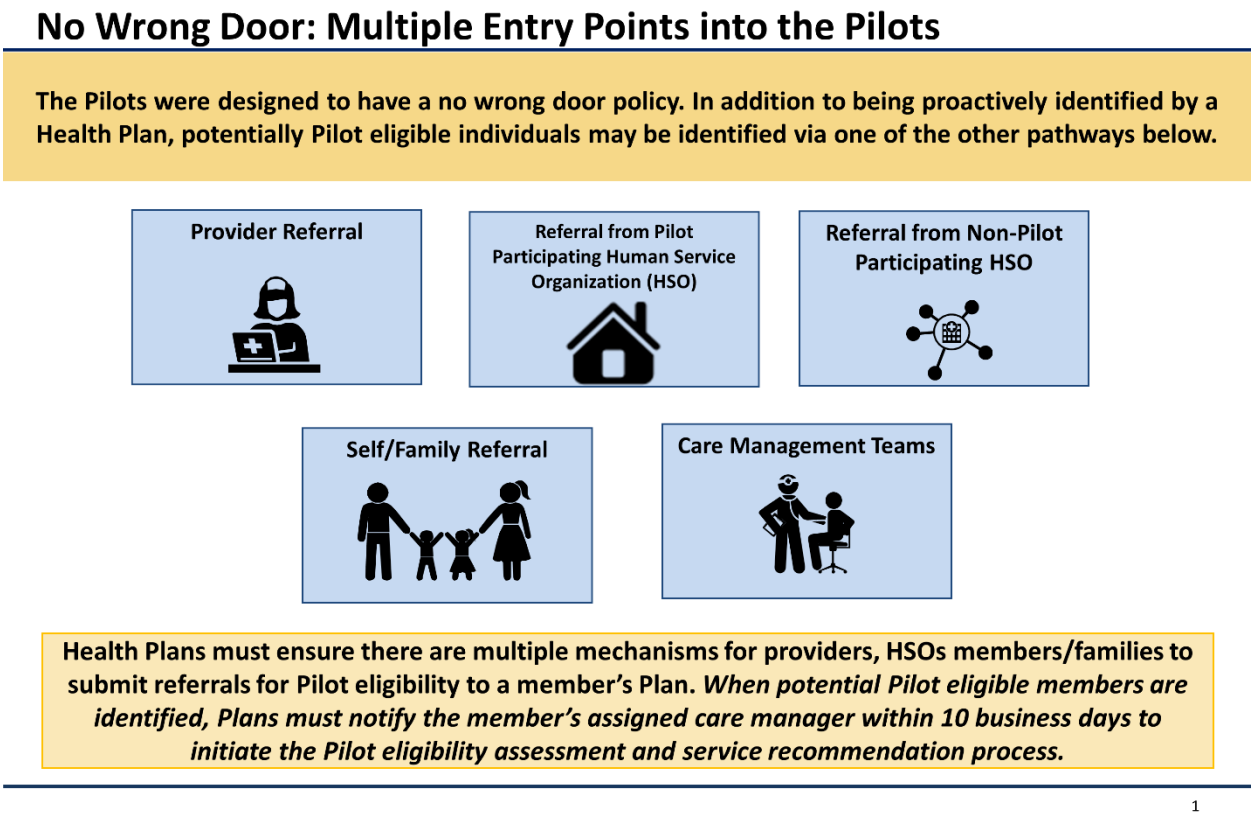


Figure 5: Entry into the Pilots (Source: NCDHHS)

Goals of Rapid Cycle Assessment

This report describes the first Rapid Cycle Assessment (RCA), conducted as part of the overall evaluation of the Pilots. As described in the approved evaluation design:

"The goal of the rapid cycle assessment[19,20] phase of the evaluation is to determine, as quickly as possible, if the Pilots are operating as intended and whether Pilot services are having their intended effects on targeted populations. By using an iterative process, North Carolina will be able to collect data to test the services, examine the results, and modify services or adopt a different service as appropriate. The goal of the RCA is to provide results to North Carolina so that appropriate steps can be taken to modify Pilot services, as needed, in order to maximize their effectiveness and discontinue services that are less effective to ensure dollars are spent on services with a demonstrated impact. During this phase, the major comparisons will be within intervention recipients, before and after they receive intervention, using interrupted time series designs."

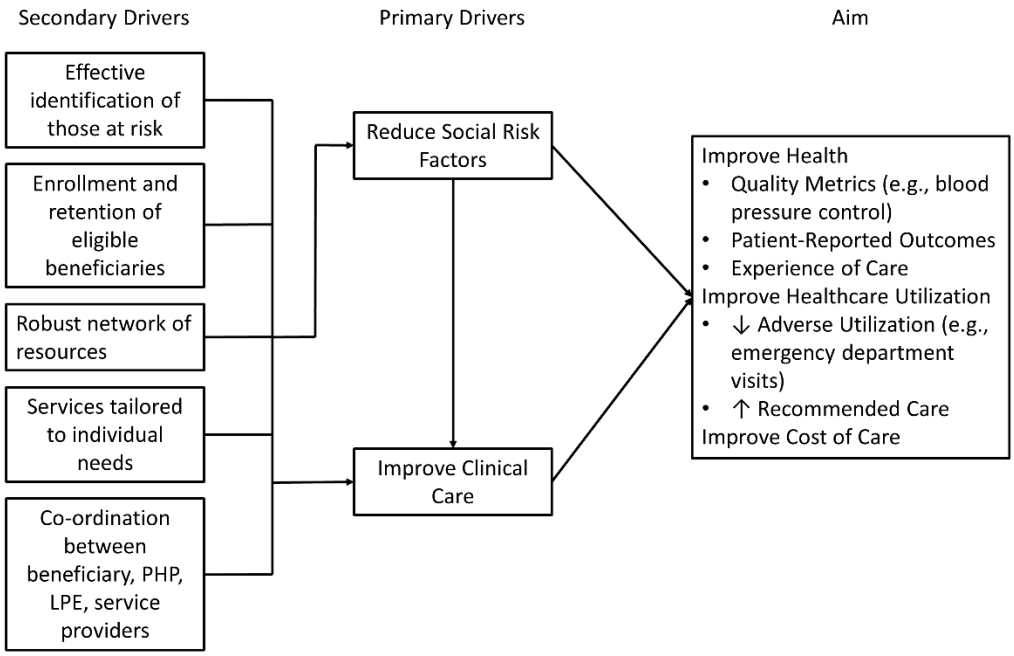


Figure 6: Driver Diagram

As described in the Evaluation Design, the RCAs have different areas of emphasis depending on their timing relative to the delivery of Pilot services. In this first report, the emphasis is on factors

related to initial delivery of Pilot services, enrolling Pilot participants, and resolution of social needs. This is in keeping with the theory of change depicted in the Driver Diagram (**Figure 6**), which sees identification of individuals with social risk factors, and enrollment and retention of those individuals in services to reduce those risks, as key parts of the process that is expected, ultimately, to lead to improved health, healthcare utilization, and cost of care.

For this reason, this RCA report focuses on analyses related to Evaluation Questions 1, 2, and 3 (described in more detail in the next section), which deal with topics of screening for social risks, enrolling participants, delivering Pilot services, and reducing social risks. Subsequent evaluation activities will shift emphasis to analyses of Evaluation Questions 4, 5, and 6, which deal with topics of clinical outcomes, healthcare utilization, and healthcare cost. Ultimately, the summative evaluation report will synthesize findings across all evaluation questions.

Evaluation Questions and Hypotheses

The state of North Carolina's overall goal is to improve North Carolina's Medicaid beneficiaries' health, healthcare utilization, and healthcare spending by building a well-coordinated system that "buys health" as well as healthcare. Evaluating how well the Pilots achieve that goal involves evaluating specific questions related to program performance. As discussed above in reference to the Driver Diagram that depicts the underlying logic of the Pilots, one key component of successfully achieving the goals of the Pilots involves identifying beneficiaries with social needs that affect health, enrolling them in the Pilots, and delivering services to them that address those needs. Achieving those goals promotes the objectives of Titles XIX and XXI by helping to improve health for Medicaid beneficiaries. This RCA Report describes analyses that break these pieces into the following Evaluation Questions and Hypotheses:

- Evaluation Question 1 ("Effective Delivery of Pilot Services") analyses relate to activities undertaken by NLs and HSOs to establish the necessary infrastructure, workforce, and data systems needed to effectively contract with and build the capacity of a network of HSOs, and to deliver Pilot services once established. Overall, Evaluation Question 1 analyses help test the hypothesis that NLs will enable effective delivery of Pilot services
- Evaluation Question 2 ("Increased Rates of Social Risk Factor Screening and Connection to Appropriate Services") analyses relate to how the coordinated activities of PHPs, NLs, and HSOs facilitate screening for social risk factors/needs in Pilot regions, and connect a higher proportion of those with social risk factors/needs to services to address those needs in Pilot regions, compared with non-Pilot regions that do not have these coordinated activities. Overall, Evaluation Question 2 analyses help test the hypothesis that the Pilots will increase rates of Medicaid beneficiaries screened for social risk factors and connected to services that address these risk factors.
- Evaluation Question 3 ("Improved Social Risk Factors") analyses relate to improving the social risk factors that Pilot members experience, across all eligibility categories: adults, pregnant individuals, children ages 0 to 21, and the subset of children age 0 to 3. Evaluation Question 3 analyses help test the hypothesis that the Pilots will measurably improve the qualifying social risk factors in participants.

There are three other Evaluation Questions that are part of the overall evaluation of the Pilots, but were planned to be undertaken after this initial rapid cycle assessment. These Evaluation Questions relate to changes in clinical outcomes (Evaluation Question 4), changes in healthcare utilization (Evaluation Question 5), and changes in healthcare cost (Evaluation Question 6). Evaluation activities to address these questions will occur in subsequent periods.

Methodology

Evaluation Design

In this reporting period, Evaluation Question 1 ("Effective Delivery of Pilot Services") activities used three evaluation designs: primary data collection using quantitative surveying of NL and HSO staff members, primary data collection using qualitative interviewing of NL and HSO staff members, and secondary analyses of Pilot operations data from the NCCARE360 platform and NC Medicaid administrative files.

For quantitative surveying, names and email addresses of NL and HSO staff were provided to the UNC Sheps Center for Health Services Research (The Sheps Center) evaluation team for the purpose of recruitment. A link to an anonymous REDCap survey was emailed to each participant. Participants provided informed consent prior to completing the survey. All surveys were completed between April and July 2022. Surveys included both close-ended questions and open-ended questions to understand readiness to implement pilot services and network connections.

For qualitative interviewing, names and email addresses of NL and HSO staff members were provided to the evaluation team for the purpose of recruitment. After providing informed consent, a Zoom video interview was scheduled. Open-ended, in-depth questions were posed during the interviews. All interviews were conducted around the time service delivery began, between April and July 2022, and ranged from 20-70 minutes.

Evaluation Question 1 ("Effective Delivery of Pilot Services") is descriptive and explanatory in nature, and so it does not involve comparisons or inferential statistics.

In this reporting period, we planned to use a cross-sectional comparative design for Evaluation Question 2 ("Increased Rates of Social Risk Factor Screening and Connection to Appropriate Services") analyses, comparing Medicaid beneficiaries in regions that did versus did not have operating HOP programs. We were not able to complete these analyses owing to lack of data. This is explained in more detail in the Methodological Limitations section below.

In this reporting period, Evaluation Question 3 ("Improved Social Risk Factors") activities used two designs: A within-participant comparison evaluating the prevalence and number of health-related social needs as a function of time and Pilot participation, and a between-participant comparison,

evaluating the prevalence of health-related social needs as a function of time and receipt of specific Pilot services.

Target and Comparison Populations

For Evaluation Question 1 ("Effective Delivery of Pilot Services") analyses in this reporting period, which related to establishment of the infrastructure necessary to deliver Pilot services and services delivered, the target population for the quantitative surveying and qualitative interviews were NL and HSO staff members. The target population for the secondary data analyses of Pilot operations data was Pilot participants.

For Evaluation Question 2 analyses in this reporting period, which related to comparisons of screening for social risks and delivering services to those with social risks in the Pilot and non-Pilot regions, the target population was Medicaid beneficiaries in the Pilot regions, and the comparison population was intended to be Medicaid beneficiaries in non-Pilot regions.

For Evaluation Question 3 ("Improved Social Risk Factors") analyses in this reporting period, which related to changes in social risks, the target population was Pilot participants. Comparisons were made both within-participant (i.e., comparing how health-related social needs changed over time) and between participants who received different Pilot services (e.g., examining whether Pilot participants who received one type of service related to a food need had outcomes that differed from Pilot participants who received a different type of service for a food need).

Evaluation Period

The data used for this report were received on Jan 4, 2023. The last date of Pilot enrollment in the data received was November 30, 2022. Therefore, the evaluation period for this report, across Evaluation Questions 1, 2, and 3, covers March 15, 2022 through November 30, 2022.

Evaluation Measures

Measures used for this evaluation period are presented in the below table, **Table 3**. The Sheps Center was the steward for all measures.

Table 3: Measures Used in Rapid Cycle Assessment Report

Measure Name	Measure Description
Positive Screens for Unmet Social Needs	The percentage of beneficiaries who reported unmet social needs within NCCARE360 data within measurement period, reported by non-mutually exclusive categories of: • Food Insecurity • Housing Instability or Homelessness • Transportation Barrier • Experience Interpersonal Violence or Toxic Stress-related concern
Positive Screens for Unmet Social Needs Connected to Services	The percentage of beneficiaries who reported unmet social needs within NCCARE360 data within measurement period, who received at least 1 invoiced service to address their needs
Number of Participants Served	The total number of participants who received at least 1 invoiced Pilot service in the reporting period
Payment Completion	Percentage of completed payments made to HSOs
Payment Lag Time	Time from receipt of service to payment completion
Pilot Participants	Number of Medicaid members who enrolled in the Pilots
Dollars paid	Dollar amount paid
Mean Payment Lag	Mean calendar days from HSO creating invoice to NL to PHP effectuating payment to HSO
Total amount invoiced	Total dollar amount invoiced
HSO Referrals	Number of referrals sent to human service organizations (HSO)
Services Invoiced	Number of services invoiced for during the assessment period
Mean business days from Pilot eligibility assessment to service delivery	Mean number of days between Pilot eligibility assessment and delivery of first invoiced Pilot service for those who enrolled in the Pilots

Data Sources

In this reporting period, Evaluation Question 1 ("Effective Delivery of Pilot Services") activities used three data sources: primary data collection using quantitative surveying of NL and HSO staff members, conducted by the Sheps Center, primary data collection using qualitative interviewing of NL and HSO staff members, conducted by the Sheps Center, and secondary analyses of Pilot operations data from the NCCARE360 platform and NC Medicaid administrative files. Data cleaning and validation for quantitative surveys and qualitative interviews was conducted by the Sheps Center. Data cleaning and validation for NCCARE360 and NC Medicaid data was conducted by Unite Us, NCDHHS, and the Sheps Center. Unite Us is a software company that helped develop the NCCARE360 information technology platform in collaboration with United Way/211, Expound, and the Foundation for Health Leadership and Innovation, used for Pilot enrollment, tracking, referrals, and invoicing.

In this reporting period, Evaluation Question 3 ("Improved Social Risk Factors") activities used data from the NCCARE360 platform and NC Medicaid administrative files. Data cleaning and validation for NCCARE360 and NC Medicaid data was conducted by Unite Us, NCDHHS, and the Sheps Center.

Analytic Methods

In this reporting period, the analytic methods for Evaluation Question 1 ("Effective Delivery of Pilot Services") activities varied by data type. For analyses of quantitative surveys, we conducted descriptive statistics and plotting of findings.

For analyses of qualitative interviews, all interviews were audio-recorded with participant permission and transcribed verbatim. Identifiable information was removed from the transcripts prior to analysis. Audio files and transcriptions were stored on the secure password protected server available only to evaluation team members. Transcripts were reviewed with the audio files for accuracy and completeness. Once completed, all transcripts were imported in ATLAS.ti 9., a qualitative software program, to facilitate analysis. A directed form of content analysis was used to analyze data. Prior to analysis, a codebook was created collaboratively with the project team based on (1) the CFIR (Consolidated Framework for Implementation Research) conceptual framework[21], (2) the evaluation questions, and (3) specific topics related to the interview guide. During the coding process, inductively derived codes were developed as needed to fully capture all relevant information. The transcripts were

coded by two independent coders who met to compare and reconcile any coding discrepancies. Once coding was complete, data were put into a matrix and themes were identified.

For analyses of NCCARE360 and NC Medicaid data, we conducted descriptive statistics of program administration data.

In this reporting period, the analytic methods for Evaluation Question 3 ("Improved Social Risk Factors") consisted of descriptive statistics and individual-level interrupted time series regression analyses. Interrupted time series regression analyses generally took two forms, depending on whether they were evaluating reductions in social risks associated with Pilot participation overall (i.e., evaluating the impact of Pilot participation on social risks), or with receipt of specific Pilot services (i.e., evaluating the comparative effectiveness of different interventions on social risks). For individual-level interrupted time series regressions evaluating social risks associated with Pilot participation overall, regression models generally took the form:

$$\boldsymbol{Y_{ij} = \beta_0 + \beta_1 Participation_{ij} + \beta_2 Time_{ij} + \beta_3 Participation_{ij} * Time_{ij} + \varepsilon}$$

Where i indexes a unique individual observed on a particular day j. Y represents the outcome, participation is an indicator of whether a participant was participating in the Pilots on the date of observation, time indicates the number of days relative to the participant's initial enrollment in the pilots, with an error term. The coefficient on participation provides an estimate of the change in level of the outcome associated with Pilot participation, while the coefficient on the participation*time product term provides an estimate of the trend of change in the outcome associated with Pilot participation. Standard errors were clustered at the level of the individual, which is the level of treatment for these analyses.[22] After fitting models, we used predictive margins to target an average treatment effect on the treated (ATT) estimand, comparing needs around the start of HOP enrollment to needs at 90 days.

For individual-level interrupted time series regressions evaluating social risks associated with receipt of specific Pilot services, regression models generally took the form:

$$\boldsymbol{Y_{ij} = \beta_0 + \beta_1 Intervention_{ij} + \beta_2 Time_{ij} + \beta_3 Intervention_{ij} * Time_{ij} + \varepsilon}$$

Where i indexes a unique individual observed on a particular day j. Y represents the outcome, time indicates the number of days relative to the participant's initial enrollment in the Pilot, intervention indicates the specific pilot service the participant was receiving, with an error term. The coefficient on intervention provides an estimate of the change in level of the outcome associated with receipt of a

specific service, compared with those receiving other services, while the coefficient on the intervention*time product term provides an estimate of the difference in trend of change in the outcome associated with receiving a specific, compared with those receiving other services. The services of interest and their comparisons vary for different social risks. For example, for food risks, we compared the relative impact of receiving a food voucher versus a food box. This structure of an interrupted time series analysis, comparing different types of interventions, is mathematically identical to a difference-in-differences analysis. We again clustered standard errors at the level of the individual. Further, we again used predictive margins after fitting the models to target an ATT estimand, comparing needs across intervention types at 90 days of HOP participation. Improvements in social needs after 90 days has been found in prior randomized trials.[23] We consider this to be the minimum time point at which an improvement may be expected.

We used linear regression to estimate interrupted times series model for outcomes of total needs and specific needs. We chose to use linear regression models even for dichotomous specific need outcomes to aid interpretability of model coefficients, especially as the coefficients on product terms in non-linear models do not have a clear interpretation.[24,25] The trade-off for this, however, is the possibility of 'out-of-bounds' estimates (i.e., estimates < 0 or > 1 for outcomes that cannot fall out of this range), especially when uncertainty is high. We did not view this as problematic as these cases occur when estimates are highly uncertain anyway, and so we do not believe this affects interpretation of the results.

Methodological Limitations

We divide this section into limitations related to the methods used overall, and limitations related to the specific data available (or not available) for this assessment period.

Regarding methodological limitations overall, for Evaluation Question 1 ("Effective Delivery of Pilot Services") activities, methodological limitations of the quantitative surveys include non-response, which may mean that the respondents were not a representative sample of all NL and HSO staff members. However, we believe response was sufficient to provide a meaningful snapshot of NL and HSO organizations as they prepared to deliver services.

For Evaluation Question 2 ("Increased Rates of Social Risk Factor Screening and Connection to Appropriate Services") activities, the main methodological limitations relate to the possibility that screening data were not recorded, which could bias comparisons.

For Evaluation Question 3 ("Improved Social Risk Factors") activities, the main methodological limitation is that some analyses use within-participant comparisons, without an external comparison group. This means that regression to the mean is an important threat to validity for these analyses. As justified in the Evaluation Design, this was a known limitation, one that was viewed as acceptable during this formative phase of the evaluation in order to facilitate delivery of Pilot services and provide feedback to NL and HSO organizations in order to make course corrections. The results of these analyses are not definitive, but instead meant to inform Pilot operations. The later summative evaluation phase will use comparisons that will not be subject to this limitation. Overall, at this point in the evaluation, we believe that the analyses are sufficiently informative to be useful guides as to program operations, while recognizing that they are not definitive determinations of the effectiveness of the Pilots. A second limitation is that if there is differential loss to follow-up (i.e., whether an individual completes a repeated assessment is correlated with whether their needs are or are not improving), that can bias results. The solution to this is to encourage that follow-up data collection is as complete as possible for all participants.

A third limitation for Evaluation Question 3 ("Improved Social Risk Factors") activities is that when comparing the relative impact of different services (e.g., food boxes versus food vouchers), assignment to the specific service was non-random. Therefore, there may be aspects of the individual's

circumstances that confound receipt of the services. Regression adjustment can help mitigate this if the factors that produce the confounding were measured, but unmeasured confounding cannot be excluded. Later periods in the evaluation use different study designs to help overcome this issue, so present results should be interpreted as preliminary.

There were three sets of analyses we were unable to complete during this RCA period owing to lack of data availability. We will complete these analyses and report their results in subsequent evaluation periods as the necessary data become available. Lack of necessary data most importantly affected Evaluation Question 2 ("Increased Rates of Social Risk Factor Screening and Connection to Appropriate Services") analyses. Lack of data affected Evaluation Question 1 ("Effective Delivery of Pilot Services") analyses in a more limited way. The analyses we were unable to complete were:

- Evaluation Question 2 ("Increased Rates of Social Risk Factor Screening and Connection to Appropriate Services") analyses that entailed comparing Medicaid beneficiaries in the Pilot regions and the non-Pilot regions on screening for social risks and connection to services to address those risks. We were unable to complete these analyses because we have only received data on social risk screening results for participants in the Pilots, and we have not received data on screening for non-Pilot participants. We anticipate receiving the necessary data in subsequent periods, and we believe we will be able to complete these analyses as planned before the end of the evaluation. Since this RCA report focuses on the performance of the Pilots in order to make adjustments, we do not believe that lack of these data presents a meaningful limitation to the reported results.
- Evaluation Question 1 ("Effective Delivery of Pilot Services") analyses related to number of beneficiaries screened. As with analyses related to Evaluation Question 2 ("Increased Rates of Social Risk Factor Screening and Connection to Appropriate Services"), because we only received data on screening results for Pilot participants, we were not able to assess the number of individuals who had health-related social needs assessments and screened negative, within Pilot regions. Thus, we could not determine the rate of positive screening or the number of individuals who received health-related social needs screening.
- Evaluation Question 1 ("Effective Delivery of Pilot Services") analyses related to participant reason for ending Pilot enrollment. In the evaluation design, we planned to analyze the number of participants who completed Pilot participation, withdrew from participation, or were lost to

follow-up. We do not receive individual-level data that provide reasons that participants end Pilot participation. We do receive information at the referral-level regarding why a specific referral was closed, but this is different from why an individual may end participation in the Pilots overall. We will work to identify the necessary data sources for these analyses and include them in subsequent evaluation reports.

Results

Evaluation Question 1

Quantitative Surveying

The quantitative survey administered to NL and HSO staff collected data on demographics, assessed organizational readiness to begin delivering Pilot services using the ORIC (Organizational Readiness for Implementing Change) survey[26], and assessed network connections between organizations. Overall, there were 19 complete responses out of 37 invited to participate (response rate: 51%). All three Pilot regions were represented. The mean age of the respondents was 38.3 years (SD: 8.2), 74% identified as women, 47% identified as non-Hispanic/Latino White, and 42% identified as non-Hispanic/Latino Black. 12 respondents worked for HSOs, and respondents from both NLs and HSOs worked in leadership, management, administration, and sectoral support.

Responses to the organizational readiness survey both overall and stratified by Pilot region, are presented in **Table 4.** The organizational readiness survey has 7 total items, which are scored on a Likert scale with 1 = strongly disagree and 5 = strongly agree. Higher scores indicate greater readiness to change. Responses are summarized as an overall score (all 7 items), a commitment to change sub-score (2 items), and a change efficacy sub-score (5 items). Overall, scores reflected a moderate level of readiness to implement Pilot programs, as assessed by NLs and HSOs.

Table 4: Organizational Readiness for Implementing Change Survey Results

	Overall		Access East		Cape Fear		Impact Health	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Total Score (Range: 7-35)	25.68	2.81	26.86	1.86	25.75	2.06	24.63	3.58
Commitment to change sub-score (Range: 2-10)	7.84	0.50	8.00	0.00	8.00	0.00	7.63	0.74
Change efficacy sub-score (Range: 5-25)	17.84	2.59	18.86	1.86	17.75	2.06	17.00	3.25

Greater scores indicate increasing readiness, commitment, and/or efficacy for change

Analyses of network connectivity suggest that NLs and HSOs in this sample report strong connections to both NL and HSO organizational partners. NL and HSO respondents report past collaborations with those they are collaborating with in the Pilots, strong personal connections, and a high frequency of communication. There are, however, important variations by network and geography, with certain areas having more organizational connectivity than others. For example, organizations in the Access East network reported a higher number of organizational partners than those in Impact Health or Cape Fear. Similarly, certain counties are better connected organizationally than others; Pitt County, for example, had stronger reported organizational connections than Pasquotank County, both in the Access East network.

Survey Items Capturing Organizational Connectivity

The survey asked respondents to report on the relationships between their organization and other organizations they were working with as part of the Pilots. The survey asked respondents to name organizations that their organization works with. For each named organizational partner, respondents were asked about the nature of the relationship between their organization and the partner over the last 3-6 months. This came in the form of two questions, capturing connection and collaboration.

For connection, respondents were asked to rate their level of connection to an organizational partner on a scale of 0-3:

0=No Connection: I don't know this organization

1=Light Connection: I had heard of this organization but did not have a personal or professional relationship with them.

2=Good Connection: I have a personal or professional relationship with this organization, but only occasionally communicate with them.

3=Strong connection. I have a personal or professional relationship with this organization, and I regularly communicate with them.

For collaboration, respondents were asked to rate their level of collaboration with an organizational partner on a scale of 0-2:

0=Not at all. I have not collaborated with this organization**.**

1=Yes, with their organization in the past. I have collaborated with this organization in the past, but not currently.

2=Yes, currently. I am currently collaborating with this organization (on initiatives and projects other than the Healthy Opportunities Pilot work)

Distribution of Number of Partners

Figure 7 presents the distribution of number of partners named (without differentiating between organizational type or health network). Many organizations name only a single partner as part of the survey. The survey allowed respondents to name up to 10 organizations, although no organization went above 4 named partners. It is worth noting that the number of named partners is likely an undercount, as several respondents suggested in their open-ended comments that they had upwards of 20 or 30 partners, despite only naming 1 organization in the survey. This mismatch is likely due to respondent fatigue and/or recall bias.

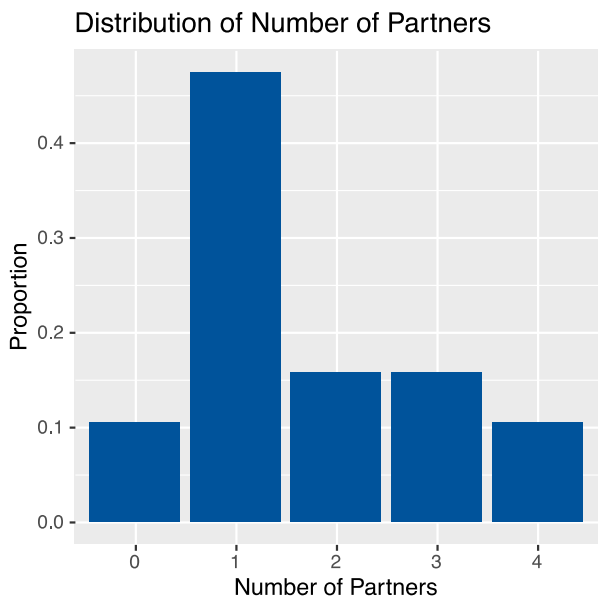


Figure 7: Number of Organizational Partners Named

Figure 8 presents the number of organizational partners stratified by Network Lead.

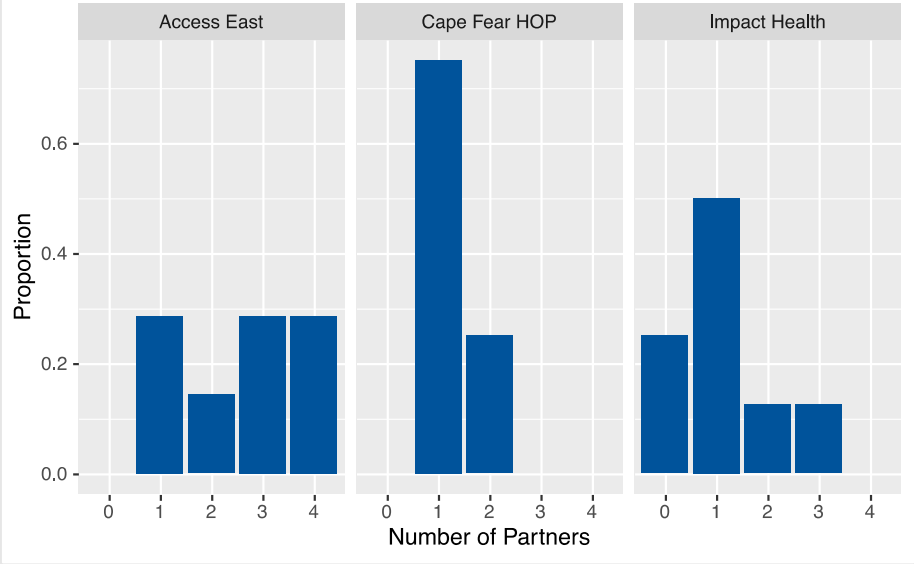


Figure 8: Number of Organizational Partners Named by Network Lead

We assess the nature of the reported relationships in **Figure 9**, which presents the mean for connection and collaboration for the whole sample. Organizations reported strong connections to their organizational partners. Over half of the organizations reported the maximum value of 3 (strong connection) for every organizational partner that they name. The overall mean level of connection is 2.56 while the median is 3. The results for collaboration are similar. The overall mean is 1.79 (out of 2 max), while the median value is 2, corresponding to a current collaboration that exists outside of the Pilots.

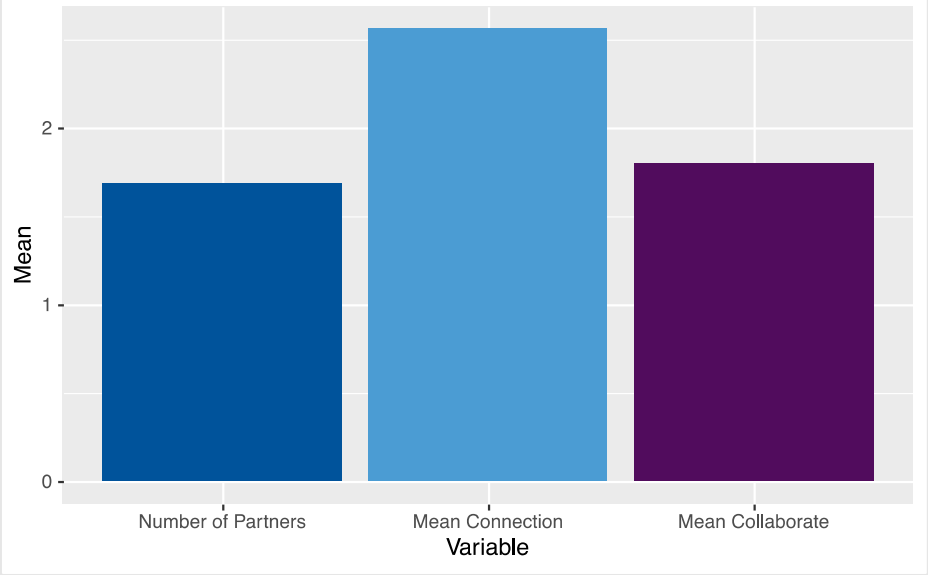


Figure 9: Overall Means for Number of Partners, Connection and Collaboration

Results are similar when stratified by Network Lead (**Figure 10**).

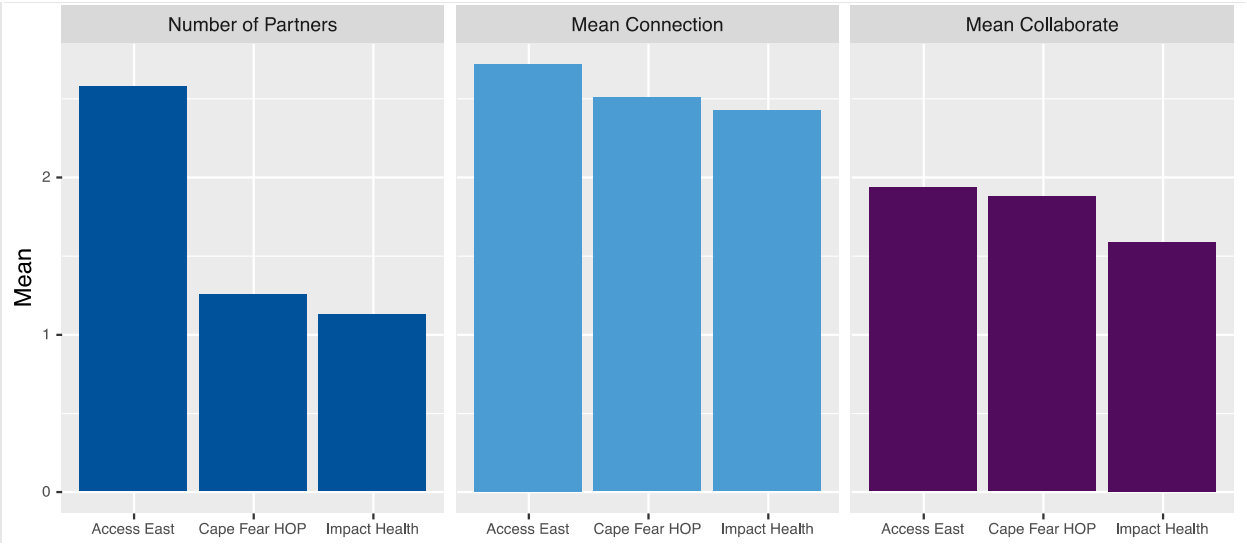


Figure 10: Overall Means for Key Variables by Network Lead

The maps below show the state of North Carolina divided along county lines. The colored regions are counties that are represented in the survey data, with at least one organization located in that county. The colors run from light to dark, with darker colors representing higher values for the variable of interest. We include three maps, one for mean number of partners, one for mean connection and one for mean collaboration. These maps depict the density of connections between NL and HSO organizations at the county-level. We color the county by the mean value over all organizations in that county. The gray colored counties are counties that are not represented in the sample.

Figure 11 presents the results for number of partners. There are three broad regions in the map that are colored, corresponding directly to the three health networks in the study. Impact Health includes western North Carolina counties (Buncombe and Jackson); Cape Fear includes southern North Carolina counties (Brunswick, Columbus, New Hanover); and Access East corresponds to the eastern North Carolina counties (Beaufort, Pasquotank, Pitt).

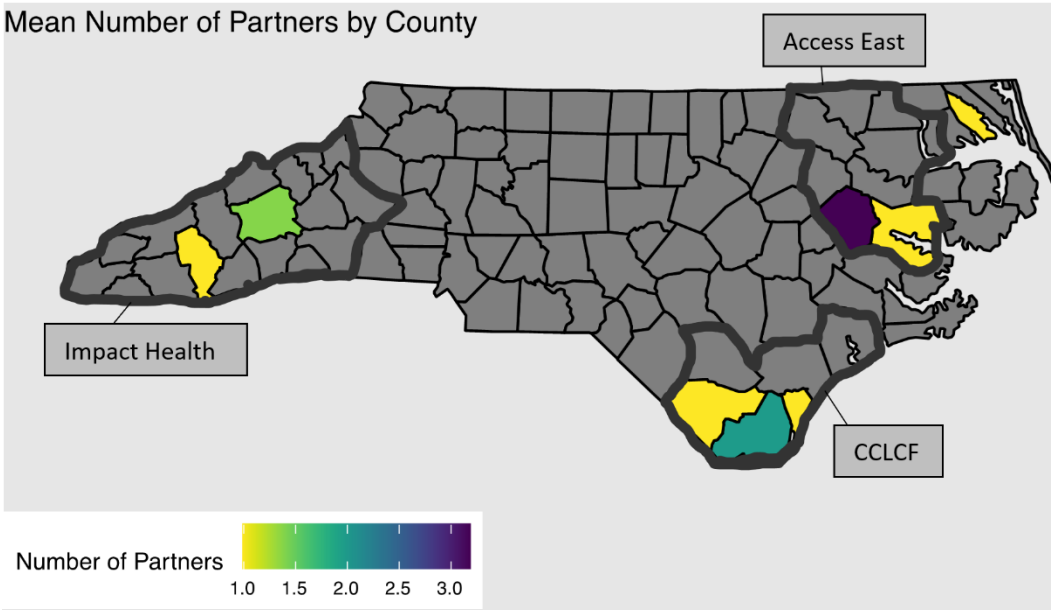


Figure 11: Geographic Variation in Number of Partners

The results are generally similar when looking at mean connection in **Figure 12**

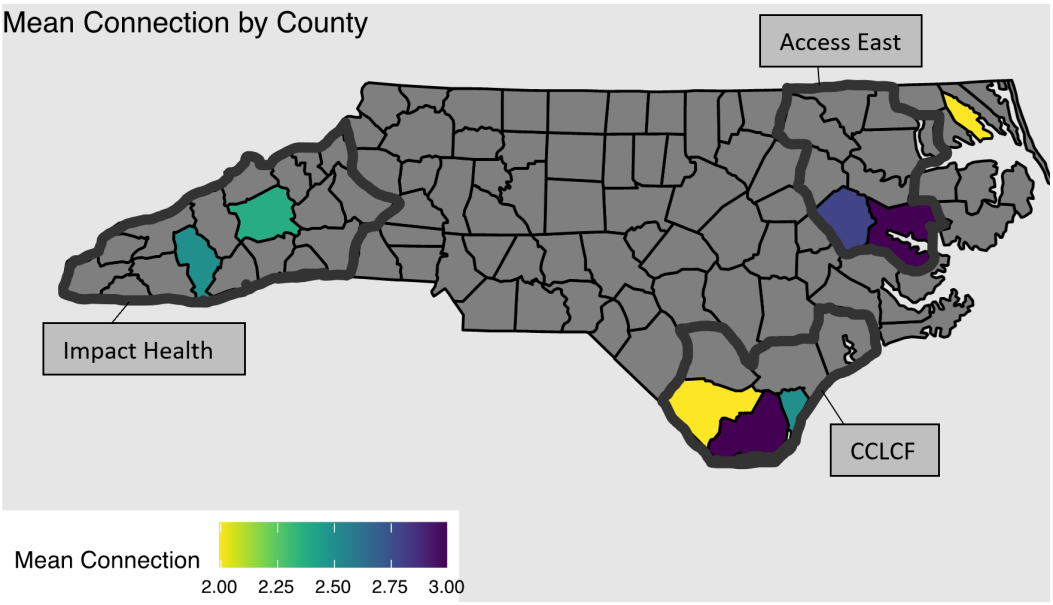


Figure 12: Geographic Variation in Mean Connection

In **Figure 13**, we present the final map, focusing on mean collaboration. Here, there are generally few differences across counties, with nearly all counties having high levels of collaboration; with mean values ranging from 1.4 at the low end to 2.0 at the high end (the max value).

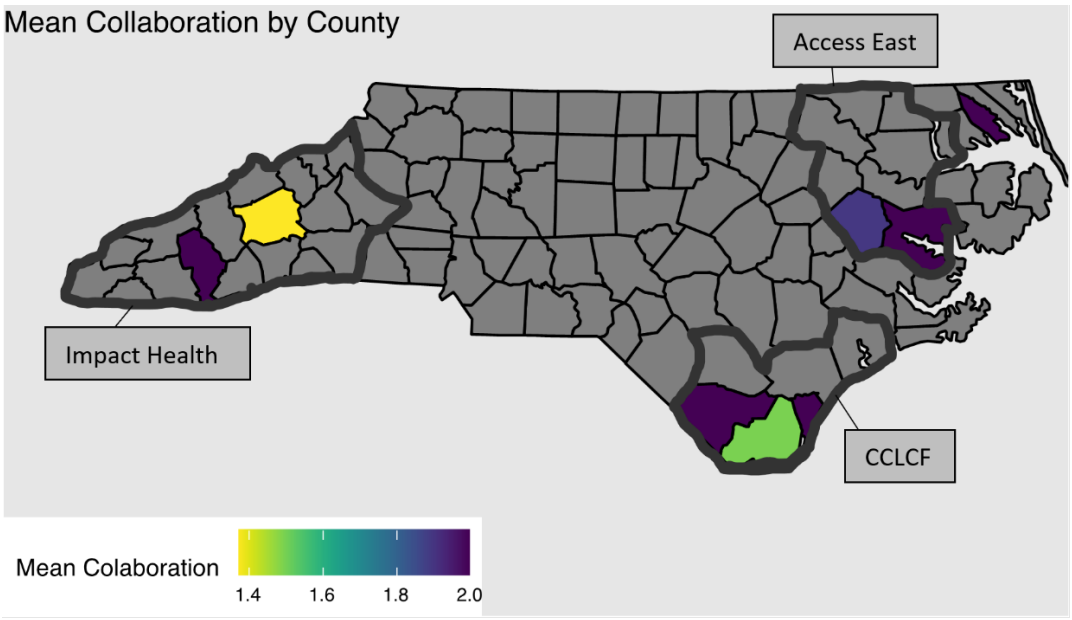
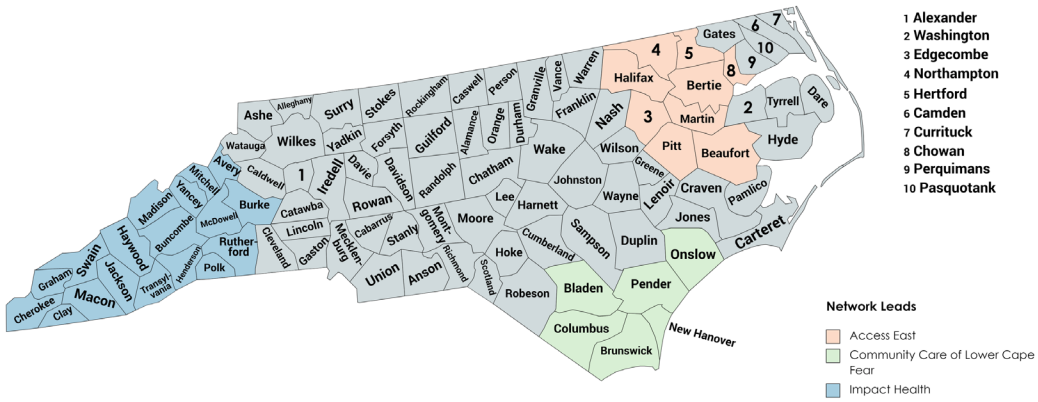


Figure 13: Geographic Variation in Mean Collaboration

The final analyses in this section examine the relationships between two of the main variables, mean connection and mean collaboration. Overall, there is a general positive relationship between mean connection and mean collaboration (.34 over the whole sample). Organizations that are currently working together (collaboration) tend to have stronger rating of the relationship (connection).

Qualitative Interviewing

There were 36 interviews with 37 individuals (one interview had two individuals participating in the call), across three Regions (**Figure 14**). Among those who participated, 83% were women, 16% were men. Half (51%) identified as White, 38% Black, and 3% Hispanic or Latino.



Region	# Participants Interviewed (N=37)
Access East	14
Community Care of Lower Cape Fear	11
Impact Health	12

Breakdown of HSO's interviewed within Network Lead (Phase 1)

Access East	Cape Fear	Impact Health
Cornerstone	CoastalCCS	HIGHTS
Albermarle Regional Health Services (ARHS)	Keep Your Hands Off Me	Eleanor Health Foundation
Catholic Charities	Warm	Mountain Projects
	EquitiFoods	Macon Project for Progress

Figure 14: Participants Interviewed By Region

Qualitative Findings

FINDINGS: STAFFING ADEQUACY

The adequacy of staffing structures varied across regions with a strong focus on keeping proportionality to future capacity needs. Network Leads and HSOs noted having to keep a proportionality between staff and future program growth.

"Startups have rough bumps, so the cool thing is that we just decided not to look at it and panic [at] any of the rough pages, but just band together and lean through it and then come out on the other side. And it's been wonderful to see that happen."

HSOs reported a range of 1-4 full time staff members running the entirety of the pilot services for their organization while Access East and Community Care of the Lower Cape Fear (CCLCF) shared they had at least 17 staff members dedicated to HOP. Impact Health reported they had eight staff members. Two Network Lead regions (CCLCF and Access East) were already existing organizations within their communities, and there was a common theme of individual's roles in these organizations transitioning over to HOP entirely or being able to fill these designated roles with individuals already working within the network. In contrast, the third Network Lead region, Impact Health, was an entirely new organization created for HOP with legal assistance from Dogwood Health Trust. In addition to being a new organization that started later than the other two Network Lead organizations, Impact Health also experienced a dramatic change in leadership personnel, losing three members of leadership unexpectedly and abruptly in the first few months of HOP.

Participants felt they were initially understaffed but getting to a point of adequacy. Across various agencies, additional staffing roles needed to be filled included case workers, registered dietitians, delivery drivers, and administrative assistants. Those who were able to increase their capacity mentioned expanding their teams with additional staff. Examples of expanded positions included:

- Case Managers, Care Services Coordinators, Care Council Leads
- Data Scientists
- Engagement Coordinators, Community Engagement Manager
- Finance Team
- Project Managers, Compliance Managers
- Executive Directors
- Environmental Health Technician

FINDINGS: HOP SERVICES AND RESOURCES

Food, housing, and transportation were the main HOP services and resources offered by organizations. During the time of the interviews, IPV-related services were not yet offered. Interviewees reported that there were some services they wished to offer but would not be covered by Pilot funding. They also expressed concerns about capacity and making IPV-related services work within the framework of the Pilots, which requires coordination across organizations that could make maintaining confidentiality difficult.

"I think, right now, the gaps and things that we have seen, we're working diligently to fix those or to fill in those gaps. So, plans are pretty much in place for that."

Key gaps Interviewees noted included:

- Funding gaps impacting capacity and reach
- Medicaid coverage gaps impacting who may be covered by HOP
- Gaps in transportation services related both to the number of providers and the longer distances to travel to receive services in rural areas
- Rurality often meant large regions to cover with less density of HSOs. HSOs service limits (for example, serving individuals residing within 10 miles of an HSO) that may work in urban areas may be overly restrictive in rural areas.

From the perspective of NLs, growing a large network of HSOs was appealing as it meant they could offer a greater array of the services. In terms of missing services, or those that should be added, interviewees offered the following suggestions:

- Education workforce
- Therapy
- Mental health
- Paying for medications

FINDINGS: HOP PROVISION OF SERVICES

Interviewees were generally positive about how HOP provision of services fit into other services that the HSO offered, but expressed concerns about issues of reimbursement, capacity funds, and sustainability.

"What I am concerned about that is right now, obviously, we're able to hire those staff on the initial start-up funds, so the capacity building funds. I'm very concerned that the payment and reimbursement structure will not really lend itself to stall the sustainability for the program. And a couple of things that we have seen so far is when we started out, we were under the impression that the capacity-building funds we could use those to kind of help us get going, right? And it was not clear that we couldn't use them for some of those initial costs for the actual payments."

When asked about how provision of services through HOP fit into other services offered and populations served by organizations, interviewees were generally positive. They mentioned multiple ways this fit with other services offered. For example:

- Provides additional funding for services and staff
- Integrates into existing programs
- Partners with other agencies doing same work
- Receive additional assistance from other staff (i.e., legal, compliance, communication)
- Makes the work a priority, gives a sense of urgency
- Makes reimbursement streams become policy
- Fits into same budget as community health workers

Interviewees noted that Pilot funding and revenue streams were impacted by several factors including restrictions on use, changing funding sources, referrals, the availability of grant funds and private donations. In some situations, it was also impacted by other individuals' willingness to accept HOP funds. Financial stability concerns centered around issues of reimbursement, the end of capacity funds, and sustainability.

FINDINGS: HOP GOALS

Interviewees set short- and long-term goals for their organizations with an emphasis on internal operations and infrastructure as well as expanding services, reach, and achieving sustainability.

"The long-term goal goes back to sustainability that while this is set up to be a pilot, my goal is to make sure that when the pilot's over, that if it's decided that this thing is working, and we want it to go, that it keeps running, right? It doesn't flame out after the two- to five-year pilot and that it's built for success, long term, because it, really, can become a model for other people to build off."

Interviewees identified both short- and long-term goals for HOP. Many of the short-term goals were focused on internal operations and infrastructure. Additionally, interviewees also mentioned establishing short-term external goals that centered around increasing awareness and expansion.

- Recruit additional HSOs
- Support and set up networks to be successful
- Connect HSOs to community resources
- Meet all reporting requirements and pilot timelines
- Stress the importance and necessity of HSOs getting on board correctly
- Learn the process and become acclimated with the pilot programs and services
- Get data and be able to share and use it
- Increase awareness of HOP among organizations and potential enrollees
- Get clients and referrals
- Build a diverse network
- Expand geographically

Long-term goals for HOP placed emphasis on setting networks to be in a stronger position to succeed. Interviewees talked about setting goals to address social determinants of health, expanding services and sustainability. Long term goals included:

- Extend pilot duration
- Meet compliance, create a compliance program structure
- Purchase needed equipment
- Set networks to be in a stronger position post-pilot
- Increase awareness and bring additional support and resources for region
- Continue addressing social determinants of health (SDOH)
- Expand services and reach
- Sustainability

FINDINGS: HOP BENEFITS AND SUCCESSFUL PLANS

The benefits of HOP include building networks, supporting HSO/CBOs' growth, and supporting community health and wellness. Key components necessary in a successful plan to provide services need to incorporate capacity building, improved communication, and the creation of more intensive logistic plans.

"The main benefits, I would have to say-- as far as with our HSOs and how they serve the community, I would say just the work itself, how our HSOs being connected with us are better able to serve the community… So just seeing the resources and the benefits from them being in our program and how it helps their program, to me, it's just awesome."

The main benefits interviewees associated with HOP included building networks, supporting HSO/CBOs' growth as well as supporting community health and wellness. To provide services, interviewees indicated access to tools, training, and communication as beneficial in their preparations. They also noted communication and regular meetings, funding support, capacity building, HSOs feeling supported by NLs, and trust to be important.

To help organizations feel ready to successfully participate in HOP, interviewees shared that having the ability for trial and error to see what works for individual organizations was beneficial. Additionally, having individuals within the organizations that are experts and have experience working with the communities the Pilots will serve is essential to delivering Pilot services successfully. Other key components interviewees viewed as necessary in a plan to provide services included:

- Capacity building
- Improved communication
- More intensive logistics plans
- Improved referral process and NCCARE360 platform
- More staff and volunteers
- More advertising of HOP to the community by the State
- Education for both HSO and PHP staff, as well as education to help the community understand the HOP program

There were mixed feelings and experiences around quality of communication across and between the Pilot Networks and the State; however, organizations generally agreed that the ability to grow with and alongside HOP has been a huge benefit. Being able to create and expand their networks has allowed individual organizations to find and fill their own diverse gaps in service.

FINDINGS: HOP CHALLENGES

In their preparations for HOP, interviewees experienced challenges and difficulties related to the physical, work, and information technology infrastructures. They also reported challenges working with different partners and systems, Medicaid and reimbursement requirements, and timelines.

"The biggest challenge so far has probably been NCCARE360 and helping our HSOs learn how to navigate that system. It's definitely been a challenge. There's been a lot of referrals that have been closed for-- accidentally, or they may have sent an invoice about something, or they may not know where to click to send the invoices."

In terms of preparations to provide services, interviewees expressed concerns about the set up and startup of services. Many worried about getting a system in place and having it ready to be used. They also expressed concerns about how long it would take to start the pilot services. Specific challenges related to the pilot preparations included physical, work, and information technology infrastructures as well as partnerships and funding. For example:

- Geographical barrier of not being in same location or region for services
- Onboarding process for staff and payers
- Unclear organization of tasks and responsibilities and staff roles
- Burdensome amount of reporting and documentation required
- Technology glitches, lack of consistent templates
- Issues with partners, external networks, and organizations; HSOs stop being adaptable
- Limited access to knowledge, information, guidance, or trainings
- Limited communication, delayed response from DHHS
- Limited promotion and awareness of HOP
- Accelerated time frame to launch, needing time to grow
- Limited availability of external funds, limitations on use of capacity funds

In terms of providing services, interviewees were most concerned about the referral process to NCCARE360, the billing and reimbursement for smaller agencies, getting access to data to see what needs to be done, and financial sustainability. The main challenges noted by interviewees to providing pilot services included:

- Difficulty working with NCTracks
- Data confidentiality, how to be discrete with information
- Complicated referral and reimbursement systems
- Confusion as to what documentation is required/expected for services:
- NCCARE360 needing to be more user friendly
- Difficulty working with PHP systems
- Working with different HSOs and their limitations
- Medicaid requirements and reimbursement issues
- Hard to plan for how much demand for services there will be
- Getting referrals to come in
- Limited HOP timeline may make it difficult to demonstrate a benefit of services offered
- Concerns about sustainable funding after the Pilot period

FINDINGS: MEDICAID AND REGULATIONS

Interviewees had mixed experiences with the Medicaid regulatory environments. Some felt the regulatory impact helped organizations with support and new skills. Others feel the regulatory environment created and added barriers for organizations, particularly with sustainability for smaller organizations.

"The main thing that just came to my mind is the level of restrictions that this kind of funding tends to bring. So just kind of thinking about the sustainability of it and HSOs actually wanting to participate for a

long time. Given the source of the funding, we'll see if things can get a little cleaner and more streamlined."

Prior to the Pilots, most HSOs had not previously received Medicaid funding, and so Medicaid funding represents a new funding source with different regulations/requirements than what they are used to. Interviewees had mixed experiences in preparation for HOP. Many noted that learning new skills and receiving support from the regulatory environment were two main positive impacts they experienced. In contrast, interviewees identified challenges associated with both Medicaid and other regulations, such as DOJ regulations for IPV services.

FINDINGS: PARTNERSHIPS

Having collaborative partnerships and key players at the table is a critical support strategy and partnership decision making and success is based on the ability to have flourishing communication, growing networks, and collaborative efforts that are mutually beneficial.

"I think anytime you work and what you're trying to do across the group, it makes it easier. And the more people you can bring in, the more ideas you get, the more resources you have, the different abilities and talents that you have. So the collaboration, in my opinion, has been fantastic on this thing. … The more you can level the work across different people, you get different ideas, different ways of doing things, you get ideas and collaboration. That's huge, in my opinion."

Interviewees shared that partnerships enabled them to find ways to work together to achieve Pilot goals. When choosing partners, they talked about the importance of compatibility and bringing on long term partners. The partnerships included individuals from health care systems, universities, community organizations, and state departments with each providing key assets to the pilot collaboration. These assets included:

- Training support
- Connection to larger network
- Longstanding community trust
- Experience-based feedback and support
- Marketing/Advertisement assistance and general recruitment
- Data analysis or data support
- Meeting with DHHS

In addition, interviewees discussed what to look for and consider in new partnerships. They wanted to broaden their partnerships to include representatives from food, transportation, behavioral health agencies, business development, and government/policy makers.

FINDINGS: COMMUNICATION

Interviewees incorporated different types of communication strategies to promote programs and services, both internally within organizations and externally with their partnerships. But they also see opportunities to enhance their current efforts.

"We need to have more conversations with the partners in order to make sure we're all on the same page. That communication right now is struggling, and so, I mean, I think they're doing a decent job. But I'm really big on partnerships and communication. I know that that's going to be crucial for some of our local efforts, identifying who some of these partners are and this, that, and the other."

Interviewees recognized that multiple strategies were necessary to promote HOP services. Many shared that their internal communication strategies focused on NLs and the HSOs. They described using methods including direct, verbal communication, as well as meetings, and electronic formats. Interviewees also mentioned their external communication strategies and promotional efforts, specifically indicating the use of multiple strategies to reach their target audiences. This included:

- Community outreach and engagement
- Having a presence at community sponsored events
- Media campaigns and collaboratives
- Printed materials and paraphernalia
- Websites

To further enhance HOP, interviewees talked about additional strategies that could be included in their communication efforts. Some strategies discussed included:

- Participate in community outreach, conversations, and connections
- Plan meetings to get all players at a meeting
- Include more branding and logos on items
- Increase awareness and education at local agencies
- Increase social media
- Create cards and flyers with QR codes
- Create websites
- Design HSO portal

In a few instances, interviewees indicated that they had not yet communicated or promoted their programs and services. It was also brought up that at the point they were at in preparing to deliver pilot services, it would be advantageous to prioritize the details of program operations over marketing the services.

FINDINGS: INTERNAL EVALUATION PLANS

As part of their internal evaluation plans, interviewees have multiple formal and informal strategies to track components within their organizations as well as external components that examine populations served, services provided, and levels of satisfaction.

"I know that part of what we're going to be doing is having to do some interviews. So, I haven't quite figured out how that's going to work. We need to figure these pieces out. So do we need to interview families that get the services? And if so, how does that work? Because, again, making sure of privacy and things like that. So, it's one thing for us to interview the agencies that are providing the services. I mean, it's a little different when you're trying to interview individuals."

Internal evaluation plans included tracking components within HOP like reports, trainings billing, data with multiple strategies and methods:

- Reports by Salesforce, NCCARE360, Quality Improvement coordinators, compliance managers
- Trainings by UNCW canvas system
- Billing, reimbursement requests, and invoices by using Quickbooks, templates, financial metrics, Google, electronic medical records, and payments dashboard
- Data by data managers, data scientists, software programs
- Gap analysis by UNCW subcontractor, data scientists
- Equity coverage by data scientists

Additionally, interviewees talked about tracking different external components of the pilot to keep track of progress. This included:

- Referrals by surveys, monthly reports. DHHS, NCCARE360 tableau
- HSO Network adequacy by staff evaluations, client surveys, network adequacy reports, data scientists, NCCARE360
- Participant served and how; tracking meal interest and service needs by using surveys, Excel, practicum student
- Services provided (food boxes, care plans) by using Microsoft Excel, TA person, and NCCARE360
- Services satisfaction by family interviews
- Overall success using Salesforce and Asana

Interviewee Recommendations and Lessons Learned in Preparing to Deliver Pilot Services

From the interviews, participants shared their suggestions and recommendations for what is essential to enable effective delivery of pilot services in their region. This also included advice offered for other organizations that seek to do this type of work. Their recommendations are summarized in **Table 5**. Components are described in more detail below, with a selection of illustrative quotes.

Table 5: Interviewee Recommendations For Effective Delivery Of Pilot Services

Components	Theme
A. Financing	Funding Sources
B. Access to Knowledge and Information	Advertisement and Media Assistance
C. Information Technology Infrastructure	Technology Platforms Tracking System Reporting Templates Data and Analytics Rejection Notifications
D. Work Infrastructure	Minimal HSO Burden HSO System Support & Sustainability Advance Requests for Reports
E. Communication	Simplified Communication and Referral Process

A. Financing. Funding from external entities (grants, reimbursement) is available to implement and/or deliver the intervention.

- **Funding sources, grants or capacity-building funds are necessary to provide new services**
  "But if you're trying to provide services where the service providers don't exist, then you're going to have to put a fair-- you're going to have to give them a fair amount in grants or capacity-building funds to get them to a point where they can even provide those services."

B. Access to Knowledge and Information. Guidance and/or training is accessible to implement and deliver innovative services.

- **Advertisement and education are necessary to provide new services**
  "*This pilot will be a good pilot to advertise in the schools because the social workers or guidance counselors that are in the schools, they might can identify children that them and their family are eligible for this program. Yeah, they may be getting food assistance from another program, but they're in need of housing assistance, or their house needs to be remodeled or something. So that's why I say do it because you want to reach as many and help many people as you can. Because if you don't, their outcome is never going to change. It's just going to be a vicious cycle."*

- **Assistance with media strategies and user-friendly templates to increase service awareness**
  "I mean, it would be amazing if we were equipped with a template. … So, we don't know when we're supposed to put the State's logo on things and when we're not. So, all of our things are

mainly Impact Health branding. So, it's, is that okay or do we need branding from the State? But then something that easily explains would help is easily explains the channels that they need to go through to find out if they're eligible. And then for the west, what we're struggling with is how helpful is it for the actual clients to know the agencies that are involved. Because [it's] not like they're calling up the agency because the agency can't start the referrals. So it's one of those [things] where I guess even if there was just bigger media that people are like, okay, I call the network leads to find out more that's happening. I just feel like because it's got delayed so much and it hasn't been huge amount of referrals so far because there aren't that many care managers that can refer that it hasn't hit the media yet. And so any kind of media would kind of help but then a template that's okay for us to share when our HSOs want to communicate about it. So, if they want to give a presentation, if there's a flyer, if they want to put it in their newsletter."

C. Information Technology Infrastructure. Technological systems for tele-communication, electronic documentation, and data storage, management, reporting, and analysis supports implementation and/or delivery of the innovation.

- **Create technology platforms that will work with the program**
  "Thinking about the technology in the platform and really trying to make sure that you have technology that will work for your program and not the other way around, where you're trying to constantly bend your program for the technology. The technology should be bending for your program."

- **Provide continuous access and assistance with tracking information**
  "There's a way that instead of us keeping track of all that, is there some type of program where we can just plug in numbers in NCCARE360 to keep track? We can just plug in a number to a person and it automatically tracks. Small things like that would be great because even though it's small, it can be aggravating sometime."

- **Make things more user-friendly and provide templates and forms to help with organization and reporting**
  "I wish they had a little more of a template for the forms and stuff you have to complete, things that have to be developed. There was just a little bit of template or something to go back from making these plans for organizing these plans, but I've talked with them and they work me through the process, which is good, but I think it would be good because of if everybody was kind of using the same template, it would just make things a little more easier and then have better guidelines for it."

  "So as a person doing the reporting, [laughter] I'm trying to pull the reporting together? I like templates and getting that-- or the ability to say, "Hey--" so we're using Salesforce as the collector of all of our information and everything. It makes me very happy working in Salesforce. So I've been helping with creating and everything else and we're actually to the point where we're running our first reports to be able to turn in. And so my hope is that the State is going to be okay with me saying, "Hey, this massive report that we have I recreated it in Salesforce. It's got all the same columns. Can I just send you that? Please don't make me copy and paste it into a new [one]."

"Gosh. So in NCCARE360. There is a lot of things that are coming, like phase two, and it's going to be easier and I wish we could fast forward to that to see what it looks like because I feel like we're like, okay, right now you have to copy and paste this big long authorization number. If you copy and paste that incorrectly, then your invoice will get rejected. So it's just like things that we think software should be able to automate. It would be awesome if that does come to fruition. And so I think that's-- how much is NCCARE360 going to change so that is more user-friendly and doesn't have all this room for human error."

- **Provide network specific data and analytics**
  "I don't know if we've really set a baseline on how do we assess [how the program is doing]? How do we assess what it's doing? I'm sure DHHS probably has some kind of ideas about it as well. But from a network lead perspective, I'd love to go get my hands on that data to understand what is it doing. But we don't have all the information that's going to be needed for that. How do we take the patients that we've serviced and then compare the medical spend from pre-op to post-op? How much do we change it? How much do we modify it? … What I'm thinking would be helpful between the network lead and DHHS, let's go look at the insurance companies, obviously as well. Let's go look at the spend. Where was it? Where is it now? Where do we impact the most? We might find that-- I think there's 49 services overall. We may find that 25 really impact stuff, 24 don't. But without doing the actual data mining and doing that analytics, how do you really know?"

- **Incorporate a generic rejection push notifications**
  "It would be cool if there was a rejection. I mean, even if it just came via email, "Hey," and it was a generic push that this was rejected and this is why, that explanation, that would be more helpful than anything because then we can rectify it faster. But as it stands right now, we're just kind of a sit-and-wait, and we don't really know which way to go with it. I mean, we're on NCCARE360 or Unite Us. It goes by both. So I don't really know which one to call it anymore."

D. Work Infrastructure. Organization of tasks and responsibilities within and between individuals and teams, supports implementation and/or delivery of the intervention.

- **Minimize burden to HSO**
  "I think so from the network lead perspective, something that we have set up right now, which are the weekly calls and [NAME] responsiveness. That is so helpful with understanding the network lead role and then being able to understand related to HSOs. From the HSO side, I think it's figuring out how it fits into their workflow and making it so that it doesn't seem like this huge burden for them to then get reimbursed. That figuring out that delicate balance of how much time does it take the worker? How much time does it take the client? What's actually necessary to ensure a good service is delivered? So just figuring out how to not make it burdensome to the HSO and get a good experience for everyone involved."

- **Provide HSOs with system support and think through sustainability**
  "I mean, I'll just go back to referrals since, I mean, I think we have the full confidence of our HSOs, 50 currently, to be able to do this work and to do it well and to improve health and lower healthcare costs. But I think, again, without kind of the system's support and thinking through sustainability and what comes after this, I do see that as our kind of continued role."

- **Request reports due earlier on**
  "So going back to my fun part of wanting reports and things like that, I think the need to have those earlier on. We've been building Salesforce, so the ability-- thankfully, I had some of the reports, and I could just hand them to Salesforce and say, "This is the information we need to be able to pull from here." And it went great and integrated again. I think it's easier to do that at the beginning rather than later on. Thankfully, we're still at that beginning piece. But if suddenly somebody decides to do a whole new type of report, we've now got almost, like I said, a month worth of-- well, actually, from January 1 on in Salesforce. To make that report work, I'd have to go back and fix all of that. So those types of things can cause things to get backlogged and you end up doing crazy data stuff. You spend a whole lot of time doing that instead of really doing what the work needs to be. I'm a huge proponent of how much of this can we get ahead of so that it's already there that all we have to do is just run things. And I think the same for the HSOs. I know a lot of them have had-- yeah, I remember the conversation of, "What is a big food box, and what's a small food box? What exactly does this mean, and is it different depending on how does it work?" And I think where we need to have that conversation would be if it's-- it was almost like we needed to have a list of, "These are things you guys need to just figure out on your own and let us know what you're doing, and these are the things that absolutely have to be told to you by the State." And because if we had known or we knew that, "Yes, these things, you guys have to figure out and create how you want it to work in your community," the nice thing is we've got this great group of HSOs that are more than willing to sit down at the table and have those conversations because they are the experts in the field."

E. Communication. Formal and information sharing practices support implementation and/or delivery of the intervention.

- **Get the information out and make it simpler to get referrals**
  "The key component would be communication. Honestly, cutting back, not making the process for getting referrals to be so lengthy. And I know you have to go through the prepaid health, the insurance, and get all their authorization. I understand that. I think that's the biggest thing. Being able to first make sure you get the information out there to all, everybody, let them know about the opportunities that we have here. And it will have to be just like decrease it or make it a little more simpler to get referrals."

Interviewee Advice for Other Organizations

Given the need for new HSOs to join the Pilots, current organizations had advice for new organizations. This advice is summarized in **Table 6**. Components are described in more detail below, with a selection of illustrative quotes.

Table 6: Interviewee Advice for Other Organizations

Components	Theme
A. Mindset and Attitude	Be open with communication across all collaborators Be willing to ask questions, learn, and share knowledge Be willing to jump in when there are no exact answers Be patient and expect changes Be creative Be adaptable Support the organizations you are working with Be prepared for the amount of time required to do this work
B. Planning and Preparation	Apply for additional funding Start with a readiness assessment and focus on the process Build a team with community knowledge and experience Build a team with a variety of content expertise Study successful organizations Follow guidelines and best practices Provide training opportunities for your team Documentation Have good financial policies in place Remember your why

A. **Mindset and Attitude**

- **Be open with communication across all collaborators**
  "It has to be open. It has to be communication. Communication with the community, communication with the clients, communication within the agency, in order-- without network lead, what's working, what's not working. Communication is going to be the key to seeing that this be effective or seeing how effective this can be."

  "Our communication. I mean, the communication for the set up of the program and that sustainability funding, and then the communication with potential clients and how they can get in the system."

  "Pulling it out but also engaging them. So we're not creating that guidance, just sitting in a corner by ourselves. We're doing that based on the convenings we've had with them and lots and lots of feedback. So that's where that conversation piece comes in. So lots of organization and really, kind of, managing all of the information that's coming into you. And then lots of

conversation and making sure you're walking that tightrope between receiving information and sharing it but also not bombarding them. Because they still have to do their regular job."

"Everybody working together. That coordination and communication. It really needs to be there. There also has to be a trust between the agencies and the network leads. They have to trust that we're going to be approving their invoices and that we're not going to do something with things-- that we're going to work with them."

- **Be willing to ask questions, learn, and share knowledge**
  "I do think it is key to learn from your peers, right? So if you're thinking about doing something like this, really sitting down with folks, like the three network leads who've done this before and really talking about what worked well, what didn't, how do we dive into something like this. And it's going to cover the gambit, right? You're going to be talking about things like what should your staffing model look like for what you're trying to achieve? Who are the partners in your network? How big of a geography area do you want to try to tackle, initially? Are you looking at a rural area like ours, 18 counties where you need 100 HSOs for? Or maybe you want to tackle something that's like three or four counties, and there's 30 human service organizations that can cover the different services that you're looking at. So I think really trying to think through what's needed for your particular geography and what are the services that you're trying to tackle. Four domains doesn't sound like a lot, but then there's a lot of services within the four domains. And so really kind of understanding if you were going to be tackling something like this, what does your population look like? What are the needs of that particular population? Who are the service providers currently providing those things? And then where are the gaps?"

  "Don't be afraid to ask people who have done this before in some extent. This pilot is new in the nation, so it's not exactly going to have a blueprint for it. But don't be afraid to ask around, and seeing what's best practice for certain things that's going to be new to you. If you want to get best practice, you can't be afraid to just communicate with your colleagues, with whoever and say, "Hey, what is the best way to do this in the community? How do you feel we can reach certain people in the community." Just open dialect within the community, I think would be it."

  "Use your voice. I mean, don't just accept the fact that you're being told. Ask questions. There's no need to be rude about it, but ask questions and point out when things just aren't making sense. So they are too often, we just kind of go with the status quo. We're not asking why, and I think we need to ask why more frequently and kind of give the alternate perspective for why we need to go in a different direction and why we need to look at this. Because, again, we want this to succeed. We want this to move forward."

  "So we end up having conversations with the other network leads on a regular basis. I'm like, "Hey, how did this--" I'm so excited. Impact Health now has a compliance person because in the beginning, it was only me out of all the agencies. And so unfortunately, we're all so crazy. It's hard to find that time to have a sit-down and have a conversation. But the fact somebody else out there-- --is doing a lot of the same things because-- and I think one of the things that when we first met, they were like, "We don't want to take anything from you guys." And we're like, "No, here, take it. Run with it. Use this." Because I think for a lot of it was like, "Well, is this going to be proprietary?" And I think from what I've been hearing, it's not. That's not what we want to

do. What we want to do is share that information so that everybody has the best. And you know what? We may not have had the best. It may be one of the other agencies or one that would please him. We need to know, and we'll change accordingly. I'm okay with that."

- **Be willing to jump in when there are no exact answers**
  "it's just being ready to jump in and try. And not always have the exact answer. Just get ready to dive in. [laughter] … I mean, I think, transparency, being ready to support. It's never been done before, so we're going to hit roadblocks, but some sort of resiliency to get through that."

- **Be patient and expect changes**
  "Patience. Definitely patience and grace. Give yourself grace because it's a pilot. It's going to change. It's unknown territory. And sometimes the unknown is scary especially when you don't have all the information up front. So give yourself grace for that. It's easy to beat yourself up so give yourself grace. And then enjoy it and be creative. Because it is a pilot, so you're creating it as you're going. So that's the other piece."

  "Just to be patient that it is a lot of work that goes into it but if you be patient and you get it all done and you just stay goal-focused then you will reach your goal and your organization will be able to offer everything that you envision for it to offer."

  "I would say just always expect that there's going to be some sort of change. Everything as of right now is not all set in stone because again, it is a pilot."

- **Be creative**
  "Enjoy it and be creative. Because it is a pilot, so you're creating it as you're going. So that's the other piece."

  "Creative as possible. That's all I can say."

- **Be adaptable**
  "You have to be super adaptable. And I used to always joke like, wow, today feels like my first day. Just because we would uncover something that nobody knew about and that would change everything we had known. So thankfully, knock on wood, that hasn't happened since food launched. But my first month it was like, what? Every day there was just something that we would uncover. So I think it's the ability to adapt, the ability to figure out this complex information and then be able to relay it to various adult learners that will grasp it. And then also it takes a lot of time to build those trusting relationships and to keep those trusting relationships. So it is not for the faint of heart."

- **Support the organizations you are working with**
  "I would want one thing. The sponsoring entities need to make sure they've done a lot of thinking about some things. I feel like, yes, this was a plan in the making for 15 years or so, but then when you finally launched, there seemed to be a lot of stuff that was undone. So how can you support particularly the HSOs, the CBOs? Because again, if indeed you haven't thought about all of that-- like I say to people all the time, if we're too hard on HSOs and HSOs decide they don't

want to be here and they leave, without the HSOs, there's just not a pilot. So we have to really want this balance of what it looks like to do the pilot, make sure we're compliant with what the State wants to need but also supporting HSOs so they can provide the information that we need. Otherwise, if they start saying pressing the stop button, then you've got a whole slew of issues about trying to get the reimbursement if they were awarded faster building funding, what does that look like if they haven't fully participated in the pilot, I'm going to ask them to reimburse that back to the State. So it just opens up a whole bunch of cans of worms."

- **Be prepared for the amount of time required to do this work**
  "It's a lot of work. So going into it, I knew what to expect. But all of the paperwork and all the process and doing the initial applications on all of the Medicaid sites and getting through that process and the turnaround time and it's a lot. 20 hours isn't going to cover it. 30 hours is not going to cover it. It is a lot of work and a lot of learning. Just some terms and things and how it's going to go and then how you're going to lay out your boxes, how are they going to look, how are you going to offer these services, how's that going to look? And, yeah, it's a lot more work to initially set up than I think any of us thought. Because I sat in a lot of meetings where people where their minds were blown and they were frustrated and they were tired and they were dealing with the same things that we were."

B. Planning and Preparation

- **Apply for additional funding**
  "Apply for Capacity Building funds. You're going to need staff. Hopefully, like I said, they're going to expand this to all Medicaid."

- **Start with a readiness assessment and focus on the process**
  "I really think, and I know I keep going back to the readiness assessment because that's where I live. … So the middle of the readiness assessment is really pulling apart the process step by step. So we do our best to make sure that HSO has really thought through every aspect of the service they're providing, so. And realize that if a process doesn't happen the way they thought it would, to come back to us and we can help them, especially if something feels sticky or not quite right. So I think that process, them talking through it with us and, because sometimes you see a light bulb go off when they're walking through something you're like, "Is that going to work? … So doing that and actually getting them to walk through what it's going to look like before it actually happens, I think is a huge thing to help them to make sure the services are going to be provided the way we think they will."

  "Create a structure and set up that complements the services within the community.
  If I'm talking about an HSO, I would probably say one of the keys to, I think, our current HSO's success is that they were already providing the service. They didn't sign up for anything really new to them, so they were already offering it in some capacity. So that's been a huge benefit to them so far because if we're talking about providing meals, they already understood food violence, they already understood the nutrition aspect and maybe bringing in a nutritionist if we're talking about medically tailored meals. So they already had that background knowledge and things weren't kind of sprung on them by surprise with the requirements. If it's a network lead, I would say the structure and the staff setup would be key to trying to start this work. Like I

said earlier, I think that's been a benefit to Access East, the way we're set up, because we're able to divide out the work and it's not all on one or two people to complete the work. So I think that would be key as another network lead was trying to do this type of work."

"So much of it has to do with planning. Intentionality, planning, matching organizations that have the internal capacity, or the potential in the near future to develop that capacity, to provide specific services to people that people need. It's a data-driven matching, but it's also not deaf. It can't be deaf to what's actually going on in the community and what people actually do and need."

- **Build a team with community knowledge and experience**
  "When you hire your team that's front-facing with the HSO, make sure they have community experience. All of my team members do, and it's been wonderful because I haven't had to tell them how to communicate with them. It's been great."

  "Really making sure that HSOs know how to go into NCCARE360 and see the other services that members are receiving. So then they can be like, "Oh, you're also getting something from the HSO down the road. Let me call and coordinate with them and make sure that we're doing this really well for you."

- **Build a team with a variety of content expertise**
  "I think we just have more content experts. ... So I don't think that they don't have the expertise. I just think that we have it a little more spaced out. So if someone has an immediate question, we're accessible and really able to dig in. So I do quality improvement, and so I'm digging into readiness, and so I'm managing that. We're going to get everyone ready. We're going to make sure nobody falls through the cracks. We're going to make sure everyone feels ready."

- **Study successful organizations**
  "Well, I would say that one thing that they could do is look at other groups that are similar-- like for instance, if it's a food pantry, look at someone who does food pantry and hot meals because that way they can see how that group was able to expand to do hot meals. If they do transportation, see if they only have a van, and look for a bigger organization that has a van and buses. That way they can see how they grew to be able to encompass a bigger capacity. So basically, just studying bigger and more successful groups."

- **Follow guidelines and best practices**
  "I would say just to make sure that they follow all the State guidelines and try to follow as many best practices as possible. It's okay to recreate some things, but I would try to say to kind of stick with the best practices that have already been established that says this works rather than trying to recreate the wheel."

  "Utilize your HSOs that have been in the business of-- we have one HSO that's larger, that's been in business for a while and really has a lot of best practices already and understands things and-- use them. Not use them, but help your other HSOs to talk with them to see what their best practices are. So I think best practices from HSOs should be shared. And we're doing that in our quarterly meetings, too."

"But don't be afraid to ask around, and seeing what's best practice for certain things that's going to be new to you. If you want to get best practice, you can't be afraid to just communicate with your colleagues, with whoever and say, "Hey, what is the best way to do this in the community? How do you feel we can reach certain people in the community." Just open dialect within the community, I think would be it."

"Well, one thing that I think that Impact Health has done a beautiful job at is working with the other network leads. So I would say that knowledge sharing, like being at that level is very important because there's no need to create [a barrier]. There are resources that are shareable that aren't confidential that you can really learn and understand what the best practices are."

- **Provide training opportunities for your team**
  "The only thing I feel like is essential is that we are trained well enough to deal with the community we are serving which I feel like we are getting the training we need so that's the biggest .. We are currently in community health workers training and that's two days a week. It's been going on since the beginning of April and it won't be over until July. After that, we'll take our parenting curriculum training. We are looking to nurturing parenting. That's a three-day training and I have my bachelor's in family development. One of our case managers she has a master's. So that training also goes into being a case manager."

  "Like I said, the biggest piece was the care manager training, and there, I can see some progress in that area."

  "I think one of the things that we could do to feel ready for the pilot is also maybe some more trainings. And we're actually going to be providing this for our care managers, not our internal CCLCF care managers. But all the care managers in our counties, they're going to be creating the referrals because this is a new space for them. It's a pilot so it's a new space for everybody. But used to and I know this because we provide the service used to if I had a food issue, I would connect to that HSO that I know and they would manage the food issue. They had an intake process and they were like, "All right, let's figure it out. Let's get you what you need." Now that care manager has to evaluate of these 29 services, what does that fit your needs? And even though they have the piece that it's really more of an authorization tool, it's not an assessment. So helping them feel secure and understanding what services will need to be referred. So we're doing that. Actually, our combination of myself and our program managers and our care council leads, we're going to be bringing our local guidance because the State has their guidance which was intentionally vague. Yes, we drilled down a little bit. And so we're going to take that drill down and introduce to the care managers and say, "Hey, this is what a box in our six counties is going to be based off of. These are the HSOs that we have in the counties you serve that are doing this service and this is kind of just like an introduction just to give them a little more background."

- **Documentation**
  "Just document everything."

- **Have good financial policies in place**

"Have some really good financial policies in place and try to be as low barrier as possible. With Medicaid, I understand, people are going to have to have their ID and such, but if they're going to do it beyond just HOP, they're going to do social insurance of health work. Understand that people who are homeless, people who are recently incarcerated, people who are not citizens, people with cognitive disabilities are not going to have all of the items that you would need, for example, to start a new job. So we actually use the standard. There's a standard at the Department of labor-- and this is how I convinced my board to not have to show ID. There's a standard with the Department of labor that if you are a non-citizen with-- I think it's with a disability or under a certain age, a very young age. Like I don't know, 21 or something."

- **Remember your why**
  "Always remember why you started. Always remember that it was once you. Always know that it can be you again or a family member or somebody you truly love. Never lose that spark as to why you're doing this. You're saving lives. If we're saving lives let's save lives. That's what we're doing. I say it to people a lot of time, "Your job is to save lives let's [do it?]."

  "And focus on the clients. That is what I would do."

  "Any future HSOs, I would also let them know, hey, this isn't just giving out food boxes or just transporting people or just paying a bill or anything like that. This is actually servicing human beings, people who are in dire need of things. Because sometimes, we can get wrapped up in our work and we forget about humanity [inaudible]. And I think it can be overwhelming, especially the food part. And sometimes, you just like, you know what? I don't care what they're giving up. Don't think like that, you know what I mean? Because at the end of day, how about if it was you [inaudible] those boxes? How about if it was you receiving the transportation or needing your car repaired or your lights to be turned on or whatever. Like my mom and my grandmother will always say, treat others like you who want to be treated. … Yeah, the golden rule, so. And being in this tight position, again, it can be extremely overwhelming, when you having multiple of people coming, doing the same thing. And things can be repetitive, especially with the food part when you staying all those camps. … But at the end of the day, just got to keep going. Put a smile on your face, keep going and know that you're helping others. … It's not just a job, you know what I mean? Then I think that's what a lot of people right. It's not just a job. I consider the work that we do, we're angels on earth, helping others."

Results of Secondary Analyses of NCCARE360 and NC Medicaid Data

For this evaluation period, as described in the methodological limitations section, we did not have data on individuals who screened negative for all needs and who were not enrolled in the Pilots, so we were unable to report findings regarding the number and characteristics of individuals screened. These analyses will be conducted and reported in subsequent reporting periods. In compliance with CMS guidelines[a] cells have been suppressed when counts were fewer than 10 or calculated values were determined using fewer than 10 values. Data used in this assessment covered the period March 15, 2022 to November 30, 2022. All data used for this assessment were received by January 4, 2023. Some statistics relating to Pilot activities may be affected by data lag—particularly for activities that occurred in October or November 2022.

Enrollment Measures

A total of 2,705 participants enrolled in the Pilots during any point in the Pilot between March 15, 2022 and November 30, 2022. Of these, 2,374 were currently enrolled at the end of the reporting period.

Enrollment by region is presented as **Table 7**. Region was calculated using information provided from NCCARE360. When available, region was assessed using the county indicated in NCCARE360 data at enrollment. If county was not provided, region was derived from zip code (n = 435). Of the participants below with missing region (n = 102), 92 were due to no zip code being provided, and the remaining 10 zip codes could not be matched to an NC zip code.

Table 7: Enrollment by Region

Region	Number	Percentage
Access East	819	30.28%
CCLCF	1,041	38.48%
Impact Health	743	27.47%
Missing	102	3.77%
Total	**2,705**	**100.00%**

Enrollment by Prepaid Health Plan (PHP) is presented as **Table 8**. Enrollment into a PHP was determined using the PHP indicated in the NCCARE 360 people file at their earliest date of enrollment.

[a] https://www.hhs.gov/guidance/document/cms-cell-suppression-policy

Table 8: Enrollment by PHP

PHP	Number	Percentage
AmeriHealth Caritas North Carolina	500	18.48%
Blue Cross and Blue Shield of North Carolina	617	22.81%
Carolina Complete Health*	119	4.40%
UnitedHealthcare of North Carolina	557	20.59%
WellCare of North Carolina	912	33.72%
Total	**2,705**	**100.00%**

*Carolina Complete Health is a regional health plan, and only covers Medicaid beneficiaries in one Pilot region

Enrollment by eligibility category is presented as **Table 9**. We found assessments that indicated disparate eligibility categories when completing multiple screening forms, even on the same day of completion. Due to this, eligibility category was determined by age at time of enrollment for age-based categories. As there was no other data source, assessments were used to identify if an individual was within the pregnant individuals category. If a Pilot participant indicated they were pregnant on their screening form at any point in their enrollment, they were also placed in the pregnant individuals eligibility category. Individuals that did not fall into the pregnant individuals category and had no date of birth provided had eligibility category missing.

Table 9: Enrollment by Eligibility Category

Eligibility Category *	Number	Percentage
0-3	189	6.99%
0-20	937	34.64%
21+	1,694	62.62%
Pregnant individual	39	1.44%
Missing	73	2.70%

**Participant can be in more than one category*

Tables 10-14, below, present more detailed information on enrollment, and **Figures 15** and **16** show enrollment both by month and cumulatively. Statistics for months later in 2022 may be affected by data lag.

Table 10: Enrollment by Eligibility Category and Region

Eligibility Category *	Access East	CCLCF	Impact Health	Missing
	N (column %)	N (column %)	N (column %)	N (column %)
Children 0-3	< 30 (< 3.75)	89 (7.72)	68 (8.27)	**(**)
Children 0-20	235 (27.61)	401 (34.78)	294 (35.77)	**(**)

Adults 21+	584 (68.63)	640 (55.51)	448 (54.50)	22 (20.75)
Pregnant individuals	**(**)	23 (1.99)	12 (1.46)	**(**)
Missing	0 (0.0)	0 (0.0)	0 (0.0)	73 (68.87)

**Participant can be in more than one category*
*** Suppressed due to small cell count*

Table 11: Enrollment by Eligibility Category and PHP

Eligibility Category *	**AmeriHealth Caritas North Carolina**	**Blue Cross and Blue Shield of North Carolina**	**Carolina Complete Health**	**United Healthcare of North Carolina**	**WellCare of North Carolina**
	N (column %)	N (column %)	N (column %)	N (column %)	N (column %)
Children 0-3	34 (6.31)	41 (6.18)	11 (8.27)	50 (8.09)	53 (5.41)
Children 0-20	167 (30.98)	241 (36.35)	35 (26.32)	160 (25.89)	334 (34.12)
Adults 21+	326 (60.48)	354 (53.39)	80 (60.15)	376 (60.84)	558 (57.00)
Pregnant individuals	**(**)	**(**)	**(**)	**(**)	**(**)
Missing	**(**)	**(**)	**(**)	**(**)	**(**)

**Participant can be in more than one category*
*** Suppressed due to small cell count*

Table 12: Enrollment by Month & Region

Enrollment Month (2022)	**Access East**	**CCLCF**	**Impact Health**	**Total**
March *	18	32	36	86
April	32	38	34	104
May	67	67	77	211
June	117	96	71	284
July	93	144	75	312
August	130	185	115	430
September	107	198	108	413
October	140	150	126	416
November	115	131	101	347
Total	**819**	**1,041**	**743**	**2,603 ****

**49 participants were enrolled before start enrollment date was a mandatory field, these participants were adjusted for enrollment in March*
*** 102 participants had region missing*
****statistics for months later in 2022 may be affected by data lag*

Table 13: Enrollment of New Participants by Month & Eligibility Category

Enrollment Month (2022) ***	Children 0 - 3	Children 0 - 20	Adults 21 +	Pregnant Individuals	Missing
March *	**	24	64	0	**
April	**	33	71	**	**
May	**	78	134	**	**
June	19	111	174	**	**
July	16	108	210	**	**
August	34	131	303	**	**
September	33	167	249	**	**
October	37	154	268	**	**
November	29	131	221	11	**

**49 participants were enrolled before start enrollment date was a mandatory field, these participants were adjusted for enrollment in March*
*** Suppressed due to small cell count*
****participants can be enrolled in more than one category*
*****statistics for months later in 2022 may be affected by data lag*

Table 14: Enrollment of New Participants by Month & PHP

Enrollment Month (2022)	AmeriHealth Caritas North Carolina	Blue Cross and Blue Shield of North Carolina	Carolina Complete Health	United Healthcare of North Carolina	WellCare of North Carolina	Total
March *	23	**	**	23	22	91
April	21	**	**	16	50	104
May	29	42	**	**	101	212
June	45	76	**	**	121	287
July	46	87	13	35	142	323
August	74	101	28	85	147	435
September	97	84	20	116	101	418
October	95	94	21	97	119	426
November	70	104	21	105	109	409
Total	**500**	**617**	**119**	**557**	**912**	**2705**

**49 participants were enrolled before start enrollment date was a mandatory field, these participants were adjusted for enrollment in March*
*** Suppressed due to small cell count*
****statistics for months later in 2022 may be affected by data lag*

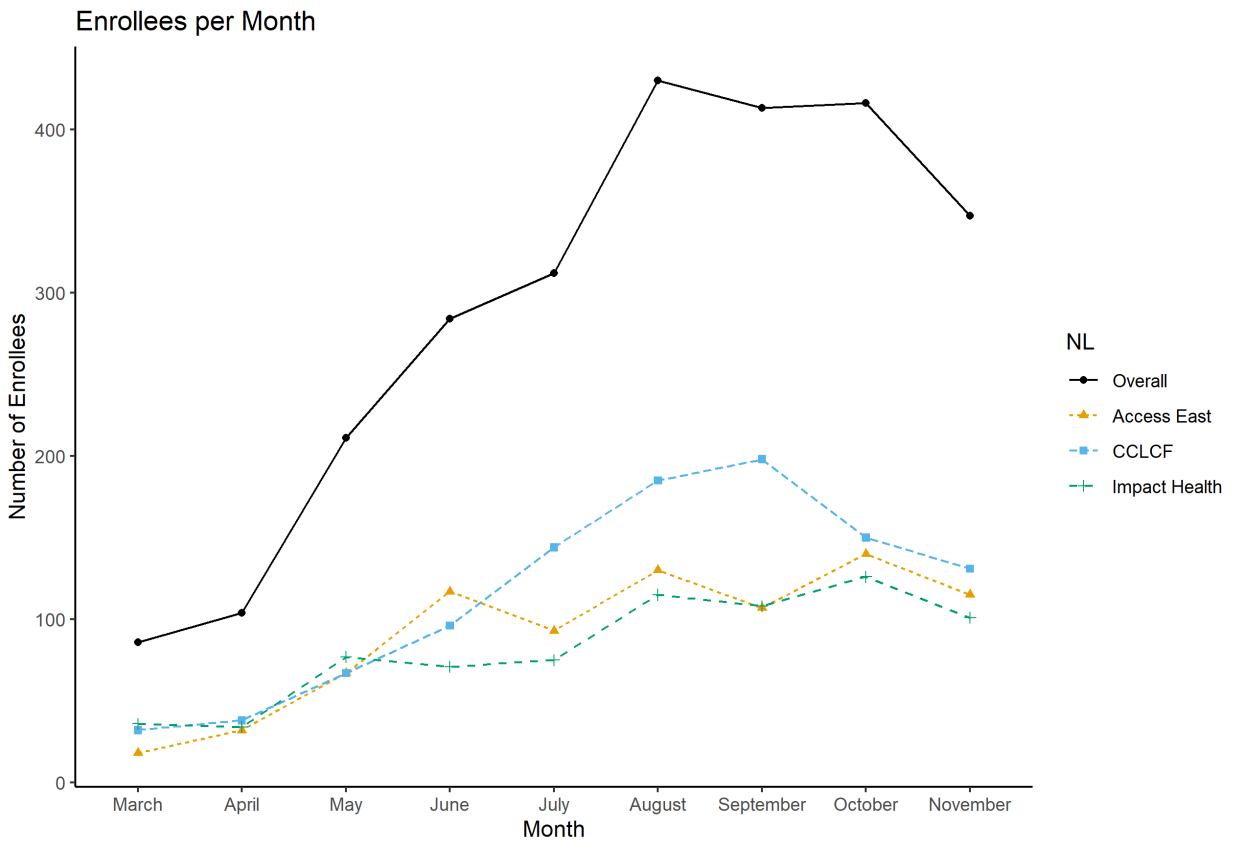


Figure 15: New Enrollees per Month

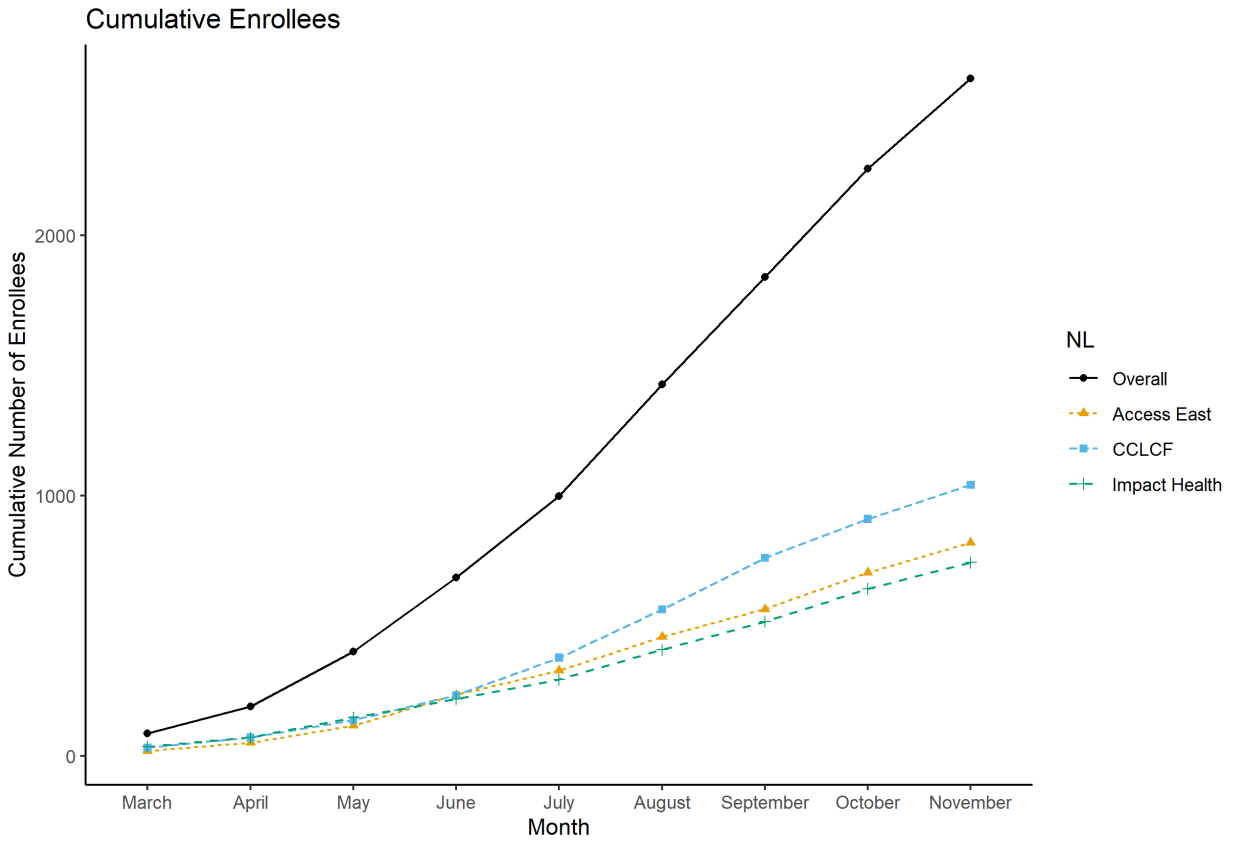


Figure 16: Cumulative Enrollees per Month

Demographic Comparisons of Pilot Participants and Medicaid Beneficiaries in Pilot Regions

We examined how the demographics of Pilot participants compared with the demographics of the population they were drawn from—Medicaid beneficiaries in Pilot regions. For this comparison, we note that we would not expect Pilot participants to have similar demographics of Medicaid beneficiaries in Pilot regions, owing to eligibility criteria for Pilot participation. That is to say, applying eligibility criteria inherently includes some individuals and excludes others, meaning there is no reason to think Pilot participants would be demographically similar to all Medicaid beneficiaries in Pilot regions. Pilot participants are a specific subset of Medicaid beneficiaries selected based on their likelihood of benefitting from Pilot services.

We analyzed the NC Medicaid Member file to better understand demographics for both Pilot participants and Pilot counties. The total number of Medicaid beneficiaries in the Pilot counties was 616,170. We were able to link 2,604 HOP participants to members within the Medicaid member file. Across all Pilot counties, 0.42% of Medicaid beneficiaries enrolled in the Pilots.

In order to maintain consistency of analysis across the total Medicaid population and HOP participants, this portion of analyses uses NC Medicaid Member File data, rather than NCCARE360 data.

Table 15 shows enrollment in the Pilots as a percentage of Medicaid beneficiaries in the Pilot regions.

Table 15: Enrollment rate by region

Region*	HOP Enrollment Count	Percentage of Total HOP Participants	Number of Medicaid Beneficiaries	Percentage of Total Medicaid Beneficiaries in Pilot Regions	Proportion of Medicaid Beneficiaries Enrolled in HOP, of All Medicaid Beneficiaries
Access East	819	31.45%	165,186	26.81%	0.50%
CCLCF	1,040	39.94%	195,887	31.79%	0.53%
Impact Health	757	29.07%	256,870	41.69%	0.29%

**Participant can be in more than one region*

Table 16 shows enrollment in the Pilots as a percentage of Medicaid beneficiaries in each Pilot county.

Table 16: Enrollment in HOP by County

Region*	County*	HOP Enrollment Count	Percentage of Total HOP Participants	Number of Medicaid Beneficiaries	Percentage of Total Medicaid Beneficiaries in Pilot Regions	Proportion of Medicaid Beneficiaries Enrolled in HOP, of All Medicaid Beneficiaries
Access East	Beaufort	101	3.88%	17,401	2.82%	0.58%
Access East	Bertie	52	2.00%	8,241	1.34%	0.63%
Access East	Chowan	22	0.84%	5,142	0.83%	0.43%
Access East	Edgecombe	116	4.45%	29,180	4.74%	0.40%
Access East	Halifax	56	2.15%	22,946	3.72%	0.24%
Access East	Hertford	54	2.07%	9,323	1.51%	0.58%
Access East	Martin	30	1.15%	9,206	1.49%	0.33%
Access East	Northampton	38	1.46%	7,686	1.25%	0.49%
Access East	Pitt	390	14.98%	63,328	10.28%	0.62%
CCLCF	Bladen	43	1.65%	14,660	2.38%	0.29%
CCLCF	Brunswick	116	4.45%	36,489	5.92%	0.32%
CCLCF	Columbus	162	6.22%	23,949	3.89%	0.68%
CCLCF	New Hanover	286	10.98%	53,421	8.67%	0.54%
CCLCF	Onslow	395	15.17%	55,134	8.95%	0.72%
CCLCF	Pender	104	3.99%	19,844	3.22%	0.52%
Impact Health	Avery	**	**	4,532	0.74%	**
Impact Health	Buncombe	252	9.68%	67,179	10.90%	0.38%
Impact Health	Burke	49	1.88%	31,583	5.13%	0.16%
Impact Health	Cherokee	**	**	10,031	1.63%	**
Impact Health	Clay	**	**	3,573	0.58%	**
Impact Health	Graham	**	**	3,417	0.55%	**

Table 16: Enrollment in HOP by County

Region*	County*	HOP Enrollment Count	Percentage of Total HOP Participants	Number of Medicaid Beneficiaries	Percentage of Total Medicaid Beneficiaries in Pilot Regions	Proportion of Medicaid Beneficiaries Enrolled in HOP, of All Medicaid Beneficiaries
Impact Health	Haywood	81	3.11%	19,111	3.10%	0.42%
Impact Health	Henderson	100	3.84%	27,802	4.51%	0.36%
Impact Health	Jackson	41	1.57%	12,294	2.00%	0.33%
Impact Health	Macon	29	1.11%	11,219	1.82%	0.26%
Impact Health	Madison	29	1.11%	7,219	1.17%	0.40%
Impact Health	McDowell	51	1.96%	16,346	2.65%	0.31%
Impact Health	Mitchell	**	**	4,936	0.80%	**
Impact Health	Polk	**	**	5,248	0.85%	**
Impact Health	Rutherford	46	1.77%	24,381	3.96%	0.19%
Impact Health	Swain	**	**	7,201	1.17%	**
Impact Health	Transylvania	48	1.84%	8,414	1.37%	0.57%
Impact Health	Yancey	14	0.54%	6,014	0.98%	0.23%

**Participant can be in more than one region/county*
*** Suppressed due to small cell count*

Statistics relating to the age (in years), gender, and race and ethnicity of Pilot participants and Medicaid beneficiaries in Pilot regions are shown in **Tables 17-20**, below.

Table 17: Age, in years, by region

Sample	Region **	N	Min*	Median*	Max*	IQR (Q1, Q3)*	Mean	Std Dev
	Access East	819	0	38	66	(17, 51)	36	19

Table 17: Age, in years, by region

Sample	Region **	N	Min*	Median*	Max*	IQR (Q1, Q3)*	Mean	Std Dev
Enrolled in HOP	Impact Health	757	0	35	67	(11, 54)	32	21
	CCLCF	1040	0	33	65	(12, 51)	32	21
	Total HOP	2,604	0	35	81	(12, 52)	33	20
All Medicaid Beneficiaries in Pilot Region	Access East	165,186	0	22	99	(11, 45)	30	23
	Impact Health	195,887	0	22	96	(10, 42)	28	22
	CCLCF	256,870	0	22	98	(10, 45)	29	23
	All Pilot Regions	616,170	0	22	99	(10, 44)	29	23

**Values have been aggregated to reflect the average of 11 values around this measure to comply with cell suppression*
*** Participant can be in more than one region*

Table 18: Gender by HOP Participants and All Medicaid Beneficiaries in Pilot Regions

	Enrolled in HOP		All Medicaid Beneficiaries in Pilot Regions	
Gender	**Count**	**Percentage**	**Count**	**Percentage**
Female	1,686	64.75%	350,330	56.86%
Male	918	35.25%	265,840	43.14%

A Pilot participant can report more than one race category. In order to most accurately capture this, the following race categories were designated: Individuals who only selected American Indian are represented in “American Indian Only”. Individuals who selected American Indian and any other race are represented in “American Indian Multi”. As such, a participant can be represented in multiple categories if they selected more than one race. Ethnicity categorization is reported separately.

Table 19: Racial Categorization among HOP Participants and All Medicaid Beneficiaries in Pilot Regions

	Enrolled in HOP		All Medicaid Beneficiaries in Pilot Regions	
Race*	**Count**	**Percentage**	**Count**	**Percentage**
American Indian & Alaskan Native Only	17	0.65%	11,647	1.89%
American Indian & Alaskan Native Multi-Racial	12	0.46%	4,713	0.76%
Asian Americans & Native Hawaiians and Other Pacific Islanders Only	19	0.73%	9,059	1.47%

Table 19: Racial Categorization among HOP Participants and All Medicaid Beneficiaries in Pilot Regions

	Enrolled in HOP		All Medicaid Beneficiaries in Pilot Regions	
Race*	**Count**	**Percentage**	**Count**	**Percentage**
Asian Americans & Native Hawaiians and Other Pacific Islanders Multi-Racial	**	**	3,489	0.57%
Black Only	1,292	49.62%	192,996	31.32%
Black Multi-Racial	92	3.53%	16,917	2.75%
White Only	1,384	53.15%	423,406	68.72%
White Multi-Racial	103	3.96%	21,434	3.48%
Unreported	**	**	2804	0.46%

**Participant can be in more than one racial group*

*** Suppressed due to small cell count*

Table 20: Ethnicity Categorization among HOP Participants and All Medicaid Beneficiaries in Pilot Regions

	Enrolled in HOP		All Medicaid Beneficiaries in Pilot Regions	
Ethnicity	**Count**	**Percentage**	**Count**	**Percentage**
Hispanic	161	6.18%	59,266	9.62%
Not Hispanic	2,406	92.40%	547,266	88.82%
Unknown	37	1.42%	9,638	1.56%

Social Needs Assessment and Needs Identified

There were a total of 12,686 social needs assessments for 2,653 unique individuals recorded in the NCCARE360 data in this time period. Out of 2,705 individuals enrolled in the Pilots, this indicates that 98.1% had at least one assessment recorded. **Tables 21-24**, below, present information on assessments made.

Table 21: Assessments Provided by Region

Enrollment Region	Assessments Count	Assessments Percentage	Participant Count	Participant Percentage
Access East	3,859	30.42%	816	30.76%
CCLCF	5,654	44.57%	1032	38.90%
Impact Health	2,975	23.45%	736	27.74%
Missing	198	1.56%	69	2.60%
Total	**12,686**	**100.00%**	**2,653**	**100.00%**

Table 22: Assessments Provided by Eligibility Categories

Eligibility Category *	Assessments Count	Assessments Percentage	Participant Count	Participant Percentage
Children 0-3	770	6.07%	184	6.94%
Children 0-20	4,211	33.19%	928	34.98%
Adults 21+	8,374	66.01%	1,683	63.44%
Pregnant individuals	185	1.46%	39	1.47%
Missing	39	0.31%	17	0.64%

**Participant can be in more than one category*

Table 23: Assessments Provided by PHP

PHP	Assessments Count	Assessments Percentage	Participant Count	Participant Percentage
AmeriHealth Caritas North Carolina	2,157	17.00%	489	18.43%
Blue Cross and Blue Shield of North Carolina	2,817	22.21%	601	22.65%
Carolina Complete Health	487	3.84%	115	4.33%
UnitedHealthcare of North Carolina	1,972	15.54%	531	20.02%
WellCare of North Carolina	5,195	40.95%	893	33.66%
Missing	58	0.46%	24	0.90%
Total	**12,686**	**100.00%**	**2,653**	**100.00%**

Table 24: Assessments Per Month, by Assessments and by Unique Participant

Enrollment Month (2022)	Assessments Count	Assessments Percentage	Participant Count*	Participant Percentage
March	189	1.49%	45	1.70%
April	389	3.07%	116	4.37%
May	1,000	7.88%	249	9.39%
June	1,518	11.97%	399	15.04%
July	1,935	15.25%	485	18.28%
August	3,052	24.06%	695	26.20%
September	2,345	18.48%	702	26.46%
October	1,112	8.77%	701	26.42%
November	1,146	9.03%	719	27.10%

**Participant can be represented in more than one month*
***statistics for months later in 2022 may be affected by data lag*

The mean number of needs indicated on an assessment was 1.56. Food needs were the most common needs indicated, followed by housing (**Table 25**).

Table 25: Assessments and Participants with Identified Needs

Identified Need	Assessments Count*	Assessments Percentage	Participant Count*	Participant Percentage
Food	10,222	80.58%	2,129	80.25%
Housing	6,278	49.49%	1,330	50.13%
IPV-related / Toxic Stress	113	0.89%	21	0.79%
Transportation	3,160	24.91%	647	24.39%

**Participant could indicate more than one need per screening*

Pilot participants reported more than 1 need on slightly under half of assessments (43.7%) (**Table 26**).

Table 26: Needs per Assessment

Needs Indicated on a Screening	Count	Percentage
Zero needs	62	0.49%
One need	7,079	55.80%
Two needs	3,984	31.40%
Three needs	1518	11.97%
Four needs	43	0.34%
Total	12,686	100.00%

Pilot participants had needs assessments in a timely fashion, with almost all individuals (95%) assessed on the day of enrollment. **Tables 27** and **28** provide further information on time to first assessment, in days.

Table 27: Days from Enrollment to First Assessment by Region

Region	N	Min*	Mean*	Max*	IQR (Q1, Q3)*	% Immediately Assessed
Access East	816	0	1	52	(0, 0)	99%
CCLCF	1032	0	3	126	(0, 0)	95%
Impact Health	736	0	4	115	(0, 0)	95%
Missing	69	0	8	53	(0, 0)	90%
Overall	2629	0	3	169	(0, 0)	95%

**Values have been aggregated to reflect the average of 11 values around this measure to comply with cell suppression*

Table 28: Days from Enrollment to First Assessment by PHP

PHP	N	Min*	Mean*	Max*	IQR (Q1, Q3)*	% Immediately Assessed
AmeriHealth Caritas North Carolina	489	0	2	85	(0, 0)	95%
Blue Cross and Blue Shield of North Carolina	601	0	2	82	(0, 0)	99%
Carolina Complete Health	115	0	6	62	(0, 0)	90%
UnitedHealthcare of North Carolina	531	0	2	81	(0, 0)	99%
WellCare of North Carolina	893	0	4	133	(0, 0)	95%
Overall**	2629	0	3	169	(0, 0)	95%

**Values have been aggregated to reflect the average of 11 values around this measure to comply with cell suppression*

An analysis of needs identified per month and by assistance type is shown below **(Table 29)** across all assessments, with the trend depicted as **Figure 17**.

Table 29: Needs Identified by Month

Enrollment Month (2022)	Food	Housing	IPV/Stress	Transportation
March	189	-	-	-
April	389	**	-	**
May	832	< 400	-	< 275
June	1,166	610	19	391
July	1,527	855	38	390
August	2,417	1,802	37	862

September	1,884	1,398	**	724
October	882	593	**	273
November	936	633	**	249
Total	**10,222**	**6,278**	**113**	**3,160**

*** Suppressed due to small cell count*

****statistics for months later in 2022 may be affected by data lag*

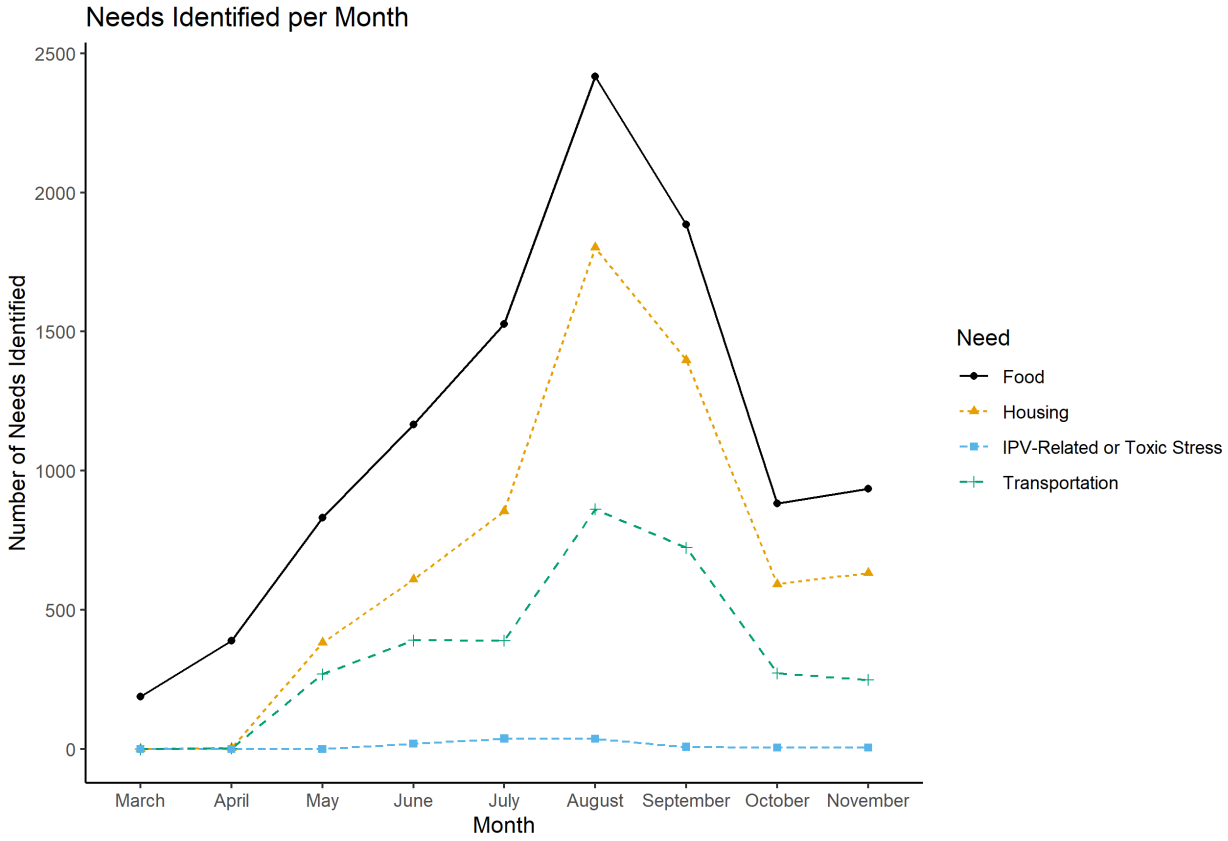


Figure 17: Needs Identified by Month

Participants Served and Services Invoiced

A total of 1,713 participants received services that were invoiced for through November 30, 2022. Out of 2,705 individuals enrolled in the Pilots, this means that 63.3% received at least 1 invoiced service. It is important to note that more individuals likely received services that had not yet been invoiced, and that even more would eventually receive services that were being arranged at the time data for this assessment period was received.

There was variation in the percentage of individuals who received services across types of services **(Table 30)**, with food services provided to over two thirds of those who reported a food need. Of note, there were no invoices for IPV-related and Toxic Stress services during this reporting period. IPV-related services were not available for delivery during this time period. Toxic Stress services were available for delivery, but no Toxic Stress services were invoiced. The following table shows the number of individuals who screened positive for different need types, and of those, the number who received a related service to their need.

Table 30: Connection to Services by Service Type

Service Type	Total Participants Screened Positive	Participants Reporting Need Who Received Assistance For That Need	Screened Positive & Received Services
Food	2,129	1,442	67.73%
Housing	1,330	535	40.23%
IPV-related / Toxic Stress*	21	0	0%
Transportation	647	101	15.61%

**No invoices for IPV-related or Toxic Stress services were received during this period. IPV-related services were not available for delivery during this time period. Toxic Stress services were available for delivery, but no Toxic Stress services were invoiced.*

Tables 31-34 below present information on Pilot participants who received services by region, eligibility category, PHP, and month. **Figure 18** depicts the trend in connections to services.

Table 31: Connection to Services by Region

Enrollment Region	Participant Count	Participant Percentage
Access East	493	28.78%
CCLCF	729	42.56%
Impact Health	477	27.85%
Missing	14	0.82%
Total	**1,713**	**100.00%**

Table 32: Connection to Services by Eligibility Category

Eligibility Category *	Participant Count	Participant Percentage
Children 0-3	112	6.54%
Children 0-20	604	35.26%
Adults 21+	1,104	64.45%

Pregnant individuals	**	**
Missing	**	**

**Participant can be in more than one category*
*** Suppressed due to small cell count*

Table 33: Connection to Services by PHP

PHP	Participant Count	Percentage of HOP Participants
AmeriHealth Caritas North Carolina	320	18.68%
Blue Cross and Blue Shield of North Carolina	399	23.29%
Carolina Complete Health	78	4.55%
UnitedHealthcare of North Carolina	330	19.26%
WellCare of North Carolina	597	34.85%
Total	**1,724**	**100.00%**

** Participant may have switched PHP during year*

Table 34: Connection to Services by Month and Service Type

Benefit Month (2022)*	Total	Food	Housing	Transportation
March	22	22	0	0
April	110	109	0	**
May	242	228	**	**
June	439	402	65	**
July	677	608	132	19
August	966	822	284	27
September	1,108	969	257	35
October	964	877	117	37
November	572	540	38	**

**Participant can be served in more than one month and receive more than one service in a month*
*** Suppressed due to small cell count*
****2 Individuals received cross-domain services*
*****No IPV-related/Stress services were invoiced through November 2022*
******statistics for months later in 2022 may be affected by data lag*

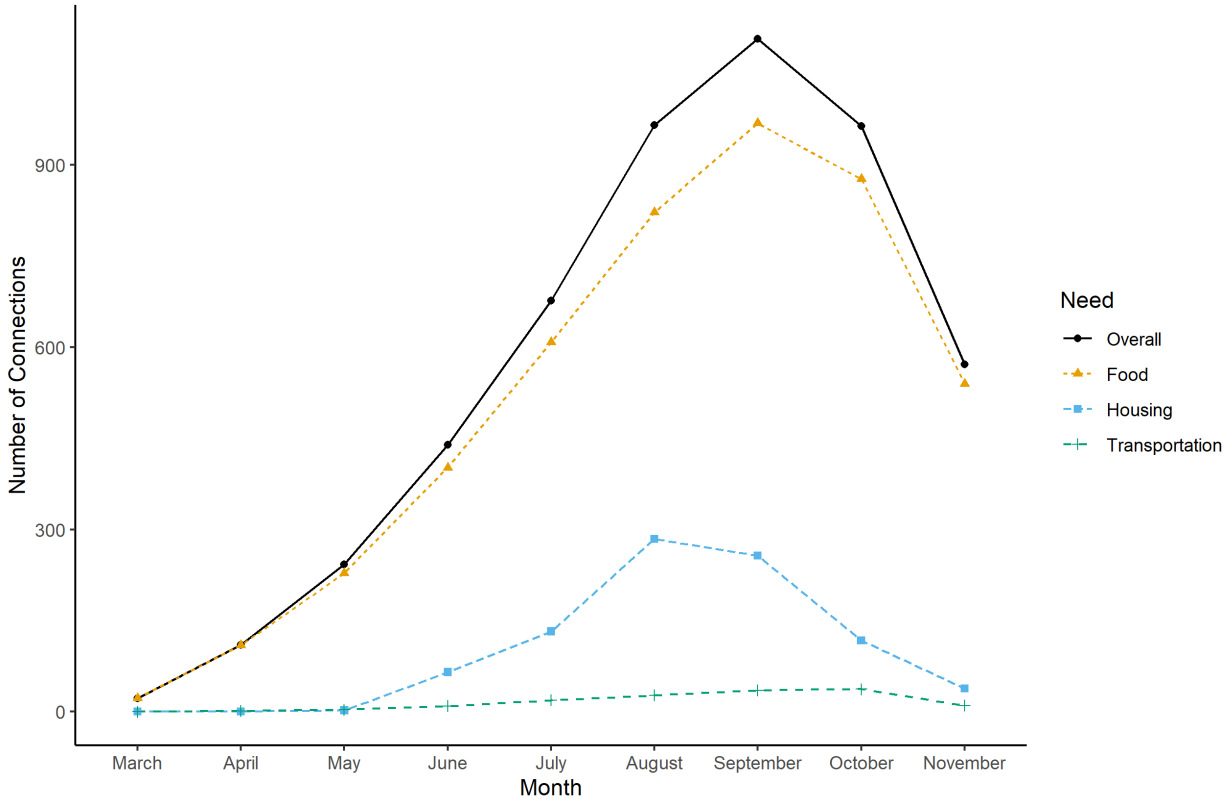


Figure 18: Connections to Services by Month

We calculated the cumulative number of services provided by HSOs with at least 1 paid invoice (**Table 35**).

Table 35: Services delivered by HSOs

Measure	Number of HSOs	Min	Median	Max	IQR (Q1, Q3)	Mean	Std Dev
Services Provided by HSO	83	1	31	2441	(13, 173)	174	358

Half of services had date of when the service began that was within a week after eligibility was established, and over 75% began within two weeks (**Table 36**).

Table 36: Time from Eligibility to Service Dates, in Days

Measure	N	Min*	Median*	Max*	IQR (Q1,Q3)*	Mean	Std Dev
Eligibility to Service Date	1,713	0	7	172	(4,13)	13	22

**Value has been aggregated to reflect the average of 11 values around this measure to comply with cell suppression*

There were a total of 14,427 services provided with a total amount invoiced of $2,324,567.33.

Services were determined to have been delivered by identifying invoices with a status of: accepted by payer, paid, submitted by network lead, submitted contracted service note, submitted to network lead, transmitted to payer, or under dispute. Invoices with invoice status of rejected by administrator, rejected by NL, or rejected by payer were not included in analysis. These records would have resulted in erroneous counting of services and costs had they been included.

Across 14,427 services, the mean invoiced amount was $161.13 per service. The mean invoiced amount per food service was $131.82. The mean invoiced amount per transportation service was $156.98. The mean invoiced amount per housing service is suppressed to prevent identification of small cell counts for other services. Across 2,705 enrolled Pilot participants, the mean invoiced amount was $859.36 per enrolled participant. Across 1,713 individuals who received Pilot services, the mean invoiced amount was $1,357.02 per individual who received HOP services. Of note, because more detailed cost reporting is conducted quarterly as part of ongoing Pilot monitoring, separate from the RCA, we do not focus on analyses of Pilot spending in this report.

Tables 37-42 below provide more detail on number of services and spending on services by type of service, region, eligibility category, PHP, month, and month by type of service. Food services represent the bulk of services delivered and the majority of the invoiced amount, although housing services have higher invoiced amounts per service.

Table 37: Services Provided by Service Type

Service Type	Service Count	Service Percentage	Invoiced Amount Total	Invoiced Amount Percentage
Cross-Domain	**	**	**	**
Food	13,110	90.87%	$1,728,218.92	74.35%
Housing	< 1,025	< 7.25%	$510,643.68	21.97%
IPV-related / Toxic Stress*	0	0.00%	$0	0.00%
Transportation	306	2.12%	$48,034.37	2.07%
Total	**14,427**	**100.00%**	**$2,324,567.33**	100.00%

No invoices for IPV-related or Toxic Stress services were received during this period. IPV-related services were not available for delivery during this time period. Toxic Stress services were available for delivery, but no Toxic Stress services were invoiced.

*** Suppressed due to small cell count. Housing statistics are partially suppressed to prevent identification of cell counts for suppressed cells*

Table 38: Services Provided by Region

Enrollment Region	Service Count	Percentage of Total Services	Invoiced Amount Total	Percentage of Total Invoices
Access East	3,718	25.77%	$571,938.53	24.60%
CCLCF	6,816	47.24%	$1,091,222.96	46.94%
Impact Health	3,821	26.49%	$645,515.36	27.77%
Missing	72	0.50%	$15,890.48	0.68%
Total	**14,427**	**100.00%**	**$2,324,567.33**	**100.00%**

Table 39: Services Provided by Eligibility Category

Eligibility Category *	Service Count	Percentage of Total Services	Invoiced Amount Total	Percentage of Total Invoices
Children 0-3	825	5.72%	$125,172.54	5.38%
Children 0-20	4,898	33.95%	$786,840.67	33.85%
Adults 21+	9,514	65.95%	$1,534,324.86	66.00%
Pregnant individuals	< 175	< 1.25%	$30,938.76	1.33%
Missing	**	**	**	**

Participant can be in more than one category

*** Suppressed due to small cell count*

Table 40: Services Provided by PHP

PHP	Service Count	Percentage of Total Services	Invoiced Amount Total	Percentage of Total Invoices
AmeriHealth Caritas North Carolina	2,408	16.69%	$370,498.65	15.94%
Blue Cross and Blue Shield of North Carolina	3,451	23.92%	$630,220.41	27.11%
Carolina Complete Health	652	4.52%	$98,937.04	4.26%
UnitedHealthcare of North Carolina	2,327	16.13%	$401,729.67	17.28%
WellCare of North Carolina	5,589	38.74%	$823,181.56	35.41%
Total	**14,427**	**100.00%**	**$2,324,567.33**	**100.00%**

Month of service was determined by the service start date on the invoice. Lag in receiving invoices may explain lower invoiced amounts closer to the data cut-off date (e.g., in November 2022).

Table 41: Services Provided by Month

Service Month (2022)	Service Count	Percentage of Total Services	Invoiced Amount Total	Percentage of Total Invoices
March	29	0.20%	$5,558.29	0.24%
April	207	1.43%	$30,899.86	1.33%
May	701	4.86%	$136,395.33	5.87%
June	1,256	8.71%	$208,419.84	8.97%
July	1,919	13.30%	$301,331.62	12.96%
August	2,941	20.39%	$481,858.12	20.73%
September	3,724	25.81%	$565,309.60	24.32%
October	2,694	18.67%	$439,152.34	18.89%
November	956	6.63%	$155,642.33	6.70%
Total	**14,427**	**100.00%**	**$2,324,567.33**	**100.00%**

**statistics for months later in 2022 may be affected by data lag*

Table 42: Services Provided by Month and Service Type

Service Month (2022)	Food	Housing	Transportation
March	29	0	0
April	206	0	**
May	675	22	**
June	1,166	72	18
July	1,739	153	27
August	2,586	303	52
September	3,319	282	123
October	2,494	136	64
November	896	42	18
Total	**13,110**	**1,010**	**306**

*** Suppressed due to small cell count*

***statistics for months later in 2022 may be affected by data lag*

Payments

The following analyses present information about payments made for services.

We used invoiced amount within NCCARE360 Invoice data for cost calculations. We investigated using paid amount for cost calculations. However, there were instances where paid amount was greater than invoiced amount and/or unreasonably large in comparison to the fee schedule for a given service. Thus we believe there were errors in data entry in the paid amount field that made it less accurate to use. The table below (**Table 43**) shows these differences.

Table 43: Differences in Data Source Invoice Amounts

Source	N	Sum	Mean	Stan. Dev.	Min	Max
NCCARE360 Total Invoiced Amount	11,068	$1,754,102.67	$ 158.48	$ 243.60	$ 7.23	$10,300.00
NCCARE360 Total Paid Amount	11,068	$1,950,139.39	$ 176.20	$ 323.29	$ 1.00	$10,300.00

Most invoices were paid, and invoices paid were typically paid within 30 days, and almost all within 60 days (**Tables 44-45**).

Table 44: Invoices Submitted and Paid by PHP

PHP	Invoice Paid Count	Invoice Submitted Count	Percentage Paid
AmeriHealth Caritas North Carolina	1,942	2,408	80.65%
Blue Cross and Blue Shield of North Carolina	2,977	3,451	86.26%
Carolina Complete Health	548	652	84.05%
UnitedHealthcare of North Carolina	1,321	2,327	56.77%
WellCare of North Carolina	4,280	5,589	76.58%
Total	11,068	14,427	76.72%

Table 45: Time from Invoice Submission to Payment, in Days

PHP	N	Min*	Median*	Max*	IQR (Q1, Q3)*	Mean	Stan. Dev.
AmeriHealth Caritas North Carolina	1,942	10	21	116	(17, 37)	29	19
Blue Cross and Blue Shield of North Carolina	2,977	5	19	134	(13, 35)	26	19
Carolina Complete Health	548	13	27	85	(21, 35)	31	15
UnitedHealthcare of North Carolina	1,321	12	37	133	(26, 51)	41	22
WellCare of North Carolina	4,280	8	32	138	(24, 45)	37	19
Total	**11,068**	**4**	**28**	**155**	**(19, 42)**	**33**	**20**

**Values have been aggregated to reflect the average of 11 values around this measure to comply with cell suppression*

Retention and End of Enrollment

The majority of individuals who enrolled in the Pilots did not have a valid end date for their Pilot enrollment and were thus presumed to be currently enrolled. 331 individuals (12.2%) had an end date for the Pilots and were thus presumed to no longer be receiving Pilot services. **Tables 45-47**, below, present details of those whose Pilot enrollment had ended by the date of the report.

Table 46: Enrollment Ended by Region

Enrollment Region	Number	Percentage
Access East	< 50	< 15.25%
CCLCF	114	34.44%
Impact Health	162	48.94%
Missing	**	**
Total	**331**	**100.00%**

*** Suppressed due to small cell count*

Table 47: Enrollment Ended by Eligibility Categories

Eligibility Category *	Number	Percentage
Children 0-3	37	39.88%
Children 0-20	132	34.64%
Adults 21+	197	59.52%
Pregnant individuals	**	**
Missing	**	**

**Participant can be in more than one category*
*** Suppressed due to small cell count*

Table 48: Enrollment Ended by PHP

PHP	Number With Enrollment Ended	Total Number of Pilot Participants	Percentage with Enrollment Ended
AmeriHealth Caritas North Carolina	64	500	12.80%
Blue Cross and Blue Shield of North Carolina	87	617	14.10%
Carolina Complete Health	11	119	9.24%
UnitedHealthcare of North Carolina	86	557	15.44%
WellCare of North Carolina	83	912	9.10%
Total	**331**	**2,705**	**12.24%**

Evaluation Question 2

Owing to lack of data, we were not able to complete analyses for Evaluation Question 2 ("Increased Rates of Social Risk Factor Screening and Connection to Appropriate Services") during this reporting period, as described above in the methodological limitations section. These analyses will be conducted and reported in subsequent reporting periods.

Evaluation Question 3

The goal of Evaluation Question 3 ("Improved Social Risk Factors") analyses was to determine whether the overall burden of needs decreased with Pilot participation, among all participants and across different eligibility categories, along with determining whether the risk for specific needs decreased with Pilot enrollment. Finally, we sought to determine whether certain Pilot services were associated with greater reductions in needs than other services.

Evaluation Question 3 ("Improved Social Risk Factors") analyses primarily used an individual-level interrupted time series approach that estimated a change in level (immediate change in needs after Pilot enrollment) associated with Pilot enrollment and a trend (changes in needs over time as Pilot services were received). We anticipated that the change in level would be positive (i.e., implying that enrolling in the Pilot would increase the number of measured needs as needs were uncovered during the enrollment process), and that the trend would be negative (i.e., that total needs would decrease over time as services were received, and the risk of any specific need would decrease over time). To help present results clearly, we compare needs at enrollment (day 0, or 'baseline') to estimated needs after 90 days of enrollment. Although all data received, including observations made beyond 90 days, were included in the analyses, presenting estimated needs at longer durations of time after enrollment was not feasible owing to there being few assessments beyond 90 days at this time. In subsequent reports, we plan to examine needs at 180 and 365 days of Pilot enrollment as well.

It is important to recognize that the time frame for change in needs covered in this RCA is relatively brief—likely the minimum needed to observe changes. Examining longer time periods of Pilot participation in subsequent evaluation periods will be important before drawing firm conclusions about the effectiveness of Pilot services.

Eligibility Categories for Evaluation Question 3 Analyses

There were 12,686 needs assessments. 66.2% of all assessments were in non-pregnant adults. There were 185 assessments in pregnant individuals, 4,208 assessments in children age 0 to 20, and 769 assessments in the subset of children age 0 to 3. Of 3,265 assessments made after Pilot enrollment, most (71.7%) were in non-pregnant adults. There were 45 assessments made after Pilot enrollment in pregnant individuals, 889 in children age 0 to 20, and 153 in the subset of children age 0 to 3. Of 1,316

assessments made after 90 days or more of Pilot enrollment, most (67.9%) were in non-pregnant adults. 15 were for pregnant individuals, 393 were for children age 0 to 20, and 69 were for the subset of children age 0 to 3.

Overall, this means that results are most reliable for the non-pregnant adult and children age 0 to 20 eligibility categories.

Total Needs

As expected, we observed an immediate increase in recorded needs associated with Pilot enrollment. Also as expected, we observed a negative trend, suggesting a decrease in needs over time. However, decline in needs was small in magnitude (**Table 48**). When examining different categories of eligibility, patterns were similar, with substantial uncertainty for the category of pregnant individuals.

Table 49: Changes in Total Needs

Eligibility Category	Change In Level (SE)	Trend (SE)	Needs at Enrollment (95% CI)	Needs at 90 Days (95% CI)	Difference (95% CI)
Overall	0.25 (0.03)	-0.04 (.009)	1.73 (1.67 to 1.81)	1.69 (1.63 to 1.75)	-0.05 (-0.07 to -0.02)
Non-Pregnant Adults	0.27 (0.04)	-0.04 (0.01)	1.76 (1.68 to 1.84)	1.72 (1.65 to 1.79)	-0.04 (-0.07 to -0.01)
Pregnant Individuals	0.10 (0.49)	-0.15 (0.07)	1.64 (0.53 to 2.75)	1.65 (1.01 to 2.30)	0.01 (-1.30 to 1.32)
Children 0 to 20 years of age	0.17 (0.05)	-0.06 (0.01)	1.67 (1.56 to 1.78)	1.63 (1.54 to 1.72)	-0.04 (-0.08 to 0.01)
Children 0 to 3 years of age	0.34 (0.13)	-0.02 (0.03)	1.94 (1.68 to 2.20)	1.81 (1.59 to 2.04)	-0.13 (-0.20 to -0.05)

Change in level indicates the change in number of needs immediately associated with Pilot enrollment. A positive number indicates more needs being identified. Trend indicates the change in needs per day associated with Pilot enrollment. A negative number indicates declining needs.

Figures 19 and 20 depict the estimated change in total needs over time, both overall and by eligibility category.

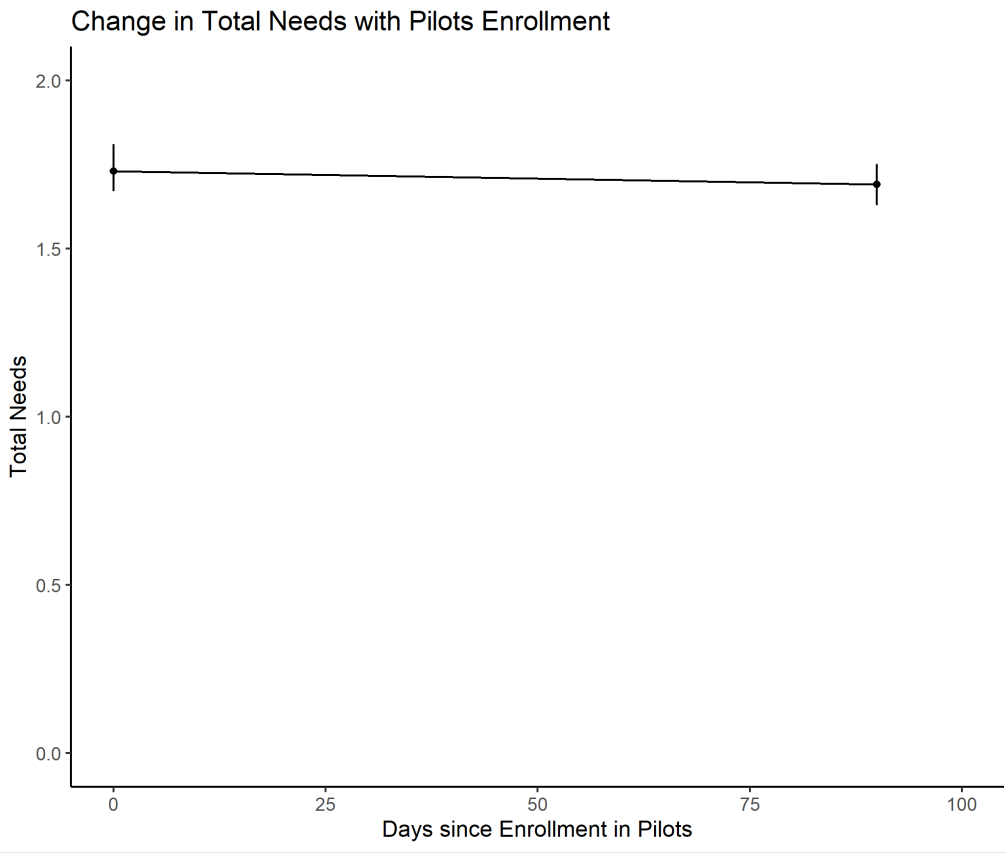


Figure 19: Change in Total Needs over Time for all Pilot Participants

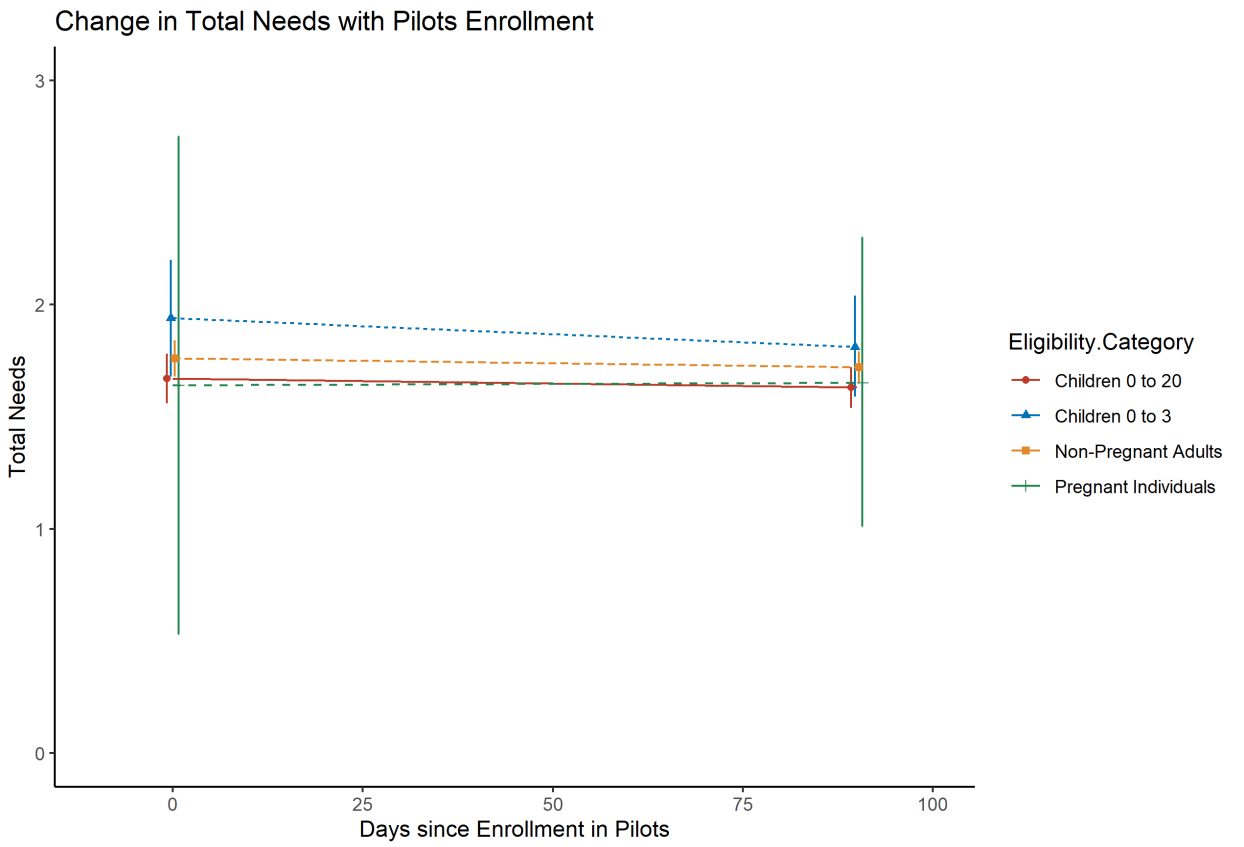


Figure 20: Change in Total Needs over Time by Pilot Eligibility Category

Food Needs

We examined how the probability of reporting a food need changed over time with Pilot participation. We found that there was an increased probability immediately associated with Pilot enrollment, and we found a small, statistically insignificant decrease in food needs over time (**Table 49**). When examining categories of eligibility, there was little improvement for adults, and suggestions of improvement for children. Results for pregnant individuals were very uncertain, owing to small sample size.

Table 50: Probability of Reporting a Food Need

Eligibility Category	Change In Level (SE)	Trend (SE)	Probability At Enrollment (95% CI)	Probability at 90 Days (95% CI)	Difference (95% CI)
Overall	0.07 (0.02)	-0.003 (0.005)	0.86 (0.82 to 0.90)	0.85 (0.82 to 0.87)	-0.01 (-0.03 to 0.01)
Non-Pregnant Adults	0.05 (0.02)	-0.002 (0.006)	0.84 (0.79 to 0.88)	0.84 (0.81 to 0.87)	0.002 (-0.02 to 0.03)
Pregnant Individuals	-0.43 (0.23)	0.02 (0.06)	0.25 (-0.22 to 0.73)	0.84 (0.48 to 1.20)	0.58 (-0.02 to 1.18)
Children 0 to 20 years of age	0.10 (0.03)	-0.002 (0.007)	0.91 (0.84 to 0.96)	0.87 (0.83 to 0.92)	-0.04 (-0.08 to 0.01)
Children 0 to 3 years of age	0.23 (0.06)	0.01 (0.02)	0.97 (0.85 to 1.07)	0.83 (0.75 to 0.92)	-0.13 (-0.19 to -0.07)

Change in level indicates the change in the probability of reporting a food need immediately associated with Pilot enrollment. A positive number indicates greater probability. Trend indicates the change in probability of reporting a food need per day associated with Pilot enrollment. A negative number indicates declining probability.
'Out-of-bounds' estimates (estimates of probability < 0 or > 1) are due to use of linear regression models for analysis.

We also examined whether any particular food service was associated with lower probability of reporting a food need at 90 days, relative to other interventions. These comparisons were among all Pilot participants. Sample size did not permit comparisons by eligibility category. Though there were many possible food services, we focused on comparing the four most common food services (comparisons with other food services could not be made owing to sample size). These services were (roughly in order of increasing unit cost): a healthy food subsidy/voucher/'fruit and vegetable prescription', a food box (small or large) picked up by the participant, a food box (small or large) delivered to the participant's home, and healthy delivered meals.

Overall, we found that the probability of reporting a food need at 90 days was lower with healthy meals compared with other services. The probability was 0.08 lower (95% Confidence Interval [CI]: 0.12 lower to 0.02 lower, p = .001) with delivered meals compared with a food subsidy, 0.06 lower (95%CI: 0.11 lower to 0.01 lower, p = 0.01) with delivered meals compared with a food box for pick up, and 0.04 lower (95%CI: 0.08 lower to no difference, p = 0.05) with delivered meals compared with a delivered food box.

A delivered food box was associated with 0.04 lower probability (95%CI: 0.06 lower to 0.02 lower, p = .001), compared with a food subsidy. There was no difference between the probability of reporting a food need associated with a food box for pick up compared with a food box for delivery, or a food box for pick up compared with a food subsidy.

While interesting, these results should be interpreted with caution given that participants were not randomly assigned to food services, and so the differential probability observed could result from confounding. Later phases of the evaluation are designed to address this potential threat to validity.

Housing Needs

We examined how the probability of reporting a housing need changed over time with Pilot participation. We found that there was an increased probability immediately associated with Pilot enrollment. This probability decreased over time, but the magnitude of the change was small (**Table 50**). When examining categories of eligibility, we did not observe statistically significant improvement for any category, and estimates of improvement were close to 0 for most categories. The models did estimate a change that was large in magnitude for pregnant individuals, but this was not statistically significant, with high uncertainty.

Table 51: Probability of Reporting a Housing Need

Eligibility Category	Change In Level (SE)	Trend (SE)	Probability At Enrollment (95% CI)	Probability at 90 Days (95% CI)	Difference (95% CI)
Overall	0.09 (0.02)	-0.02 (0.005)	0.55 (0.51 to 0.60)	0.55 (0.51 to 0.58)	-0.004 (-0.03 to 0.02)
Non-Pregnant Adults	0.10 (0.03)	-0.01 (0.007)	0.57 (0.52 to 0.63)	0.56 (0.52 to 0.61)	-0.01 (-0.05 to 0.03)
Pregnant Individuals	0.48 (0.21)	-0.04 (0.04)	1.04 (0.68 to 1.42)	0.57 (0.19 to 0.94)	-0.48 (-1.06 to 0.10)
Children 0 to 20 years of age	0.03 (0.04)	-0.03 (0.009)	0.49 (0.41 to 0.57)	0.51 (0.45 to 0.57)	0.02 (-0.03 to 0.06)
Children 0 to 3 years of age	0.01 (0.09)	-0.03 (0.02)	0.58 (0.40 to 0.77)	0.56 (0.41 to 0.71)	-0.02 (-0.15 to 0.10)

Change in level indicates the change in the probability of reporting a housing need immediately associated with Pilot enrollment. A positive number indicates greater probability. Trend indicates the change in probability of reporting a housing need per day associated with Pilot enrollment. A negative number indicates declining probability.
'Out-of-bounds' estimates (estimates of probability < 0 or > 1) are due to use of linear regression models for analysis.

We also examined whether any particular housing service was associated with lower probability of reporting a housing need at 90 days, relative to other interventions. These comparisons were among all Pilot participants. Sample size did not permit comparisons by eligibility category. We focused on comparing the three most commonly used housing services (comparisons with other services could not be made owing to sample size). These interventions were receipt of tenancy support and sustaining

services (which provides one-to-one case management and/or educational services to prepare an enrollee for stable, long-term housing), receipt of a home visit, and rental assistance.

Overall, we found that the probability of reporting a housing need at 90 days was lower with tenancy support and sustaining services compared with other housing services. The probability was 0.05 lower (95%CI: 0.10 lower to 0.01 lower, p = 0.02) with tenancy support and sustaining services compared with a home inspection, and 0.08 lower (95%CI: 0.12 lower to 0.03 lower, p <.001) with tenancy support and sustaining services compared with rental assistance.

We did not observe a difference between home visit and first month rental assistance in their association with probability of reporting a housing need.

As with food services, these results should be interpreted with caution given that participants were not randomly assigned to housing interventions, and so the differential probability observed could result from confounding. Later phases of the evaluation are designed to address this potential threat to validity.

Transportation Needs

We examined how the probability of reporting a transportation need changed over time with Pilot participation. We found that there was an increased probability immediately associated with Pilot enrollment. There was a decreased probability over time, however the magnitude was small (**Table 51**). When examining categories of eligibility, benefit was most clear for non-pregnant adults. Substantial uncertainty limits conclusions about effectiveness for other eligibility categories.

Table 52: Probability of Reporting a Transportation Need

Eligibility Category	Change In Level (SE)	Trend (SE)	Probability At Enrollment (95% CI)	Probability at 90 Days (95% CI)	Difference (95% CI)
Overall	0.09 (0.02)	-0.02 (0.005)	0.31 (0.27 to 0.36)	0.29 (0.25 to 0.32)	-0.03 (-0.05 to -0.01)
Non-Pregnant Adults	0.11 (0.03 to 0.13)	-0.02 (0.007)	0.34 (0.29 to 0.39)	0.31 (0.27 to 0.35)	-0.03 (-0.05 to -0.01)
Pregnant Individuals	0.05 (0.25)	-0.12 (0.03)	0.34 (-0.22 to 0.90)	0.25 (0.01 to 0.49)	-0.09 (-0.68 to 0.50)
Children 0 to 20 years of age	0.02 (0.03)	-0.002 (0.008)	0.25 (0.18 to 0.31)	0.23 (0.18 to 0.28)	-0.01 (-0.05 to 0.02)
Children 0 to 3 years of age	0.04 (0.10)	0.004 (0.01)	0.33 (0.14 to 0.52)	0.37 (0.22 to 0.52)	0.03 (-0.09 to 0.16)

Change in level indicates the change in the probability of reporting a transportation need immediately associated with Pilot enrollment. A positive number indicates greater probability. Trend indicates the change in probability of reporting a transportation need per day associated with Pilot enrollment. A negative number indicates declining probability.
'Out-of-bounds' estimates (estimates of probability < 0 or > 1) are due to use of linear regression models for analysis.

We also examined whether any particular transportation service was associated with lower probability of reporting a transportation need at 90 days, relative to other transportation services. These comparisons were among all Pilot participants. Sample size did not permit comparisons by eligibility category. We focused on comparing the two most common commonly used transportation services (comparisons with other services could not be made owing to sample size). These services were receipt of a subsidy for public transportation, and receipt of a subsidy for private transportation.

Overall, we found that the probability of reporting a transportation need at 90 days was lower with a subsidy for private transportation compared with a subsidy for public transportation (0.11 lower, 95%CI 0.22 lower to 0.00, p = 0.06), but this difference was not statistically significant.

As with other interventions, these results should be interpreted with caution given that participants were not randomly assigned to transportation interventions, and so the differential probability observed could result from confounding. Later phases of the evaluation are designed to address this potential threat to validity.

Toxic Stress and IPV Needs

We examined how the probability of reporting a toxic stress and/or IPV-related need changed over time with pilot participation. The prevalence of reporting a toxic stress and/or IPV-related need was very low, and it is important to remember that no IPV-related or toxic stress specific services were invoiced during this assessment period. Further, as noted above, IPV-related services were not open to referral during this period. We did not find a statistically significant increased probability immediately associated with Pilot enrollment or a statistically significant decreased probability over time (**Table 52**). When examining categories of eligibility, patterns were similar. However, the low number of reported needs means these results should be interpreted cautiously.

Table 53: Probability of Reporting a Toxic Stress and/or IPV Need

Eligibility Category	Change In Level (SE)	Trend (SE)	Probability At Enrollment (95% CI)	Probability at 90 Days (95% CI)	Difference (95% CI)
Overall	0.005 (0.005)	-0.0006 (0.001)	0.01 (0.002 to 0.02)	0.01 (0.002 to 0.02)	-0.003 (-0.005 to -0.001)
Non-Pregnant Adults	0.0008 (0.003)	0.0002 (0.001)	0.01 (0.00 to 0.02)	0.01 (0.000 to 0.01)	-0.003 (-0.005 to 0.0001)
Pregnant Individuals	--	--	--	--	--
Children 0 to 20 years of age	0.02 (0.01 to 0.25)	-0.002 (0.002)	0.02 (0.00 to 0.05)	0.02 (0.00 to 0.04)	-0.004 (-0.001 to 0.001)
Children 0 to 3 years of age	0.06 (to 0.06)	-0.01 (0.008)	0.06 (-0.05 to 0.18)	0.05 (-0.05 to 0.15)	-0.01 (-0.03 to 0.01)

The model for pregnant individuals did not converge owning to small sample size.
Change in level indicates the change in the probability of reporting a toxic stress and/or IPV need immediately associated with Pilot enrollment. A positive number indicates greater probability. Trend indicates the change in probability of reporting a toxic stress and/or IPV need per day associated with Pilot enrollment. A negative number indicates declining probability.
'Out-of-bounds' estimates (estimates of probability < 0 or > 1) are due to use of linear regression models for analysis.

No Toxic Stress or IPV-related services were invoiced during the study period, so we could not conduct analyses comparing intervention types.

Conclusions

With regard to Evaluation Question 1 ("Effective Delivery of Pilot Services") analyses, the state of North Carolina's goal of establishing a multi-sector collaboration between the state, PHPs, healthcare systems, and HSOs has been achieved. Although there are always areas of operations that can be improved, this was a major undertaking completed in a relatively compressed timeframe after unavoidable disruption due to the COVID-19 pandemic. In preparation to deliver services, staff at the organizations expressed concern about the scale of the task and the differences between the structure of the Pilots and their usual methods of operation, including interfacing with the Medicaid regulatory environment. Collaboration often began among organizations that had worked together previously, then grew substantially in order to offer a wide array of services for the Pilots.

Operational data reveal that despite challenges, Pilot infrastructure has successfully enabled delivery of services in the Pilots. As of November 30, 2022 a total of 2,705 unique individuals have been enrolled, and 14,427 services have been delivered across many different intervention types by 84 HSOs. Initial assessments of social needs occur quickly (most commonly right at the time of enrollment). As needs are uncovered, services to address them are delivered quickly. At the time of this report, 63% of those who enroll—1,713 out 2,705 Pilot participants—had received at least one invoiced service, with more participants in the pipeline to receive services as time progresses. Further, there can be a lag between service delivery and invoicing for services. The rate of service receipt varies across need types. 68% of individuals reporting a food need received an invoiced food service during this period, while 40% of those reporting a housing need received an invoiced housing service, and 16% of those reporting a transportation need received an invoiced transportation service. This difference may reflect both the phased rollout of services, with food services preceding all other services, and the complexity of delivering services to address the varying needs. For example, housing shortages are common in many communities served by the Pilots, and the availability of transportation resources varies across communities as well. Very few cross-domain services were invoiced during this period, and no toxic stress services were invoiced during this evaluation period. Further, no IPV-related services were invoiced, as these services are not yet offered.

Food services constituted the majority (90%) of services delivered, and over 75% of services had a service start date within 2 weeks of enrollment in the Pilots. Invoices for services were paid in a timely fashion. 56.2% of invoices were paid within 30 days, 90.3% within 60 days, and 97.9% within 90 days.

This is important as a major goal of the Pilots was to ensure that HSOs, many of which historically depend on grant funding received prior to delivery of services, could operate successfully with a financing model that includes payments made after services were delivered.

Owing to lack of data, we were unable to assess how activities to address health-related social needs in the areas served by the Pilots differed from those not served by the Pilots. Although we expect more substantial efforts were made in Pilot areas, we could not evaluate that directly at this time. Such questions will be addressed in subsequent evaluations.

Evaluation Question 3 ("Improved Social Risk Factors") analyses analyze whether Pilot services seem to be addressing the health-related social needs that Pilot participants report. Following the Driver Diagram (**Figure 6**) that depicts the underlying logic of the Pilots, addressing those needs is a key pathway whereby Pilot services can lead to changes in health, healthcare utilization, and healthcare cost. Thus, optimizing services delivered to address those needs is important to the overall success of the Pilots, and a key rationale for conducting a RCA.

Overall, the evidence regarding the effectiveness of Pilot services at addressing social needs was mixed. As anticipated, we observed an initial increase in recorded needs as needs are identified by detailed assessments around the time of enrolling in the Pilots, followed by a decrease in needs as Pilot services address them. However, the magnitude of the decrease in needs was small. For example, we estimated that soon after enrollment in the Pilots, individuals reported an average of 1.73 needs, which declined to 1.68 needs at 90 days after enrollment. While statistically significant, whether a decrease of this magnitude is likely to improve health, healthcare utilization, or healthcare cost is unclear. However, 90 days is likely the minimum amount of time needed for a change to be observed[23], and there have not been enough individuals with longer Pilot participation to examine needs at 180 or 365 days. Such analyses will be reported in subsequent assessments.

When examining specific needs, we estimated that the probability of an individual reporting a food need at 90 days after Pilot enrollment (0.85) was almost identical to the probability of reporting a food need around the time of enrollment (0.86). Similarly, the probability of reporting a housing need was 0.55 around the time of enrollment and still 0.55 at 90 days after Pilot enrollment, and the probability of reporting a transportation need was 0.31 around the time of enrollment and 0.29 at 90 days after Pilot enrollment. IPV-related and toxic stress needs were not reported very frequently during this evaluation period, and so we cannot draw conclusions about changes in those need types (and again, IPV-related services were not yet available in this time period).

In interpreting these findings, it is important to be mindful of two key limitations. First, owing to the timing of service delivery, there were relatively few individuals who were enrolled in the Pilots for longer periods of time. 90 days is a very brief period in which to observe an effect of the Pilots on social needs. Making comparisons at 180 and 365 days, which will be feasible in subsequent reporting periods, may reveal different patterns. Second, the study design in this phase of the analysis relies on repeated observations of participants in the Pilots. Because there was substantial variability in who received follow-up assessments of social needs, this could introduce selection bias that affects the results. Approaches to address this concern are discussed in the Lessons Learned section below.

We observed interesting findings with regards to specific services. A premise of the Pilots is that comparative effectiveness information needs to be generated, because there are often different services that might plausibly address a need, without sufficient evidence to choose one over another. For example, both a food subsidy and delivery of healthy meals might address food needs, but which is more effective is not clear. We did find suggestions of variations across intervention types that support this premise. Healthy meals delivery was associated with lower probability of reporting a food need at 90 days of Pilot enrollment than other food services offered within the Pilots like food subsidies (e.g., fruit and vegetable prescriptions) and food boxes, and these differences were large enough that they may be clinically meaningful. Similarly, with regard to housing services, tenancy support and sustaining services were associated with lower probability of reporting a housing need after 90 days of Pilot enrollment than other types of housing services.

Overall, these findings support a key rationale of conducting and evaluating the Pilots, which is to develop evidence on the comparative effectiveness of social needs interventions, so that the state of North Carolina can make an evidence-informed decision as to what services to offer for all Medicaid beneficiaries in subsequent years. However, these findings should also be interpreted cautiously, as receipt of services was not randomly assigned. Aspects of a participant's clinical or social situation could have influenced both what type of service they received for their need and the likelihood that such a need would resolve. This could confound the associations observed between type of service received and reduction in the probability of experiencing a particular social need. As per the approved Evaluation Design, subsequent reporting periods will include additional approaches to evaluation that can help overcome these limitations.

Plans in Subsequent Evaluation Periods

The below sections describe plans to help answer evaluation questions in subsequent evaluation periods.

Evaluation Question 1

We will continue to monitor enrollment, delivery of Pilot services, and spending on Pilot services. We will conduct network analyses examining the interrelationship between PHPs, NLs, and HSOs. We will conduct qualitative interviews with PHPs, NLs, and HSOs.

Evaluation Question 2

We will examine rates of screening for health-related social needs and rates of enrollment in the Pilots (among those who screen positive), of Medicaid beneficiaries in Pilot regions. We will compare rates of screening for health-related social needs and services to address them between Medicaid beneficiaries in Pilot and non-Pilot regions.

Evaluation Question 3

We will conduct analyses examining the effect of Pilot participation on changes in health-related social needs over longer timeframes. We will also conduct analyses comparing the effectiveness of different types of interventions (e.g., food subsidies versus meal delivery) for improving health-related social needs.

Evaluation Question 4

We will conduct analyses examining the effect of Pilot participation on changes in clinical outcomes (as detailed in the evaluation design). We will also conduct analyses comparing the effectiveness of different types of interventions (e.g., food subsidies versus meal delivery) for improving clinical outcomes.

Evaluation Question 5

We will conduct analyses examining the effect of Pilot participation on changes in healthcare utilization (as detailed in the evaluation design). We will also conduct analyses comparing the effectiveness of

different types of interventions (e.g., food subsidies versus meal delivery) for improving healthcare utilization.

Evaluation Question 6

We will conduct analyses examining the effect of Pilot participation on changes in healthcare cost (as detailed in the evaluation design). We will also conduct analyses comparing the effectiveness of different types of interventions (e.g., food subsidies versus meal delivery) for improving healthcare cost.

Interpretations, Policy Implications, and Interactions with Other State Initiatives

Interpretations

We offer the following interpretations to integrate the findings of this first RCA.

First, the major achievement is the establishment of the infrastructure necessary for the Pilots to function. This included the necessary information technology platforms, the legal and regulatory agreements necessary for the state of North Carolina, PHPs, NL, HSOs, healthcare organizations to collaborate, integrating HSOs into the healthcare ecosystem, and the interpersonal work of making these relationships productive. It was a massive undertaking, and has been accomplished successfully, allowing for large-scale delivery of services across three regions of the state.

Second, the ability to address some questions of interest in this assessment was hindered by the number of individuals enrolled in the Pilots. The Pilots were designed to ramp up during this assessment period, and so the enrollment numbers may reflect that. Another explanatory factor could be that methods of social need assessment and enrollment require iteration. In any event, working to increase enrollment in the Pilots is a major goal going forward.

Third, we were unable to compare to results in Pilot regions to other regions in the state, or to evaluate the reach of Pilot services within their region. These will be important topics of analysis in future periods.

Fourth, delivery of services to those who enrolled in the Pilots has had both bright spots and limitations. Around two-thirds of those who enrolled in the Pilots have received invoiced services to date. This includes almost half of those reporting a housing need receiving housing services, which is a difficult need to address. It is likely that this percentage will rise as services that have already been delivered are invoiced, and as those in the pipeline to receive services receive them. At the same time, working to ensure as high a percentage of individuals who enroll in the Pilots as possible receive services is another major goal. Strategies to boost this number could include making modifications to the selection of services available and/or the processes for Pilot participants to receive services.

Fifth, the evolution of social needs reported followed an expected pattern. Needs were highest around the time of Pilot enrollment, and decreased over time. At this time, the magnitude of the decrease observed has been small, however, particularly given the overall goal of improving health, healthcare utilization, and healthcare cost. Two important factors for interpreting these findings,

however, are the relatively short amount of time individuals have been receiving services, and the relatively few (and unevenly distributed) follow-up assessments after receiving Pilot services. This makes it difficult to distinguish whether the impact of the services on needs is small, or whether there is selection bias such that those who continue to have needs are re-assessed, and those whose needs were successfully resolved do not receive further assessments. Distinguishing these possibilities will be a focus of subsequent analyses.

Sixth, we observed interesting potential variation in the effectiveness of different interventions. For example, healthy meal delivery was associated with lower probability of reporting a food need, among those who received a food service, compared with a food subsidy. This provides a justification for later parts of the Pilots, which emphasize a comparative effectiveness evaluation between services that can address social needs. However, at this time, results should be interpreted cautiously as there could be confounding factors related to why individuals received one type of intervention over another.

Policy Implications

We believe the key policy implication of the Pilots so far is that the intended structure of Pilot service delivery is feasible, capable of reaching those in need and delivering services to them, and may be offering benefits (albeit small on average) with regard to reducing health-related social needs. Overall, this supports continuing the Pilots with modifications, as suggested below, in order to better pursue the state of North Carolina's goals to improve health for those experiencing health-related social needs.

Interactions with Other State Initiatives

In this first RCA, the focus has been on the performance of the Pilots, and thus we have not assessed how the Pilots integrate with other state initiatives. Such an assessment will be a part of subsequent evaluation activities.

Lessons Learned and Recommendations

Lessons learned from this Rapid Cycle Assessment suggest several recommendations for alterations of Health Opportunities Pilots activities going forward. These are:

1. Continue to Accelerate Enrollment in the Healthy Opportunities Pilots. This assessment period coincided with a planned ramp-up of Pilot services, which meant lower enrollment earlier in the period, and growing enrollment later in the assessment period. In subsequent assessment periods, greater enrollment in the Pilots is likely to be beneficial both for Medicaid beneficiaries and for the purposes of evaluation. If Medicaid beneficiaries who could benefit from Pilot services are not enrolled, it could leave them in need. Greater enrollment would also help increase the power of evaluation activities, and permit evaluation of a broader set of questions. This is particularly important for detecting differences in response to services across groups, and for more in-depth analysis of groups that are of interest to the state of North Carolina, but are less common among Pilot participants, such as pregnant individuals. Without adequate numbers of individuals from categories of interest, there will be substantial uncertainty in any conclusions drawn from evaluation activities.
2. Ensure High Rates of Service Delivery. We found that around one third of individuals who enrolled in the Pilots did not have an invoice for Pilot services at time of the evaluation. This does not necessarily mean these individuals will not receive any Pilot services—this observation could reflect a lag in data from delivery of services to invoicing for them, or simply reflect the time needed for services to be arranged after enrollment in the Pilots. However, ensuring that as many individuals who enroll in the Pilots as possible do receive services is an important goal for the Pilots. Continuing to monitor service delivery will be important in subsequent periods.
3. Collect Repeated Needs Assessments. As of this report, the short duration of participation for many individuals in the Pilots means that sufficient time for repeated needs assessments to occur may not yet have elapsed. However, ensuring these assessments do occur in subsequent periods is an important goal. A key feature of the Pilots is the use of needs assessments to help determine whether Pilot services are having their intended effect. If the services are not reducing needs, it is less likely that they will improve health, healthcare utilization, or healthcare spending. Finding that needs persist despite receiving services means that alternative services could be offered. On the other hand, if needs are being met, this would suggest that services are

working and should be continued, if the Pilot participant so desires. In addition, repeated assessments can serve to evaluate whether Pilot services are having their intended effect and suggest whether course corrections in service delivery are needed, which may increase the likelihood of achieving hoped-for effects in the summative phase of the evaluation. Thus, repeated assessment of needs periodically throughout Pilot participation is an important part of the program—both for participants and for NLs and HSOs who want to ensure the services being delivered are working as intended. As time goes on, it will be important to ensure processes for routine collection of health-related social needs information are implemented with fidelity.

4. We Do Not Recommend Changes to Services at This Time. In this initial Rapid Cycle Assessment, we noted interesting signals that some services may be more effective at reducing needs than others. However, these should be interpreted as preliminary findings at this time. The associations observed may be confounded, and the sample sizes are small. Thus, we believe the best course of action is to continue delivering services to more Pilot participants, in order to collect more data. When more data are in hand, informed decisions about which services to continue, modify, or discontinue can be made. Although we do not recommend changes to specific services offered by the Pilots at this time, we do recommend that the state of North Carolina continue with the efforts it is making for operational improvements to the Pilots. Such planned improvements include those related to capacity building funding, streamlining the process of Pilot enrollment, and making the NCCARE360 data platform more user friendly. These improvements that the state of North Carolina plans to make are in accord with feedback provided by NLs and HSOs in surveys and qualitative interviews.

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Attachments

CMS Approved Evaluation Design

Please see separate PDF of the CMS approved Evaluation Design

Healthy Opportunities Pilots Fee Schedule

Please see separate PDF of the Healthy Opportunities Pilots Fee Schedule

Interview Guide

Healthy Opportunities Pilots Evaluation

Introduction

Greeting: Hello, my name is _____ and I work with the evaluation team at University of North Carolina at Chapel Hill. The NC Department of Health and Human Services has asked us to evaluate North Carolina Medicaid's Healthy Opportunities Pilots. I really appreciate you taking the time to participate in this interview.

Purpose: I am part of a research team working on the evaluation to learn more about how organizations are preparing to provide services in the pilot regions. From these interviews, we would like to better understand what you are doing and how you plan to carry out these services.

Confidentiality and Introduction: To start, I'd like to stress that we will keep everything said here today confidential. Also, nothing you say will be connected with your name. I hope that you will feel free to speak openly. I will ask you some specific questions, but the most important part of the discussion will be the information that you will share with us. Please know that there is no right or wrong answer to these questions. Our main goal is to learn from you and have you feel comfortable sharing your thoughts and experiences about this pilot work. Our discussion today will last about **30 minutes**.

(If applicable) As a thank you for your time and participation, we will send you (incentive information here)

Before we begin, I would like to State that the conversation is being recorded to help us remember what is said during this interview. You may ask me to turn off the recorder at any time or simply say you do not want to answer a question.

Do you have any questions before we begin? May I start the recorders?

START RECORDERS

Section 1. Background and Context

To start off, I would like to learn a little bit about you. Please tell me:

- What is your role and how long you have been in this position?
- What is your favorite thing about the work you do?

Section 2. Organizational Capacity and Readiness

One of the things I would like to learn more about is your organization. Let's start off with staffing.

Staffing

1. How adequate is the current staffing structure for what you are being asked to do for this pilot implementation?

2. What changes, if any, happened in the staffing or organizational result? (Positions added, expanded, consolidated?)

Services and Resources

3. In terms of service and resources, tell me some of the key services and resources offered by your organization?

    a. What services or resources, if any, were newly added as a result of the Healthy Opportunities Pilots?

    b. What services or resources, if any, were modified or changed?

    c. What gaps in services or resources would you like to see addressed and added to the Healthy Opportunities Pilots?

Financial Stability

4. In terms of funding and revenue streams, how does provision of services through the Healthy Opportunities Pilots fit into other services offered and populations served by your organization?

Readiness

5. What most excites you about this Healthy Opportunities Pilot?

    a. What are the main benefits you see with this pilot?

6. What most worries you about this Healthy Opportunities Pilot?

    a. What are the main challenges you see with this pilot?

7. What would help you feel ready to successfully participate in the Healthy Opportunities Pilots?

8. The Healthy Opportunities Pilots will provide an opportunity for cross-sectoral collaboration (e.g., Medicaid, housing policy, food policy etc) to address needs of the individuals served. If at all, how has the need to involved different sectors and associated regulatory environments affected your preparations?

Section 3. Preparation for the Pilot

9. What are your short term and long-term goals for your organization with regard to the Healthy Opportunities Pilots?

10. If you were to picture a successful plan to provide services in your region, what are the key components involved in that plan?

    a. What has been most beneficial in your preparations to provide these services?

b. What has been most challenging in your preparations to provide these services?

c. As the Healthy Opportunities Pilots are a Medicaid program, has that affected your preparations, and if so, how?

Section 4. Networks and Partnerships

11. Think back to when you first began planning for these programs and services. Who are the main partnerships that will collaborate to promote and provide support for this initiative? This can include any individuals, community partners or agencies involved in this pilot.

    a. How did you choose who would be in this partnership?

    b. What are the key assets they bring to this collaboration?

12. Thinking about your current partners, who is missing? What other individuals, organizations, or agencies should be engaged in this work?

Section 5. Communication

13. What types of communication strategies are you using to promote your programs and services?

    a. Internally within your organization?

    b. Externally with your partnerships?

14. To further enhance your work, what additional communication strategies should be considered or included?

Section 6. Internal Evaluations

15. Once services begin, what plans, if any, do you (or your organization) have to internally keep track of progress?

    a. What will be assessed? (How and when)

Section 7. Closing

16. We have talked about many different aspects of your programs and services. Based on our discussion today, what is one thing you feel is essential to enable effective delivery of pilot services in your region?

17. What advice would you offer other organizations that seek to do this type of work?

Is there anything else you feel we did not cover that I need to know?

Thank you!

TURN OFF RECORDERS

Qualitative Analysis Codebook

Healthy Opportunities Pilots Evaluation Codebook

Code Name	Description	Notes
Section 1. Participant Background Participant codes refer to information about participant, their role or position and what excites them about the pilot.		
Participant Role	Comments about participant's role and how long they have been in this position. Also include any comments about favorite thing(s) about work.	To supplement demographic info as needed
Participant Excitement	Comments about what most excites participant about this Healthy Opportunities Pilot.	
Section 2. Organizational Capacity and Readiness Organizational codes refer to information about the organization's capacity and readiness as it relates to Healthy Opportunities Pilots. It includes comments about key components of staffing, services and resources, finances, and the impact of regulatory environment.		
Organ Staffing	Comments about how adequate the current staffing structure is for pilot implementation and any changes (positions added, expanded, consolidated) that may have happened.	
Oran Services & Resources	Comments about key service and resources offered by organization, including any newly added, modified or changed because of the Healthy Opportunities Pilots. Also include any comments about gaps in services or resources participant would like to see addressed and added.	Subcodes: • Service Changes • Service Gaps
Organ Financial Stability	Comments about funding and revenue streams, or how provision of services through the Healthy Opportunities Pilots fit into other services offered and populations served by organizations	
Organ Regulatory Impact	Comments about how the need to involve different sectors and associated regulatory environments affected organization's preparations	
Section 3. Preparation for the Pilot Prep codes refer to the goals, components of success, benefits and challenges, and the impact of Medicaid on preparations.		
Prep Goals	Comments about short term and long-term goals for organizations with regard to the Healthy Opportunities Pilots	
Prep Benefits & Success	Comments about what has been most beneficial in the preparations to provide these services. Also include comments about what may be viewed as the main benefits this pilot. (Edits 07.06.22) Combine code with PREP SUCCESS:	Subcodes: • Benefit Prep • Benefit Pilot

Code Name	Description	Notes
	Comments about the key components involved in a successful plan to provide these services. Also include comments about what would help organizations feel ready to successfully participate in the Healthy Opportunities Pilots	
Prep Challenges	Comments about what has been most challenging in the preparations to provide these services. Also include comments about what most worries participants about this Healthy Opportunities Pilot or the main challenges seen with this pilot.	Subcodes: • Challenge Prep • Challenge Pilot
Prep Medicaid	Comments about any affect the Medicaid program has on organization's preparations	
Section 4. Networks and Partnerships Partnership code refers to the partners and collaborators who play a role in the Healthy Opportunity Pilot, reasons for their selection and involvement and their contributions. It also includes individuals, community partners or agencies that are missing and should be involved in this work.		
Partnerships	Comments about who are the main partnerships and collaborations involved in this initiative, including individuals, community partners or agencies involved in this pilot. Also include comments about how partners were selected and key assets they bring to this collaboration. Use this code for any comments about missing individuals, organizations, or agencies that should be engaged in this work.	Subcodes: • Partners Assets • Partners Missing
Section 5. Communication Communication code refers to types of strategies being used to promote programs and services within and outside of organizations.		
Communication	Comments about types of communication strategies being using to promote programs and services, both internally within organizations and externally with your partnerships. Also include comments any additional communication strategies that should be considered or included to enhance this work.	Subcodes: • Comm Internal • Comm External • Comm Add
Section 6. Internal Evaluations Internal Eval codes refer to any plans or things that will be assessed internally to track progress once service begins.		
Internal Eval	Comments about what plans or things that will be assessed (how and when) internally to track progress once service begins. Also include any comments about the ABSENCE of internal plans for tracking progress	
Additional Codes		
Recommendations	Comments about what participants feel is essential to enable effective delivery of pilot services in their region. Also include any advice would for other organizations that seek to do this type of work	
Quotables	Comments about any particular aspects of the HOP that are particularly important and well articulated that should be noted for inclusion in final reports, presentations.	

1. Title page for the state's substance use disorder (SUD) demonstration or the SUD component of the broader demonstration

The state should complete this title page at the beginning of a demonstration and submit as the title page for all monitoring reports. The content of this table should stay consistent over time. Definitions for certain rows are below the table.

State	*North Carolina*
Demonstration name	*North Carolina Medicaid Reform Demonstration*
Approval period for section 1115 demonstration	*10/24/2018 – 10/31/2024*
SUD demonstration start date[a]	*11/01/2019*
Implementation date of SUD demonstration, if different from SUD demonstration start date[b]	*Enter SUD demonstration implementation date (MM/DD/YYYY).*
SUD (or if broader demonstration, then SUD -related) demonstration goals and objectives	As part of its commitment to expand access to treatment for substance use disorders (SUDs), North Carolina's Department of Health and Human Services is pursuing a Section 1115 demonstration waiver to strengthen its SUD delivery system by: 1. Expanding its SUD benefits to offer the complete American Society of Addiction Medicine (ASAM) continuum of SUD services; 2. Obtaining a waiver of the Medicaid institution for mental diseases (IMD) exclusion for SUD services; 3. Ensuring that providers and services meet evidence-based program and licensure standards; 4. Building SUD provider capacity; 5. Strengthening care coordination and care management for individuals with SUDs; and 6. Improving North Carolina's prescription drug monitoring program (PDMP).
SUD demonstration year and quarter	*DY4(Annual Report)*
Reporting period	*Reporting Quarter: 11/01/2021 – 10/31/2022*

[a] **SUD demonstration start date:** For monitoring purposes, CMS defines the start date of the demonstration as the *effective date* listed in the state's STCs at time of SUD demonstration approval. For example, if the state's STCs at the time of SUD demonstration approval note that the SUD demonstration is effective January 1, 2020 – December 31, 2025, the state should consider January 1, 2020 to be the start date of the SUD demonstration. Note that the effective date is

considered to be the first day the state may begin its SUD demonstration. In many cases, the effective date is distinct from the approval date of a demonstration; that is, in certain cases, CMS may approve a section 1115 demonstration with an effective date that is in the future. For example, CMS may approve an extension request on 12/15/2020, with an effective date of 1/1/2021 for the new demonstration period. In many cases, the effective date also differs from the date a state begins implementing its demonstration.

[b] **Implementation date of SUD demonstration:** The date the state began claiming federal financial participation for services provided to individuals in institutions for mental disease.

2. Executive summary

Operational Updates

In DY4 the Department has continued developing and seeking input on new clinical coverage policies (CCPs) that will allow NC Medicaid to provide the complete American Society of Addiction Medicine (ASAM) continuum of SUD services, as described in Milestone 1. Newly covered services and their anticipated implementation dates are below:

- Clinically Managed Low Intensity Residential Treatment Services (ASAM level 3.1) - Dec. 1, 2023
- Clinically Managed Population Specific High Intensity Residential Programs (ASAM level 3.3) - July 1, 2023
- Ambulatory Management with Extended Onsite Monitoring (ASAM level 2WM) - July 1, 2023
- Clinically Managed Residential Withdrawal (ASAM level 3.2-WM) – July 1, 2023

Last quarter, the proposed Opioid Treatment Program (OTP) policy and rate model were presented to and approved by the Department's Policy and Program Design Committee. In August 2022, the proposal was approved by the Medicaid Executive Review Committee. The policy is scheduled for review at the November Physicians Advisory Group (PAG) meeting. The PAG is a nonprofit organization of health care professionals that makes recommendations to the Department regarding Medicaid CCPs. The OTP service currently includes reimbursement only for methadone or buprenorphine administration for treatment or maintenance of OUD, does not include counseling or the cost of the medication, and is reimbursed at less than half of Medicare rates. The proposed policy includes medication, medication administration, counseling, case management services and other supportive services such as lab work and education services. Additionally, it would reimburse at a rate equivalent to Medicare and update the policy to match ASAM criteria for operational, staffing and staff education requirements.

The SUD Mid-Point Assessment was submitted in April 2022. Separately but at the same time as the Mid-Point Assessment was being conducted, the Department engaged Manatt Health to review progress on completion of the requirements in the SUD Implementation Plan. A mitigation plan addressing issues raised in the review was submitted to CMS with the Mid-Point Assessment. As recommended in the mitigation plan, the

Department has established project management support for the Implementation Plan items and has established new deadlines for items such as CCPs for which the original deadlines were missed or are no longer realistic. The Department is attaching an appendix along with this submission that details the expected implementation date of each CCP at the time this document was prepared.

One task highlighted as behind deadline by the review is the requirement under Milestone 4 for the Department to conduct an assessment of all Medicaid-enrolled providers that are accepting new patients at the critical levels of care, including those offering MAT. To mitigate this, the Department has engaged Health Services Advisory Group (HSAG) to complete the SUD provider assessment.

Quarterly Metric Trends

Quarterly metrics that rely on claims/encounter data lag by one quarter, and for Quarter 4 these metrics reflect the period of May 1, 2022 to July 31, 2022. The quarterly measures highlighted below indicate unusually small changes from the prior quarter. However, the results should be interpreted with caution when compared to DY4Q3. Due to a previously reported issue with the data, the Department had to re-submit the DY4Q3 results at a much later date, which created a much longer claims run-out. Both DY4Q3 and DY4Q4 results were therefore generated at a single time point in mid-December 2022, which likely explains the relatively stable trends seen when comparing the prior and the current quarter results.

Trending toward State goals:

- Utilization of Residential and Inpatient Services (Metric #10) and Withdrawal Management (Metric #11) increased from the prior quarter.

Trending away from State goals:

- Utilization of Intensive Outpatient and Partial Hospitalization Services (Metric #9) declined from last quarter.
- The use of the emergency department for SUD per 1,000 Medicaid beneficiaries (Metric #23) increased slightly during this quarter.
- There was a small increase in inpatient stays for SUD per 1,000 Medicaid beneficiaries (Metric #24), by 3.07% this quarter.
- The percent of SUD visits that had a PCP visit in the 30 days following the SUD visit (Metric Q2) declined to an average of 41.14% in Quarter 4.

Stable:

- The number of Medicaid-enrolled individuals with a SUD (Metric #3) decreased by only 0.89% from the prior quarter. The size of the Medicaid population continued to grow at a similar rate during this quarter, increasing by 1.49% of fully eligible beneficiaries, indicating that the overall percent of Medicaid beneficiaries with SUD diagnosis remained relatively stable from Quarter 3 to Quarter 4.
- There were no significant changes in the number of individuals receiving various forms of SUD treatments (Metric #6) compared to the prior quarter. Specifically, there were no meaningful changes for the utilization of Outpatient Services (Metric #8) and Medication Assisted Treatment (Metric #12).
- The percent of individuals receiving Medication-Assisted Treatment (MAT) who are also receiving counseling, behavioral, or psychosocial therapies in their first 12 months of the MOUD episode (Metric Q3) was 35.9% in the current reporting quarter, which

demonstrates a 0.59% increase over the prior quarter. This state-specific measure was developed this demonstration year in consultation with subject matter experts.

Annual Metrics

The annual metrics reported this quarter reflect Calendar Year 2021.

Trending toward State goals:

- There was a small decrease in the Concurrent Use of Opioids and Benzodiazepines (Metric #21), from 13.53% in 2020 to 13.18% in 2021.
- Follow-up rates after Emergency Department Visit for Alcohol and Other Drug Abuse or Dependence (Metric #17.1) and after Emergency Department visit for Mental Illness (Metric #17.2) increased compared to 2020 results.
- The Continuity of Pharmacotherapy for Opioid Use Disorder (Metric #22), measured as the percent of beneficiaries with pharmacotherapy for OUD who have at least 180 days of continuous treatment, increased from 22.88% in 2020 to 24.09% in 2021.

Trending away from State goals:

- The initiation rate of Alcohol and Other Drug Abuse or Dependence Treatment (Metric #15) stayed marginally unchanged from 2020 to 2021, but the engagement rate in such treatment fell by 5.9%.
- Use of Opioids at High Dosage in Persons Without Cancer (Metric #18) increased, going from 6.25% in 2020 to 6.86% in 2021.

Stable:

- Access to Preventive/Ambulatory Health Services for Adult Medicaid Beneficiaries with SUD (Metric #32), which measures the percentage of Medicaid beneficiaries with SUD who had an ambulatory or preventive care visit, was relatively unchanged between 2020 and 2021, with a 0.20% increase in the measure.

We note that a change in the programmer analyst this quarter and reinterpretation of the metrics could be responsible for a change in metric 17.1 and 17.2. In this report, we refer to changes from the Version 4/Calendar Year 2020 metrics for annual, which have been recalculated using the updated coding.

Reporting of Overdose Deaths (count) and Overdose Deaths (rate) (Metrics #26 and #27) is delayed as the Sheps Center's linkage between the Department of Public Health death certificate data and Medicaid enrollment data has not yet been finalized. The Department expects to have these metrics by the end of May 2023 and will submit a revised report at that time. This delay has been communicated to CMS via email.

3. Narrative information on implementation by milestone and reporting topic

Prompt	State has no trends/update to report (place an X)	Related metric(s) (if any)	State response
1. Assessment of need and qualification for SUD services			
1.1 Metric trends			
1.1.1. The state reports the following metric trends, including all changes (+ or -) greater than 2 percent related to assessment of need and qualification for SUD services		*Metric #3*	The number of beneficiaries with SUD diagnosis remained stable, going from an average of 81,395 to an average of 80,667 beneficiaries this quarter. The following are sub-populations with a change of greater than +/- 2% from the prior quarter if the number of beneficiaries is over 30. SUD diagnoses (monthly): • decreased by 3.72% among beneficiaries who were criminal justice involved, going from an average of 466 beneficiaries to an average of 449 beneficiaries this quarter.
1.2 Implementation update			
1.2.1. Compared to the demonstration design and operational details, the state expects to make the following changes to: 1.2.1.i. The target population(s) of the demonstration	*X*		
1.2.1.ii. The clinical criteria (e.g., SUD diagnoses) that qualify a beneficiary for the demonstration	*X*		

Prompt	State has no trends/update to report (place an X)	Related metric(s) (if any)	State response
1.2.2 The state expects to make other program changes that may affect metrics related to assessment of need and qualification for SUD services	*X*		

Prompt	State has no trends/update to report (place an X)	Related metric(s) (if any)	State response
2. Access to Critical Levels of Care for OUD and other SUDs (Milestone 1)			
2.1 Metric trends			

2.1.1 The state reports the following metric trends, including all changes (+ or -) greater than 2 percent related to Milestone 1		*Metric #6*	Beneficiaries receiving SUD treatment increased by 1.40%, going from an average of 29,755 beneficiaries receiving treatment to an average of 30,170 beneficiaries this quarter. The following are sub-populations with a change of greater than +/- 2% from the prior quarter if the number of beneficiaries is over 30. SUD treatment: • decreased by 5.05% among beneficiaries under age 18, going from an average of 765 beneficiaries last quarter to an average of 726 beneficiaries this quarter. • decreased by 2.01% among dually eligible beneficiaries, going from an average of 4,160 beneficiaries last quarter to an average of 4,077 beneficiaries this quarter.
		Metric #7	The number of beneficiaries receiving Early Intervention services decreased by 13.04%, going from an average of 8 beneficiaries last quarter to an average of 7 beneficiaries this quarter. There are several potential reasons for the low number of beneficiaries receiving these services. Screening services are usually provided by primary care providers, and some providers may not perform screenings because they don't have the available staff to facilitate referrals or face a shortage of SUD service providers to refer to in their area. Additionally, while the type of providers who can be reimbursed for this service was expanded in recent years, the Department believes many providers are unaware of this. The proposed changes to CCP 8C would expand the places of service at which Early Intervention services can be reimbursed, which we expect to increase the number of beneficiaries receiving the service.
		Metric #8	Beneficiaries receiving Outpatient SUD services increased by 1.55%, going from an average of

		Metric #9	18,926 beneficiaries to an average of 19,220 beneficiaries this quarter. The following are sub-populations with a change of greater than +/- 2% from the prior quarter if the number of beneficiaries is over 30. Outpatient SUD Services: • increased by 2.28% among beneficiaries with OUD, going from an average of 12,534 beneficiaries last quarter to an average of 12,819 beneficiaries this quarter. • decreased by 8.87% among beneficiaries under age 18, going from an average of 500 beneficiaries last quarter to an average of 455 beneficiaries this quarter. • decreased by 2.40% among dually eligible beneficiaries, going from an average of 3,109 beneficiaries last quarter to an average of 3,035 beneficiaries this quarter. Beneficiaries receiving Intensive Outpatient and Partial Hospitalization Services decreased by 5.46% from last quarter, going from an average of 1,167 to an average of 1,103 beneficiaries this quarter. The following are sub-populations with a change of greater than +/- 2% from the prior quarter if the number of beneficiaries is over 30. Intensive Outpatient and Partial Hospitalization Services Recipients: • decreased by 6.11% among beneficiaries with OUD, going from an average of 518 beneficiaries last quarter to an average of 486 beneficiaries this quarter. • increased by 10.57% among beneficiaries under age 18, going from an average of 41 beneficiaries last quarter to an average of 45 beneficiaries this quarter. • decreased by 4.49% among beneficiaries age 18 to 64, going from an average of 1,039

			beneficiaries last quarter to an average of 992 beneficiaries this quarter. • decreased by 24.52% among beneficiaries age 65 or over, going from an average of 87 beneficiaries last quarter to an average of 66 beneficiaries this quarter. • decreased by 27.98% among pregnant beneficiaries, going from an average of 56 beneficiaries last quarter to an average of 40 beneficiaries this quarter. • decreased by 15.64% among dually eligible beneficiaries, going from an average of 292 beneficiaries last quarter to an average of 246 beneficiaries this quarter.
		Metric #10	Beneficiaries receiving Residential and Inpatient SUD treatment increased by 9.49% from last quarter, going from an average of 249 to an average of 273 beneficiaries this quarter. The following are sub-populations with a change of greater than +/- 2% from the prior quarter if the number of beneficiaries is over 30. Residential and Inpatient SUD treatment: • increased by 7.49% among beneficiaries age 18 to 64, going from an average of 240 beneficiaries last quarter to an average of 258 beneficiaries this quarter.
		Metric #11	Beneficiaries receiving SUD withdrawal management increased by 3.13% from last quarter, going from an average of 107 beneficiaries receiving treatment to an average of 110 beneficiaries this quarter. The following are sub-populations with a change of greater than +/- 2% from the prior quarter if the number of beneficiaries is over 30. Withdrawal management:

			• increased by 10.00% among beneficiaries with OUD, going from an average of 50 beneficiaries last quarter to an average of 55 beneficiaries this quarter. • increased by 2.94% among beneficiaries age 18 to 64, going from an average of 102 beneficiaries last quarter to an average of 105 beneficiaries this quarter. The number of beneficiaries receiving medication assisted treatment (MAT) remained relatively stable, going from an average of 15,680 beneficiaries receiving treatment to 15,836 beneficiaries this quarter.
		Metric #12	The following are sub-populations with a change of greater than +/- 2% from the prior quarter if the number of beneficiaries is over 30. MAT: • increased by 3.23% among beneficiaries under age 18, going from an average of 72 beneficiaries last quarter to an average of 75 beneficiaries this quarter. • increased by 5.58% among beneficiaries age 65 or over, going from an average of 72 beneficiaries last quarter to an average of 76 beneficiaries this quarter. • decreased by 3.78% among pregnant beneficiaries, going from an average of 687 beneficiaries last quarter to an average of 661 beneficiaries this quarter.
		Metric #22	The Continuity of Pharmacotherapy for Opioid Use Disorder measured as a percent of beneficiaries with pharmacotherapy for OUD who have at least 180 days of continuous treatment increased by 5.29%, going from 22.88% in 2020 to 24.09% in 2021. The denominator decreased by 9.03% to 22,206 individuals, while the numerator decreased by 4.21% to 5,349 individuals.
2.2 Implementation update			

2.2.1 Compared to the demonstration design and operational details, the state expects to make the following changes to: 2.2.1.i. Planned activities to improve access to SUD treatment services across the continuum of care for Medicaid beneficiaries (e.g. outpatient services, intensive outpatient services, medication-assisted treatment, services in intensive residential and inpatient settings, medically supervised withdrawal management)			In the past quarter, the Department completed the following tasks related to implementation of clinical policies that will support improved access to SUD treatment services across the continuum of care: • Last quarter, the proposed OTP policy and rate model were presented to and approved by the Department's Policy and Program Design Committee. In August 2022, the proposal was approved by the Medicaid Executive Review Committee. The policy is scheduled for review at the November PAG meeting. In the Implementation Plan, the Department committed to developing "an integrated service model for outpatient opioid treatment that includes medication, medication administration, counseling, laboratory tests and case management activities." The OTP service currently includes reimbursement only for methadone or buprenorphine administration for treatment or maintenance of OUD, does not include counseling or the cost of the medication, and is reimbursed at less than half of Medicare rates. The proposed policy includes medication, medication administration, counseling, case management services and other supportive services such as lab work and education services. Additionally, it would reimburse at a rate equivalent to Medicare and update the policy to match ASAM criteria for operational, staffing and staff education requirements. • The CCP for Diagnostic Assessments, ASAM level 1.0, was presented to PAG on Aug. 25, 2022. The policy was approved with one revision. The Department reviewed feedback on the CCP and revised it for public posting. • Facilitated stakeholder engagement for the CCP for ASAM level 2.1 (Substance Abuse Intensive

			Outpatient Services) on Sept. 21 and Sept. 22, 2022, reviewed comments, and made draft policy revisions. • Facilitated stakeholder engagement for ASAM level 2.5 (Substance Abuse Comprehensive Outpatient Treatment) on Sept. 28 and Sept. 30, 2022, reviewed stakeholder comments, and made draft policy revisions. • Developed and revised SPA language for CCPs for ASAM levels 1 WM and 2 WM (Ambulatory Withdrawal Management without Extended Onsite Monitoring and Ambulatory Withdrawal Management with Extended Onsite Monitoring) in preparation for review by the Eastern Band of Cherokee Indians (EBCI). 2 WM will be a new covered service when implemented. • Completed final edits for the CCP for ASAM levels 4 and 4WM (Inpatient Behavioral Health Services). Completed review of the SPA and coordinated with the Fiscal Planning and Provider Reimbursement team to determine SPA needs. • Convened and facilitated internal work groups to revise service staffing in the CCP for ASAM level 3.3 (Clinically Managed Population Specific High Intensity Residential Programs) and determined rates and fiscal impact for the service. This service is for beneficiaries with Traumatic Brain Injury (TBI) and will be a new covered service when implemented. • Convened and facilitated internal workgroups and edited draft policy for Adolescent, Adult, Pregnant and Parenting populations for ASAM level 3.5 (Clinically Managed High Intensity Residential Services Adult & Adolescent). This is an existing service that is currently only available to pregnant and parenting women and is being expanded to cover all adult and adolescent beneficiaries. • Convened and facilitated internal work group to review public comments and edit draft policy for ASAM level 3.2 WM (Clinically Managed

Prompt	State has no trends/update to report (place an X)	Related metric(s) (if any)	State response
			Residential Withdrawal Management). The CCP was posted for the 45-day public comment period last quarter. This will be a new covered service when implemented. • Convened and facilitated internal work group to review public comments and edit draft policy for ASAM level 3.7 (Medically Monitored Intensive Inpatient Services).
2.2.1.ii. SUD benefit coverage under the Medicaid state plan or the Expenditure Authority, particularly for residential treatment, medically supervised withdrawal management, and medication-assisted treatment services provided to individual IMDs	X		
2.2.2 The state expects to make other program changes that may affect metrics related to Milestone 1	X		

Prompt	State has no trends/update to report (place an X)	Related metric(s) (if any)	State response
3. Use of Evidence-based, SUD-specific Patient Placement Criteria (Milestone 2)			
3.1 Metric trends			
3.1.1 The state reports the following metric trends, including all changes (+ or -) greater than 2 percent related to Milestone 2	X		
3.2. Implementation update			
3.2.1 Compared to the demonstration design and operational details, the state expects to make the following changes to: 3.2.1.i. Planned activities to improve providers' use of evidence-based, SUD-specific placement criteria			In this quarter, review of the SPA for CCP 8C was completed and it was determined that a revision was not needed. The policy is expected to go into effect in February 2023. The revisions to CCP 8C include requirements regarding the completion of ASAM level of care determinations on beneficiaries, in addition to requiring all licensed clinicians completing CCAs to have training on the ASAM criteria that is a minimum of 10 hours in length and meets clearly defined training objectives. The Department continues to provide low-cost ASAM training through a contract with the University of North Carolina (UNC) Behavioral Health Springboard and Train for Change to support licensed clinicians in meeting the revised training requirements. This quarter 111 providers completed the two-day training seminar on the ASAM criteria.
3.2.1.ii. Implementation of a utilization management approach to ensure (a) beneficiaries have access to SUD services at the appropriate level of care, (b) interventions are appropriate for the diagnosis and level of care, or (c) use of independent process for reviewing placement in residential treatment settings	X		

Prompt	State has no trends/update to report (place an X)	Related metric(s) (if any)	State response
3.2.2 The state expects to make other program changes that may affect metrics related to Milestone 2	X		

Prompt	State has no trends/update to report (place an X)	Related metric(s) (if any)	State response
4. Use of Nationally Recognized SUD-specific Program Standards to Set Provider Qualifications for Residential Treatment Facilities (Milestone 3)			
4.1 Metric trends			
4.1.1 The state reports the following metric trends, including all changes (+ or -) greater than 2 percent related to Milestone 3 *Note: There are no CMS-provided metrics related to Milestone 3. If the state did not identify any metrics for reporting this milestone, the state should indicate it has no update to report.*	X		
4.2 Implementation update			
4.2.1 Compared to the demonstration design and operational details, the state expects to make the following changes to: 4.2.1.i. Implementation of residential treatment provider qualifications that meet the ASAM Criteria or other nationally recognized, SUD-specific program standards			NC Medicaid is working with the Department of Mental Health, Developmental Disabilities and Substance Abuse Services (DMH/DD/SAS) on licensure waiver and licensure rule development for residential services.
4.2.1.ii. Review process for residential treatment providers' compliance with qualifications.	X		
4.2.1.iii. Availability of medication-assisted treatment at residential treatment facilities, either on-site or through facilitated access to services off site			The Department previously developed language to include in all residential service CCPs creating access requirements that programs must meet to ensure beneficiaries have access to MAT. The Department continues to include this requirement in CCPs being currently developed.
4.2.2 The state expects to make other program changes that may affect metrics related to Milestone 3	X		

Prompt	State has no trends/update to report (place an X)	Related metric(s) (if any)	State response
5. Sufficient Provider Capacity at Critical Levels of Care including for Medication Assisted Treatment for OUD (Milestone 4)			
5.1 Metric trends			
5.1.1 The state reports the following metric trends, including all changes (+ or -) greater than 2 percent related to Milestone 4	X		
5.2 Implementation update			
5.2.1 Compared to the demonstration design and operational details, the state expects to make the following changes to: Planned activities to assess the availability of providers enrolled in Medicaid and accepting new patients in across the continuum of SUD care			Health Services Advisory Group (HSAG) has agreed to complete the SUD provider assessment on behalf of the Department, but contract language is not yet finalized. The evaluator for the SUD demonstration, the Sheps Center for Health Services Research, will be conducting an analysis of SUD claims to identify the number of providers currently billing NC Medicaid for services at each ASAM level. The number of providers identified will help determine what level of outreach to providers by HSAG is feasible. As several CCPs for newly covered services have not been finalized yet, the start date for this work is to be determined. The Implementation Plan due date for the assessment was October 2019, but the Department experienced significant delays in the implementation of new CCPs.
5.2.2 The state expects to make other program changes that may affect metrics related to Milestone 4	X		
6. Implementation of Comprehensive Treatment and Prevention Strategies to Address Opioid Abuse and OUD (Milestone 5)			
6.1 Metric trends			

6.1 The state reports the following metric trends, including all changes (+ or -) greater than 2 percent related to Milestone 5		*Metric #18*	The annual Use of Opioids at High Dosage in Persons Without Cancer as a percent of beneficiaries using opioids for at least 90 days increased by 9.72%, going from 6.25% in 2020 to 6.86% in 2021. The denominator of opioid users decreased by 9.62% to 22,470 individuals, while the numerator decreased by 0.84% to 1,541 individuals. The absolute change for this metric was a decrease of 0.61 percentage points.
		Metric #21	The annual Concurrent Use of Opioids and Benzodiazepines as a percent of beneficiaries using opioids decreased by 2.57% going from 13.53% in 2020 to 13.18% in 2021. The denominator decreased by 9.38% to 26,137, while the numerator decreased faster, by 11.71% to 3,446. The absolute percent change was a decrease of 0.35 percentage points.
		Metric #23	Emergency Department Utilization for SUD per 1,000 Medicaid Beneficiaries increased by 2.28%. The denominator reflecting the number of Medicaid beneficiaries increased by 1.49%, while the numerator reflecting those beneficiaries who used ED services for SUD increased by 3.78%. The following are sub-populations with a change of greater than +/- 2% from the prior quarter if the number of beneficiaries is over 30. ED use for SUD per 1,000beneficiaries: • decreased by 11.00% among beneficiaries under age 18, going from rate of 0.143 per 1,000 last quarter to 0.127 per 1,000 this quarter. • increased by 9.31% among beneficiaries age 65 and over, going from rate of 0.811 per 1,000 last quarter to 0.887 per 1,000 this quarter.
		Metric #26	Reporting of Overdose Deaths (count) and Overdose Deaths (rate) is delayed as the Sheps Center's linkage between the Department of Public Health death certificate

Prompt	State has no trends/update to report (place an X)	Related metric(s) (if any)	State response
		Metric #27	data and Medicaid enrollment data has not yet been finalized. The Department expects to have these metrics by the end of May 2023 and will submit a revised report at that time. This delay has been communicated to CMS via email.
6.2 Implementation update			
6.2.1 Compared to the demonstration design and operational details, the state expects to make the following changes to: 6.2.1.i. Implementation of opioid prescribing guidelines and other interventions related to prevention of OUD			This quarter the new OTP policy was approved by the NC Medicaid Executive Review Committee and was scheduled to be presented to the PAG.
6.2.1.ii. Expansion of coverage for and access to naloxone			The Department continues to include requirements for access to naloxone in revised CCPs for specific service programs.
6.2.2 The state expects to make other program changes that may affect metrics related to Milestone 5	X		
7. Improved Care Coordination and Transitions between Levels of Care (Milestone 6)			
7.1 Metric trends			

7.1.1 The state reports the following metric trends, including all changes (+ or -) greater than 2 percent related to Milestone 6		*Metric #15*	Compared to calendar year 2020, the Initiation of Alcohol and Other Drug Abuse or Dependence Treatment (IET-AD) rate decreased for 'alcohol abuse or dependence' and 'other drug abuse or dependence' cohorts by 2.58% and 3.11%, respectively. However, there was a 9.07% increase in the initiation rate for the 'opioid abuse or dependence' cohort. The total AOD abuse or dependence initiation rate remained relatively stable, going from 41.13% in 2020 to 40.87% in 2021, for a decrease of 0.26 percentage points. The same trends were observed for Engagement in Alcohol and Other Drug Abuse or Dependence Treatment (IET-AD) measure, for which engagement rates of the 'alcohol abuse or dependence' and 'other drug abuse or dependence' cohorts fell by 14.45% and 15.23%, respectively. In contrast, the rate for the 'opioid abuse or dependence' cohort increased by 12.08%. Hence, the total engagement rate fell by 5.85%, going from 15.52% in 2020 to 14.61% in 2021, for a decrease of 0.91 percentage points. These changes are all due to decreases in both the denominators and the numerators.
		Metric #17.1	Follow-up rates after Emergency Department visit for alcohol and other drug abuse or dependence increased by 9.79% and 5.72% at the 7- and 30-day ratios, respectively. The denominator of emergency department visits for alcohol and other drug abuse or dependence decreased by 3.19% going from 11,008 in 2020 to 10,657 visits in 2021. The numerator of ED visits with a 7-day follow-up increased by 6.29% (1,909 in 2020 to 2,029 in 2021) and visits with a 30-day follow up increased by 2.34% (2,900 in 2020 to 2,968 in 2021).
		Metric #17.2	Follow-up rates after Emergency Department visit for Mental Illness increased by 4.79% at the 7-day ratio but remained stable at the 30-day ratio. The denominator of emergency department visits for mental illness decreased by 2.69% going from 11,064 in 2020 to 10,766 visits in

Prompt	State has no trends/update to report (place an X)	Related metric(s) (if any)	State response
			2021. The numerator of ED visits with a 7-day follow-up increased by 1.96% (4,379 in 2020 to 4,465 in 2021), while visits with a 30-day follow up decreased by 2.46% (6,250 in 2020 to 6,096 in 2021).
7.2 Implementation update			
7.2.1 Compared to the demonstration design and operational details, the state expects to make the following changes to: Implementation of policies supporting beneficiaries' transition from residential and inpatient facilities to community-based services and supports	X		
7.2.2 The state expects to make other program changes that may affect metrics related to Milestone 6	X		
8. SUD health information technology (health IT)			
8.1 Metric trends			

8.1.1 The state reports the following metric trends, including all changes (+ or -) greater than 2 percent related to its health IT metrics		*Metric S1* *Metric Q1* *Metric Q2* *Metric Q3*	In May 2022, the NC Controlled Substance Reporting System reported 1,162,079 queries. In June there were 1,193,037 queries, and in July there were 1,132,515 queries. The average number of queries remained stable from last quarter, increasing by 1.82%. In May 2022, the NC Controlled Substance Reporting System reported 71,063 users (prescribers and dispensers) registered. In June, there were 71,703 registered users. In July, there were 72,461 registered users. There was a 2.23% increase in the average number of users registered from last quarter to the current quarter. The percentage of SUD visits with a follow-up PCP visit decreased by 4.70% from last quarter (from 43.2% to 41.1%). The denominator of SUD visits increased by 1.13%, going from 158,724 last quarter to 160,523 this quarter, while the numerator of SUD visits with a PCP follow-up within 30 days decreased by 3.56%, going from 68,494 last quarter to 66,056 this quarter. The percentage of individuals receiving Medication-Assisted Treatment (MAT) who are also receiving counseling, behavioral, or psychosocial therapies in their first 12 months on MAT remained relatively constant (from 35.6% to 35.9%). The denominator of people receiving MAT decreased by 0.30% going from 3,481 last quarter to 3,471 this quarter, and the numerator of psychosocial visits during the current and prior 3 months also increased by 0.30% going from 1,241 last quarter to 1,244 this quarter. The following are sub-populations with a change of greater than +/- 2% from the prior quarter when the number of beneficiaries is over 30. The percentage of individuals receiving Medication-Assisted Treatment (MAT) who are also receiving counseling, behavioral, or psychosocial therapies:

Prompt	State has no trends/update to report (place an X)	Related metric(s) (if any)	State response
			• increased by 8.44% among beneficiaries under age 18, going from rate of 61.6% last quarter to 66.8% this quarter. • decreased by 33.02% among beneficiaries age 65 and over, going from rate of 9.7% last quarter to 6.5% this quarter. • decreased by 9.64% among pregnant beneficiaries, going from the rate of 37.9% last quarter to 34.2% this quarter. • decreased by 38.32% among dually eligible beneficiaries, going from the rate of 14.2% last quarter to 8.8% this quarter. Some populations have more significant changes between quarters due to the relatively small number of individuals from these populations receiving MAT.
8.2 Implementation update			
8.2.1 Compared to the demonstration design and operational details, the state expects to make the following changes to: 8.2.1.i. How health IT is being used to slow down the rate of growth of individuals identified with SUD	X		
How health IT is being used to treat effectively individuals identified with SUD			
8.2.1.ii. How health IT is being used to effectively monitor "recovery" supports and services for individuals identified with SUD	X		
8.2.1.iii. Other aspects of the state's plan to develop the health IT infrastructure/capabilities at the state, delivery system, health plan/MCO, and individual provider levels	X		

Prompt	State has no trends/update to report (place an X)	Related metric(s) (if any)	State response
8.2.1.iv. Other aspects of the state's health IT implementation milestones	X		
8.2.1.v. The timeline for achieving health IT implementation milestones	X		
8.2.1.vi. Planned activities to increase use and functionality of the state's prescription drug monitoring program			In this DY, a team of outreach staff completed several training sessions with health professionals on how to use the state Prescription Drug Monitoring Program (PDMP) how to interpret risk scores, and the relevance to their practice and the ongoing opioid epidemic.
8.2.2 The state expects to make other program changes that may affect metrics related to health IT	X		
9. Other SUD-related metrics			
9.1 Metric trends			

Prompt	State has no trends/update to report (place an X)	Related metric(s) (if any)	State response
9.1.1 The state reports the following metric trends, including all changes (+ or -) greater than 2 percent related to other SUD-related metrics		*Metric #24*	Inpatient stays for SUD per 1,000 Medicaid beneficiaries increased by 3.07%. The denominator reflecting the number of Medicaid beneficiaries increased by 1.49%, while the numerator reflecting those beneficiaries who used IP services for SUD increased by 4.59%. The following are sub-populations with a change of greater than +/- 2% from the prior quarter if the number of beneficiaries is over 30. Inpatient stays for SUD per 1,000: • increased by 11.57% among beneficiaries under age 18, going from rate of 0.055 per 1,000 (and an average of 71 beneficiaries) last quarter to 0.062 per 1,000 this quarter (and an average of 80 beneficiaries). • increased by 6.44% among beneficiaries age 65 and over, going from rate of 0.825 per 1,000 (and an average of 122 beneficiaries) last quarter to 0.878 per 1,000 (and an average of 131 beneficiaries) this quarter.
		Metric #32	The percentage of Medicaid beneficiaries with SUD who had an ambulatory or preventive care visit was relatively unchanged between 2020 and 2021, with a 0.20% increase in the measure. The denominator increased by 7.46%, going from 70,519 in 2020 to 75,778 in 2021, while the numerator increased by 7.67% going from 64,213 in 2020 to 69,140 in 2021.
9.2 Implementation update			

Prompt	State has no trends/update to report (place an X)	Related metric(s) (if any)	State response
9.2.1 The state reports the following metric trends, including all changes (+ or -) greater than 2 percent related to other SUD-related metrics	X		

4. Narrative information on other reporting topics

Prompts	State has no update to report (Place an X)	State response
10. Budget neutrality		
10.1 Current status and analysis		
10.1.1 If the SUD component is part of a broader demonstration, the state should provide an analysis of the SUD-related budget neutrality and an analysis of budget neutrality as a whole. Describe the current status of budget neutrality and an analysis of the budget neutrality to date.		North Carolina appears to be within budget neutrality limits for both the broader demonstration and the SUD component. The most recent budget neutrality workbook was uploaded to PMDA on Feb. 15, 2023.
10.2 Implementation update		
10.2.1 The state expects to make other program changes that may affect budget neutrality	X	

Prompts	State has no update to report (Place an X)	State response
11. SUD-related demonstration operations and policy		
11.1 Considerations		
11.1.1 The state should highlight significant SUD (or if broader demonstration, then SUD-related) demonstration operations or policy considerations that could positively or negatively affect beneficiary enrollment, access to services, timely provision of services, budget neutrality, or any other provision that has potential for beneficiary impacts. Also note any activity that may accelerate or create delays or impediments in achieving the SUD demonstration's approved goals or objectives, if not already reported elsewhere in this document. See report template instructions for more detail.		At the end of September 2022, the Department announced that launch of the Behavioral Health and Intellectual/Developmental Disability (I/DD) Tailored Plans would be delayed until April 1, 2023. The delay will allow Tailored Plans more time to contract with additional providers and to validate that data systems needed for launch are working. Most beneficiaries expected to be enrolled in Tailored Plans currently remain in NC Medicaid Direct and will not experience any disruption of services due to this delay. However, some providers have expressed concern that Standard Plan members in need of intensive SUD recovery services can't obtain these services while in a Standard Plan, and the date change prolongs the time until these members can switch into Tailored Plans that cover these services. The Department is allowing Standard Plans to submit In Lieu of Service (ILOS) requests as a bridge for members until they are moved to Tailored Plans. Additionally, the Department is working to add Intensive Outpatient and Partial Hospitalization Services to Standard Plan coverage, but this change will require legislative approval. The Department's goal continues to be to ensure a seamless and successful experience for Medicaid beneficiaries, their families and advocates, providers and other stakeholders committed to improving the health of North Carolinians. On April 1, 2023, approximately 55,000 children covered by NC Health Choice will transition to NC Medicaid. These beneficiaries' families will no longer have to pay enrollment fees or copays and will gain access to non-emergency medical transportation and Early and Periodic Screening, Diagnosis and Treatment (EPSDT). These changes may increase access to SUD services for beneficiaries under age 18.

Prompts	State has no update to report (Place an X)	State response
11.2 Implementation update		
11.2.1 Compared to the demonstration design and operational details, the state expects to make the following changes to: 11.2.1.i. How the delivery system operates under the demonstration (e.g. through the managed care system or fee for service)	X	
11.2.1.ii. Delivery models affecting demonstration participants (e.g. Accountable Care Organizations, Patient Centered Medical Homes)	X	
11.2.1.iii. Partners involved in service delivery	X	
11.2.2 The state experienced challenges in partnering with entities contracted to help implement the demonstration (e.g., health plans, credentialing vendors, private sector providers) and/or noted any performance issues with contracted entities	X	
11.2.3 The state is working on other initiatives related to SUD or OUD	X	
11.2.4 The initiatives described above are related to the SUD or OUD demonstration (The state should note similarities and differences from the SUD demonstration)	X	

Prompts	State has no update to report (Place an X)	State response
12. SUD demonstration evaluation update		
12.1 Narrative information		
12.1.1 Provide updates on SUD evaluation work and timeline. The appropriate content will depend on when this report is due to CMS and the timing for the demonstration. There are specific requirements per Code of Federal Regulations (CFR) for annual reports. See report template instructions for more details.		The Sheps Center's work on the SUD evaluation for North Carolina has followed the requested CMS timelines. Over the last year, the Sheps team has been engaged in several activities, including reporting quarterly metrics for the quarterly and annual SUD monitoring reports. In this DY, Sheps developed Metric Q3, a new state-specific measure, in consultation with Department subject matter experts. The measure is aimed at tracking the percent of individuals receiving Medication-Assisted Treatment (MAT) who are also receiving counseling, behavioral or psychosocial therapies.
12.1.2 Provide status updates on deliverables related to the demonstration evaluation and indicate whether the expected timelines are being met and/or if there are any real or anticipated barriers in achieving the goals and timeframes agreed to in the STCs		We are on track regarding the timing of deliverables per the STCs. Per discussions with CMS, the Department will be submitting a SUD waiver extension application by May 31, 2023. The SUD Interim Evaluation Report will be submitted at the same time as the application. There are no anticipated barriers in achieving the goals and timeframes agreed to in the STCs.
12.1.3 List anticipated evaluation-related deliverables related to this demonstration and their due dates		The Interim Evaluation Report will be submitted to CMS by May 31, 2023.
13. Other demonstration reporting		
13.1 General reporting requirements		
13.1.1 The state reports changes in its implementation of the demonstration that might necessitate a change to approved STCs, implementation plan, or monitoring protocol	X	
13.1.2 The state anticipates the need to make future changes to the STCs, implementation plan, or monitoring protocol, based on expected or upcoming implementation changes	X	

Prompts	State has no update to report (Place an X)	State response
13.1.3 Compared to the demonstration design and operational details, the state expects to make the following changes to: 13.1.3.i. The schedule for completing and submitting monitoring reports	X	
13.1.3.ii. The content or completeness of submitted reports and/or future reports	X	
13.1.4 The state identified real or anticipated issues submitting timely post-approval demonstration deliverables, including a plan for remediation	X	
13.2 Post-award public forum		
13.2.2 If applicable within the timing of the demonstration, provide a summary of the annual post-award public forum held pursuant to 42 CFR § 431.420(c) indicating any resulting action items or issues. A summary of the post-award public forum must be included here for the period during which the forum was held and in the annual report.		On Dec. 10, 2021, the Department held a post-award public forum during North Carolina's quarterly Medical Care Advisory Committee (MCAC) meeting. The Department provided an overview of the content of the current 1115 waiver, an update of the implementation progress to date, and an overview of the upcoming work and timeline for implementation of future key aspects of the waiver. The Department provided a summary of public comments made at the forum in the broader demonstration monitoring report submitted to CMS for DY4Q1. The most recent post-award public forum was held January 30, 2023, at the Community Partners Webinar. As this is outside of the reporting period, details will be provided in a future monitoring report.

Prompts	State has no update to report (Place an X)	State response
14. Notable state achievements and/or innovations		
14.1 Narrative information		
14.1.1 Provide any relevant summary of achievements and/or innovations in demonstration enrollment, benefits, operations, and policies pursuant to the hypotheses of the SUD (or if broader demonstration, then SUD related) demonstration or that served to provide better care for individuals, better health for populations, and/or reduce per capita cost. Achievements should focus on significant impacts to beneficiary outcomes. Whenever possible, the summary should describe the achievement or innovation in quantifiable terms, e.g., number of impacted beneficiaries.		In order to improve providers' use of evidence-based, SUD-specific placement criteria, the Department has a contract with UNC Behavioral Health Springboard to provide ASAM training. In DY4, 239 individuals completed the two-day training seminar. A new bundled payment OTP policy is currently in the review process. The Department is demonstrating its commitment to improving access to SUD treatment by proposing a reimbursement rate equivalent to the Medicare rate for this service.

*The state should remove all example text from the table prior to submission.

Note: Licensee and states must prominently display the following notice on any display of Measure rates:

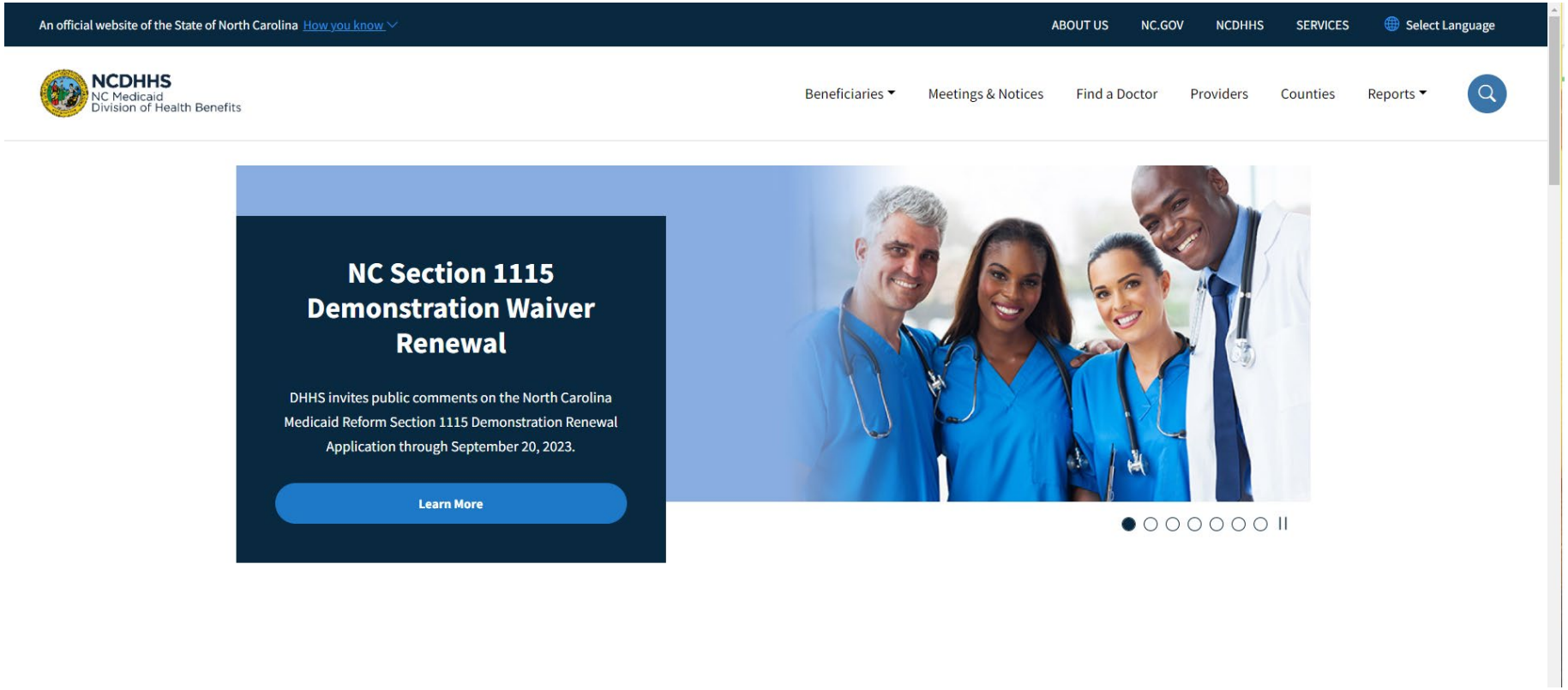
Measures IET-AD, FUA-AD, FUM-AD, and AAP [Metrics #15, 17(1), 17(2), and 32] are Healthcare Effectiveness Data and Information Set (HEDIS®) measures that are owned and copyrighted by the National Committee for Quality Assurance (NCQA). HEDIS measures and specifications are not clinical guidelines, do not establish a standard of medical care and have not been tested for all potential applications. The measures and specifications are provided "as is" without warranty of any kind. NCQA makes no representations, warranties or endorsements about the quality of any product, test or protocol identified as numerator compliant or otherwise identified as meeting the requirements of a HEDIS measure or specification. NCQA makes no representations, warranties, or endorsement about the quality of any organization or clinician who uses or reports performance measures and NCQA has no liability to anyone who relies on HEDIS measures or specifications or data reflective of performance under such measures and specifications.

The measure specification methodology used by CMS is different from NCQA's methodology. NCQA has not validated the adjusted measure specifications but has granted CMS permission to adjust. A calculated measure result (a "rate") from a HEDIS measure that has not been certified via NCQA's Measure Certification Program, and is based on adjusted HEDIS specifications, may not be called a "HEDIS rate" until it is audited and designated reportable by an NCQA-Certified HEDIS Compliance Auditor. Until such time, such measure rates shall be designated or referred to as "Adjusted, Uncertified, Unaudited HEDIS rates."

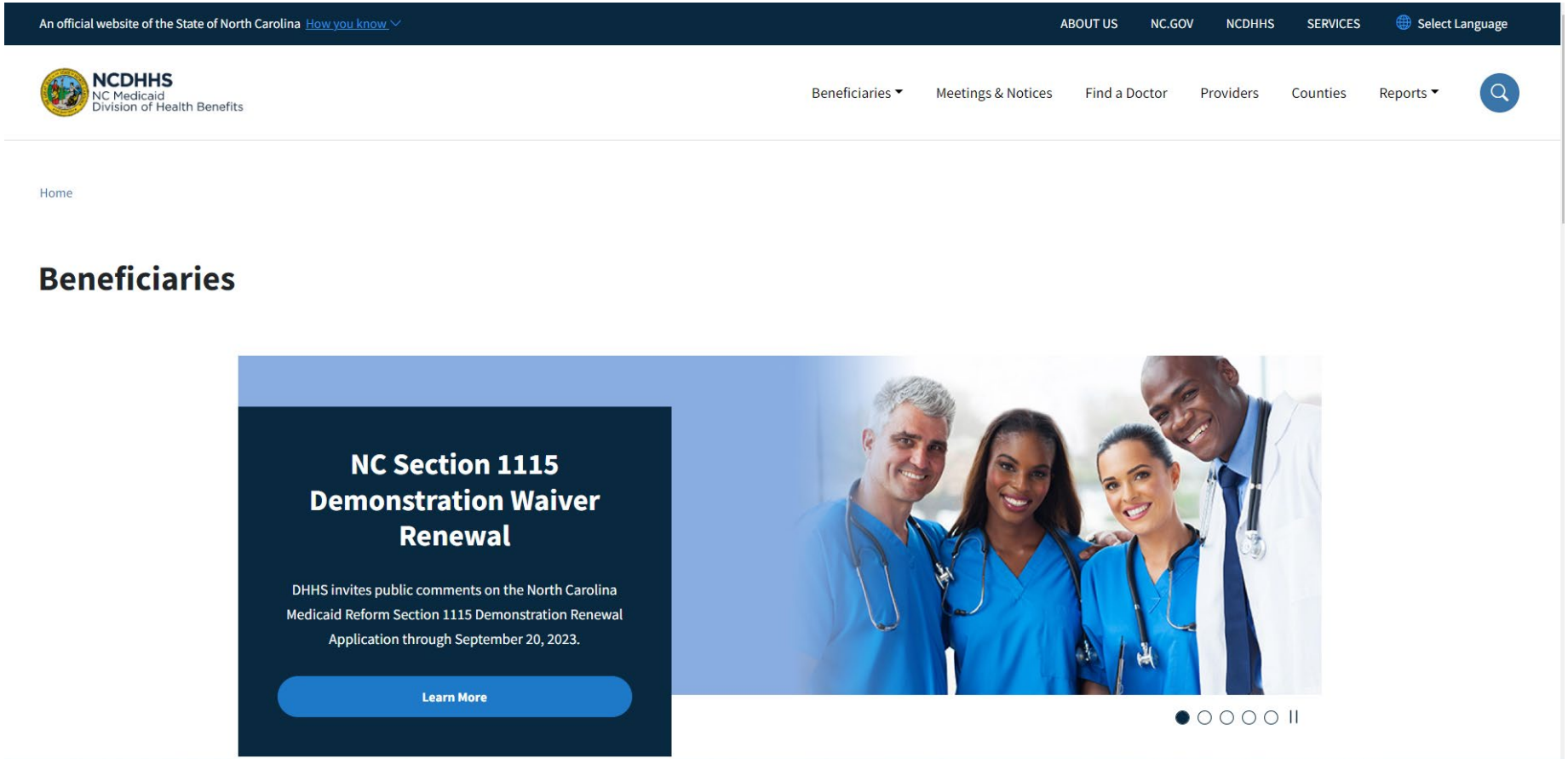
Appendix B

Posting on the NC DHHS Website

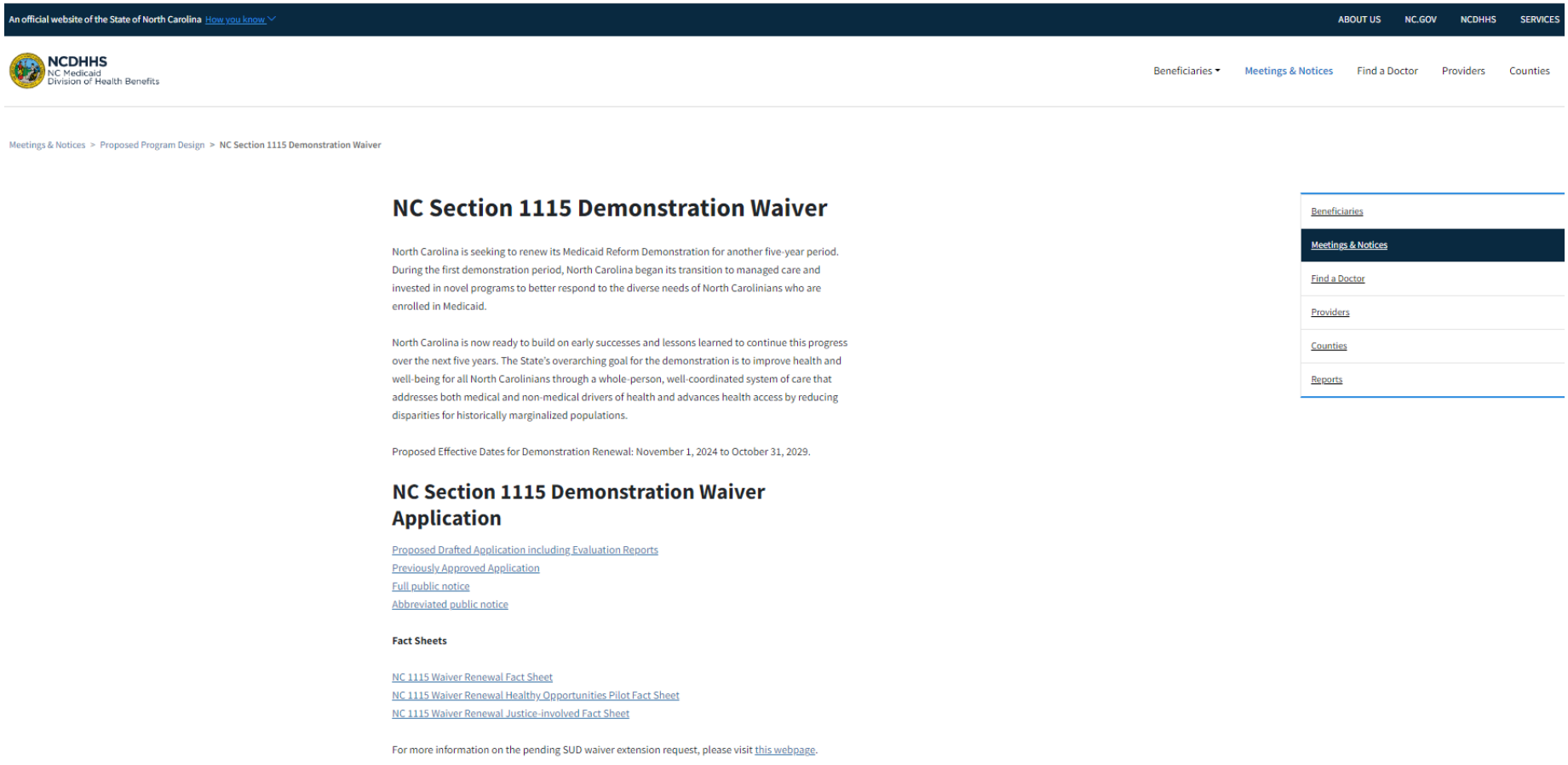
Main NC DHHS Page Carousel



NC DHHS Beneficiary Page Carousel



NC DHHS Demonstration Renewal Webpage



An official website of the State of North Carolina How you know

ABOUT US NC.GOV NCDHHS SERVICES

NCDHHS
NC Medicaid
Division of Health Benefits

Beneficiaries Meetings & Notices Find a Doctor Providers Counties

Meetings & Notices > Proposed Program Design > NC Section 1115 Demonstration Waiver

NC Section 1115 Demonstration Waiver

North Carolina is seeking to renew its Medicaid Reform Demonstration for another five-year period. During the first demonstration period, North Carolina began its transition to managed care and invested in novel programs to better respond to the diverse needs of North Carolinians who are enrolled in Medicaid.

North Carolina is now ready to build on early successes and lessons learned to continue this progress over the next five years. The State's overarching goal for the demonstration is to improve health and well-being for all North Carolinians through a whole-person, well-coordinated system of care that addresses both medical and non-medical drivers of health and advances health access by reducing disparities for historically marginalized populations.

Proposed Effective Dates for Demonstration Renewal: November 1, 2024 to October 31, 2029.

NC Section 1115 Demonstration Waiver Application

Proposed Drafted Application including Evaluation Reports
Previously Approved Application
Full public notice
Abbreviated public notice

Fact Sheets

NC 1115 Waiver Renewal Fact Sheet
NC 1115 Waiver Renewal Healthy Opportunities Pilot Fact Sheet
NC 1115 Waiver Renewal Justice-involved Fact Sheet

For more information on the pending SUD waiver extension request, please visit this webpage.

Beneficiaries
Meetings & Notices
Find a Doctor
Providers
Counties
Reports

Opportunities for Public Comment

North Carolina invites public comments on the North Carolina Medicaid Reform Demonstration renewal application from August 21, 2023 through September 20, 2023.

To be assured consideration prior to submission of this demonstration renewal request, comments must be received by 5 p.m. EST, September 20, 2023.

Written comments may be sent to the following address (please indicate "NC Section 1115 Waiver" in the written message):

North Carolina Department of Health and Human Services
NC Medicaid Section 1115 Waiver Team
1950 Mail Service Center
Raleigh, NC 27699-1950

Comments may also be emailed to Medicaid.NCEngagement@dhhs.nc.gov. Please indicate "NC Section 1115 Waiver" in the subject line of the email message.

You may request a copy of the proposed renewal request, notices and/or a copy of submitted public comments, once available, related to the Medicaid Reform Section 1115 Demonstration renewal by requesting it in writing to the mailing or email addresses listed above.

Interested parties will also have the opportunity to officially comment on the demonstration renewal application during the federal public comment period; the submitted application will be available for comment on the CMS website at medicaid.gov/medicaid/section-1115-demonstrations/index.html.

Public Hearings

To ask questions about accessibility or request accommodations, please email Medicaid.NCEngagement@dhhs.nc.gov. At least two weeks' advance notice will help us to provide seamless access.

North Carolina will host five public hearings to seek input regarding the waiver extension request:

First Public Hearing (in person)

Sept. 5 from 9:30-11 a.m. EST
Mountain Area Health Education Center (MAHEC)
Blue Ridge A & B in the Education Building
121 Hendersonville Road, Asheville NC 28803

Second Public Hearing (in person)

Sept. 6 from 9:30 -11 a.m. EST
McKimmon Conference & Training Center
NC State University, 1101 Gorman Street, Raleigh NC 27606

Third Public Hearing

Sept. 6 from 5:30-7:00 p.m. EST
Virtual via Microsoft Teams Join on your computer, mobile app or room device
Click here to join the meeting
Call in (audio only)
+1 984-204-1487, 902948880# United States, Raleigh
Phone Conference ID: 902 948 880#

Fourth Public Hearing (in person)

Sept. 7 from 2:30-4 p.m. EST
Greenville Convention Center
303 SW Greenville Blvd., Greenville NC 27834

Fifth Public Hearing

Sept. 15 from 11:30 a.m.-12:30 p.m., EST During the Medical Care Advisory Committee Meeting (MCAC)
Virtual via Microsoft Teams Join on your computer, mobile app or room device
Click here to join the meeting
Call in (audio only)
+1 984-204-1487, 412615457# United States, Raleigh
Phone Conference ID: 412 615 457#

Full Public Notice

NORTH CAROLINA DEPARTMENT OF HEALTH AND HUMAN SERVICES

Public Notice for Renewal Request of North Carolina's Medicaid Reform Section 1115 Demonstration

Release Date: August 21, 2023

PUBLIC NOTICE. This public notice provides information of public interest regarding the proposed renewal request of North Carolina's Medicaid Reform Section 1115 Demonstration.

North Carolina is seeking to renew its Medicaid Reform Demonstration for another five-year period. During the first demonstration period, North Carolina began its transition to managed care and invested in novel programs to better respond to the diverse needs of North Carolinians who are enrolled in Medicaid. North Carolina is now ready to build on early successes and lessons learned to continue this progress over the next five years. The State's overarching goal for the demonstration is to improve health and well-being for all North Carolinians through a whole-person, well-coordinated system of care that addresses both medical and non-medical drivers of health and advances health access by reducing disparities for historically marginalized populations.

I. Vision and Goals for Medicaid Reform Demonstration Renewal, 2024-2029

The 1115 demonstration renewal will advance the State's overarching goal through the following specific objectives and related initiatives:

Objective 1: Support a continued, smooth transition to managed care with a focus on improving care for enrollees with the most complex needs

- **Initiative 1a.** Provide integrated whole-person, well-coordinated care for Medicaid enrollees through continued implementation of Standard Plans.
- **Initiative 1b.** Provide integrated care for individuals with serious mental illness, serious emotional disturbance (SED), severe substance use disorder (SUD), intellectual and developmental disabilities (I/DD), and/or traumatic brain injury (TBI), through the launch of Tailored Plans.
- **Initiative 1c.** Provide integrated care to address the complex needs of youth and families served by the child welfare system through the implementation of the Children and Families Specialty Plan (CFSP).

Objective 2: Strengthen access to a person-centered and well-coordinated system of care which addresses both medical and non-medical drivers of health:

- **Initiative 2a.** Build on the Healthy Opportunities Pilot (HOP) infrastructure and experience to expand health-related social needs services to North Carolinians across the state.
- **Initiative 2b.** Promote continuity of care by offering continuous enrollment in Medicaid to children and former foster care youth.
- **Initiative 2c.** Improve health outcomes and support reentry into the community for justice-involved individuals by providing targeted pre-release Medicaid services.

Objective 3: Strengthen the behavioral health and I/DD delivery system:

- **Initiative 3a.** Reduce incidence of opioid use disorder (OUD)/SUD by providing Medicaid coverage for individuals obtaining short-term residential services for SUD in an institution for mental disease (IMD).
- **Initiative 3b.** Improve the coordinated system of care for people with behavioral health and I/DD needs through targeted new investments in technology.
- **Initiative 3c.** Bolster the behavioral health and long-term services and supports (LTSS) workforce.
- **Initiative 3d.** Expand access to critical supports offered under the 1915(i) authority.

Effective Dates:
November 1, 2024 to October 31, 2029

II. Opportunities for Public Comment

North Carolina invites public comments on the North Carolina Medicaid Reform Demonstration renewal application from August 21, 2023 through September 20, 2023.

To be assured consideration prior to submission of this demonstration renewal request, comments must be received by 5 p.m. (Eastern Time) on September 20, 2023.

Electronic copies of this public notice, the full proposed extension request, and the summary of comments received during this State public comment period upon submission to CMS will be available on the North Carolina Department of Health and Human Services (NCDHHS) Medicaid website at https://medicaid.ncdhhs.gov/meetings-notices/proposed-program-design/nc-section-1115-demonstration-waiver.

You may also request a copy of the proposed renewal request, notices, and/or a copy of submitted public comments, once available, related to the Medicaid Reform Section 1115 Demonstration renewal by requesting it in writing to the mailing or email addresses listed in this notice.

Written comments may be sent to the following address (please indicate "NC Section 1115 Waiver" in the written message):

North Carolina Department of Health and Human Services
NC Medicaid Section 1115 Waiver Team
1950 Mail Service Center
Raleigh, NC 27699-1950

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Phone Conference ID: 412 615 457#

Interested parties will also have the opportunity to officially comment on the demonstration renewal application during the federal public comment period; the submitted application will be available for comment on the CMS website at medicaid.gov/medicaid/section-1115-demonstrations/index.html.

III. Summary of Continuing Demonstration Features and Changes Requested to Demonstration, Including Populations Affected

Continuing Demonstration Features. North Carolina is seeking continued authority to support a smooth transition to managed care with a focus on improving care for Medicaid enrollees with the most complex needs. Specifically, during the next demonstration period, North Carolina will continue its efforts to:

- Provide integrated whole-person, well-coordinated care for Medicaid enrollees through continued implementation of Standard Plans
- Provide integrated care for individuals with serious mental illness, serious emotional disturbance, severe SUD, I/DD and/or TBI, through the launch of Tailored Plans
- Provide integrated care to address the complex needs of youth and families served by the child welfare system through the implementation of the CFSP
- Reduce incidence of OUD/SUD by providing Medicaid coverage for individuals obtaining short-term residential services for SUD in an IMD.[1]

Proposed Changes to Continuing Demonstration Features. North Carolina is seeking authority to refine existing initiatives as follows:

- Expand access to critical supports offered under 1915(i) authority to Medicaid enrollees who need

[1] North Carolina may consider seeking a waiver of the IMD exclusion for serious mental illness (SMI)/serious emotional disturbance (SED) treatment outside the renewal.

home- and community-based services.

- Build on the HOP infrastructure and experience to expand health-related social needs services to North Carolinians across the state by:
    - Expanding HOP to operate statewide
    - Expanding HOP eligibility criteria
    - Procuring new Network Leads (NLs) to support statewide HOP expansion
    - Scaling Pilot services to new regions of the state based on service effectiveness, regional readiness to participate, and community-based Health Services Organization (HSO) capacity
    - Permitting direct contracting between managed care entities and HSOs that demonstrate readiness
    - Seeking additional capacity building funds to support program growth

Proposed New Demonstration Features. North Carolina is seeking authority to introduce the following features in line with the State's objectives:

- **Improve health outcomes and support reentry into the community for justice-involved individuals by providing targeted pre-release Medicaid services.** North Carolina is requesting authority for federal Medicaid matching funds to provide a set of targeted Medicaid services to eligible justice-involved populations within the 90-day period prior to release, and to provide $315 million total computable in capacity building funding to support service delivery. These services, which at a minimum will include case management, medication-assisted treatment (MAT), a 30-day supply of prescription medication, will be available to individuals incarcerated in the state's prisons as well as to individuals incarcerated in select county- and tribal-operated jails and youth correctional facilities. Additional pre-release services, including physical and behavioral health clinical consultations, laboratory and radiology services, medications and medication administration, tobacco cessation, and durable medical equipment (DME) upon release, will be phased in over the course of the demonstration based on readiness to implement.
- **Improve the coordinated system of care for people with behavioral health and I/DD needs through targeted new investments in technology.** North Carolina is seeking $45 million in expenditure authority to allow Medicaid match health information technology and related technical assistance for behavioral health, I/DD and TBI providers and schools to improve access to behavioral health services and promote care integration and whole-person care.
- **Bolster the behavioral health and LTSS workforce.** North Carolina is seeking expenditure authority for $70 million in total computable funding to strengthen the behavioral health workforce, as well as providers and other professionals who serve individuals with I/DD and provide LTSS.
- **Promote continuity of care by offering continuous enrollment in Medicaid to children and former foster care youth.** Under the next demonstration, North Carolina is requesting authority to implement continuous enrollment for children through age five, extend the continuous enrollment period to 24 months for children and youth ages six through 18, and offer continuous enrollment for youth who have aged out of foster care prior to January 1, 2023, up to age 26, aligning eligibility determination

practices for these former foster care youth with other former foster care youth who aged out of foster care after January 1, 2023.

- **Designated State Health Program (DSHP) funding**. North Carolina is seeking expenditure authority to receive matching funds for certain DSHP expenditures and will use freed up state dollars from these funds to support select waiver initiatives. North Carolina is requesting $610 million in total computable DSHP funding.

IV. Benefits, Eligibility, Delivery System, and Cost Sharing

Benefits. Managed care benefits will continue to be defined under the State Plan or, where applicable, the 1915(c) waiver. The State continues to request an enhanced set of benefits for the Tailored Plans and CFSP in comparison to the Standard Plans as described in the full renewal application.

Other changes to benefits proposed in the renewal are described in the renewal application and above, and include:

- Expanding HOP statewide, reauthorizing the existing list of HOP services, and modifying service definitions
- Providing targeted pre-release services for justice-involved individuals in the 90 days prior to release
- Allowing individuals with incomes above 150% FPL to be eligible for 1915(i) services
- Permitting individuals transitioning out of an IMD to obtain North Carolina's 1915(i) community transition benefit, if they otherwise meet the otherwise meet the 1915(i) eligibility criteria

Eligibility. This demonstration renewal proposes to continue managed care eligibility as authorized in the current demonstration with no changes. All eligibility is defined under the State Plan, including M-CHIP, or, where applicable, the 1915(c) waiver as described in Table A. This demonstration affects all eligibility groups other than those listed in Table B below. The groups listed in Table B below will not be affected by the demonstration and will continue to receive Medicaid benefits through the service delivery system under the approved state plan or under existing waivers.

Table A: Full Benefit Medicaid Beneficiaries in This Table Are Eligible for SUD and HOP (if they meet the HOP criteria and are served by a HOP Administrator consistent with these STCs)[2]

GROUP NAME	CITATIONS
Duals Eligible for Full Medicaid, except those who are enrolled in the state's Innovations and TBI 1915(c) waiver programs, which qualifies the beneficiary for enrollment in the Tailored Plans	
Medically Needy • Medically Needy Pregnant Individuals except those covered by Innovations or TBI waivers • Medically Needy Children under 18 except those covered by Innovations or TBI waivers • Medically Needy Children Age 18 through 20 except those covered by Innovations or TBI waivers • Medically Needy Parents and Other Caretaker Relatives except those covered by Innovations or TBI waivers • Medically Needy Aged, Blind, or Disabled except those covered by Innovations or TBI waivers • Medically Needy Blind or Disabled Individuals Eligible in 1973 except those covered by Innovations or TBI waivers	1902(a)(10)(C)
Individuals Participating in the NC Health Insurance Premium Payment (HIPP) program except those covered by Innovations or TBI waivers	1906
Medicaid-only Beneficiaries Receiving Long-Stay Nursing Home Services	State Plan Eligibility
Community Alternatives Program for Children (CAP/C)	1915(c) waiver
Community Alternatives Program for Disabled Adults (CAP/DA)	1915(c) waiver

[2] North Carolina, consistent with requirements in state statute, intends to enroll dual eligible and long-term stay nursing home populations into managed care in the future, and will update these tables as appropriate when more information is available on that change.

GROUP NAME	CITATIONS
Individuals in any eligibility category not otherwise excluded during their period of retroactive eligibility or prior to the effective date of PHP coverage[3]	1902(a)(34)

Table B: Populations Excluded from Comprehensive Managed Care and This Demonstration

GROUP NAME	CITATIONS
Duals Eligible for Cost-Sharing Assistance • Qualified Medicare Beneficiaries • Qualified Disabled and Working Individuals • Specified Low Income Medicare Beneficiaries • Qualifying Individuals	1902(a)(10)(E)(i) 1905(p)(1) 1902(a)(10)(E)(ii) 1902(a)(10)(E)(iii) • 1902(a)(10)(E)(iv)
Individuals with Limited or no Medicaid Coverage (e.g., eligible for emergency services only)	• 1903(v)(2) and (3)
Individuals Eligible for Family Planning Services	1902(a)(10)(A)(ii)(XXI) • 42 CFR 435.214
Incarcerated Individuals *(Inpatient stays only), except for the provision of pre-release services to certain incarcerated individuals as described in this application*	Clause (A) following 1905(a)(29)(A) • 42 CFR 435.1009, 1010
Presumptively Eligible • Presumptively Eligible Pregnant Individuals • Presumptively Eligible MAGI Individuals	1902(a)(47) 1920 1920A 1920B 1920C

[3] Individuals in any eligibility category not otherwise excluded during their period of retroactive eligibility or prior to the effective date of PHP coverage are eligible for the SUD component of the demonstration but are not eligible for HOP.

GROUP NAME	CITATIONS
Individuals Participating in the Program of All-Inclusive Care for the Elderly (PACE)	• 1905(a)(26) • 1934

See section III above for information on eligibility-related changes proposed in the demonstration for HOP and continuous enrollment for certain children and youth.

Delivery System. North Carolina is not requesting changes to the delivery system, as compared to the State's currently authorized demonstration features. North Carolina is proposing changes to implementation dates as described in the full application.

Beneficiaries, except those excluded or exempted, shall be enrolled to receive services through a Prepaid Health Plan (PHP) in the state that will be under contract with the state. All Medicaid populations except for those who are excluded or exempt are either currently enrolled in PHPs or will be phased in to PHPs according to the schedule detailed in Table C of the application. For these populations, Medicaid managed care enrollment is mandatory. Members of federally recognized tribes, including members of the Eastern Band of Cherokee Indians (EBCI), may voluntarily enroll in PHPs on an opt-in basis.

Cost Sharing. There are no changes to cost sharing proposed under this demonstration. Cost sharing under this demonstration is consistent with the provisions of the approved state plan.

V. Waiver and Expenditure Authorities

North Carolina is requesting the following waiver and expenditure authorities to operate the 1115 demonstration renewal:

Table C. Requested Waiver and Expenditure Authorities

Waiver/ Expenditure Authority	Use for Waiver / Expenditure Authority	Currently Approved Waiver / Expenditure Authority
Waiver Authorities		
Statewideness: Section 1902(a)(1)	To the extent necessary to enable the state to operate managed care on less than a statewide basis	Currently approved

	To the extent necessary to enable the state to implement HOP in geographically limited areas of the state	Currently approved
	To enable the state to provide pre-release services to qualifying beneficiaries on a facility limited basis, as outlined in this application	Not currently approved
Freedom of Choice: Section 1902(a)(23)(A)	To the extent necessary to enable the state to restrict freedom of choice of provider by mandatory enrollment in managed care plans for the receipt of covered services including individuals in the Innovations and TBI 1915(c) waivers NC 0423.RO2.00, NC1326.R00.00, respectively. No waiver of freedom of choice is authorized for family planning providers.	Currently approved
	To enable the state to require qualifying beneficiaries to receive pre-release services, as described in this application, through only certain providers.	Not currently approved
Amount, Duration, and Scope of Services: Section 1902(a)(10)(B) **Comparability:** Section 1902(a)(17)	To the extent necessary to enable the state to vary the amount, duration, and scope of services offered to individuals in managed care under this demonstration, regardless of eligibility category	Currently approved
	To enable the state to provide HOP services as described in this application and that are not otherwise available to all beneficiaries in the same eligibility group.	Currently approved *(Note: language is slightly modified from previous approval)*
	To enable the state to provide additional benefits to Medicaid beneficiaries who are enrolled in the HOP program.	Currently approved
	To enable the state to provide only a limited set of pre-release services to qualifying	Not currently approved

	beneficiaries, as described in this application, that is different than the services available to all other enrollees outside of carceral settings in the same eligibility groups authorized under the state plan or the demonstration	
Expenditure Authorities[4]		
Managed Care		
Tailored Plans	Expenditures under contracts with managed care entities that do not meet the requirements in 1903(m)(2)(A) and 1932(a) of the Act as implemented in 42 CFR 438.52(a), to the extent necessary to allow the state to limit the choice to a single Tailored Plan in each county for Medicaid enrollees meeting one of the following criteria: a. Residing in an ICF-IID b. Participating in North Carolina's Transitions to Community Living c. Enrolled in the Innovations or Traumatic Brain Injury 1915(c) waiver d. Receiving services/supports in state-funded residential treatment (i.e., individuals receiving services to support them in their residence/house setting, including services provided in group homes or non-independent settings such as Group Living, Family Living, Supported Living, and Residential Supports)	Currently approved
Healthy Opportunities Pilot		

[4] In the SUD waiver extension request submitted to CMS on [XXX], North Carolina requested to continue expenditure authority for Residential and Inpatient Treatment for Individuals with a Substance Use Disorder (SUD).

Expenditures Related to Healthy Opportunities Pilot Services	Expenditures to provide HOP services for individuals who meet the eligibility criteria and in accordance with this application.	Currently approved *(Note: language is modified from previous approval to reflect statewide expansion and to remove October 31, 2024, expiration date)*
Expenditures Related to Healthy Opportunities Pilot Program Capacity Building Funding	Expenditures for capacity building funding to support implementation of HOP.	Currently approved *(Note: Capacity building dollars were previously incorporated in the expenditure authority for Pilot services; North Carolina is proposing a separate expenditure authority in this application)*
Continuous Enrollment for Children		
Expenditures Related to Continuous Enrollment	Expenditures for continued benefits for individuals who have been determined eligible for the applicable continuous eligibility period who would otherwise lose coverage during an eligibility determination.	Not currently approved
Coverage for Justice-Involved Reentry		
Expenditures Related to Pre-Release Services	Expenditures for pre-release services provided to qualifying demonstration beneficiaries who would be eligible for Medicaid if not for their incarceration status, for up to 90 days immediately prior to the expected date of	Not currently approved

	release from a participating state prison, county jail, or youth correctional facility.	
Expenditures Related to Pre-Release Services Capacity Building Funding	Expenditures for capacity building funding to support implementation of Justice-Involved Reentry Initiative.	Not currently approved
Behavioral Health and I/DD Technology		
Expenditures Related to Behavioral Health and I/DD HIT Infrastructure	Expenditures for the HIT Grants initiative.	Not currently approved
Expenditures Related to School Health Capabilities	Expenditures for the School Health and Health-Related Capabilities initiative.	Not currently approved
Behavioral Health and LTSS Workforce		
Expenditures Related to Clinical Loan Repayment Program	Expenditures for the Clinical Loan Repayment initiative.	Not currently approved
Expenditures Related to Recruitment and Retention	Expenditures for the Recruitment and Retention Payments for Direct Care Workers and Paraprofessionals initiative.	Not currently approved
1915(i) Services		
Community Transition Services	Expenditures to provide 1915(i) community transition services to Medicaid-enrolled individuals transitioning out of an IMD	Not currently approved
Expenditures Related to 1915(i) Services	Expenditures to provide 1915(i) services to Medicaid-enrolled individuals with incomes above 150% FPL	Not currently approved

Designated State Health Programs		
Designated State Health Programs	Expenditures for Designated State Health Programs, as described in this application, which are otherwise fully state-funded, and not otherwise eligible for Medicaid matching funds.	Not currently approved

VI. Hypotheses and Evaluation Approach

As required under the terms of the original demonstration, North Carolina engaged an independent research organization, the North Carolina University Cecil G. Sheps Center for Health Services Research ("Sheps Center"), to evaluate the performance of the demonstration initiatives. The approved evaluation design, inclusive of the Department's objectives and hypotheses, is available here.

Because the many programs included in the demonstration have different time frames, structures, and funding streams, the evaluation designs and timelines for the programs also vary. The full application include findings from the following reports:

- Annual report from Demonstration Year 4
- Qualitative evaluation findings from Demonstration Year 3
- Interim Evaluation between October 1, 2015 – September 31, 2022, of the SUD components of the demonstration
- Latest Rapid Cycle Assessment on the HOP program for the period between March 15, 2022, and November 30, 2022

Plans for Evaluating Impact of Demonstration Renewal

North Carolina will continue to contract with an external evaluator to assess the impact of proposed new demonstration features. North Carolina is proposing the research questions, hypotheses, and proposed evaluation approaches described below to include as part of its evaluation design. Additional information on evaluation for the demonstration renewal can be found in the full application.

Table D. Approach to Evaluation for Demonstration Renewal

Hypotheses	Evaluation Approach and Data Sources
Managed Care	
• Improve health outcomes for Medicaid enrollees in managed	Approach and data sources will be consistent with the North Carolina

care via a new delivery system • Maximize high-value care to ensure sustainability of the Medicaid program • Reduce SUD	Medicaid Reform Demonstration Approved Evaluation Design, including: • Primary care/obstetrics survey • Beneficiary interviews
Healthy Opportunities	
• Improve health outcomes for HOP participants • Improve the share of Medicaid enrollees receiving Pilot services that report improvements in unmet resource needs	Approach and data sources will be consistent with the Enhanced Case Management and Other Services Pilots Evaluation Design; Attachment H
Continuous Enrollment	
• Reduce churn and gaps in Medicaid coverage for children and youth, including for racial and ethnic groups that experience disproportionately high rates of churn • Improve health outcomes for children and youth	Analysis of enrollment and claims files
Justice Involved Pre-Release Services	
• Increase Medicaid coverage for justice-involved individuals • Improve health outcomes for justice-involved individuals, including by improving transitions into the community following release	Analysis of data files, including: • Claims linked with criminal justice indicators • Data on preventive and routine physical and behavioral health care • Data on avoidable emergency department (ED) visits and inpatient hospitalizations
Behavioral Health and I/DD Technology	
• Improve rates of real-time data sharing with the North Carolina HIE (HealthConnex) among participating behavioral health and I/DD providers • Improve rates of schools equipped with technologies need to improve billing and tracking for delivery of services and	• Analysis of Medicaid Enterprise Systems (MES), which incentivizes Electronic Health Record (EHR) improvements • Survey and/or analysis of

referrals among participating school providers	providers
Behavioral Health and LTSS Workforce	
• Reduce workforce shortages • Increase provider retention and Medicaid participation among Behavioral Health, I/DD and LTSS providers who serve Medicaid beneficiaries in North Carolina	• Analysis of administrative data such as Medicaid billing data, NC Health Professions Data System, and/or HCBS electronic visit verification • Survey and interviews of providers

VII. Enrollment and Expenditures[5]

Enrollment

Table E provides historical data on Member Months and estimated Person Count for North Carolina Medicaid Reform 1115 demonstration populations from November 1, 2019, to October 31, 2024. Note that a portion of the DY5 and all the DY6 figures reflect continuation of reported experience through March 31, 2023.

Table E. Estimated Historical Person Count

		Historical Member Months and Person Count				
		DY2[6]	DY3	DY4	DY5	DY6
Medicaid Eligibility Group		Nov 2019 to Oct 2020	Nov 2020 to Oct 2021	Nov 2021 to Oct 2022	Nov 2022 to Oct 2023	Nov 2023 to Oct 2024
Aged, Blind, Disabled (ABD)	Member months	0	303,156	1,198,700	1,256,600	1,256,600
	Person count	0	101,052	99,892	104,717	104,717

[5] The calculations and figures included in this Section have been developed for purposes of illustrating 1115 demonstration budget neutrality as required by CMS. 1115 demonstrations must be budget neutral to the federal government, not to the State, according to the policies negotiated in each demonstration. The required approach, inputs and methods for CMS may not align with estimates performed by the State for other purposes. For example, the illustrated per capita caps and expenditures do not consider the impact of pharmacy rebates or other costs that are outside of the managed care programs and populations included in this document.

[6] Demonstration Year 1 was associated with SUD waiver implementation only. This table reflects the appropriate Demonstration years for the comprehensive Medicaid Reform Demonstration.

		Historical Member Months and Person Count				
		DY2[6]	DY3	DY4	DY5	DY6
TANF & Related Adults	Member months	0	937,257	4,326,423	5,180,866	5,180,866
	Person count	0	312,419	360,535	431,739	431,739
TANF & Related Children	Member months	0	2,856,570	11,789,555	12,238,814	12,238,814
	Person count	0	952,190	982,463	1,019,901	1,019,901
Innovations/ Traumatic Brain Injury (TBI)	Member months	0	0	0	0	0
	Person count	0	0	0	0	0
Medicaid Expansion	Member months	N/A	N/A	N/A	0*	0*
	Person count	N/A	N/A	N/A	0*	0*

*Launch of Medicaid expansion is pending given ongoing budget negotiations. Estimates in DY5 and DY6 are subject to change. North Carolina will update and include final projections in the demonstration renewal request submitted to CMS.

North Carolina has estimated enrollment for the next demonstration period for the purposes of public comment. Table F provides the estimated enrollment for the five years of the 1115 demonstration renewal from November 1, 2024, to October 31, 2029. The State will include final projections in the demonstration renewal request submitted to CMS.

Table F. Projected Member Months and Person Count Under Renewal

	Projected Member Months and Person Count Under Renewal				
	DY7	DY8	DY9	DY10	DY11
Medicaid Eligibility Group	**Nov 2024 to Oct 2025**	**Nov 2025 to Oct 2026**	**Nov 2026 to Oct 2027**	**Nov 2027 to Oct 2028**	**Nov 2028 to Oct 2029**
Medicaid Eligibility Groups					

		Projected Member Months and Person Count Under Renewal				
		DY7	DY8	DY9	DY10	DY11
ABD	Member months	2,217,445	2,239,620	2,262,016	2,284,636	2,307,482
	Person count	184,787	186,635	188,501	190,386	192,290
TANF & Related Adults	Member months	3,682,854	3,719,682	3,756,879	3,794,448	3,832,393
	Person count	306,904	309,974	313,073	316,204	319,366
TANF & Related Children	Member months	15,642,839	16,212,785	16,792,565	16,960,491	17,130,095
	Person count	1,303,570	1,351,065	1,399,380	1,413,374	1,427,508
Innovations/TBI	Member months	168,000	168,000	168,000	168,000	168,000
	Person count	14,000	14,000	14,000	14,000	14,000
Medicaid Expansion	Member months	7,415,187	7,489,339	7,564,232	7,639,874	7,716,273
	Person count	617,932	624,112	630,353	636,656	643,023

Continuously enrolled children and former foster youth are included in the TANF & Related Children Medicaid Eligibility Group projections noted above. Table G provides a summary of the number of individuals impacted by these continuous enrollment changes.

Table G. Continuous Enrollment Impacts

	Estimated Number of Individuals Affected by Continuous Enrollment				
	DY7	**DY8**	**DY9**	**DY10**	**DY11**
Continuous Enrollment Groups	**Nov 2024 to Oct 2025**	**Nov 2025 to Oct 2026**	**Nov 2026 to Oct 2027**	**Nov 2027 to Oct 2028**	**Nov 2028 to Oct 2029**
Children age 0 through five	27,431	41,558	55,964	56,524	57,089
Individuals age 6 through 18	35,792	54,224	73,022	73,752	74,490
Former foster care youth	5,015	7,597	10,231	10,333	10,437

Justice-involved individuals are not included in the Medicaid Eligibility Group projections noted above. Table H provides a summary of the estimated number of individuals who will receive pre-release services under this demonstration.

Table H. Estimated Justice-Involved Reentry Initiative Impacts

	Estimated Number of Individuals Affected by Justice-Involved Reentry Initiative				
	DY7	**DY8**	**DY9**	**DY10**	**DY11**
	Nov 2024 to Oct 2025	**Nov 2025 to Oct 2026**	**Nov 2026 to Oct 2027**	**Nov 2027 to Oct 2028**	**Nov 2028 to Oct 2029**
Justice-involved Individuals	2,925	6,825	9,750	9,750	9,750

Expenditures

Table I provides historical data on the total expenditures for the North Carolina Medicaid Reform 1115 demonstration services and populations from November 1, 2019, to October 31, 2024. Note that a portion of the DY5 and all the DY6 figures are estimated based on reported experience through March 31, 2023.

Table I. Historical Total Computable Expenditures

	Historical Total Computable Expenditures (in $M)				
	DY2[7]	DY3	DY4	DY5	DY6
Historical Expenditures	**Nov 2019 to Oct 2020**	**Nov 2020 to Oct 2021**	**Nov 2021 to Oct 2022**	**Nov 2022 to Oct 2023**	**Nov 2023 to Oct 2024**
Medicaid Eligibility Groups					
ABD	0	$508,987,665	$2,046,744,665	$2,253,393,450	$2,253,393,450
TANF & Related Adults	0	$374,099,591	$2,287,582,053	$2,738,045,214	$2,738,045,214
TANF & Related Children	0	$620,287,515	$2,708,208,039	$2,863,757,092	$2,863,757,092
Innovations/TBI	0	0	0	0	0
Medicaid Expansion	0	0	0	0*	0*
Healthy Opportunities Pilot					
ECM Capacity Building	0	$19,024,872	$18,689,376	$10,000,000	0
ECM Services	0	$16,660,324	$5,010,877	$84,000,000	$84,000,000

*Launch of Medicaid expansion is pending given ongoing budget negotiations. Estimates in DY5 and DY6 are subject to change. North Carolina will update and include final projections in the demonstration renewal request submitted to CMS.

For the purposes of public notice and comment, the State has summarized in the table below the projected expenditures for the renewal. The State will include final projections in the demonstration renewal request submitted to CMS.

[7] Demonstration Year 1 was associated with SUD waiver implementation only. This table reflects the appropriate Demonstration years for the comprehensive Medicaid Reform Demonstration.

Table J. Projected Total Computable Expenditures Under Renewal

	Projected Total Computable Expenditures				
	DY7	**DY8**	**DY9**	**DY10**	**DY11**
With Waiver Expenditures	**Nov 2024 to Oct 2025**	**Nov 2025 to Oct 2026**	**Nov 2026 to Oct 2027**	**Nov 2027 to Oct 2028**	**Nov 2028 to Oct 2029**
Medicaid Eligibility Groups					
ABD	$5,586,941,191	$5,896,737,080	$6,223,711,151	$6,568,815,934	$6,933,056,778
TANF & Related Adults	$3,064,472,454	$3,234,397,451	$3,413,744,790	$3,603,036,938	$3,802,825,337
TANF & Related Children	$5,188,185,940	$5,619,191,812	$6,082,044,107	$6,419,293,452	$6,775,243,274
Innovations/TBI	$1,561,052,272	$1,631,299,624	$1,704,708,107	$1,781,419,972	$1,861,583,871
Medicaid Expansion	$9,780,541,039	$10,372,263,772	$10,999,785,730	$11,665,272,767	$12,371,021,789
Healthy Opportunities Pilots					
Services	$340,000,000	$340,000,000	$340,000,000	$340,000,000	$340,000,000
Capacity Building	$50,000,000	$100,000,000	$100,000,000	$25,000,000	$25,000,000
Justice-Involved Reentry Capacity Building					
Services	$4,096,381	$10,036,134	$15,054,201	$15,806,911	$16,597,256
Capacity Building	$100,000,000	$125,000,000	$50,000,000	$30,000,000	$10,000,000
Behavioral Health and I/DD Provider Technology					
	$15,000,000	$15,000,000	$0	$0	$0
Behavioral Health and LTSS Workforce					
	$35,000,000	$35,000,000	$0	$0	$0
Technology to Advance Schools					

	Projected Total Computable Expenditures				
	DY7	**DY8**	**DY9**	**DY10**	**DY11**
	$7,500,000	$7,500,000	$0	$0	$0
DSHP					
	$122,000,000	$122,000,000	$122,000,000	$122,000,000	$122,000,000

Abbreviated Public Notice

NORTH CAROLINA DEPARTMENT OF HEALTH AND HUMAN SERVICES

Abbreviated Public Notice for Renewal Request of North Carolina's Medicaid Reform Section 1115 Demonstration

Release Date: August 21, 2023

PUBLIC NOTICE. ***This abbreviated public notice provides information of public interest regarding a proposed request to renew North Carolina's Medicaid Reform Section 1115 Demonstration.***

North Carolina is seeking to renew its Medicaid Reform Demonstration for another five-year period (November 1, 2024 to October 31, 2029).

During the first demonstration period, North Carolina began its transition to managed care and invested in novel programs to better respond to the diverse needs of North Carolinians enrolled in Medicaid. North Carolina is now ready to build on early successes and lessons learned to continue this progress over the next five years. The State's overarching goal for the demonstration is to improve health and well-being for all North Carolinians through a whole-person, well-coordinated system of care that addresses both medical and non-medical drivers of health and advances health access by reducing disparities for historically marginalized populations.

The 1115 demonstration renewal will advance this overarching goal through the following specific objectives and related initiatives:

Objective 1: Support a continued, smooth transition to managed care with a focus on improving care for enrollees with the most complex needs:

- **Initiative 1a.** Provide integrated whole-person, well-coordinated care for Medicaid enrollees through continued implementation of Standard Plans.
- **Initiative 1b.** Provide integrated care for individuals with serious mental illness (SMI), serious emotional disturbance (SED), severe substance use disorders (SUD), intellectual and developmental disabilities (I/DD), and/or traumatic brain injury (TBI) through the launch of Tailored Plans.
- **Initiative 1c.** Provide integrated care to address the complex needs of youth and families served by the child welfare system through the implementation of the Children and Families Specialty Plan (CFSP).

Objective 2: Strengthen access to a person-centered and well-coordinated system of care which addresses both medical and non-medical drivers of health:

- **Initiative 2a.** Build on the Healthy Opportunities Pilot (HOP) infrastructure and experience to expand health-related social needs services to North Carolinians across the state.
- **Initiative 2b.** Promote continuity of care by offering continuous enrollment in Medicaid to children and former foster care youth.
- **Initiative 2c.** Improve health outcomes and support reentry into the community for justice-involved individuals by providing targeted pre-release Medicaid services.

Objective 3: Strengthen the behavioral health and I/DD delivery system:

- **Initiative 3a.** Reduce incidence of opioid use disorder (OUD)/SUD by providing Medicaid coverage for individuals obtaining short-term residential services for SUD in an institution for mental diseases (IMD).
- **Initiative 3b.** Improve the coordinated system of care for people with behavioral health and I/DD needs through targeted new investments in technology.
- **Initiative 3c.** Bolster the behavioral health and long-term services and supports (LTSS) workforce.
- **Initiative 3d.** Expand access to critical supports offered under the 1915(i) authority.

Electronic copies of this abbreviated public and the full public notice and proposed renewal request are available on the North Carolina Department of Health and Human Services Medicaid website at https://medicaid.ncdhhs.gov/meetings-notices/proposed-program-design/nc-section-1115-demonstration-waiver.

Opportunities for Public Comment
North Carolina invites public comments on the North Carolina Medicaid Reform Demonstration renewal application from August 21, 2023 through September 20, 2023.

To be assured consideration prior to submission of this demonstration renewal request, comments must be received by 5 p.m. (Eastern Time) on September 20, 2023.

Electronic copies of this public notice, the full proposed extension request, and the summary of comments received during this State public comment period upon submission to CMS will be available on the North Carolina Department of Health and Human Services (NCDHHS) Medicaid website at https://medicaid.ncdhhs.gov/meetings-notices/proposed-program-design/nc-section-1115-demonstration-

waiver.

You may also request a copy of the proposed renewal request, notices, and/or a copy of submitted public comments, once available, related to the Medicaid Reform Section 1115 Demonstration renewal by requesting it in writing to the mailing or email addresses listed in this notice.

Written comments may be sent to the following address (please indicate "NC Section 1115 Waiver" in the written message):

North Carolina Department of Health and Human Services
NC Medicaid Section 1115 Waiver Team
1950 Mail Service Center
Raleigh, NC 27699-1950

Comments may also be emailed to Medicaid.NCEngagement@dhhs.nc.gov. Please indicate "NC Section 1115 Waiver" in the subject line of the email message.

North Carolina will host five public hearings to seek input regarding the waiver extension request. To ask questions about accessibility or request accommodations, please email Medicaid.NCEngagement@dhhs.nc.gov. At least two weeks' advance notice will help us to provide seamless access.

First Public Hearing (in person)
Sept. 5 from 9:30-11:00 a.m. EST
Mountain Area Health Education Center (MAHEC)
Blue Ridge A & B in the Education Building
121 Hendersonville Road, Asheville NC 28803

Second Public Hearing (in person)
Sept. 6 from 9:30 -11:00 a.m. EST
McKimmon Conference & Training Center
NC State University, 1101 Gorman Street, Raleigh NC 27606

Third Public Hearing
Sept. 6 from 5:30-7:00 p.m. EST
Virtual via Microsoft Teams Join on your computer, mobile app or room device
Click here to join the meeting

Call in (audio only)
+1 984-204-1487, 902948880# United States, Raleigh
Phone Conference ID: 902 948 880#

Fourth Public Hearing (in person)
Sept. 7 from 2:30-4:00 p.m. EST
Greenville Convention Center
303 SW Greenville Blvd., Greenville NC 27834

Fifth Public Hearing
Sept. 15 from 11:30 a.m.-12:30 p.m., EST During the Medical Care Advisory Committee Meeting (MCAC)
Virtual via Microsoft Teams Join on your computer, mobile app or room device
Click here to join the meeting
Call in (audio only)
+1 984-204-1487, 412615457# United States, Raleigh
Phone Conference ID: 412 615 457#

Interested parties will also have the opportunity to officially comment on the demonstration renewal application during the federal public comment period; the submitted application will be available for comment on the CMS website at medicaid.gov/medicaid/section-1115-demonstrations/index.html.

For more information about NC Medicaid Managed Care transformation, visit medicaid.ncdhhs.gov/transformation.

LEGAL NOTICES

Legal Notices

NORTH CAROLINA DEPARTMENT OF HEALTH AND HUMAN SERVICES

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The 1115 demonstration renewal will advance this overarching goal through the following specific objectives and related initiatives:

Objective 1: Support a continued, smooth transition to managed care with a focus on improving care for enrollees with the most complex needs:
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•**Initiative 1b.** Provide integrated care for individuals with serious mental illness (SMI), serious emotional disturbance (SED), severe substance use disorders (SUD), intellectual and developmental disabilities (I/DD), and/or traumatic brain injury (TBI) through the launch of Tailored Plans.
•**Initiative 1c.** Provide integrated care to address the complex needs of youth and families served by the child welfare system through the implementation of the Children and Families Specialty Plan (CFSP).

Objective 2: Strengthen access to a person-centered and well-coordinated system of care which addresses both medical and non-medical drivers of health:
•**Initiative 2a.** Build on the Healthy Opportunities Pilot (HOP) infrastructure and experience to expand health-related social needs services to North Carolinians across the state.
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•**Initiative 3a.** Reduce incidence of opioid use disorder (OUD)/SUD by providing Medicaid coverage for individuals obtaining short-term residential services for SUD in an institution for mental diseases (IMD).
•**Initiative 3b.** Improve the coordinated system of care for people with behavioral health and I/DD needs through targeted new investments in technology.
•**Initiative 3c.** Bolster the behavioral health and long-term services and supports (LTSS) workforce.
•**Initiative 3d.** Expand access to critical supports offered under the 1915(i) authority.

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To be assured consideration prior to submission of this demonstration renewal request, comments must be received by 5 p.m. (Eastern Time) on September 20, 2023.

Electronic copies of this public notice, the full proposed extension request, and the summary of comments received during this State public comment period upon submission to CMS will be available on the North Carolina Department of Health and Human Services (NCDHHS) Medicaid website at medicaid.ncdhhs.gov/meetings-notices/proposed-program-design/nc-section-1115-demonstration-waiver

You may also request a copy of the proposed renewal request, notices, and/or a copy of submitted public comments, once available, related to the Medicaid Reform Section 1115 Demonstration renewal by requesting it in writing to the mailing or email addresses listed in this notice.

Written comments may be sent to the following address (please indicate "NC Section 1115 Waiver" in the written message):

North Carolina Department of Health and Human Services
NC Medicaid Section 1115 Waiver Team
1950 Mail Service Center
Raleigh, NC 27699-1950

Comments may also be emailed to Medicaid.NCEngagement@dhhs.nc.gov. Please indicate "NC Section 1115 Waiver" in the subject line of the email message.

North Carolina will host five public hearings to seek input regarding the waiver extension request. To ask questions about accessibility or request accommodations, please email Medicaid.NCEngagement@dhhs.nc.gov. At least two weeks' advance notice will help us to provide seamless access.

First Public Hearing (in person)
Sept. 5 from 9:30-11:00 a.m. EST
Mountain Area Health Education Center (MAHEC)
Blue Ridge A & B in the Education Building
121 Hendersonville Road, Asheville NC 28803

Second Public Hearing (in person)
Sept. 6 from 9:30 -11:00 a.m. EST
McKimmon Conference & Training Center
NC State University, 1101 Gorman Street, Raleigh NC 27606

Third Public Hearing
Sept. 6 from 5:30-7:00 p.m. EST
Virtual via Microsoft Teams Join on your computer, mobile app or room device
Click here to join the meeting
Call in (audio only)
+1 984-204-1487, 902948880# United States, Raleigh
Phone Conference ID: 902 948 880#

Fourth Public Hearing (in person)
Sept. 7 from 2:30-4:00 p.m. EST
Greenville Convention Center
303 SW Greenville Blvd., Greenville NC 27834

Fifth Public Hearing
Sept. 15 from 11:30 a.m.-12:30 p.m., EST during the Medical Care Advisory Committee Meeting (MCAC)
Virtual via Microsoft Teams Join on your computer, mobile app or room device
Click here to join the meeting
Call in (audio only)
+1 984-204-1487, 412615457# United States, Raleigh
Phone Conference ID: 412 615 457#

Interested parties will also have the opportunity to officially comment on the demonstration renewal application during the federal public comment period; the submitted application will be available for comment on the CMS website at medicaid.gov/medicaid/section-1115-demonstrations/index.html.

For more information about NC Medicaid Managed Care transformation, visit medicaid.ncdhhs.gov/transformation.

Legal Notices

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION
INTENT TO ISSUE
NPDES STORMWATER DISCHARGE PERMITS

The North Carolina Environmental Management Commission proposes to issue NPDES stormwater discharge permit(s) to the person(s) listed below. Public comment or objection to the draft permits is invited. Written comments regarding the proposed permit will be accepted until 30 days after the publish date of this notice and considered in the final determination regarding permit issuance and permit provisions. The Director of the NC Division of Energy, Mineral, and Land Resources (DEMLR) may hold a public hearing should there be a significant degree of public interest. Please mail comments and/or information requests to DEMLR at 1612 Mail Service Center, Raleigh, NC 27699-1612.

• Chemol Company, Inc. [2300 Randolph Avenue, Greensboro, NC] has requested renewal of permit NCS000048 for the Chemol Company, Inc. facility in Guilford County. This facility discharges to an unnamed tributary to Mile Run Creek in the Cape Fear River Basin.

Interested persons may visit DEMLR at 512 N. Salisbury Street, Raleigh, NC 27604 to review information on file. Additional information on NPDES permits and this notice may be found on our website: https://deq.nc.gov/about/divisions/energy-mineral-and-land-resources/stormwater/stormwater-program/stormwater-public-notices, or by contacting Brianna Young at brianna.young@deq.nc.gov or 919-707-3647.

NOTICE OF DESTRUCTION, DONATION, OR AUCTION OF ARTICLES IN THE POSSESSION OF NORTH CAROLINA A&T STATE UNIVERSITY POLICE DEPARTMENT, CITY OF GREENSBORO, NORTH CAROLINA

Notice is hereby given that NC A&T SU Police Department, City of Greensboro, North Carolina, have in their possession bicycle(s), wallets, clothes, keys, jewelry, watches, identification cards, bank cards, cell phones/cell phone accessories, a camera, laptop computer, and U.S. Currency through seizure, confiscation, or found property. These items have been in the possession of said Police Department over the required preservation time. All persons who have or claim any interest therein are requested to make and establish such claim or interest to the NC A&T SU Police Department's Evidence and Property Section no later than 30 days from the date of this publication. All claims for said property must be made to Property Control Lt. John LeGrand at 336-334-7128 or jolegan@ncat.edu or at Ward Hall (406 Laurel St., Greensboro, North Carolina). Proof of ownership required. The undersigned will offer said articles for donation, destruction after the 30 days. Unclaimed bicycles will be donated to a charity organization. Items not suitable for donation will be destroyed.

Notice is given in accordance with provisions of Chapter 15, Section 12, and General Statutes of North Carolina.

NOTICE OF SERVICE AND SERVICE OF PROCESS BY PUBLICATION

STATE OF NORTH CAROLINA, COUNTY OF GUILFORD
IN THE GENERAL COURT OF JUSTICE
DISTRICT COURT DIVISION

IN THE MATTER OF:
R.L.W. DOB: 11/29/2008 19 JT 245

Mother: Samantha Wright-Maxwell
To: ROBERT CROSBY, alleged father, and/or UNKNOWN FATHER, of the minor child named above: R.L.W. (DOB: 11/29/2008).

TAKE NOTICE that a pleading seeking relief against you has been filed in the above-entitled action. The nature of the relief being sought is as follows:

CUSTODY OF YOUR MINOR CHILD, BASED UPON A MOTION IN THE CAUSE TO TERMINATE PARENTAL RIGHTS

You are required to make defense to such pleading not later than 40 days after the first date of publication, and upon your failure to do so the party seeking relief against you will apply to the Court for the relief herein sought.

You are entitled to attend any hearing affecting your rights. You are entitled to have counsel appointed by the Court if you are indigent. If you desire counsel, you must appear in court to request an attorney and submit information for consideration of your request for counsel.

This the 25th day of August, 2023.

_____
James M. White, IV
NC State Bar #51066
Attorney for the GUILFORD COUNTY
DEPARTMENT OF HUMAN SERVICES
71 McCachern Blvd SE
PO Box 368
Concord, NC 28026
704 920 1400/704 786 5161

PUBLIC AUCTION The contents of storage spaces located at RIGHT FIT STORAGE 4106 Spring Garden Street Greensboro, NC 27407 will be sold to the highest bidder at PUBLIC AUCTION on Online storage auction website: www.lockerfox.com Bidding ends on September13, 2023 at 3:00 p.m. and begins seven (7) days prior. Payment by Money Order, Cashier's Check or Visa/Mastercard/American Express. No Cash Accepted. Space Numbers are: 1003, 1007, 1010, 1024, 1025, 1061, 1063, 1091, 1092, 1110, 1136, 1165, 1228, 1267, 1296, 1359, 1360, 1364, 1392, 2007, 2036, 2047, 2055, 2060, 2082, 2090, 2154, 2186, 2205, 2244, 2284, 2297, 2324, 2349, 2390, 2391, 3018, 3102, 3106, 3114, 3136, 3160, 3178, 3298, 3307, 3309, 3359, 3378, 3389

PUBLIC HEARING NOTICE

Section 5311 (ADTAP), 5310, 5339, 5307 and applicable State funding, or combination thereof.

This is to inform the public that a public hearing will be held on the proposed 2025 Community Transportation Program Application to be submitted to the North Carolina Department of Transportation no later than October 6, 2023. The public hearing will be held on September 7,2023 at 5:30pm before the Guilford County Board of Commissioners. Those interested in attending the public hearing and needing either auxiliary aids and services under the Americans with Disabilities Act (ADA) or a language translator should contact Irma Zimmerman on or before September 6, 2023, at telephone number 336-641-3515 or via email at izimmer@guilfordcountync.gov.

The Community Transportation Program provides assistance to coordinate existing transportation programs operating in Guilford County as well as provides transportation options and services for the communities within this service area. These services are currently provided using 21-Wheelchair Equipped Vehicles. Services are rendered by Guilford County Transportation and Mobility Services.

The total estimated amount is requested for the period July 1, 2024 through June 30, 2025.

NOTE: Local share amount is subject to State funding availability.

Project	Total Amount	Local Share
Administrative	$ 316,454	$ 47,468 (15%)
Operating (5311)	$	$ (50%)
Capital (Vehicles & Other)	$ 1,820,000	$ 182,000 (10%)
5310 Operating	$ 200,000	$ 100,000 (50%)
Other _____	$	$ (%)
TOTAL PROJECT	$ 2,336,454	$ 329,468
	Total Funding Request	**Total Local Share**

This application may be inspected at 1203 Maple St. room 116 from 8:30am-4:30pm. Written comments should be directed to Irma Zimmerman before October 6, 2023.

Notice to Creditors

NOTICE TO CREDITORS

Having qualified as Administrator of the Estate of Brandon J Crutchfield deceased, Guilford County, North Carolina, the undersigned does hereby notify all persons, firms and corporations having claims against the estate of said decedent to exhibit them to the undersigned on or before the 6th day of November, 2023, or this notice will be pleaded in bar of their recovery. This the 6th day of August, 2023.
Penelope L McCaskill, Administrator
295 Windy Lane
Candor, NC 27229

Foreclosure Notices

NOTICE OF SALE OF REAL PROPERTY
STATE OF NORTH CAROLINA
IN THE GENERAL COURT OF JUSTICE
COUNTY OF GUILFORD
BEFORE THE CLERK
 # 23-SP-982

IN THE MATTER OF THE PROPOSED FORECLOSURE OF CLAIM OF LIEN FILED AGAINST RITA EMMA BRONI BY TRINITY LAKE HOMEOWNERS ASSOCIATION, INC. RECORDED SEPTEMBER 20, 2022 IN DOCKET # 22M2047 IN THE OFFICE OF THE CLERK OF SUPERIOR COURT FOR GUILFORD COUNTY

Under and by virtue of the authority of the North Carolina statutes, the applicable declarations and/or restrictions filed of record, and Claim of Lien filed by Trinity Lake Homeowners Association, Inc., (hereinafter "the Association") recorded in the Office of the Clerk of Superior Court for Guilford County, North Carolina, in docket #22M2047, and because of the owner's default in the payment of the indebtedness secured by the Claim of Lien, pursuant to demand of the Petitioner, the undersigned will expose for sale at public auction to the highest bidder for cash the property therein described, to wit:

BEING all of Lot 47, Phase 1-C, Map 2, Trinity Lake Subdivision, as shown on plat recorded in Plat Book 137, Page 52, in the Office of the Register of Deeds of Guilford County, North Carolina.
Address of Property: 2201 Cabin Ct. Greensboro, NC 27406

Present Record Owners: Rita Emma Broni
The terms of the sale are that the real property described above will be sold for cash to the highest bidder and that the undersigned may require the successful bidder at the sale to immediately deposit cash or a certified check in the amount of the greater of five percent (5%) of the amount of the bid or seven hundred fifty dollars ($750.00).
The real property described above will be sold subject to any and all superior liens, including taxes and special assessments.
The notice of sale of residential real property with less than 15 rental units shall also state all of the following:

1. That an order for possession of the property may be issued pursuant to G.S. 45-21.29 in favor of the purchaser and against the party or parties in possession by the clerk of superior court of the county in which the property is sold.

2. Any person who occupies the property pursuant to a rental agreement entered into or renewed on or after October 1, 2007, may, after receiving the notice of sale, terminate the rental agreement by providing written notice of termination to the landlord to be effective on a date stated in the notice that is at least 10 days, but no more than 90 days, after the sale date contained in the notice of sale, provided that the mortgagor has not cured the default at the time the tenant provides the notice of termination. Upon termination of a rental agreement, the tenant is liable for rent due under the rental agreement prorated to the effective date of the termination.

The sale will be held open for ten (10) days for upset bids as by law required.

Hour and Date of Sale: 11:00 a.m. on September 6, 2023
Place of Sale:
Usual Place of Foreclosure Sales at the Guilford County Courthouse
201 South Eugene St. Greensboro, NC 27401
Date of this Notice: August 2, 2023
Karrenstein & Love, PLLC, Trustee
By: Chris Karrenstein
Chris Karrenstein, Attorney
10590 Independence Pointe Parkway, Suite 200
Matthews, North Carolina 28105
Telephone: 704-364-6464
Facsimile: 704-364-6466

Request for Bids

ADVERTISEMENT FOR BIDS

Sealed proposals will be received by Mr. T.O. (Buddy) Hale of UNC-Greensboro, Facilities Design & Construction until 3 PM on September 26, 2023, for the exterior renovation of the existing building of the UNC Greensboro Armfield Preyer Admissions Building at which time and place bids will be opened and read. The address for submission of proposals is 105 Gray Drive, Greensboro, NC 27412 Complete plans and specifications for this project can be obtained from Accent Imaging, www.accentimaging.com or www.planscope.com, 8121 Brownleigh Drive, Raleigh, NC 27617, 800-280-0755 phone, 800-477-0755 fax after August 28, 2023. A refundable plan deposit of one hundred fifty dollars ($150.00) in cash, check payable to Accent Imaging, or credit card is required for each set. Contractor will be required to pay for all shipping.

Contractors interested in bidding as prime bidders are required to attend the Mandatory pre-bid meeting and site visit, which will be held on September 12, 2023 at 3 PM, at 105 Gray Drive, Greensboro, NC 27412.

All bidders to park at the McIver Parking Deck on McIver Street.

In accordance with GS 133-3 and SCO procedures, this meeting will identify the following preferred brand items, which are being considered as alternates by the owner for this project: Keyed cylinders by Corbin Russwin Hardware.

UNC Greensboro reserves the unqualified right to reject any and all proposals.

Architect:
Megan Paris Colfer, AIA
HH Architecture
1100 Dresser Court
Raleigh, NC 27609
919-828-2301 phone
mpcolfer@hh-arch.com

Owner Representative:
UNC Greensboro Project Manager
Mr. T.O. (Buddy) Hale
UNC-Greensboro, Facilities Design & Construction
Gray Home Management House
105 Gray Drive,
Greensboro, NC 27412
336-334-4431 phone

Stakeholder Emails

From: Batton, Kathleen
To: Bunch, Christina; Burkes, Karen; Bush, Melanie E; Dowler, Shannon; Dubay, Kristen; Fain, Shannon; Farrington, Debra; Fulcher, Eva D; Gillespie, Rosemary C; Gooch, Brenda; Gross, Matt; Guy, Dan; Knick, Kelsi A; Ludlam, Jay; McFadden, Cassandra; Osborne, Susan; Palmer, LaQuana R; Owen, Allison; Thompson, Suzanne; Urland, Douglas W
Cc: Schoenberger, Julia A; Gill, Marissa; Pean, Josie J; Maa, James; Gregosky, Sarah A; Hamilton, Gina M; Howard, Angela; Sauer, Maggie; Henderson, Badia; Platts, Jennifer A; Johnson, Ericka Y; Beatty, Pamela A; Lerche, Julia K; Sandoe, Emma
Subject: PLEASE SHARE: North Carolina Medicaid Section 1115 Demonstration Renewal Posted for Public Comment

Good morning,

Below is an email providing stakeholders with information about the North Carolina Medicaid Section 1115 Demonstration Renewal.

Would you please share with your external stakeholders* as appropriate? Feel free to edit the sample copy for your voice and audience.

If you would please let us know when you have distributed, or if you do not believe this message applies, so we can record who received the communication for CMS. Please copy emma.sandoe@dhhs.nc.gov on your response.

*Stakeholder List:

- Kathy Batton: ACN Member, Provider & Comms Leads; Manatt Leads; NCDHHS Comms; Medicaid Contact Center; Help Center
- Christina Bunch: AHEC
- Karen Burkes: State-operated Facilities
- Melanie Bush: Division Directors; Medicaid staff via staff email
- Shannon Dowler (cc James Maa/Josie Pean): Thursday AHEC/CCNC webcast audience
- Kristen Dubay: AMH TAG; TCM TAG
- Shannon Fain (cc Sarah Gregosky): CCNC; Eastern Band of Cherokee Indians
- Debra Farrington: Historically Marginalized Population groups, Juvenile Justice
- Eva Fulcher (cc: Gina Hamilton): Enrollment Broker
- Rosemary Gillespie: Department of Insurance
- Brenda Gooch: NEMT
- Matt Gross: Hospital Government Affairs
- Dan Guy: CCNC/AHEC Communications team; Providers via NCTracks
- Kelsi Knick: LME/MCOs; Tailored Plans
- Jay Ludlam (cc Angela Howard): Associations via Assoc List
- Cassandra McFadden: Standard Plans
- Susan Osborne: DSS Association; DSS Directors
- LaQuana Palmer: Community Partners; Health Equity groups; NC Medicaid Ombudsman
- Allison Owen (cc: Maggie Sauer): FQHCs; Free Clinics
- Suzanne Thompson (cc: Badia Henderson): State Consumer and Family Advisory Committee (SCFAC); Behavioral Health Consumer Groups, Minority Provider Coalition/Resource Connections
- Doug Urland: Local Health Departments

Email:

SUBJECT: North Carolina Medicaid Section 1115 Demonstration Renewal Posted for Public Comment

North Carolina will be requesting the Centers for Medicare & Medicaid Services renew the NC Medicaid Section 1115 Demonstration Waiver for a second five-year period, from Nov. 1, 2024 through Oct. 31, 2029. The Demonstration Waiver application has been posted for public comment through September 20, 2023.

The Demonstration Waiver, initially approved in October 2018, supports the state's goal to improve health and well-being for all North Carolinians through a whole-person, well-coordinated system of care that addresses both medical and non-medical drivers of health, while advancing health access by reducing disparities for historically marginalized populations.

Renewing the Demonstration Waiver will allow North Carolina to build on successes and continue the work of the state and its partners, in addition to requesting four new initiatives that will help drive the Department's overall goals. North Carolina is requesting:

- extensions of ongoing managed care authorities;
- expansion of and refinements to the Healthy Opportunities Pilot program; and
- implementation of four new initiatives focused on streamlining Medicaid enrollment for children and youth; improving care for justice-involved individuals; and investing in behavioral health.

The Department knows that public input is crucial to ensuring the Demonstration Waiver will best serve the people of North Carolina. Five public hearings will be held; three will be in-person throughout the state and two will be online. These public hearings will provide an overview of the renewal application and gather comments. To ask questions about accessibility or request accommodations, please email Medicaid.NCEngagement@dhhs.nc.gov. At least two weeks' advance notice will help us to provide seamless access.

- Tuesday, Sept. 5, 2023, from 9:30-11 a.m. (in person)
  Mountain Area Health Education Center (MAHEC)
  Blue Ridge A & B in the Education Building
  121 Hendersonville Road, Asheville, NC 28803
- Wednesday, Sept. 6, 2023, from 9:30-11 a.m. (in person)
  McKimmon Conference & Training Center
  NC State University, 1101 Gorman Street, Raleigh, NC 27606
- Wednesday, Sept. 6, 2023, from 5:30-7 p.m.
  Virtual via Microsoft Teams, join on your computer, mobile app or room device.
  Click here to join the meeting
  Call in (audio only)
  +1 984-204-1487, 902948880# United States, Raleigh
  Phone Conference ID: 902 948 880#
- Thursday, Sept. 7, 2023, from 2:30-4 p.m. (in person)
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  303 SW Greenville Blvd., Greenville, NC 27834
- Friday, Sept. 15, 2023, from 11:30 a.m.-12:30 p.m. (during the Medical Care Advisory Committee Meeting)
  Virtual via Microsoft Teams, join on your computer, mobile app or room device.
  Click here to join the meeting
  Call in (audio only)
  +1 984-204-1487, 412615457# United States, Raleigh
  Phone Conference ID: 412 615 457#

Written comments also will be accepted by email or U.S. Mail through 5 p.m., Wednesday, Sept. 20, 2023. Please include "NC Medicaid Section 1115 Waiver" as the subject.

Email: Medicaid.NCEngagement@dhhs.nc.gov

U.S. Mail:
North Carolina Department of Health and Human Services
NC Medicaid Section 1115 Waiver Team
1950 Mail Service Center
Raleigh, NC 27699-1950

More information on the Demonstration Waiver renewal along with the draft proposed application are available on the NC Medicaid website at medicaid.ncdhhs.gov/meetings-notices/proposed-program-design/nc-section-1115-demonstration-waiver.

Thank you for your assistance.

Regards,
Kathy

Kathy Batton
Communications Manager
NC Medicaid, Division of Health Benefits
NC Department of Health and Human Services

Mobile: 919-906-5884
Kathy.Batton@dhhs.nc.gov

1985 Umstead Drive, Kirby Building
2501 Mail Service Center
Raleigh, NC 27699-2501
NCDHHS provides essential services to improve the health, safety and well-being of all North Carolinians. Learn more about NCDHHS initiatives and priorities.
Twitter | Facebook | Instagram | YouTube | LinkedIn

From: Croom, Leonard A
To: Abbie Szymanski; adavis2@communitycarenc.org; agarland@communitycarenc.org; allocklear@communitycarenc.org; amenconj@atlanticmedicalmanagement.com; Amy.Russell2@HCAHealthcare.com; Anna Boone; aprilroberson@emtirohealth.org; Ashley Ehlert; Becca Hayes (NCCHCA; Boice Darren; Breklyn Smith; "Burger, Jarahnee"; "cory.jackson@uniteus.com"; cschaefer@ammhealthcare.com; Cynthia.Reese@HCAHealthcare.com; "DARTTM@ecu.edu"; ddnoreski@communitycarenc.org; Deborah.Beck1@HCAHealthcare.com; denisetedder@emtirohealth.org; dernst@communitycarenc.org; elanaberry@emtirohealth.org; Emily Anders; evernau@ammhealthcare.com; FOLTZ, JASON; "gregwallis@emtirohealth.org"; hbutler@communitycarenc.org; Jennifer A Houlihan; jmassey@communitycarenc.org; "johnsonc@ncchca.org"; Judy Caton; jworrell@ammhealthcare.com; karicurry@emtirohealth.org; kellygallimore@emtirohealth.org; krconn@communitycarenc.org; Kristen Dubay; Laurel Yarbrough (NCCHCA; Lauren Lowery (NCCHCA; "Levine, Michelle W"; lgriffith@communitycarenc.org; Lindsay Hebert; "loweryl@ncchca.org"; lwhitley@communitycarenc.org; "madi.smith@uniteus.com"; "Marenic, Zahide"; mfox@ammhealthcare.com; Michaela Ferrari; Miranda Catania (NCCHCA; "mmittal@jcmcpa.net"; oJoy Key; "ruth.craig@accesseast.org"; "SACHSA19@ecu.edu"; Shampoe, Susan; Sherry Noto; "Smith, Gretchen"; "Smith, Marla"; staceywilson@emtirohealth.org; "Staton, Diamond R"; sweal@communitycarenc.org; Tasha Winstead; Thompson, Debra; torrigambill@emtirohealth.org; tpblount@communitycarenc.org; Trevor Koepp; twiley@communitycarenc.org; Vaughn Crawford; vmcinnis@communitycarenc.org; wajenkins@communitycarenc.org; "West, Naomi C"; White Kelly - Asheville; Stoop, Ashley; Barlow, Justin; BOWLING, GAILE; Carraway, Shelley; Cartwright, Tammy C; Chesney, Tonya Y; Chrismon, Brandy P; Moser, Carolyn; Cody, Tammy; David Howard (Brunswick LHD; Dennis, Tonya; Donata Brown; Etheridge, Michelle; Ferebee, Sandra L; Goodwin, Rebecca R; Gretta Phillips; Janelle Messer (Jackson; Kennedy, Joshua; Price, Kathy; Lippard, Anna; Lucy Townsend (Polk; Madson, James; Moore, Michelle; Osorio, Rita; Paige Prichard (Henderson; Price-Stogsdill, Andrea; Kuhnmuench, Rebecca; Russell, Elaine; Sarvis, Lisa; Sheri Johnston (Polk; Shirley Steele; Smith, Deborah C; Solomon, Leeann; Thompson, Demetrius; Wilder, Ginger
Cc: Dubay, Kristen; Alvarez, Loul; Disher, Adam; Jackson, Chameka L; Korn, Marissa; Maali, Sawhel; Ferguson, Mandy; Nelson, Niya E; Deshchenko, Olga; Parker, Michaiah; Perez, Maria; Prokos, Garrick; Ray, Joseph; Graham, Sophie; Sherman, Sophie; Strezo, Justin A; Van Vleet, Amanda M; Ward, Lauren
Subject: HOP | Pilot Partner Notice of North Carolina 1115 Waiver Renewal Public Comment Period
Date: Tuesday, August 22, 2023 9:01:07 AM

[EXTERNAL] Please do not reply, click links, or open attachments unless you recognize the source of this message and know the content is safe.

Good Afternoon Healthy Opportunities Pilot partners,

In October 2018, North Carolina received federal approval to significantly transform its Medicaid program through the Medicaid Reform Section 1115 Demonstration. The approved 1115 waiver included groundbreaking authority to implement the Healthy Opportunity Pilot (HOP). The approval is effective through Oct. 31, 2024, and North Carolina Department of Health and Human Services (NCDHHS) is seeking to renew its Medicaid Reform Demonstration for another five-year period. In an effort to improve health and well-being for all North Carolinians, the state is seeking renewed authority to build on the successes of the HOP program. Key requests include expanding the program statewide and broadening eligibility to reach more individuals with non-medical health needs. We are reaching out to let you know that NCDHHS is seeking comments from the public on the proposal. Given your role in operationalizing the Pilots, we value your input.

Opportunities for Public Input

The 1115 waiver renewal application can be found here. NCDHHS will also release a "North Carolina Medicaid Reform: Healthy Opportunities Pilot" fact sheet later this week (to be posted here). Public comments on the waiver renewal must be received by NCDHHS by **September 20, 2023, at 5 p.m. (Eastern Time)** to be considered.

Email: Medicaid.NCEngagement@dhhs.nc.gov. Please indicate **"**NC Section 1115 Waiver" in the email subject line.

U.S. Mail:
North Carolina Department of health and Human Services
NC Medicaid Section 1115 Waiver Team
1950 Mail Service Center
Raleigh NC 27699-1950

North Carolina will also host five public hearings to seek input regarding the 1115 waiver renewal. Hearings will be held at the following locations, dates and times:

- **First Public Hearing**
  September 5, 2023, from 9:30-11:00 a.m.
  Mountain Area Health Education Center (MAHEC)
  121 Hendersonville Road, Asheville NC 28803

- **Second Public Hearing**
  September 6, 2023, from 9:30-11:00 a.m.
  McKimmon Conference & Training Center
  NC State University, 1101 Gorman Street, Raleigh NC 27606

- **Third Public Hearing**
  September 6, 2023, from 5:30-7:00 p.m.
  Virtual via Microsoft Teams. Meeting information is available here.

- **Fourth Public Hearing**
  September 7, 2023, from 2:30-4:00 p.m.
  Greenville Convention Center
  303 SW Greenville Blvd., Greenville NC 27834

- **Fifth Public Hearing**
  September 15, 2023, from 11:30 a.m.-12:30 p.m. during the Medical Care Advisory Committee Meeting (MCAC)
  Virtual via Microsoft Teams. Meeting information is available here.

The public hearings will include presentations describing the proposed changes and opportunities for public testimony. Recordings will be posted afterwards here. In addition, the NCDHHS Pilot team will provide opportunities for Pilot partners to ask questions about the waiver renewal process in upcoming stakeholder meetings. Questions may also be sent to Medicaid.NCEngagement@dhhs.nc.gov.

Thank you so much for your time and please share with anyone that may be interested.

Regards,

Leonard Croom
Program Lead
NC Medicaid, Quality and Population Health

From: Dubay, Kristen <kristen.dubay@dhhs.nc.gov>
Sent: Wednesday, September 6, 2023 2:24 PM
Cc: Sandoe, Emma <Emma.Sandoe@dhhs.nc.gov>
Subject: North Carolina Medicaid Section 1115 Demonstration Renewal Posted for Public Comment

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Dear AMH and TCM Technical Advisory Workgroups and Subcommittee Members and Interested Parties,

North Carolina will be requesting the Centers for Medicare & Medicaid Services renew the NC Medicaid Section 1115 Demonstration Waiver for a second five-year period, from Nov. 1, 2024 through Oct. 31, 2029. The Demonstration Waiver application has been posted for public comment through September 20, 2023.

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- extensions of ongoing managed care authorities;
- expansion of and refinements to the Healthy Opportunities Pilot program; and
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  McKimmon Conference & Training Center
  NC State University, 1101 Gorman Street, Raleigh, NC 27606
- Wednesday, Sept. 6, 2023, from 5:30-7 p.m.
  Virtual via Microsoft Teams, join on your computer, mobile app or room device.
  Click here to join the meeting
  Call in (audio only)
  +1 984-204-1487, 902948880# United States, Raleigh
  Phone Conference ID: 902 948 880#
- Thursday, Sept. 7, 2023, from 2:30-4 p.m. (in person)
  Greenville Convention Center
  303 SW Greenville Blvd., Greenville, NC 27834
- Friday, Sept. 15, 2023, from 11:30 a.m.-12:30 p.m. (during the Medical Care Advisory Committee Meeting)
  Virtual via Microsoft Teams, join on your computer, mobile app or room device.
  Click here to join the meeting
  Call in (audio only)
  +1 984-204-1487, 412615457# United States, Raleigh
  Phone Conference ID: 412 615 457#

Written comments also will be accepted by email or U.S. Mail through 5 p.m., Wednesday, Sept. 20, 2023. Please include "NC Medicaid Section 1115 Waiver" as the subject.

Email: Medicaid.NCEngagement@dhhs.nc.gov

U.S. Mail:
North Carolina Department of Health and Human Services
NC Medicaid Section 1115 Waiver Team
1950 Mail Service Center
Raleigh, NC 27699-1950

More information on the Demonstration Waiver renewal along with the draft proposed application are available on the NC Medicaid website at medicaid.ncdhhs.gov/meetings-notices/proposed-program-design/nc-section-1115-demonstration-waiver.

Kristen Dubay, MPP
Chief of Population Health
NC Medicaid
NC Department of Health and Human Services

805 Biggs Drive
Broughton Building
Raleigh, NC 27603

Appendix C

From: Staton, Betty J <Betty.J.Staton@dhhs.nc.gov>
Sent: Tuesday, August 8, 2023 4:17 PM
To: c.cooper@cherokeehospital.org; Brandy Davis <brandavi@ebci-nsn.gov>
Cc: Tara Larson <tlarson@ccr-email.com>; Benjamin Millsap <bmillsap@ccr-email.com>; Sandoe, Emma <Emma.Sandoe@dhhs.nc.gov>
Subject: Official Notification - North Carolina 1115 Medicaid Reform Demonstration Waiver Renewal

Good afternoon Casey and Brandy,
We are officially notifying you of the Department of Health and Human Services, Division of Health Benefits intent to amend the following state plan services.

North Carolina 1115 Medicaid Reform Demonstration Waiver Renewal

-

On October 19, 2018, North Carolina received federal approval for the North Carolina Medicaid Reform Demonstration. North Carolina is seeking to renew its Medicaid Reform Demonstration for another five-year period. During the first demonstration period, North Carolina began its transition to managed care and invested in novel programs to better respond to the diverse needs of North Carolinians who are enrolled in Medicaid. North Carolina is now ready to build on early successes and lessons learned to continue this progress over the next five years. The State's overarching goal for the demonstration is to improve health and well-being for all North Carolinians through a whole-person, well-coordinated system of care that addresses both medical and non-medical drivers of health and advances health access by reducing disparities for historically marginalized populations.

The Agency will be glad to answer any questions you may have. If you would like to schedule a conference call to discuss the proposed changes, please let us know.

Thank you,

Betty Jenkins Staton, MBA

From: Tara Larson <tlarson@ccr-email.com>
Sent: Tuesday, August 8, 2023 4:51 PM
To: Staton, Betty J <Betty.J.Staton@dhhs.nc.gov>; c.cooper@cherokeehospital.org; Brandy Davis <brandavi@ebci-nsn.gov>
Cc: Benjamin Millsap <bmillsap@ccr-email.com>; Sandoe, Emma <Emma.Sandoe@dhhs.nc.gov>
Subject: [External] RE: Official Notification - North Carolina 1115 Medicaid Reform Demonstration Waiver Renewal

Yippee! Thanks Team and we'll get busy reviewing.

From: Sandoe, Emma
Sent: Thursday, August 31, 2023 1:20 PM
To: 'Tara Larson' <tlarson@ccr-email.com>; Staton, Betty J <Betty.J.Staton@dhhs.nc.gov>; c.cooper@cherokeehospital.org; Brandy Davis <brandavi@ebci-nsn.gov>
Cc: Benjamin Millsap <bmillsap@ccr-email.com>
Subject: RE: [External] RE: Official Notification - North Carolina 1115 Medicaid Reform Demonstration Waiver Renewal

Hi Tara,

I wanted to make sure the team saw the public posting and upcoming public hearings on the 1115.
https://medicaid.ncdhhs.gov/meetings-notices/proposed-program-design/nc-section-1115-demonstration-waiver

Emma Sandoe, PhD
Deputy Director, Medicaid Policy
Division of Health Benefits
NC Department of Health and Human Services
Office: (919) 527-7043
Cell: 919-270-1084
Pronouns: She/her

Tribal or Indian Health Services (IHS) Notification:

Title or Topic of State Plan Amendment (SPA)/Waiver:	North Carolina Medicaid Reform Demonstration
Contact Name, E-mail Address & Telephone Number:	**Emma Sandoe and Julia Lerche emma.sandoe@dhhs.nc.gov Julia.lerche@dhhs.nc.gov, 919-270-1084**

Check the applicable box(es):

☐ New State Plan. ☐ Amendment to be considered as new plan.
☒ New Waiver/Renewal ☐ Amendment to existing Waiver

Effective Date of SPA/Waiver: November 2024 (dependent on timing of CMS negotiations)

Reason for Proposed Change: (check the applicable box(es):

Budget Reduction: ☐ Yes ☒ No

Termination of Coverage: ☐ Yes ☒ No

Revising Methodology: ☐Yes ☒ No

Mandatory CMS Template: ☒ Yes ☐ No

Mandate or law: ☐ Yes ☒ No. If yes, document the specific Federal statute or Regulation citation:

Details of SPA/Waiver Change and the anticipated impact on Indians and IHS:
On October 19, 2018, North Carolina received federal approval for the North Carolina Medicaid Reform Demonstration. North Carolina is seeking to renew its Medicaid Reform Demonstration for another five-year period. During the first demonstration period, North Carolina began its transition to managed care and invested in novel programs to better respond to the diverse needs of North Carolinians who are enrolled in Medicaid. North Carolina is now ready to build on early successes and lessons learned to continue this progress over the next five years. The State's overarching goal for the demonstration is to improve health and well-being for all North Carolinians through a whole-person, well-coordinated system of care that addresses both medical and non-medical drivers of health and advances health access by reducing disparities for historically marginalized populations.

The 1115 demonstration renewal will advance the State's overarching goal through the following specific objectives and related initiatives:

Objective 1: Support a continued, smooth transition to managed care with a focus on improving care for enrollees with the most complex needs:

- **Initiative 1a.** Provide integrated whole-person, well-coordinated care for the majority of Medicaid enrollees through continued implementation of Standard Plans.
- **Initiative 1b.** Provide integrated care for individuals with serious mental illness, serious emotional disturbance, severe substance use disorder (SUD), intellectual and developmental disabilities (I/DD), and/or traumatic brain injury (TBI), through the launch of Tailored Plans.
- **Initiative 1c.** Provide integrated care to address the complex needs of youth and families served by the child welfare system through the implementation of the Children and Families Specialty Plan (CFSP).

Objective 2: Strengthen access to a person-centered and well-coordinated system of care which addresses both medical and non-medical drivers of health:

- **Initiative 2a.** Build on Healthy Opportunities Pilot (HOP) infrastructure and experience to expand health-related social needs (HRSN) services to North Carolinians across the state.
- **Initiative 2b.** Promote continuity of care by offering continuous enrollment in Medicaid to children and former foster care youth.
- **Initiative 2c.** Improve health outcomes and support reentry into the community for justice-involved individuals by providing targeted pre-release Medicaid services.

Objective 3: Strengthen the behavioral health and I/DD delivery system:

- **Initiative 3a.** Reduce incidence of opioid use disorder (OUD)/SUD by providing Medicaid coverage for individuals obtaining short-term residential services for SUD in an institution for mental disease (IMD).
- **Initiative 3b.** Improve the coordinated system of care for people with behavioral health and I/DD needs through targeted new investments in technology.
- **Initiative 3c.** Bolster the behavioral health and long-term services and supports (LTSS) workforce.
- **Initiative 3d.** Expand access to critical supports offered under the 1915(i) authority.

See attached application, public notices, and slide deck for additional information on the 1115 demonstration renewal request.

Indian Health Services Input on the State Plan/Waiver listed above:
The Eastern Band of the Cherokee Indians (EBCI) and the Cherokee Indian Hospital Authority (CIHA) received request for consultation on the 1115 waiver renewal on August 8, 2023. We (CIHA and NC Medicaid) had several meetings subsequent to the request regarding the content of the waiver and also EBCI/CIHA had several internal meetings to discuss the renewal. Based upon these meetings and the review of the 1115 waiver application, State Tribal PPT briefing and other documents, we offer the following comments:

- Medicaid transformation provides a excellent avenue for NC DHHS and EBCI/CIHA to work together on meeting the needs of the tribal community, exercising sovereignty while also meeting the vision of the State. We remain grateful for your partnership with addressing the health needs of the EBCI community.

- We continue to be in support of the objectives of the 1115 waiver. We continue to want to maximize the flexibilities allowed under the 1115 waiver while also operating the Tribal Option PCCM model which means making sure that tribal members of the PCCM model and Medicaid Direct have all the access to these options as those in managed care with the health plans.
- We enjoy having the relationships with the plans in discussions with the uniqueness of tribal members/Indian Health Service eligibles (IHS) and the federal/state exceptions associated with such eligibility. Due to staff turnover and implications with their systems, these conversations are frequent and must be repeated on a regular basis to address different reporting or billing requirements for this subset of their membership and provider network.
- Transformation has added complications to tribal providers and tribal members in tracking on the various options for plans and also for establishing IT billing systems to account for the variety of payers. These administrative challenges have made some tribal entities show reluctance in participating in the Medicaid program despite the fact that the services they are providing to be Medicaid billable. This is true for the regular Medicaid benefit and especially for their participation in the Healthy Opportunity Pilots. We will continue to monitor this with standard plans and with the TP go live. Our concern is the TP go live may increase the challenge as currently in the 1915b waiver, CIHA and EBCI are carved out of their participation and deal directly with the State.
- We are excited that the EBCI Tribal Option will be eligible for participation in the Health Opportunities Pilot. Based upon our experience with the roll out of the Standard Plans and in their general enrollment with NCCARE360, our tribal entities have faced many challenges which have resulted in refusal to participate. We are listening to the entities and have shared with NC DHHS the concerns expressed:
    - The current approach is viewed as a medical model being placed on support services rather than a social emotional model that is focused on resiliency and recovery. Establishing diagnosis and prescribing treatment/support is a medical model with a deficit-based focus rather than a strengths-based approach and meeting the person where they are.
    - Eligibility criteria is too restrictive – addressing only those who already have chronic conditions rather than utilizing the services to prevent or to get downstream early with addressing SDoHs before situations are catastrophic. Our approach and vision is by the nature of their participation in the Medicaid Tribal Option and being IHS/tribal member, they are at higher risk for health disparities and trauma. Eligibility criteria should be upon the recognized need by the member and their medical home. We propose a different eligibility determination for the Tribal Option and tribal members belonging to other health plans.

      We appreciate the changes made in eligibility for the services but feel this is still a burden. The State has invested in AMH, AMH+. CMA and the TO/CCNC models for driving care management. Why not empower these teams to be responsible for the ordering of these services based upon the best interest of the client/member and not go through the rigorous eligibility criteria for the various services. We know from experience with prior authorization for medical services that providers tend to avoid and find this as a way to control cost and care. This is compounded for providers or entities that are not as familiar with the Medicaid program.

- Billing is very cumbersome and mirrors typical Medicaid billing. We understand the need for documentation and reporting, however, the current procedures are not working for the tribal entities and based upon our conversations with non-tribal entities, for them as well. We suggest a more simplified process and one of mirroring a more user-friendly documentation process that community, non-Medicaid providers, will be able to manage. This may include the use of a grant allocation with a simple reconciliation process conducted at a more centralized point.
- The Tribe is in a unique position to offer a different environment to try a different methodology than other parts of the state. We are requesting that NCDHHS, Dogwood Trust and EBCI/CIHA/Tribal Option utilize the upcoming year to plan for alternative approach for Tribal Healthy Opportunities Pilot.
- We encourage the Department to work directly with tribal and other marginalized communities to refine the existing service definitions for HOP and utilize non-medical providers to help guide the work, rather than sophisticated health care providers who are "use" to the Medicaid system.
- We agree to the modifications to the 3 services including 3 meals per day, firearm safety and the rental assistance change.

- We are in support of targeting pre-lease activities for those involved with the criminal justice system. The Tribe operates its own corrections facility, not participating with the county/state correctional system. We request that these individuals in the tribal detention facility be entitled to these services as well and not for those just in the Standard Plans, Tailored Plans or Child and Family Specialty Plan.

  The change only speaks to the State correctional system, youth centers and a subset of jails. The Tribal criminal justice system is not part of the state system. We respectfully request to add the EBCI Justice Center and Detention Center as an eligible facility to access the pre-release funding and access the services. The Tribe also request access to the capacity building funds for this initiative.
- We strongly support continuous Medicaid enrollment for children and youth. The PHE unwinding has brought intensive highlight to the volume of denials that are procedural in nature and not due to change in financial or family situations. The Tribal population is being hit hard with the denials of redeterminations which are overwhelming due to paperwork/administrative and not due to change in circumstances. We encourage more flexibility to address administrative denials.
- We also support an investment in the behavioral health system and request tribal access to those funds without having to go through the Standard Plans or Tailored Plans to access. As you know, the Tribe has made huge tribal financial investment with mental health and substance use continuum of services and supports and access to the Medicaid funding enhancements will benefit the Tribe.
- We are also faced with workforce shortages despite offering competitive wages. We are eager to participate in these initiatives to bolster the Tribal workforce to support the system and also for non-tribal professionals seeking to support tribal members and their families.

  As the Tribe operates it's on MH/SA system of care with peripheral interfaces with the NC system. As described for the State systems, the Tribe faces the same shortages often competing with the State's system. They request funding as referenced in the application for their workforce.

- We support the Substance Use waivers for IMD exclusions for Medicaid direct and the funding of the ASAM services continuum. We also would advocate for seeking similar IMD approval for mental health that goes beyond those allowances offered through the managed care rules. As you know, the Tribe operates the PCCM model and to our knowledge, mental health exceptions are not available for this authority. This has caused disruption in services for tribal members, requiring cost shifting to Tribal resources rather than billing Medicaid.
- We are supportive of the b3 services being converted to the 1915i option as this gives tribal members access to these most important services via Medicaid Direct. We will monitor the usage and hope to see these services expand to more individuals across DX and not just limited to BH/IDD populations. We understand why this decision was made for the initial phase.
- The BH Technology investment for schools is much needed. Tribal members are served by neighboring county school systems while also operating their own LEA/Schools that are not part of NCDPI. The Tribe request access to these funds as their children and schools are in the same needs.
- We would also like to request the addition of a trauma informed; Tribal culturally developed that is referred to as Beauty for Ashes (BFA). We have mentioned this program recently to Medicaid staff and would like to begin the conversation for Medicaid coverage. We realized this will not be quickly accomplished and do not want to hold up this waiver submission for inclusion. However, we do want to provide this notification as a potential option in the future as we continue to work towards addressing the health disparities for our tribal community.

We so value our relationship with NCDHHS and know of your support for the Tribe in so many ways. We look forward to the development of a Tribal specific Healthy Opportunities Pilot as well as working through the implementation and logistics of our other requests in the near future.

Respectfully submitted on behalf of Casey Cooper, CEO of Cherokee Indian Hospital Authority and Brandy Cooper, Interim Secretary of EBCI Public Health and Human Services.

Please contact me if you have any questions or would like to schedule a meeting or conference call.

FOR STATE PLAN COORDINATOR USE ONLY:

State Plan Tracking Number:_____
Waiver Tracking Number:_____

From: Staton, Betty J <Betty.J.Staton@dhhs.nc.gov>
Sent: Tuesday, August 8, 2023 4:14 PM
To: Lyon, Joni (IHS/NAS/UHC) <Joni.Lyon@ihs.gov>; Rose, Cherie (IHS/NAS/UHC) <Cherie.Rose@ihs.gov>; Robert.Sanders@ihs.gov
Cc: Sandoe, Emma <Emma.Sandoe@dhhs.nc.gov>
Subject: Official Notification - North Carolina 1115 Medicaid Reform Demonstration Renewal

Good afternoon Robert,
We are officially notifying you of the Department of Health and Human Services, Division of Health Benefits intent to amend the following state plan services.
North Carolina 1115 Medicaid Reform Demonstration Renewal

-

On October 19, 2018, North Carolina received federal approval for the North Carolina Medicaid Reform Demonstration. North Carolina is seeking to renew its Medicaid Reform Demonstration for another five-year period. During the first demonstration period, North Carolina began its transition to managed care and invested in novel programs to better respond to the diverse needs of North Carolinians who are enrolled in Medicaid. North Carolina is now ready to build on early successes and lessons learned to continue this progress over the next five years. The State's overarching goal for the demonstration is to

improve health and well-being for all North Carolinians through a whole-person, well-coordinated system of care that addresses both medical and non-medical drivers of health and advances health access by reducing disparities for historically marginalized populations.

The Agency will be glad to answer any questions you may have. If you would like to schedule a conference call to discuss the proposed changes, please let us know.

Betty Jenkins Staton, MBA
State Plan and Amendments Manager
NC Medicaid
Division of Health Benefits
NC Department of Health and Human Services