STATE OF NORTH CAROLINA
OFFICE OF THE GOVERNOR

ROY COOPER
GOVERNOR

August 29, 2023

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

Dear Secretary Becerra:

I am pleased to submit to the U.S. Department of Health and Human Services (DHHS) a request to extend for five years the substance use disorder (SUD) component of the North Carolina Medicaid Reform Section 1115 Demonstration Project (11-W00313/4). With this request, the State of North Carolina is requesting no changes to the currently approved demonstration. The State will submit an application to renew the full demonstration later in 2023.

North Carolina's current demonstration authorizes a significant transformation of North Carolina's SUD delivery system and allows the State to obtain Medicaid reimbursement for short-term stays in an institution for mental diseases (IMD) for SUD treatment. The SUD component of the demonstration has been critical to our efforts to expand the SUD treatment service array and more fully align with the American Society of Addiction Medicine standards. Notably, North Carolina has observed a 26% increase in the number of Medicaid beneficiaries with SUD who have accessed Medication-Assisted Treatment since the beginning of the demonstration period.

Prior to submitting this demonstration extension request, North Carolina sought feedback from the public, including the Eastern Band of Cherokee Indians, North Carolina's only federally recognized Tribe. Through this engagement process, North Carolina received comments that were supportive of the proposed demonstration extension request.

Thank you for considering this application. We greatly appreciate DHHS's continued partnership on North Carolina's 1115 demonstration as we work toward our

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shared goals of advancing high-value care, improving population health, engaging and supporting providers, and promoting the sustainability of the Medicaid program.

With kind regards, I am

Very truly yours,

Roy Cooper

RAC/je/swh

North Carolina Medicaid Reform Section 1115 Demonstration Project (11-W00313/4)

Request to Extend Substance Use Disorder (SUD) Demonstration

Prepared by North Carolina Department of Health and Human Services

September 2023

I. Historical Narrative Summary of the Demonstration Project

The North Carolina Medicaid Reform demonstration was approved by the Centers for Medicare & Medicaid Services (CMS) on October 19, 2018, and includes a waiver of the institution for mental disease (IMD) exclusion for substance use disorder (SUD) treatment to expand access to the full continuum of SUD care. The current SUD waiver is effective January 1, 2019, through October 31, 2023. North Carolina requests to extend the SUD waiver for an additional five years.

The current demonstration benefit package for North Carolina Medicaid recipients includes Opioid Use Disorder (OUD)/SUD treatment services, including short-term residential services provided in residential and inpatient treatment settings that qualify as an IMD, which are not otherwise matchable expenditures under section 1903 of the Social Security Act. North Carolina is eligible to receive federal financial participation (FFP) for North Carolina Medicaid recipients who are short-term residents in IMDs under the terms of this demonstration for coverage of medical assistance, including OUD/SUD benefits that would otherwise be matchable if the beneficiary were not residing in an IMD. The State is required to aim for a statewide average length of stay of 30 days in residential treatment settings, which is monitored pursuant to the SUD Monitoring Protocol as outlined in STC 19(b), to ensure short-term residential treatment stays. Under the demonstration, beneficiaries have access to high-quality, evidence-based OUD and other SUD treatment services ranging from medically supervised withdrawal management to ongoing chronic care for these conditions in cost-effective settings while also improving care coordination and care for comorbid physical and mental health conditions. These services are available to beneficiaries enrolled in both the Medicaid managed care and fee-for-service/prepaid inpatient health plan (NC Medicaid Direct) delivery systems.

North Carolina's goal in the current waiver and requested extension is to reduce SUD; the State is testing and evaluating the following hypotheses in pursuit of this goal:

- Expanding coverage of SUD services to include residential services furnished in IMDs as part of a comprehensive strategy will decrease the long-term use of opioids and increase the use of medication-assisted treatment (MAT) and other opioid treatment services.
- Expanding coverage of SUD services to include residential services furnished to short-term residents in IMDs with a SUD diagnosis as part of a comprehensive strategy will result in improved care quality and outcomes for patients with SUD.

As required by CMS, the components of the SUD waiver are organized around six milestones: (1) Access, (2) Placement Criteria, (3) Provider Qualifications, (4) Capacity, (5) Prescribing and Overdose, and (6) Care Coordination. North Carolina's Mid-Point Assessment determined that the State is at:

- High risk of not achieving demonstration Milestone 1
- Medium risk of not achieving demonstration Milestones 3 and 6
- Medium/low risk of not achieving Milestone 4
- Low risk of not achieving Milestones 2 and 5

Recommendations for progress are described in the Mid-Point Assessment (see Section VI) and include the following:

- Provide greater web content for providers and beneficiaries on the SUD components of the waiver
- Determine barriers for metrics not meeting targets and identify incentives that could address these barriers
- Continue COVID-19 flexibilities
- Use monitoring metrics to mount an adaptive response to immediate needs
- Triangulate code lists and service definitions going forward
- Prioritize minimum MAT access requirements for residential treatment facilities
- Streamline the licensure process for facility-based treatment

- Support inpatient service capacity through direct financial support and/or improved allocation of beds
- Consider expanding Medicaid in North Carolina to cover those who do not have access to SUD services
- Identify and reward higher levels of beneficiary engagement in care.

II. Summary of Changes Requested

No changes requested.

III. Requested Waivers and Expenditure Authorities

North Carolina requests the same expenditure and waiver authorities as those approved for the SUD component of the current demonstration:

- **Residential and Inpatient Treatment for Individuals with a Substance Use Disorder (SUD)**. Expenditures for otherwise covered services furnished to otherwise eligible individuals who are primarily receiving treatment and withdrawal management services for substance use disorder (SUD) who are short-term residents in facilities that meet the definition of an institution for mental diseases (IMD).

IV. Quality Reports and Monitoring

As identified in the North Carolina 2020-2021 EQR Technical Report (Attachment A; also available here: https://medicaid.ncdhhs.gov/2020-2021-eqr-technical-report/download?attachment), Health Services Advisory Group, Inc. (HSAG) is the State's external quality review organization (EQRO). For state fiscal year (SFY) 2021 (July 1, 2020 through June 30, 2021), HSAG conducted preparatory activities with North Carolina for the mandatory EQR activities displayed in Table 1 and optional activities that include encounter data validation, consumer surveys, calculation of additional performance measures, focus studies on quality, quality rating of health plans, annual performance reports, annual care management performance evaluation, and collaborative quality improvement forums. In the SFY 2022 report, HSAG highlights substantive findings and actionable, state-specific recommendations to further advance the goals and objectives outlined in North Carolina's Medicaid Managed Care Quality Strategy.

Table 1. EQR Activities

Activity	Description	CMS EQR Protocol
Mandatory Activities*		
Validation of Performance Improvement Projects (PIPs)	This activity verifies whether a PIP conducted by a health plan used sound methodology in its design, implementation, analysis, and reporting.	**Protocol 1.** Validation of Performance Improvement Projects
Performance Measure Validation (PMV)	This activity assesses whether the performance measures (PMs) calculated by a health plan are accurate based on the measure specifications and State reporting requirements.	**Protocol 2.** Validation of Performance Measures
Compliance With Standards	This activity determines the extent to which a Medicaid and CHIP plan is in compliance with federal standards and associated State-specific requirements, when applicable.	**Protocol 3.** Review of Compliance with Medicaid and CHIP Managed Care Regulations

* Until the CMS network adequacy validation protocol is issued, health plans will only be subject to three mandatory EQR-related activities.

Table 2 from the North Carolina Medicaid Annual Quality Report (December 2020) (Attachment A; also available here: https://files.nc.gov/ncdma/Medicaid_QualityAnnualReport_3.30.2021.pdf) summarizes the State's performance against its Quality Strategy aims and goals in 2019.

Table 2. Summary of NC Medicaid Quality Performance 2019

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

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

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

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

Table 3 is the North Carolina Fiscal Year 2020 Annual Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) Form CMS-416 (Attachment A; available here: https://medicaid.ncdhhs.gov/cms-416-participation-reports-epsdt-ffy2020/download?attachment), which collects information on the State's Medicaid and CHIP programs to assess the effectiveness of EPSDT services.

Table 3. North Carolina Fiscal Year 2020 Annual EPSDT Form CMS-416

CMS Generated Reporting of State Form CMS-416 Data Using T-MSIS									
Description	**Cat**	**Total**	**< 1**	**1-2**	**3-5**	**6-9**	**10-14**	**15-18**	**19-20**
1a.Total Individuals Eligible for EPSDT	CN	1,284,952	70,132	145,946	215,359	252,876	310,120	212,485	78,034
	MN	2,014	46	82	129	291	492	489	485
	Total	1,286,966	70,178	146,028	215,488	253,167	310,612	212,974	78,519
1b.Total Individuals Eligible for EPSDT for 90 Continuous Days	CN	1,224,019	56,840	141,370	209,308	241,796	297,876	203,568	73,261
	MN	1,472	18	65	103	224	360	326	376
	Total	1,225,491	56,858	141,435	209,411	242,020	298,236	203,894	73,637

CMS Generated Reporting of State Form CMS-416 Data Using T-MSIS									
Description	**Cat**	**Total**	**< 1**	**1-2**	**3-5**	**6-9**	**10-14**	**15-18**	**19-20**
1c. Total Individuals Eligible Under a CHIP Medicaid Expansion	CN	173,159	187	18,024	36,239	39,915	45,201	30,799	2,794
	MN	0	0	0	0	0	0	0	0
	Total	173,159	187	18,024	36,239	39,915	45,201	30,799	2,794
2a. State Periodicity Schedule			5	4	3	4	5	4	2
2b. Number of Years in Age Group			1	2	3	4	5	4	2
2c. Annualized State Periodicity Schedule			5	2	1	1	1	1	1
3a. Total Months of Eligibility	CN	13,668,019	423,872	1,613,984	2,397,672	2,733,861	3,385,846	2,307,920	804,864
	MN	15,313	149	700	1,098	2,294	3,675	3,369	4,028
	Total	13,683,332	424,021	1,614,684	2,398,770	2,736,155	3,389,521	2,311,289	808,892
3b. Average Period of Eligibility	CN	0.93	0.62	0.95	0.95	0.94	0.95	0.94	0.92
	MN	0.87	0.69	0.90	0.89	0.85	0.85	0.86	0.89
	Total	0.93	0.62	0.95	0.95	0.94	0.95	0.94	0.92
4. Expected Number of Screenings per Eligible	CN		3.10	1.90	0.95	0.94	0.95	0.94	0.92
	MN		3.45	1.80	0.89	0.85	0.85	0.86	0.89
	Total		3.10	1.90	0.95	0.94	0.95	0.94	0.92
5. Expected Number of Screenings	CN	1,412,674	176,204	268,603	198,843	227,288	282,982	191,354	67,400
	MN	1,382	62	117	92	190	306	280	335
	Total	1,414,056	176,266	268,720	198,935	227,478	283,288	191,634	67,735
6. Total Screens Received	CN	1,026,251	261,515	291,251	143,919	105,079	133,031	78,417	13,039
	MN	542	29	83	41	78	138	103	70
	Total	1,026,793	261,544	291,334	143,960	105,157	133,169	78,520	13,109
7. SCREENING RATIO	CN	0.73	1.00	1.00	0.72	0.46	0.47	0.41	0.19
	MN	0.39	0.47	0.71	0.45	0.41	0.45	0.37	0.21
	Total	0.73	1.00	1.00	0.72	0.46	0.47	0.41	0.19
8.Total Eligibles Who Should Receive at Least One Initial or Periodic Screen	CN	1,166,077	56,840	141,370	198,843	227,288	282,982	191,354	67,400
	MN	1,286	18	65	92	190	306	280	335
	Total	1,167,363	56,858	141,435	198,935	227,478	283,288	191,634	67,735
9.Total Eligibles Receiving at Least One Initial or Periodic Screen	CN	DS	DS	DS	DS	DS	DS	DS	DS
	MN	DS	DS	DS	DS	DS	DS	DS	DS
	Total	617,594	54,718	117,816	131,076	100,674	127,194	73,901	12,215
10. PARTICIPANT RATIO	CN	DS	DS	DS	DS	DS	DS	DS	DS
	MN	DS	DS	DS	DS	DS	DS	DS	DS
	Total	0.53	0.96	0.83	0.66	0.44	0.45	0.39	0.18
11. Total Eligibles Referred for Corrective Treatment	CN	DS	DS	DS	DS	DS	DS	DS	DS
	MN	DS	DS	DS	DS	DS	DS	DS	DS
	Total	317,220	51,518	84,314	51,009	40,925	49,870	33,318	6,266
12a. Total Eligibles Receiving Any Dental Services	CN	DS	DS	DS	DS	DS	DS	DS	DS
	MN	DS	DS	DS	DS	DS	DS	DS	DS
	Total	566,868	685	28,613	102,565	141,795	169,330	101,903	21,977
12b. Total Eligibles	CN	DS	DS	DS	DS	DS	DS	DS	DS

CMS Generated Reporting of State Form CMS-416 Data Using T-MSIS									
Description	**Cat**	**Total**	**< 1**	**1-2**	**3-5**	**6-9**	**10-14**	**15-18**	**19-20**
Receiving Preventive Dental Services	MN	DS	DS	DS	DS	DS	DS	DS	DS
	Total	520,225	252	27,352	98,339	134,571	156,792	86,462	16,457
12c. Total Eligibles Receiving Dental Treatment Services	CN	DS	DS	DS	DS	DS	DS	DS	DS
	MN	DS	DS	DS	DS	DS	DS	DS	DS
	Total	243,189	286	1,941	29,237	63,846	77,622	57,441	12,816
12d. Total Eligibles Receiving a Sealant on a Permanent Molar Tooth	CN	57,279				30,417	26,862		
	MN	53				20	33		
	Total	57,332				30,437	26,895		
12e. Total Eligibles Receiving Dental Diagnostic Services	CN	DS	DS	DS	DS	DS	DS	DS	DS
	MN	DS	DS	DS	DS	DS	DS	DS	DS
	Total	544,130	664	28,496	101,178	137,682	162,252	93,729	20,129
12f. Total Eligibles Receiving Oral Health Services Provided by a Non-Dentist Provider	CN	DS	DS	DS	DS	DS	DS	DS	DS
	MN	DS	DS	DS	DS	DS	DS	DS	DS
	Total	88,055	5,238	67,525	15,195	49	33	DS	DS
12g. Total Eligibles Receiving Any Preventive Dental or Oral Health Service	CN	DS	DS	DS	DS	DS	DS	DS	DS
	MN	DS	DS	DS	DS	DS	DS	DS	DS
	Total	588,861	5,418	81,680	107,450	134,588	156,801	86,465	16,459
13.Total Eligibles Enrolled in Managed Care	CN	1,201,631	52,304	139,711	207,046	239,201	294,553	200,347	68,469
	MN	1,353	15	64	99	214	336	298	327
	Total	1,202,984	52,319	139,775	207,145	239,415	294,889	200,645	68,796
14a.Total Number of Screening Blood Lead Tests	CN	DS	DS	DS	DS				
	MN	DS	DS	DS	DS				
	Total	97,329	225	84,688	12,416				
14b. Methodology Used to Calculate the Total Number of Screening Blood Lead Tests			Enter X for Method I		Enter X for Method II		Enter X for Method III		
		CPT Code 83655 within certain diagnoses codes (Method I)	X	HEDIS (Method II)		Combin-ation Method-ology (Method III)			

CN = Categorically Needy

MN = Medically Needy

DS = Data suppressed because data cannot be displayed per the Centers for Medicare & Medicaid Services' cell-size suppression policy, which prohibits the direct reporting of data for beneficiary and record counts of 1 to 10 and values from which users can derive values of 1 to 10.

* States are not required to provide the EPSDT benefits to children enrolled in Medicaid through the medically needy benefit. CMS recommends that FFY 2020 data are not trended with data from other fiscal years due to both the significant change in delivery of services because of the COVID-19 public health emergency (PHE) and the initial use of T-MSIS as a data source in 19 states.

n/a = Not Applicable

V. Financial Data

North Carolina reviewed the current 1115 demonstration and emerging waiver reports and experience as part of the evaluation of the necessary financial projections for this requested waiver extension. North Carolina is working to implement this waiver, and, as described in the mid-point and interim evaluation reports (please see Section VI), various factors that include the COVID-19 PHE and Behavioral Health and Intellectual/Developmental Disabilities (BH I/DD) Tailored Plan launch delays have contributed to limited enrollment and expenditures reported in the first four years of the demonstration as compared to projected values for the renewal. Tables 4 and 5, respectively, describe the historical and projected future enrollment (Table 4) and expenditures (Table 5) as well as the cumulative spend over the lifetime of the demonstration (Table 5).

The budget neutrality projections for the initial waiver approved in 2018 relied on modeling in the SUD toolkit for the implementation of the broader American Society of Addiction Medicine (ASAM) service array. In addition, the Medicaid Eligibility Group (MEG) estimates utilized data from the broader 1115 budget neutrality estimates, also approved in 2018, reflecting differential costs for individuals with more significant behavioral health needs who will be served through the BH I/DD Tailored Plans.[1] As BH I/DD Tailored Plans have not yet been implemented, the prior estimates remain the most relevant data for this projection.

As the budget neutrality projections developed for the initial waiver approved in 2018 are consistent with what is expected in the upcoming Demonstration Years 6 through 10, North Carolina has projected the PMPM costs for the SUD MEGs based on the prior approved PMPMs and estimated enrollment. As illustrated in Table 6, the projection uses Demonstration Year 5 enrollment and PMPM figures from the current waiver, along with the trend factors approved in 2018, to project forward the enrollment (in person counts and member months) and PMPM costs for this waiver extension request. The use of these trends is consistent with prior discussions with CMS; moreover, based on other work within the North Carolina Department of Health and Human Services (DHHS), these trends have been deemed appropriate for estimating recent spending growth. North Carolina proposes to maintain a per capita cap approach for establishing spending limits and monitoring costs for this 1115 waiver renewal.

[1] BH I/DD Tailored Plans are specialized managed care plans that will serve Medicaid enrollees with significant behavioral health conditions, I/DD, and traumatic brain injuries.

*Table 4. Historical and Projected Enrollment (in Person Counts)**

Eligibility Group**	DY1	DY2	DY3	DY4	DY5	DY6	DY7	DY8	DY9	DY10	10-Year Total
SUD IMD MEG 1 - MC Temporary Assistance for Needy Families (TANF) & Related Adults	0	0	17	64	64	1,980	2,032	2,085	2,140	2,196	10,578
SUD IMD MEG 2 - MC Aged, Blind, and Disabled	0	0	5	15	15	1,980	2,032	2,085	2,140	2,196	10,468
SUD IMD MEG 3 – MC Innovations/ Traumatic Brain Injury (TBI)	0	0	0	0	0	729	748	768	788	808	3,841
SUD IMD Services MEG 4 - Fee-For-Service Adults	92	445	517	705	705	521	535	549	563	578	5,210
Total	**92**	**445**	**539**	**784**	**784**	**5,210**	**5,347**	**5,487**	**5,631**	**5,778**	**30,097**

*Estimates for DY1- DY5 reflect budget neutrality reporting through September 2022. Projections for DY6-10 assume implementation of the Behavioral Health and Intellectual/Developmental Disabilities (BH I/DD) Tailored Plans.

**MEG #1- #3 cover beneficiaries enrolled in a comprehensive managed care plan (i.e., Standard Plan, BH I/DD Tailored Plan). MEG #4 covers beneficiaries enrolled in NC Medicaid Direct who receive physical health services via Medicaid fee-for-service and behavioral health, I/DD, and traumatic brain injury (TBI) services via a prepaid inpatient health plan.

*Table 5. Historical and Projected Future Expenditures**

Eligibility Group**	DY1	DY2	DY3	DY4	DY5	DY6	DY7	DY8	DY9	DY10	10-Year Total
SUD IMD MEG 1 - MC Temporary Assistance for Needy Families (TANF) & Related Adults	$0	$0	$0	$9,218	$9,218	$7,701,345	$8,282,101	$8,906,651	$9,578,298	$10,300,594	$44,787,425
SUD IMD MEG 2 - MC Aged, Blind, and Disabled	$0	$0	$0	$8,732	$8,733	$10,502,163	$11,258,696	$12,069,727	$12,939,180	$13,871,266	$60,658,497
SUD IMD MEG 3 – MC Innovations/ Traumatic Brain Injury (TBI)	$0	$0	$0	$0	$0	$7,952,834	$8,480,288	$9,042,724	$9,642,462	$10,281,977	$45,400,285
SUD IMD Services MEG 4 - Fee-For-Service Adults	$0	$20,044	$179,747	$146,177	$146,177	$11,740,034	$12,603,241	$13,529,917	$14,524,728	$15,592,685	$68,482,750
Total	**$0**	**$20,044**	**$179,747**	**$164,127**	**$164,128**	**$37,896,376**	**$40,624,326**	**$43,549,019**	**$46,684,668**	**$50,046,522**	**$219,328,957**

* Estimates for DY1- DY5 reflect budget neutrality reporting through September 2022. Projections for DY6-10 assume implementation of the BH I/DD Tailored Plans.

**MEG #1- #3 cover beneficiaries enrolled in a comprehensive managed care plan (i.e., Standard Plan, BH I/DD Tailored Plan). MEG #4 covers beneficiaries enrolled in NC Medicaid Direct who receive physical health services via Medicaid fee-for-service and behavioral health, I/DD, and traumatic brain injury (TBI) services via a prepaid inpatient health plan.

Table 6. Budget Neutrality Projections

Eligibility Group*	Metric	Value from DY5 of Approved Waiver**	Trend Rate from Approved Waiver	DY6	DY7	DY8	DY9	DY10	Total Waiver (DY6-DY10)
SUD IMD MEG 1 - MC TANF & Related Adults	Eligible Member Months	2,509	2.6%	2,575	2,642	2,711	2,782	2,855	13,565
	PMPM Cost	$2,854.25	4.8%	$2,991.26	$3,134.84	$3,285.31	$3,443.01	$3,608.27	$16,462.69
	Estimated Claims	N/A	N/A	$7,701,345	$8,282,101	$8,906,651	$9,578,298	$10,300,594	$44,768,989
SUD IMD MEG 2 - MC Aged, Blind, and Disabled	Eligible Member Months	2,509	2.6%	2,575	2,642	2,711	2,782	2,855	13,565
	PMPM Cost	$3,904.53	4.5%	$4,079.11	$4,261.50	$4,452.04	$4,651.11	$4,859.07	$22,302.83
	Estimated Claims	N/A	N/A	$10,502,163	$11,258,696	$12,069,727	$12,939,180	$13,871,266	$60,641,032
SUD IMD MEG 3 - Innovations/ TBI	Eligible Member Months	924	2.6%	948	973	998	1,024	1,051	4,994
	PMPM Cost	$8,071.63	3.9%	$8,388.07	$8,716.91	$9,058.65	$9,413.78	$9,782.83	$45,360.24
	Estimated Claims	N/A	N/A	$7,952,834	$8,480,288	$9,042,724	$9,642,462	$10,281,977	$45,400,285
SUD IMD Services MEG 4 - Fee-For-Service Adults	Eligible Member Months	660	2.6%	677	695	713	732	752	3,569
	PMPM Cost	$16,569.62	4.6%	$17,331.83	$18,129.10	$18,963.05	$19,835.36	$20,747.79	$95,007.13
	Estimated Claims	N/A	N/A	$11,740,034	$12,603,241	$13,529,917	$14,524,728	$15,592,685	$67,990,605

*MEG #1- #3 cover beneficiaries enrolled in a comprehensive managed care plan (i.e., Standard Plan, BH I/DD Tailored Plan). MEG #4 covers beneficiaries enrolled in NC Medicaid Direct who receive physical health services via Medicaid fee-for-service and behavioral health, I/DD, and traumatic brain injury (TBI) services via a prepaid inpatient health plan.

**Eligible member months in DY5 represent values projected in the original approved demonstration for the current demonstration period. They do not represent actual enrollment during DY5, since data for all estimates within Tables 4 and 5 are as of 9/22 (prior to the start of DY5). For the programmatic reasons noted in the narrative, the state believes the original enrollment projections are most accurate.

VI. Evaluation Report

North Carolina submitted a Mid-Point Assessment report to CMS on April 29, 2022 (Attachment B).

Table 7, excerpted from the Mid-Point Assessment, summarizes the percentage of action items complete and the proportion of monitoring targets met for each milestone. In summary, North Carolina is at low risk of not meeting two of the six milestones: Placement Criteria (Milestone 2) and Prescribing and Overdose (Milestone 5). North Carolina is at low/medium risk of not meeting Milestone 4 (Capacity). The assessment depends on the relative importance of changes in the metrics (number of providers providing SUD and Medication for Opioid Use Disorders (MOUD) services to Medicaid beneficiaries from claims data) to completion of the process activities specified in the Implementation Plan and STCs. These documents require network adequacy assessments and provider outreach, which have not yet been completed. The Milestone 4 metrics are advancing in the intended direction (implying low risk of not meeting the milestone), while the process activities have not been completed (implying medium risk).

North Carolina is at medium risk for not completing Milestone 3 on the use of nationally recognized standards to set provider qualifications based solely on implementation activities and Milestone 6 on Coordination of Care. Finally, North Carolina is at high risk for not completing Milestone 1 on Access to Critical Levels of Care for SUD based on its limited progress in achieving targets for a number of metrics reflecting service use.

Table 7. Assessed Risk of Not Achieving Milestones

Milestone	Proportion of monitoring metric goals met (# metrics / total)	Percentage of fully completed action items (# completed / total)	Key themes from stakeholder feedback	Risk level
1. Access	**43% (3/7)**	2% (1/61)	♦ Milestone 1 has been a main focus of DHHS agencies. ♦ Several factors contributed to delays, including COVID-19, Standard Plan launch, exit of one local management entity/managed care organization (LME/MCO) and preparing for BH I/DD Tailored Plans. ♦ Providers and LME/MCOs report waiting for finalized policies for new services before beginning to establish networks and care standards.	High

Milestone	Proportion of monitoring metric goals met (# metrics / total)	Percentage of fully completed action items (# completed / total)	Key themes from stakeholder feedback	Risk level
			♦ Multiple stakeholders express concerns about preparedness for BH I/DD Tailored Plans. ♦ Beneficiaries report good access to SUD care overall and improved access to care as a result of COVID-19 flexibilities.	
2. Placement Criteria	**50% (1/2)**	60% (6/10)	DHHS agencies have made significant efforts around training providers in ASAM criteria, with over 600 trained. Turnout has not been as high as hoped, which may be partially attributable to the small fee for training.	Low
3. Qualifications	--	0% (0/4)	The State's presentations have clarified licensure requirements. LME/MCOs have concerns about the licensure process for residential facilities, which is long and costly. Some programs in NC still do not offer medication to treat opioid or alcohol use disorder.	Medium
4. Capacity	**100% (2/2)**	0% (0/4)	Staffing inpatient facilities and ensuring sufficient outpatient provider supply is a persistent concern for both State agencies and LME/MCOs. Providers perceive shortages of inpatient beds, outpatient care and office-based opioid treatment (OBOT). LME/MCOs report that developing capacity for facility-based treatment is overall more challenging,	Low/ Medium

Milestone	Proportion of monitoring metric goals met (# metrics / total)	Percentage of fully completed action items (# completed / total)	Key themes from stakeholder feedback	Risk level
			especially with lack of startup funds. Funding services is an issue, given that most people with SUD in NC are uninsured. State funds are critical for this, and the ongoing lack of Medicaid expansion threatens funding streams for new services.	
5. Prescribing and Overdose	**50% (2/4)**	100% (1/1)	There is a broad consensus that improvements to the PDMP have been very successful.	Low
6. Coordination	**71% (5/7)**	66% (2/3)	Both providers and State agencies report co-locating services has improved care coordination. Several providers report needing to make hard decisions about care management going forward, especially with the future launch of BH I/DD Tailored Plans.	Medium

North Carolina submitted an Interim Evaluation Report to CMS on June 8, 2023 (Attachment B). The report finds a number of positive improvements were observed in the state after the implementation of the SUD component of North Carolina's 1115 demonstration. For example, the number of providers offering SUD services to Medicaid beneficiaries has grown since the start of the demonstration and the number of individuals using evidence-based treatments for OUD increased during the evaluation period. At the same time, the report acknowledges the significant challenges and implementation barriers, such as the COVID-19 PHE and BH I/DD Tailored Plan launch delays, that contributed to less favorable results on other metrics during the evaluation period.

VII. Public Notice Process Compliance Documentation

Public Notice and Comment Process

North Carolina first released this waiver extension request for public comment starting on March 31, 2023, and allowed the public to submit comments through May 1, 2023. Subsequently, North Carolina released an updated version of this waiver extension request for public comment on July 29, 2023, and allowed the public to submit comments through August 28, 2023. The State posted the public notice materials (including the full public notice and abbreviated public notice, both of which included details

on how to submit comments) and the full waiver extension request on dedicated webpage of the North Carolina Department of Health and Human Services website (Attachments C and E; also available here: https://medicaid.ncdhhs.gov/proposed-program-design). An announcement linking to this website was also posted on the NC Medicaid homepage (Attachment E).

North Carolina disseminated notices and information about the public hearings both by making announcements during monthly meetings with consumer, provider, and family advisory stakeholders as well as by disseminating the notice by email to key consumer groups, advocacy groups, provider associations, community partners, and health plans. A copy of one of the email announcements can be found in Attachment E.

North Carolina also published the abbreviated public notice in the newspapers of widest circulation in each city in North Carolina with a population of at least 100,000. For the public comment period between March 31 and May 1, 2023, a list of newspapers by city appears in Table 8 and a newspaper clipping appears in Attachment C.

Table 8. Notice Distribution by Newspaper

Cities	Population as of July 2022[2]	Primary Newspaper by Circulation	Run Dates	Geographic Areas
1. Charlotte	897,720	Charlotte Observer	April 6, 9 & 10	Charlotte; Mecklenburg, Iredell, Cabarrus, Union, Lancaster, York, Gaston, Catawba and Lincoln counties
2. Raleigh	476,587	News & Observer	April 6, 9 & 10	Raleigh; Triangle area; Wake County
3. Greensboro	301,115	Greensboro News & Record	April 7, 9 & 10	Greensboro; High Point; Guilford, Rockingham and Randolph counties
4. Durham	332,680	Durham Herald Sun	April 6, 9 & 10	Durham; Durham, Orange and Chatham counties
5. Winston-Salem	251,350	Winston-Salem Journal	April 7, 9 & 10	Winston-Salem; Forsyth County
6. Fayetteville	208,873	The Fayetteville Observer	April 6, 9 & 10	Fayetteville; Fort Bragg; Cumberland County
7. Cary	180,388	News & Observer	April 6, 9 & 10	Raleigh; Triangle area; Wake County

[2] U.S. Census. Population Estimates (July 2022)

Cities	Population as of July 2022[2]	Primary Newspaper by Circulation	Run Dates	Geographic Areas
8. Wilmington	120,324	Wilmington Star-News	April 4, 9 & 10	Wilmington; New Hanover, Brunswick and Pender counties

For the public comment period between July 29 and August 28, 2023, a list of newspapers by city appears in Table 9 and a newspaper clipping appears in Attachment E.

Table 9. Notice Distribution by Newspaper

Cities	Population as of July 2022[3]	Primary Newspaper by Circulation	Run Dates	Geographic Areas
1. Charlotte	897,720	Charlotte Observer	July 27	Charlotte; Mecklenburg, Iredell, Cabarrus, Union, Lancaster, York, Gaston, Catawba and Lincoln counties
2. Raleigh	476,587	News & Observer	July 28	Raleigh; Triangle area; Wake County
3. Greensboro	301,115	Greensboro News & Record	July 28	Greensboro; High Point; Guilford, Rockingham and Randolph counties
4. Durham	332,680	Durham Herald Sun	July 28	Durham; Durham, Orange and Chatham counties
5. Winston-Salem	251,350	Winston-Salem Journal	July 28	Winston-Salem; Forsyth County
6. Fayetteville	208,873	The Fayetteville Observer	July 30	Fayetteville; Fort Bragg; Cumberland County
7. Cary	180,388	News & Observer	July 30	Raleigh; Triangle area; Wake County
8. Wilmington	120,324	Wilmington Star-News	July 30	Wilmington; New Hanover, Brunswick and Pender counties

North Carolina hosted two virtual public hearings to seek input regarding the extension request. Emma Sandoe, Associate Director, Strategy and Planning at the Division of Health Benefits, led both hearings,

[3] U.S. Census. Population Estimates (July 2022)

which were held on Tuesday, April 11, 2023, and on Thursday, April 13, 2023, via Microsoft Teams. The total number of attendees for the hearings was approximately 90 individuals. During the public hearings, DHHS gave a presentation describing the proposed waiver extension request and provided opportunities for public testimony. The slide deck presented can be found here: https://medicaid.ncdhhs.gov/documents/medicaid/ncdhhs-sud-waiver-extension-public-hearing/download?attachment

In addition to the two public hearings dedicated to the SUD waiver, North Carolina discussed the SUD waiver 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-partners-webinar-jan-30-2023/download?attachment

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

Comments and questions were received on the following topics, with most questions focusing on BH I/DD 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
    - 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
    - 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

Response to Public Comments Received between March 31- May 1, 2023

North Carolina received two written letters of public comment from organizations representing hospitals and health care systems in the state, including an integrated behavioral health care system (Attachment D). North Carolina also received one request for clarification during a public hearing.

Key themes from the comments are described below. Comments were supportive of the proposed waiver extension request. North Carolina did not make any changes to the waiver extension request in response to comments received during this public comment period.

Comment: **North Carolina received comments supporting the waiver extension request. In addition to extending the waiver of the IMD exclusion for SUD treatment that is approved under the current demonstration, a commenter advocated for requesting a waiver of the IMD exclusion for short-term mental health treatment.**

North Carolina 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. As the State pursues a variety of reforms to its behavioral health delivery system, including the upcoming launch of BH I/DD Tailored Plans, it continues to explore requesting a waiver of the IMD exclusion for short-term mental health treatment.

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

North Carolina 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 by January 2024.

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

North Carolina Response: North Carolina appreciates the commenter's feedback and is exploring options with the legislature on the feasibility of increasing rates.

Comment: **North Carolina received a request to clarify if this waiver extension request would change any of the services offered under the approved demonstration.**

North Carolina Response: North Carolina is not seeking to change any of the services offered under the approved demonstration through this waiver extension request.

Response to Public Comments Received between July 29 - August 28, 2023

North Carolina received three letters of public comment from a consumer advocate, an LME/MCO (prepaid inpatient health plan that specializes in behavioral health), and a county division of public health (Attachment F).

Key themes from the comments are described below. Comments were supportive of the proposed waiver extension request. North Carolina did not make any changes to the waiver extension request in response to comments received through this public comment period.

Comment: **North Carolina received two comments strongly supporting the waiver extension request. The commenters applauded the waiver's efforts to expand access to much-needed behavioral health services, stimulate economic growth, contribute to improving care coordination and quality, and address rural health disparities.**

North Carolina Response: North Carolina appreciates the commenters' feedback and support of the waiver extension request.

Comment: **North Carolina received a request to clarify if the current benefit package includes ASAM 3.1 (Clinically Managed Residential Treatment – Low Intensity). If so, the respondent noted that 30 days' coverage may not be sufficient for this service.**

North Carolina Response: North Carolina appreciates the commenter's feedback. North Carolina is currently in the process of developing a State Plan Amendment to cover ASAM 3.1 and anticipates submitting this for CMS approval later in 2023. North Carolina notes that the state must aim for a statewide average length of stay of 30 days in residential treatment settings; individual short-term stays of more than 30 days can be covered if medically necessary.

Comment: **One commenter highlighted the shortage of Licensed Clinical Addiction Specialists (LCAS) in the state as a factor contributing to challenges in access to substance use treatment, which may impact the state's performance on quality metrics in the Midpoint Assessment and Interim Evaluation.**

North Carolina Response: North Carolina thanks the commenter for flagging this important piece of context for readers to consider when reviewing the Midpoint Assessment and Interim Evaluation.

Tribal Consultation Process

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 SUD waiver extension request via email on September 13, 2022, and offered to schedule a conference call to discuss the proposed extension. The email correspondence was sent to Casey Cooper, CEO of the Cherokee Indian Hospital Authority, and Vickie Bradley, Secretary of EBCI Public Health and Human Services. EBCI provided comments on the SUD waiver extension request on September 23, 2022. The notice and comments appear in Attachment G. EBCI was supportive of the proposed waiver extension request and advocated for expediting implementation of the demonstration components. In addition, EBCI requested that the application clarify that SUD services, including those delivered to individuals in IMDs, are available through both the state's managed care and fee-for-service delivery systems. North Carolina is not proposing any changes to the waiver extension request in response to comments received from EBCI.

In anticipation of submitting the request to CMS, North Carolina shared an updated version of the SUD waiver extension request with EBCI on April 27, 2023. No comments were received in response to the latest communication.

North Carolina also notified the United Tribes of North Carolina of the proposed SUD waiver extension request via email on April 27, 2023, and offered to schedule a conference call to discuss the proposed extension. The email correspondence was sent to Joni Lyon and Cherie Rose at Indian Health Services. North Carolina followed up with United Tribes of North Carolina on May 18, 2023, and included Robert Sanders at Indian Health Services. No comments were received in response to this communication. The notification appears in Attachment G.

Attachments

Attachment A: Quality Reports and Monitoring

- North Carolina 2020-2021 EQR Technical Report
- North Carolina Medicaid Annual Quality Report
- North Carolina Fiscal Year 2020 Annual Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) Form CMS-416

Attachment B: Evaluation Report

- Mid-Point Assessment of North Carolina's Substance Use Disorder 1115 Waiver
- Interim Evaluation Report of the Substance Use Disorder Components of North Carolina's 1115 Waiver

Attachment C: Public Notices (March 31- May 1, 2023)

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

Attachment D: Public Comment Letters (March 31- May 1, 2023)

- Letter from North Carolina Healthcare Association
- Letter from Pyramid Healthcare

Attachment E: Public Notices (July 29- August 28, 2023)

- Posting on North Carolina Department of Health and Human Services Website
- Announcement on North Carolina Department of Health and Human Services NC Medicaid Homepage
- Email Announcement to External Partners
- Full Public Notice
- Abbreviated Public Notice
- Newspaper Clipping

Attachment F: Public Comment Letters (July 29- August 28, 2023)

- Letter from Consumer Advocate
- Letter from Behavioral Health Plan
- Letter from Guilford County Government

Attachment G: Tribal Consultation Notice and Comments

- Email Correspondence with Eastern Band of Cherokee Indians (September 2022, April 2023)
- Comments from Eastern Band of Cherokee Indians
- Email Notifications to United Tribes of North Carolina (April and May 2023)

Attachment A

NC MEDICAID

ANNUAL TECHNICAL REPORT

March 2022

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES







HSAG
HEALTH SERVICES ADVISORY GROUP

TABLE OF CONTENTS

EXECUTIVE SUMMARY

Introduction to the Annual Technical Report

Title 42 of the Code of Federal Regulations (42 CFR) at §438.364 requires that states use an external quality review organization (EQRO) to prepare an annual, independent technical report that provides a description of how the data from all activities conducted in accordance with §438.358 were aggregated and analyzed, and conclusions were drawn as to the quality and timeliness of, and access to the care furnished by the Medicaid managed care organizations (MCOs). Appendix A lists the required and recommended elements for the external quality review (EQR) technical report.

The North Carolina (NC) Department of Health and Human Services' (DHHS') Division of Health Benefits (the Department) is the state agency responsible for the overall administration of NC's Medicaid managed care program. This state fiscal year (SFY) 2021 (July 1, 2020, to June 30, 2021) EQR technical report was prepared for the Department by Health Services Advisory Group, Inc. (HSAG), the Department's EQRO. HSAG contracted with the Department as of May 24, 2021.

For a list of acronyms used in this report, please reference Appendix B.

Overview of NC's Managed Care Program

Statewide Medicaid Managed Care

In September 2015, the NC General Assembly enacted Session Law 2015-245, directing the transition of the State's Medicaid program from a predominantly fee-for-service (FFS) structure to a capitated managed care structure. Since that time, the Department has collaborated with the General Assembly and stakeholders to plan the implementation of this directive. The Department is committed to transitioning NC to Medicaid managed care to advance high-value care, improve population health, engage and support beneficiaries and providers, and establish a sustainable program with predictable costs. Implementation of managed care is occurring over a three-phased schedule: Phase 1—July 1, 2021; Phase 2—December 1, 2022; and Phase 3—projected no later than December 2023.

On July 1, 2021, the Department transitioned most beneficiaries to fully capitated prepaid health plans (PHPs) called "Standard Plans." Most enrollees, including adults and children with low to moderate intensity behavioral health (BH) needs, receive integrated physical health, BH, and pharmacy services through Standard Plans.

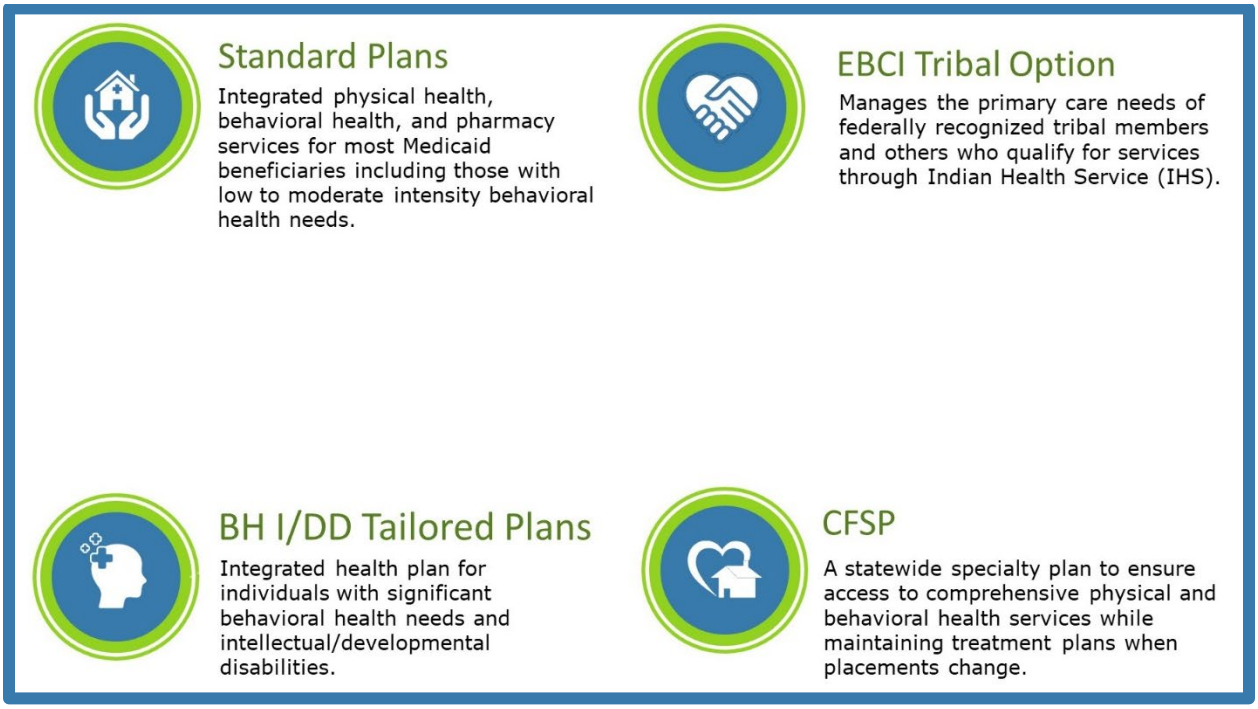
A new delivery system called the Eastern Band of Cherokee Indians (EBCI) Tribal Option was also launched on July 1, 2021. The Department's contract with the Cherokee Indian Hospital Authority (CIHA) established an Indian Managed Care Entity (IMCE), the first of its kind in the nation, to address the health needs of American Indian/Alaskan Native Medicaid beneficiaries. The EBCI Tribal Option is a non-risk bearing managed care option for federally recognized tribal members and other individuals eligible to receive Indian Health Service under 42 CFR §438.14(a). The EBCI Tribal Option has a strong focus on primary care, preventive health, and chronic disease management; provides care management for all members and care management service plans for high needs members; and coordinates all medical, BH, and pharmacy services.

BH Intellectual/Developmental Disability (I/DD) Tailored Plans are integrated health plans for individuals with significant BH needs and I/DDs. BH I/DD Tailored Plans will also serve other special populations, including 1915(c) Innovations and traumatic brain injury (TBI) waiver enrollees, as well as manage several specialized BH and I/DD services. BH I/DD Tailored Plans will launch in December of 2022.

The final phase is a Children and Families Specialty Plan (CFSP) the Department intends to launch in December 2023. The CFSP will be a statewide specialty plan to ensure access to comprehensive physical and BH services while maintaining treatment plans when placements change. The CFSP will include care management services to improve coordination among service providers, families, involved entities (e.g., Department of Social Services, Division of Juvenile Justice, schools), and other stakeholders involved in serving the CFSP's members.

Figure 1 displays the state's health plan types.

Figure 1—NC Health Plan Types



Innovative Features

NC's Section 1115 waiver provides federal authority to incorporate the following innovative features into its new managed care delivery system.

Advanced Medical Homes (AMHs). The Department developed the AMH model as the primary vehicle for care management as the state transitions to Medicaid managed care. High-quality primary care with the capacity to manage population health is foundational to the success of NC's Medicaid transformation, supporting the delivery of timely care in the appropriate setting to meet each member's needs. The AMH model supports the Department's transformation vision by maintaining the strengths of NC's legacy care management structure and promoting delivery of care management in the community. The AMH model was designed to spur development of modernized, data-driven primary care that aligns with the Department's vision for advancing value-based payments over time.

Healthy Opportunities Pilots. Three organizations were selected to serve three regions of the state to test evidence-based, non-medical interventions designed to promote community engagement, reduce costs, and improve the health of Medicaid beneficiaries. These public–private regional pilots support and strengthen work already underway in communities and at the state level to maximize efficiencies and effectiveness within the managed care program, focusing on housing, food, transportation, interpersonal safety, and cross-domain services. The Department's goal is to create a systematic approach to integrating and financing non-medical services that address social determinants of health.

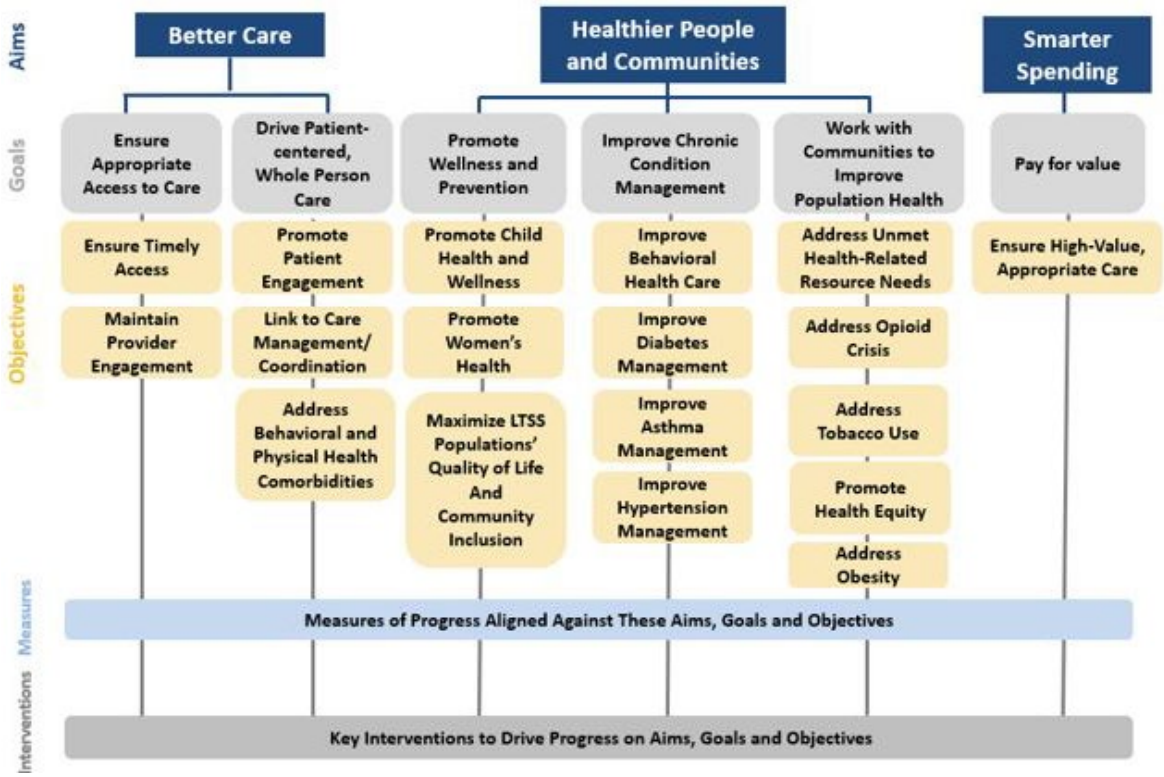
Opioid Strategy. To support broader state efforts to combat the opioid crisis, NC DHHS received federal authority to increase access to inpatient and residential substance use disorder treatment through reimbursement for services in institutions of mental disease.

Quality Strategy

The Centers for Medicare & Medicaid Services (CMS) Medicaid managed care regulations at 42 CFR §438.340 require state Medicaid agencies operating Medicaid managed care programs to develop and implement a written quality strategy for assessing and improving the quality of healthcare services offered to their enrollees.

The Department's Medicaid Managed Care Quality Strategy (Quality Strategy) outlines the Department's goals for accessible, high-quality care and smarter spending, and describes plans for achieving those goals.[1] The Quality Strategy Framework is structured around three central aims: Better Care Delivery; Healthier People and Healthier Communities; and Smarter Spending. These aims are depicted in Figure 2.

Figure 2—Overview of the Quality Strategy Framework



[1] North Carolina Department of Health and Human Services, Department of Health Benefits. *North Carolina's Medicaid Managed Care Quality Strategy*, June 16, 2021. Available at: https://medicaid.ncdhhs.gov/media/9968/download?attachment. Accessed on: Jan 28, 2022.

Each of the 18 objectives are tied to a series of focused interventions used to drive improvements within and, in many cases, across the goals and objectives set forth in the Quality Strategy. To assess the impact of these interventions and continue to identify opportunities for improving the quality of care delivered under Medicaid managed care, these interventions are tied to a set of metrics to assess progress. As baseline data for health plan performance becomes available, the Department intends to further refine the objectives to target specific improvement goals, including additional metrics that address health disparities.

Scope of External Quality Review Activities

As the Department implements managed care, HSAG will conduct mandatory and optional EQR activities, as described in 42 CFR §438.358, in a manner consistent with the associated *CMS External Quality Review (EQR) Protocols, October 2019* (CMS EQR Protocols).[2] The purpose of these activities, in general, is to improve states' ability to oversee and manage health plans they contract with for services and help health plans improve their performance with respect to the quality of, timeliness of, and access to care. Effective implementation of the EQR-related activities will facilitate State efforts to purchase high-value care and to achieve higher-performing healthcare delivery systems for their Medicaid and Children's Health Insurance Program (CHIP) members.

For SFY 2021, HSAG conducted preparatory activities with the Department for the mandatory EQR activities displayed in Table 1 and the optional activities described in the Optional EQR Activities section.

Table 1—EQR Activities

Activity	Description	CMS EQR Protocol
Mandatory Activities*		
Validation of Performance Improvement Projects (PIPs)	This activity verifies whether a PIP conducted by a health plan used sound methodology in its design, implementation, analysis, and reporting.	**Protocol 1.** Validation of Performance Improvement Projects
Performance Measure Validation (PMV)	This activity assesses whether the performance measures (PMs) calculated by a health plan are accurate based on the measure specifications and State reporting requirements.	**Protocol 2.** Validation of Performance Measures
Compliance With Standards	This activity determines the extent to which a Medicaid and CHIP plan is in compliance with federal standards and associated state-specific requirements, when applicable.	**Protocol 3.** Review of Compliance With Medicaid and CHIP Managed Care Regulations

* Until the CMS network adequacy validation protocol is issued, health plans will only be subject to three mandatory EQR-related activities.

[2] Department of Health and Human Services, Centers for Medicare & Medicaid Services. *External Quality Review (EQR) Protocols, October 2019*. Available at: https://www.medicaid.gov/medicaid/quality-of-care/downloads/2019-eqr-protocols.pdf. Accessed on: Jan 28, 2022.

Aggregating and Analyzing Statewide Data

As HSAG, the Department, and the health plans conduct EQR activities, HSAG will analyze the results obtained from each EQR activity. From these analyses, HSAG will determine which results were applicable to the domains of quality of, access to, and timeliness of care and services. HSAG will then analyze the data to determine if common themes or patterns exist that allow conclusions about overall quality of, access to, and timeliness of care and services to be drawn for each health plan independently and the overall program. These conclusions will be presented in the SFY 2022 EQR technical report.

Quality, Access, Timeliness

CMS identified the domains of quality, access, and timeliness as keys to evaluating MCO performance. HSAG used the following definitions for these domains.



Quality

as it pertains to the EQR, means the degree to which an MCO, prepaid inpatient health plan (PIHP), prepaid ambulatory health plan (PAHP), or primary care case management (PCCM) entity (described in §438.310[c][2]) increases the likelihood of desired health outcomes of its enrollees through its structural and operational characteristics; the provision of services that are consistent with current professional, evidence-based knowledge; and interventions for performance improvement.[1]

Access

as it pertains to EQR, means the timely use of services to achieve optimal outcomes, as evidenced by managed care plans successfully demonstrating and reporting on outcome information for the availability and timeliness elements defined under §438.68 (network adequacy standards) and §438.206 (availability of services). Under §438.206, availability of services means that each state must ensure that all services covered under the state plan are available and accessible to enrollees of MCOs, PIHPs, and PAHPs in a timely manner.[2]

Timeliness

as it pertains to EQR, is described by the National Committee for Quality Assurance (NCQA) to meet the following criteria: "The organization makes utilization decisions in a timely manner to accommodate the clinical urgency of a situation."[3] It further discusses the intent of this standard to minimize any disruption in the provision of healthcare. HSAG extends this definition to include other managed care provisions that impact services to members and that require a timely response from the MCO (e.g., processing expedited member appeals and providing timely follow-up care).

[1] Department of Health and Human Services, Centers for Medicare & Medicaid Services. Federal Register Vol. 81 No. 18/Friday, May 6, 2016, Rules and Regulations, p. 27882. 42 CFR §438.320 Definitions; Medicaid Program; External Quality Review, Final Rule.

[2] Ibid.

[3] National Committee for Quality Assurance. *2013 Standards and Guidelines for MBHOs and MCOs.*

NC Managed Care Program Findings and Conclusions

In the SFY 2022 report, HSAG will utilize its analyses and evaluations of EQR activity findings from SFY 2022 to assess the health plans' performance in providing quality, timely, and accessible healthcare services to beneficiaries. For each health plan reviewed, HSAG will provide a summary of its overall key findings, conclusions, and recommendations based on the health plan's performance. The overall findings and conclusions for all health plans will be compared and analyzed to develop overarching conclusions and recommendations for the NC managed care program.

Recommendations for Targeting Goals and Objectives in the Quality Strategy

In the SFY 2022 report, HSAG will highlight substantive findings and actionable state-specific recommendations, when applicable, for the Department to further promote its Quality Strategy goals and objectives.

REVIEW OF COMPLIANCE

Introduction

According to federal requirements located within 42 CFR §438.358, the state, an agent that is not a Medicaid managed care entity, or its EQRO must conduct a review within a three-year period to determine an MCO's compliance with the standards set forth in 42 CFR Part 438—Managed Care Subpart D and the quality assessment and performance improvement (QAPI) requirements described in 42 CFR §438.330. These standards must be as stringent as the federal Medicaid managed care standards described in 42 CFR Part 438.

As SFY 2022 is NC's first year of operation for statewide managed care, it will initiate the compliance review process in subsequent years.

PERFORMANCE MEASURES

Introduction

Federal regulations at 42 CFR §438.330(c) require states to specify standard PMs for health plans to include in their comprehensive QAPI programs. Each year, the health plans must measure and report to the state the standard PMs specified by the state and submit specified data to the state that enables the state to calculate the standard PMs.

To ensure that all NC Medicaid managed care beneficiaries receive high-quality care, the Department requires the health plans report on, and ultimately be held accountable for, performance against measures aligned to a range of specific goals and objectives used to drive quality improvement (QI) and operational excellence. The Department's use of specific quality requirements to advance toward these goals and objectives will evolve as the health plans' and providers' infrastructure and experience increase, with greater rewards for excellence and more significant penalties for poor performance.

In its Quality Strategy, the Department developed standard PMs, as required by 42 CFR §438.330(c), some of which Standard Plans and Tailored Plans are required to measure and report to the Department. Others will be directly measured by the Department. Consistent with the Department's desire to benchmark its progress against other states' performance and assess key priorities to drive continuous QI efforts, nearly all the measures are nationally recognized. For the first two years of managed care implementation, the Department will set a benchmark for each measure (with the exception of measures of contraceptive care) of 105 percent of the Standard Plan average from the prior year. The benchmark for the BH I/DD Tailored Plans will be set at 105 percent of the prior year's performance average of the BH I/DD Tailored Plans. For the third plan year and beyond, the Department will monitor performance and may adjust the benchmarking methodology.

Quality Strategy Measures

The Department requires the Standard Plans to monitor and evaluate the quality of care through the use of Healthcare Effectiveness Data and Information Set (HEDIS®)[3] and Department-defined PMs. Table 2 lists PMs that are outlined in the Quality Strategy for priority focus for Standard Plan accountability. The table also shows HSAG's assignment of the PMs into the domains of quality, timeliness, and access. As activities and data are produced, the Department will continue to assess the assignment of measures by quality, timeliness, and access.

Table 2—Assignment of PMs to the Quality, Timeliness, and Access Domains

Performance Measure	Quality	Timeliness	Access
Pediatric Care			
Child and Adolescent Well-Care Visits	✓	✓	✓
Well-Child Visits in the First 30 Months of Life	✓	✓	✓
Childhood Immunization Status	✓	✓	✓
Immunization for Adolescents	✓	✓	✓
Total Eligibles Receiving at Least One Initial or Periodic Screen	✓		✓
Use of First Line Psychosocial Care for Children and Adolescents on Antipsychotics	✓		
Adult Care			
Cervical Cancer Screening	✓		✓
Chlamydia Screening in Women—Total	✓		✓
Comprehensive Diabetes Care—Hemoglobin A1C (HbA1c) Testing	✓		
Controlling High Blood Pressure	✓		
Flu Vaccinations for Adults	✓		✓
Medical Assistance with Smoking and Tobacco Use Cessation	✓		
Follow-Up After Hospitalization for Mental Illness—7-Day Follow-Up—Total and *30-Day Follow-Up—Total*	✓	✓	✓
Screening for Depression and Follow-Up Plan	✓		
Use of Opioids at High Dosage in Persons Without Cancer	✓		
Use of Opioids from Multiple Providers in Persons Without Cancer	✓		
Concurrent Use of Prescription Opioids and Benzodiazepines	✓		
Plan All-Cause Readmissions	✓	✓	✓
Total Cost of Care	✓		✓

[3] HEDIS® is a registered trademark of the NCQA.

Performance Measure	Quality	Timeliness	Access
Rate of Screening for Unmet Resource Needs	✓		✓
Maternal Care			
Low Birth Weight	✓		✓
Prenatal and Postpartum Care—Timeliness of Prenatal Care and *Postpartum Care*	✓	✓	✓
Rate of Screening for Pregnancy Risk	✓	✓	✓

Health Plan Names

A full list of health plans can be found in Appendix C.

Results

The HEDIS measurement year (MY) is one year following the year reflected in the data; for example, HEDIS MY 2022 refers to the analyses of data collected from January 1, 2021, through December 31, 2021. HEDIS measures require one full year of data; however, the Standard Plans' contracts did not go into effect until July 1, 2021. Considering the Standard Plan mid-measurement year launch into managed care operations, HSAG and the Department worked closely with the Standard Plans to understand several nuances and complexities in the Standard Plans' abilities to produce future MY 2021 PM 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;[4] however, final MY 2021 PM rates will not be available until mid-CY 2022 and will, therefore, be subsequently integrated into the EQR technical report produced in SFY 2023.

[4] Department of Health and Human Services, Centers for Medicare & Medicaid Services. *Protocol 2. Validation of Performance Measures: A Mandatory EQR-Related Activity, October 2019*. Available at: https://www.medicaid.gov/medicaid/quality-of-care/downloads/2019-eqr-protocols.pdf. Accessed on: Jan 28, 2022.

PERFORMANCE IMPROVEMENT PROJECTS

Introduction

According to federal requirements located within 42 CFR §438.330, the state must require, through its contracts, that each health plan establish and implement an ongoing comprehensive QAPI program for the services it furnishes to its enrollees. The Department requires each health plan to conduct PIPs in accordance with 42 CFR §438.330.

The purpose of a PIP is to achieve, through ongoing measurement and intervention, significant improvements in clinical and nonclinical areas of care that are sustained over time. This structured method of assessing and improving health plan processes can have a favorable effect on health outcomes and member satisfaction. Federal requirements for PIPs include:

- Measurement of performance using objective quality indicators.
- Implementation of interventions to achieve improvement in the access to and quality of care.
- Evaluation of the effectiveness of the interventions based on the PMs.
- Planning and initiation of activities for increasing or sustaining improvement.

As SFY 2022 is NC's first year of operation for statewide managed care, HSAG worked with the Department in SFY 2021 to conduct preparatory activities as described below.

Preparatory Activities

For validation, the Department is requiring the Standard Plans to submit PIPs for the following topics: *Childhood Immunization Status Combo 10, Timeliness of Prenatal Care,* and *HbA1c Poor Control (>9%)*. Additionally, each Standard Plan will submit a nonclinical PIP topic for validation. The PIP topics submitted by the Standard Plans address CMS' requirements related to the quality of, access to, and timeliness of care and services.

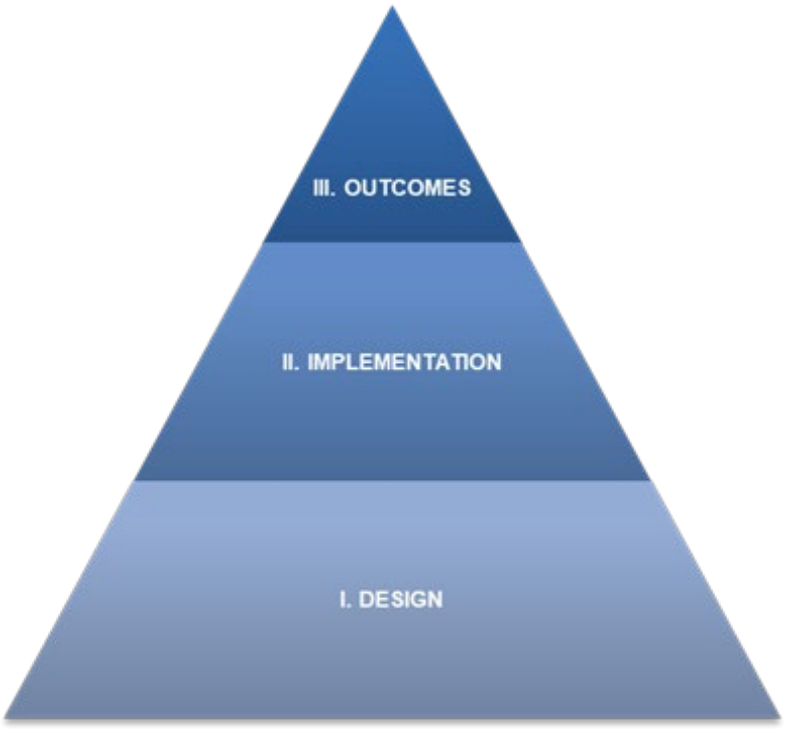
In SFY 2022, HSAG will complete the annual validation of the Standard Plans' PIPs, which includes the assessment of the Standard Plans' methodology for conducting PIPs and the evaluation of the overall PIP validity and reliability. In its PIP evaluation and validation, HSAG uses CMS EQR *Protocol 1. Validation of Performance Improvement Projects: A Mandatory EQR-Related Activity*, October 2019 (EQR Protocol 1).[5] HSAG's evaluation of the PIP includes two key components of the QI process:

1. HSAG evaluates the technical structure of the PIP to ensure the Standard Plans design, conduct, and report the PIP in a methodologically sound manner, meeting all State and federal requirements. HSAG's review determines whether the PIP design (e.g., PIP Aim statement, population, sampling techniques, performance indicator, and data collection methodology) is based on sound methodological principles and could reliably measure outcomes. Successful execution of this component ensures that reported PIP results are accurate and capable of measuring sustained improvement.
2. HSAG evaluates the implementation of the PIP. Once designed, a PIP's effectiveness in improving outcomes depends on the systematic data collection process, analysis of data, and the identification of barriers and subsequent development of relevant interventions. Through this component, HSAG evaluates how well the Standard Plans improve their rates through the implementation of effective processes (i.e., barrier analyses, interventions, and evaluation of results). The goal of HSAG's PIP validation is to ensure the Department and key stakeholders can have confidence that any reported improvement in outcomes is related to a given PIP.

Figure 3 illustrates the three stages of the PIP process—i.e., Design, Implementation, and Outcomes. Each sequential stage provides the foundation for the next stage. The Design stage establishes the methodological framework for the PIP. The activities in this section include development of the PIP topic, Aim statement, population, sampling techniques, performance indicator(s), and data collection processes. To implement successful improvement strategies, a strong methodologically sound design is necessary.

[5] Department of Health and Human Services, Centers for Medicare & Medicaid Services. *Protocol 1. Validation of Performance Improvement Projects: A Mandatory EQR-Related Activity*, October 2019. Available at: https://www.medicaid.gov/medicaid/quality-of-care/downloads/2019-eqr-protocols.pdf. Accessed on: Jan 28, 2022.

Figure 3—Stages of the PIP Process



Data Collection

Methods and Tools

HSAG obtains the data needed to conduct the PIP validation from the Standard Plans' PIP Summary Forms. This form provides detailed information about the Standard Plans' completed PIP activities. In SFY 2022, the Standard Plans will be required to complete the design of the PIP, steps 1 through 6.

To monitor, assess, and validate PIPs, HSAG also developed a PIP Validation Tool to ensure uniform assessment of PIPs. This tool is used to evaluate each of the PIPs for the following nine EQR Protocol 1 steps:

Step 1—Review the Selected PIP Topic
Step 2—Review the PIP Aim Statement
Step 3—Review the Identified PIP Population
Step 4—Review the Sampling Method
Step 5—Review the Selected Performance Indicator(s)
Step 6—Review the Data Collection Procedures
Step 7—Review Data Analysis and Interpretation of Results
Step 8—Assess the Improvement Strategies
Step 9—Assess the Likelihood that Significant and Sustained Improvement Occurred

Each evaluation element within a given step will be given a score of *Met*, *Partially Met*, *Not Met*, *Not Applicable*, or *Not Assessed* based on the PIP documentation. HSAG's methodology for assessing and documenting PIP findings provides a consistent, structured process and a mechanism for providing the PHPs with specific feedback and recommendations for the PIP. Using its PIP Validation Tool and standardized scoring, HSAG will report the overall validity and reliability of the findings as one of the following:

- *Met* = high confidence/confidence in the reported findings.
- *Partially Met* = low confidence in the reported findings.
- *Not Met* = reported findings are not credible.

Following the annual PIP validation, HSAG will provide the Department and each Standard Plan with an annual PIP Validation Report that includes background information for each PIP submitted, specific validation findings, identified strengths, opportunities for improvement, and recommendations.

Technical Assistance

In SFY 2021, HSAG provided a training for the Standard Plans to review the PIP submission requirements and validation process. Additionally, HSAG is available to provide technical assistance throughout the process to ensure PIPs are methodologically sound and meet CMS requirements. The Standard Plans may request technical assistance following the initial validation of the PIPs and prior to the resubmissions for the final validation. During technical assistance, the Standard Plans have the opportunity to ask HSAG questions, receive clarification on HSAG's validation feedback, and receive guidance on the PIP design and implementation.

Interventions

At the time of this report, the Standard Plans had not progressed to reporting interventions for their PIPs. In the next EQR technical report, the Standard Plans will report causal/barrier analysis activities, interventions, and the baseline performance indicator outcomes.

Conclusions

Strengths, Weaknesses, and Recommendations

Since the Standard Plans did not begin operations in SFY 2021, annual PIP validation had not been completed at the time of this report; therefore, HSAG had not yet identified strengths, weaknesses, why weaknesses exist, or recommendations.

OPTIONAL EQR ACTIVITIES

Introduction

EQR-related activities are the mandatory and optional activities, as set forth in 42 CFR §438.358, which produce the data and information that the EQRO analyzes when performing the EQR. EQR-related activities are intended to improve states' ability to oversee and manage the health plans they contract with for services and help improve their performance with respect to the quality of, timeliness, of and access to care. In addition to the mandatory sections described in the prior sections of this report, CMS designates six optional activities. The state has discretion to determine which optional EQR-related activities, if any, it wishes to conduct and include in the annual EQR. Upon implementation of managed care, the Department contracted HSAG to conduct the following five optional activities:

- Encounter data validation (EDV)
- Administration or validation of consumer or provider surveys of quality of care
- Calculation of PMs
- Focus studies on quality of care
- Rating of health plans

In addition to the mandatory and optional activities recognized by CMS, the Department also contracted HSAG to conduct the following tasks:

- Annual health plan performance reports
- Annual care management performance evaluation
- Collaborative QI forums

During SFY 2021, HSAG worked with the Department to prepare for the optional and additional EQR activities as described below.

Description of Optional Activities

Encounter Data Validation

Accurate and complete encounter data are critical to the success of any managed care program. State Medicaid agencies rely on the quality of the encounter data submissions to accurately and effectively monitor and improve the program's quality of care, generate accurate and reliable reports, develop appropriate capitated rates, and obtain complete and accurate utilization information. The completeness and accuracy of these data are essential to the success of the state's overall management and oversight of its Medicaid managed care program and in demonstrating its responsibility and stewardship. Federal regulations at 42 CFR Part 438 include several provisions related to encounter data, including:

- All providers must submit claims and/or encounters to states for all services regardless of the method by which a health plan pays its providers. (42 CFR §438.818[a])
- States must review and validate encounter data on initial receipt from their PHPs, and again when they submit the encounter data to CMS. (42 CFR §438.818[a][2])
- States must submit complete, accurate, and timely encounter data to CMS in a standardized format. (42 CFR §438.818[a][3])
- CMS may impose penalties on states for noncompliance by withholding Federal Financial Participation (FFP) funds. (42 CFR §438.818[c])

The EDV study proposed in the EQRO's scope of work is scheduled to begin in SFY 2023. In preparation, HSAG drafted a methodology in alignment with the CMS EQR *Protocol 5. Validation of Encounter Data Reported by the Medicaid and CHIP Managed Care Plan: An Optional EQR-Related Activity*, October 2019.[6]

The Department provided HSAG with a report produced by a previously contracted organization, and HSAG is considering that information to determine if revisions to the proposed methodology are needed. HSAG will continue to work with the Department and the PHPs throughout SFY 2022 in preparation for conducting an EDV study the following year.

Consumer Surveys

The Department contracted with HSAG to administer the Consumer Assessment of Healthcare Providers and Systems (CAHPS®)[7] 5.1 Adult Medicaid Health Plan Survey and Child Medicaid Health Plan Survey with the Children with Chronic Conditions (CCC) measurement set in SFY 2022 to enrollees in

[6] Department of Health and Human Services, Centers for Medicare & Medicaid Services. *Protocol 5. Validation of Encounter Data Reported by the Medicaid and CHIP Managed Care Plan: An Optional EQR-Related Activity*, October 2019. Available at: https://www.medicaid.gov/medicaid/quality-of-care/downloads/2019-eqr-protocols.pdf. Accessed on: Jan 28, 2022.

[7] CAHPS® is a registered trademark of the Agency for Healthcare Research and Quality (AHRQ).

the PHPs and four statewide populations (i.e., EBCI Tribal Option, FFS, BH I/DD Tailored Plan-eligible, and BH populations).

The CAHPS surveys ask adult members or the parents/caretakers of child members to report on and evaluate their experiences with the healthcare services received in the last six months. These surveys cover topics that are important to members, such as the communication skills of providers and the accessibility of services.

During SFY 2021, HSAG conducted several survey preparation activities with the Department. HSAG finalized the text that will be used in the cover letters and reminder postcards, as well as finalized the supplemental questions that will be included in the CAHPS surveys.

HSAG will administer the survey in SFY 2022 and include the results in the SFY 2022 EQR technical report.

Calculation of Performance Measures

Regulations at 42 CFR §438.358(c)(3) specify that the EQRO may calculate PMs in addition to those specified by the state for inclusion in the PHPs' QAPI programs. Calculation of these additional PMs are an optional EQR-related activity. At the time of this report, the Department had not designated any additional measures for HSAG to validate. However, at the request of the Department in future years, HSAG will validate additional PMs in accordance with CMS EQR *Protocol 7. Calculation of Additional Performance Measures: An Optional EQR-Related Activity*, October 2019.[8]

Studies on Quality

States may direct their EQROs to conduct focus studies for QI, administrative, legislative, or other purposes. Focus studies may examine clinical or nonclinical aspects of care provided by health plans and assess quality of care at a specific point in time. HSAG's EQRO contract with the Department specifies the EQRO shall be requested to conduct reviews and studies to ensure that services provided to Medicaid members are medically necessary, appropriate, and provided at the most efficient level of care. When such a request is made by the Department, HSAG will conduct the focus study in accordance with CMS EQR *Protocol 9. Conducting Focus Studies of Health Care Quality: An Optional EQR-Related Activity*, October 2019.[9]

[8] Department of Health and Human Services, Centers for Medicare & Medicaid Services. *Protocol 7. Calculation of Additional Performance Measures: An Optional EQR-Related Activity*, October 2019. Available at: https://www.medicaid.gov/medicaid/quality-of-care/downloads/2019-eqr-protocols.pdf. Accessed on: Jan 28, 2022.

[9] Department of Health and Human Services, Centers for Medicare & Medicaid Services. *Protocol 9. Conducting Focus Studies of Health Care Quality: An Optional EQR-Related Activity,* October 2019. Available at: https://www.medicaid.gov/medicaid/quality-of-care/downloads/2019-eqr-protocols.pdf. Accessed on: Jan 28, 2022.

Quality Rating of Health Plans

Regulations at 42 CFR §438.334 require the development of a Medicaid managed care quality rating system. The Department contracted HSAG to develop an annual Report Card that compares the PHPs to each other in key performance areas to help Medicaid beneficiaries select from the participating PHPs. Information in the Report Card shall include quality PMs, measures of provider and member satisfaction, and operational measures that relate to overall quality performance. During SFY 2022, HSAG will work with the Department to determine the strategy, approach, comparison measures, timing, and report format for the Report Card. HSAG will also stay abreast of CMS' development of a protocol for this activity. Currently, *Protocol 10. Assist With Quality Rating of Medicaid and CHIP Managed Care Organizations, Prepaid Inpatient Health Plans, and Prepaid Ambulatory Health Plans: An Optional EQR-Related Activity*, is reserved by CMS.

Annual Performance Reports

HSAG has also been contracted by the Department to annually produce a detailed performance report for each Standard Plan that includes the findings of its annual EQR and quality of care activities. HSAG held planning meetings with the Department in SFY 2021 to discuss the contents and format of the performance reports. In SFY 2022, HSAG will develop performance reports for each Standard Plan in accordance with the scope of work and the direction provided by the Department. The performance reports will be included in the SFY 2022 EQR technical report.

Annual Care Management Performance Evaluation

The health plans are required to offer care management services for Medicaid managed care members with chronic health conditions, or complex health issues or situations. The Department requires health plan reporting of data on care management services to determine the number of individuals, the types of conditions, and the impact care management services have on members receiving those services. HSAG is contracted to facilitate the annual collection and validation of data submitted by the health plans regarding their AMH, at-risk child, high-risk pregnancy, and long-term services and supports (LTSS) care management programs. HSAG will work with the Department throughout SFY 2022 to develop a methodology and report template to present findings for each health plan. In addition, HSAG will participate with the Department in an annual meeting with the health plans to review results from the care management data, identify opportunities for improvement, and determine efficient application of care management services to positively impact outcomes.

Collaborative Quality Improvement Forums

The Department may direct HSAG to organize and conduct at least one quality forum each contract year to promote the statewide goals of delivering high-quality, accessible care to members. The quality forum will be an interactive, face-to-face conference that includes the Standard Plans and Department stakeholders. HSAG will schedule the quality forums and create an agenda, subject to the approval of the Department, for day-to-day activities and will maintain minutes from each quality forum. During SFY 2022, HSAG will collaborate with the Department to finalize frequency and timing of quality forums, strategy and approach, and forum topics.

PRIOR EQRO RECOMMENDATIONS

Introduction

42 CFR §438.364(a)(6) requires that the EQR technical report include an assessment of the degree to which each MCO, PIHP, PAHP, or PCCM entity has addressed effectively the recommendations for QI made by the EQRO during the previous year's EQR. As SFY 2022 is NC's first year of operation for statewide managed care and, therefore, no prior EQR technical report was produced, follow-up on SFY 2022 EQR recommendations will be included in the SFY 2023 EQR technical report.

APPENDIX A. EQR TECHNICAL REPORT REQUIREMENTS

Table A-1 lists the required and recommended elements for the EQR technical report, per 42 CFR §438.364 and recent CMS technical report feedback received by states. Table A-1 also identifies the page number where the corresponding information that addresses each element is located in the EQR technical report, if applicable. In the table below, TBD represents "to be determined" to indicate that this information will be included in subsequent reports and page numbers will be able to be determined.

Table A-1—EQR Technical Report Elements

	Required Elements	Page Number
1	The state submitted its EQR technical report by April 30.	NA
2	All eligible Medicaid and CHIP plans are included in the report.	26
3	Required elements are included in the report:	
3a	Describe the manner in which the data from all activities conducted in accordance with 42 CFR §438.358 were aggregated and analyzed, and conclusions were drawn as to the quality of, timeliness of, and access to the care furnished by the MCO, PIHP, PAHP, or PCCM entity.	6
3b	An assessment of the **strengths and weaknesses of each MCO, PIHP, PAHP and PCCM entity** with respect to (a) quality, (b) timeliness, and (c) access to the healthcare services furnished by each MCO, PIHP, PAHP, or PCCM entity (described in 42 CFR §438.310[c][2]) furnished to Medicaid and/or CHIP beneficiaries. Contain specific recommendations for improvement of identified weaknesses.	7
3c	Describe how the state can **target goals and objectives in the quality strategy**, under 42 CFR §438.340, to better support improvement in the quality, timeliness, and access to healthcare services furnished to Medicaid and/or CHIP enrollees.	7
3d	Recommends improvements to the quality of healthcare services furnished by each MCO.	TBD
3e	Provides state-level recommendations for performance improvement.	TBD
3f	Ensures methodologically appropriate, comparative information about all MCOs.	TBD
3f	Assesses the degree to which each MCO has effectively addressed the recommendations for QI made by the EQRO during the previous year's EQR.	21
4	Validation of PIPs: A description of **PIP interventions** associated with each state-required PIP topic for the current EQR review cycle, and the following for the validation of PIPs: **objectives, technical methods of data collection and analysis, description of data obtained, and conclusions drawn from the data.**	12
4a	**Interventions.**	15

	Required Elements	Page Number
4b	• **Objectives.**	12
4c	• **Technical methods of data collection and analysis.**	14
4d	• **Description of data obtained.**	14
4e	• **Conclusions drawn from the data.**	15
5	Validation of performance measures: A description of **objectives, technical methods of data collection and analysis, description of data obtained, and conclusions drawn from the data.**	9
5a	• **Objectives.**	TBD
5b	• **Technical methods of data collection and analysis.**	TBD
5c	• **Description of data obtained.**	TBD
5d	• **Conclusions drawn from the data.**	11
6	Review for compliance: 42 CFR §438.358(b)(1)(iii) (cross-referenced in CHIP regulations at 42 CFR §457.1250[a]) requires the technical report include information **on a review, conducted within the previous three-year period**, to determine each MCO's, PIHP's, PAHP's or PCCM's compliance with the standards set forth in Subpart D and the QAPI requirements described in 42 CFR §438.330. Additional information that needs to be included for compliance is listed below:	8
6a	• **Objectives.**	8
6b	• **Technical methods of data collection and analysis.**	TBD
6c	• **Description of data obtained.**	TBD
6d	• **Conclusions drawn from the data.**	TBD
7	**Each remaining activity** included in the technical report must include a **description of the activity** and the following information:	16
7a	• **Objectives.**	TBD
7b	• **Technical methods of data collection and analysis.**	TBD
7c	• **Description of data obtained.**	TBD
7d	• **Conclusions drawn from the data.**	TBD

APPENDIX B. GLOSSARY OF ACRONYMS

42 CFR	Title 42 of the Code of Federal Regulations
AMH	Advanced Medical Home
BH	Behavioral Health
CAHPS	Consumer Assessment of Healthcare Providers and Systems
CCC	Children with Chronic Conditions
CFSP	Children and Families Specialty Plan
CHIP	Children's Health Insurance Program
CIHA	Cherokee Indian Hospital Authority
CMA	Care Management Agency
CMS	Centers for Medicare & Medicaid Services
CY	Calendar Year
DHHS	Department of Health and Human Services
EBCI	Eastern Band of Cherokee Indians
EDV	Encounter Data Validation
EQR	External Quality Review
EQRO	External Quality Review Organization
FFP	Federal Financial Participation
FFS	Fee-for-Service
HEDIS	Healthcare Effectiveness Data and Information Set
HSAG	Health Services Advisory Group, Inc.
I/DD	Intellectual/Developmental Disability
IMCE	Indian Managed Care Entity
LME	Local Management Entity
LTSS	Long-Term Services and Supports
MCO	Managed Care Organization
MY	Measurement Year
NC	North Carolina
NCQA	National Committee for Quality Assurance
PAHP	Prepaid Ambulatory Health Plan
PCCM	Primary Care Case Management
PHP	Prepaid Health Plan
PIHP	Prepaid Inpatient Health Plan
PIP	Performance Improvement Project

PM ..... Performance Measure
PMV ..... Performance Measure Validation
QAPI ..... Quality Assessment and Performance Improvement
QI ..... Quality Improvement
SFY ..... State Fiscal Year
TBI ..... Traumatic Brain Injury

APPENDIX C. HEALTH PLAN LIST

NC Medicaid Managed Care Health Plans

Table C-1 displays the Medicaid managed care health plans in operation for SFY 2022.

Table C-1—NC Medicaid Managed Care Health Plans

Health Plan Name	Abbreviation	Health Plan Type	Regions
AmeriHealth Caritas North Carolina, Inc.	AmeriHealth	PHP	Statewide
Healthy Blue of North Carolina	Healthy Blue	PHP	Statewide
UnitedHealthcare of North Carolina, Inc.	UnitedHealthcare	PHP	Statewide
WellCare of North Carolina, Inc.	WellCare	PHP	Statewide
Carolina Complete Health, Inc.	Carolina Complete	PHP	Regions 3, 4, and 5

Table C-2 displays additional health plan types scheduled to operate in subsequent contract years.

Table C-2—Additional Health Plans for Subsequent Contract Years

BH I/DD Tailored Plans			
Health Plan Name	**Abbreviation**	**Health Plan Type**	**Counties**
Alliance Health	Alliance	Local Management Entity/Managed Care Organization (LME/MCO)	Cumberland, Durham, Johnston, Mecklenburg, Orange, Wake
Eastpointe	Eastpointe	LME/MCO	Bladen, Duplin, Edgecombe, Greene, Lenoir, Robeson, Sampson, Scotland, Warren, Wayne, Wilson
Partners Health Management	Partners	LME/MCO	Burke, Cabarrus, Catawba, Cleveland, Davie, Forsyth, Gaston, Iredell, Lincoln, Rutherford, Stanly, Surry, Union, Yadkin
Sandhills Center	Sandhills	LME/MCO	Anson, Davidson, Guilford, Harnett, Hoke, Lee, Montgomery, Moore, Randolph, Richmond, Rockingham
Trillium Health Resources	Trillium	LME/MCO	Brunswick, Carteret, Columbus, Nash, New Hanover, Onslow, Pender, Beaufort, Bertie, Camden, Chowan, Craven, Currituck, Dare, Gates, Halifax, Hertford, Hyde, Jones, Martin, Northampton, Pamlico, Pasquotank, Perquimans, Pitt, Tyrrell, Washington
Vaya Health	Vaya	LME/MCO	Alamance, Alexander, Alleghany, Ashe, Avery, Buncombe, Caldwell, Caswell, Chatham, Cherokee, Clay, Franklin, Graham, Granville, Haywood, Henderson, Jackson, Macon, Madison, McDowell, Mitchell, Person, Polk, Rowan, Stokes, Swain, Transylvania, Vance, Watauga, Wilkes, Yancey

EBCI Tribal Option			
Category	**Abbreviation**	**Health Plan Type**	**Regions**
EBCI Tribal Option	EBCI	IMCE	Cherokee, Graham, Haywood, Jackson, and Swain (Opt in counties: Buncombe, Clay, Henderson, Macon, Madison, and Transylvania)

NC MEDICAID

ANNUAL QUALITY REPORT

DECEMBER 2020

NC DEPARTMENT OF
HEALTH AND
HUMAN SERVICES
Division of Health Benefits

TABLE OF CONTENTS

EXECUTIVE SUMMARY

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

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

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

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

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

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

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

Summary of NC Medicaid Quality Performance 2019

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

INTRODUCTION

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

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

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

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

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

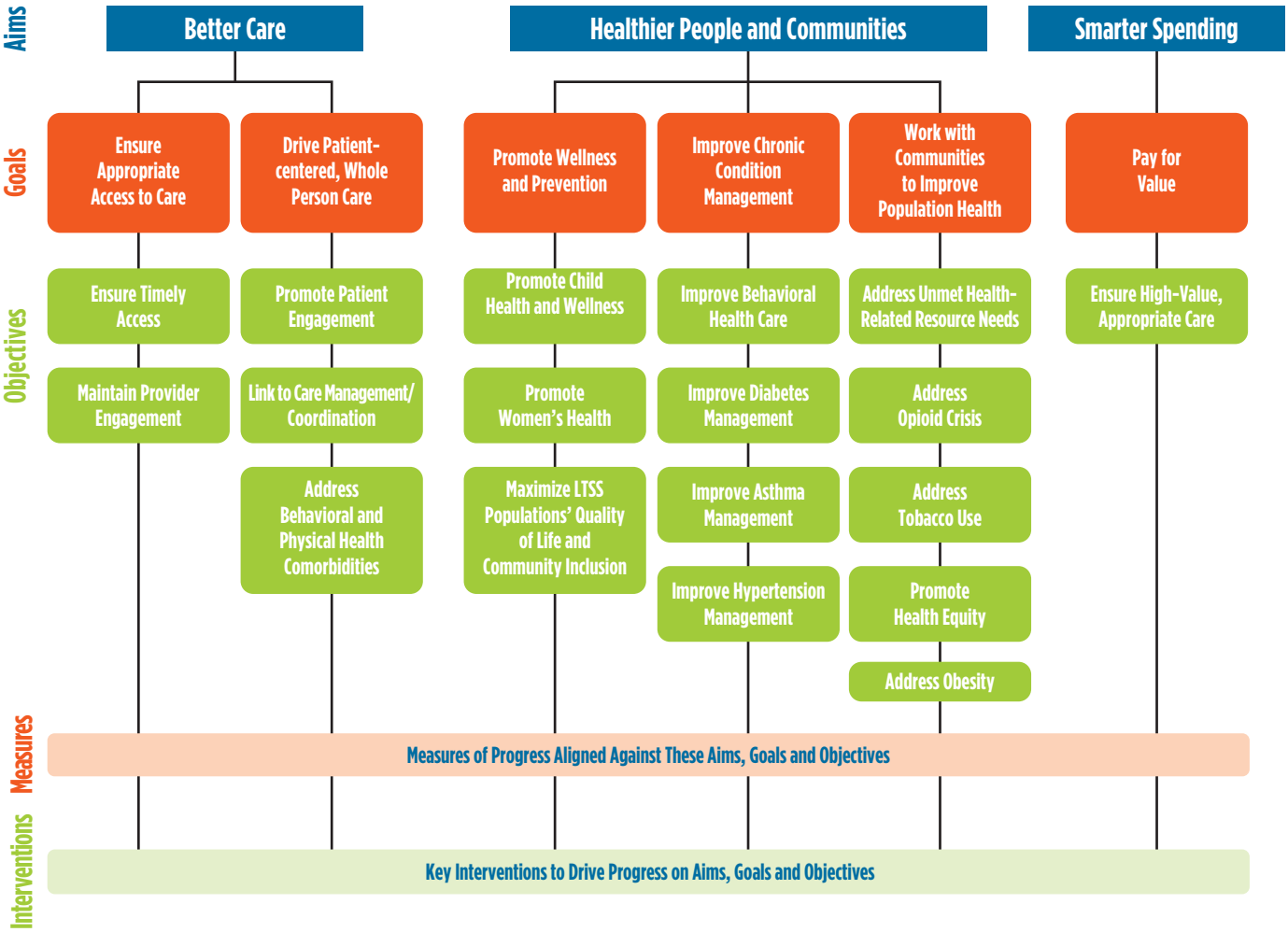
Central to NC Medicaid's effort to improve quality, care delivery and health outcomes is a commitment to address the social and environmental factors that directly impact health outcomes and cost as well as promoting "Healthy Opportunities" for North Carolinians. To effectively address these challenges,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

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

NC Medicaid Quality Strategy

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

Figure 1. Overview of the Quality Strategy Framework



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

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

Quality Accountability Across NC Medicaid Health Plans

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

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

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

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

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

REPORT METHODOLOGY

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

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

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

Data Sources

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

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

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

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

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

How to Read the Performance Rates

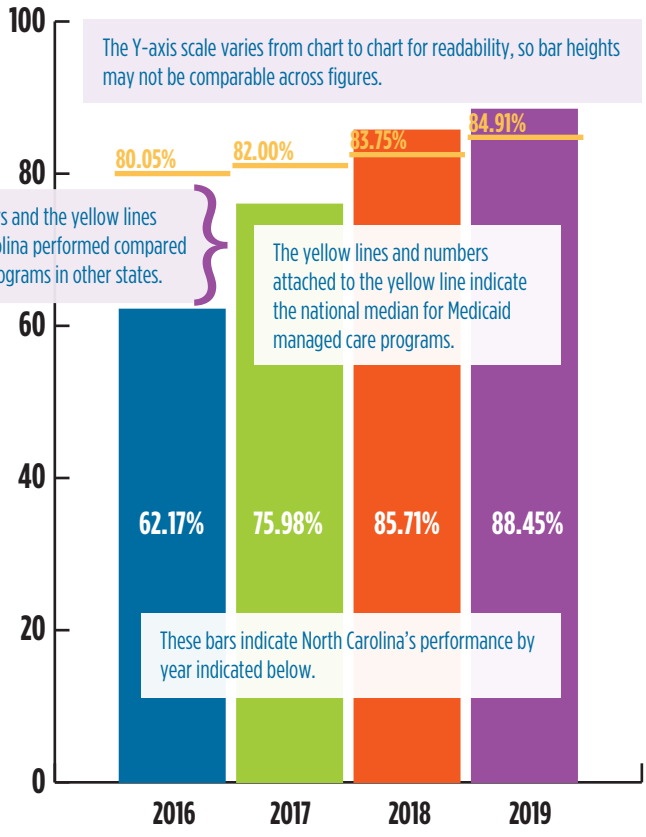
North Carolina's performance against national rates is indicated as follows:

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

How to Read the Charts in This Report

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

Figure 2. Example Chart



NC Medicaid Quality Performance 2016-2019

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

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

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

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

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

Table 1: Goal 1 – Ensure Appropriate Access to Care

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

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

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

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

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

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

Access for Children and Adolescents

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

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

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

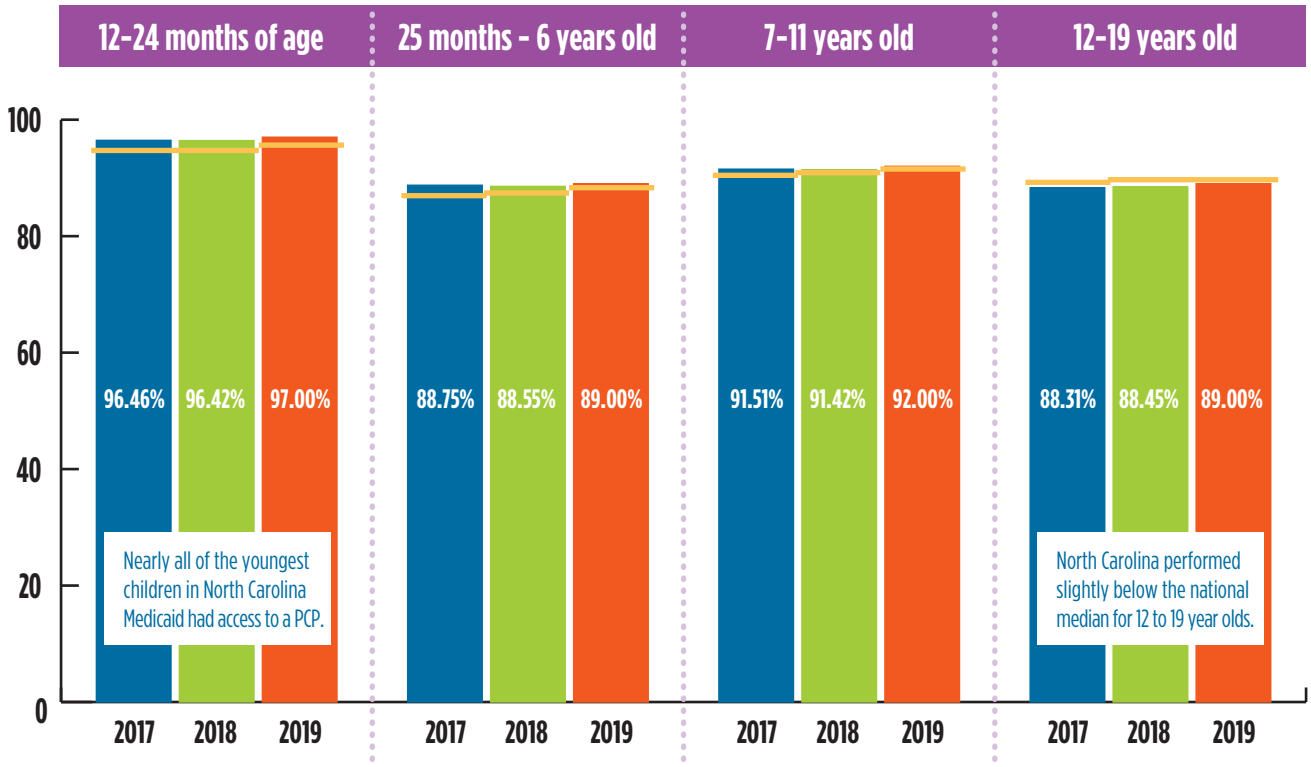


Chart 2. Well-Child Visits in First 15 Months of Life (6+ Visits) – *This chart illustrates, for 2016 through 2019, the proportion of children in NC Medicaid that had at least six well-child visits during their first 15 months of life.*

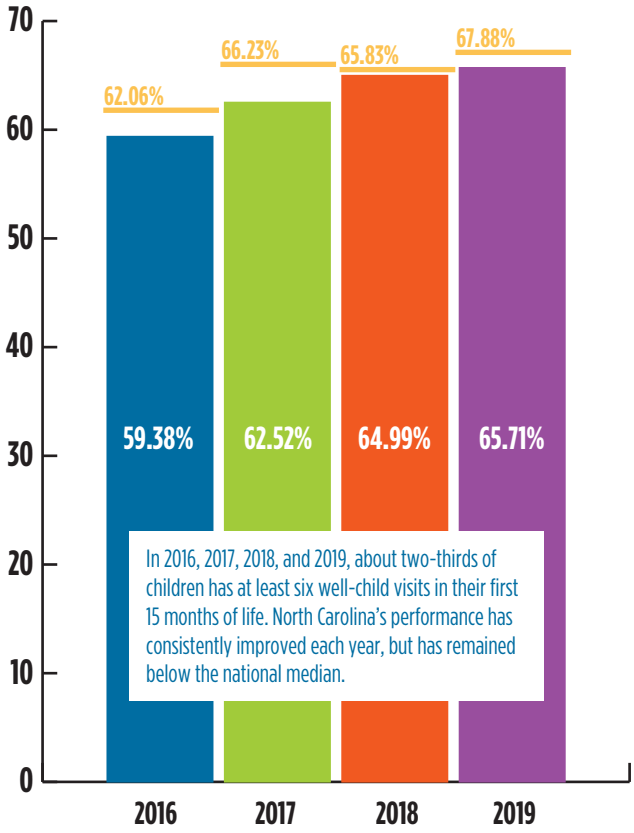
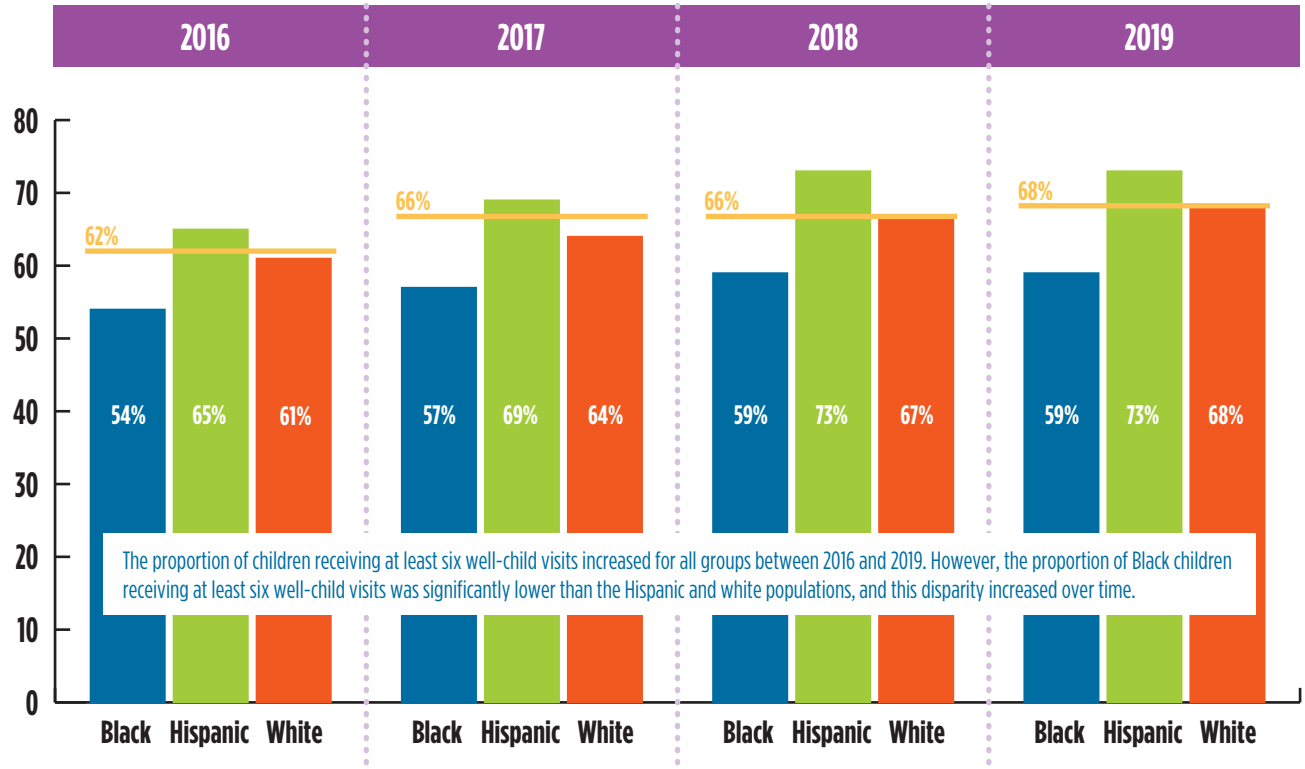


Chart 3. Well-Child Visits in First 15 Months of Life (6+ Visits) – *This chart compares, for 2016 through 2019, the rates at which NC Medicaid enrolled children had at least six well-child visits during their first 15 months of life by race/ethnicity.*[15]



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

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

Between 2016 and 2019, the rate at which three- to six-year-olds in North Carolina Medicaid received at least one annual well-child visit stayed relatively flat.

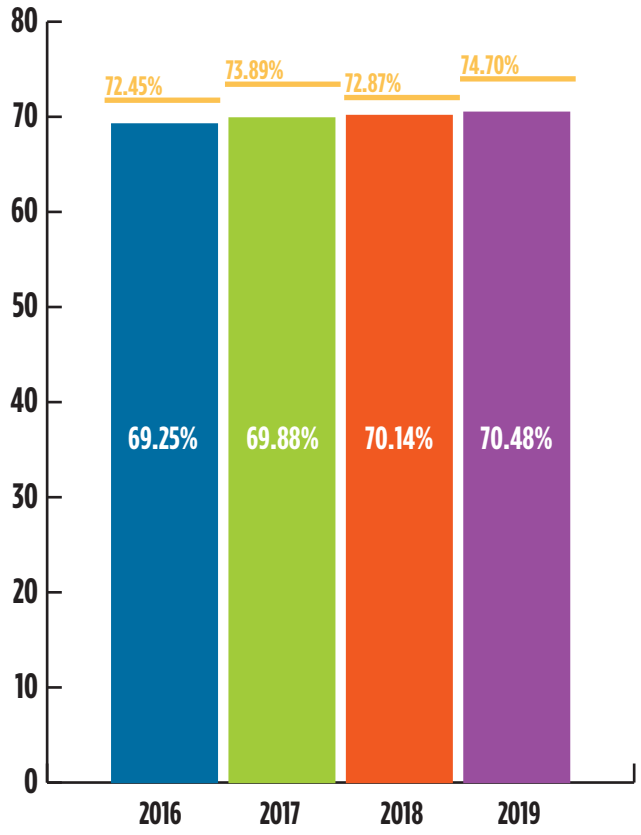
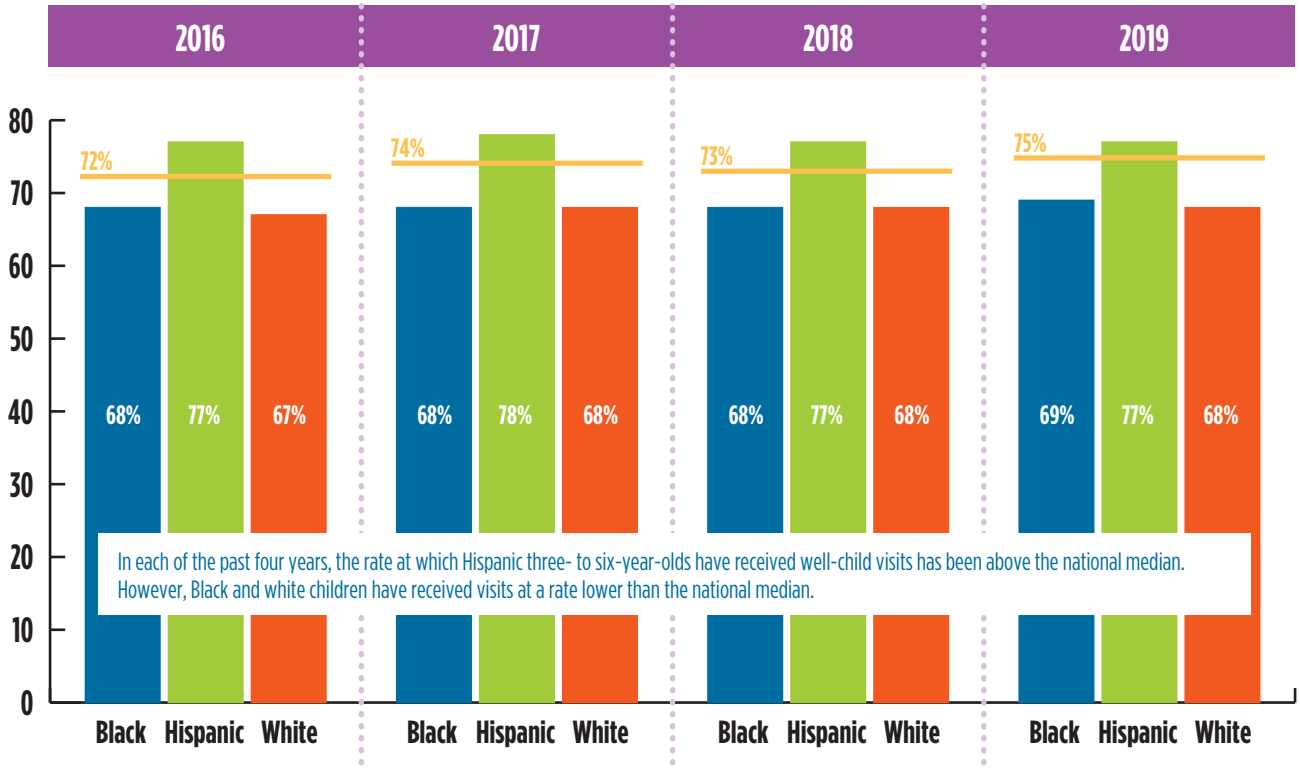


Chart 5. Well-Child Visits in the Third to Sixth Years of Life – *This chart illustrates the proportion of three- to six-year-olds in NC Medicaid that had at least one annual well-child visit for 2016 through 2019 by race/ethnicity.*[16]



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

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

Perception of Access for Adults

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

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

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

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

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

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

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

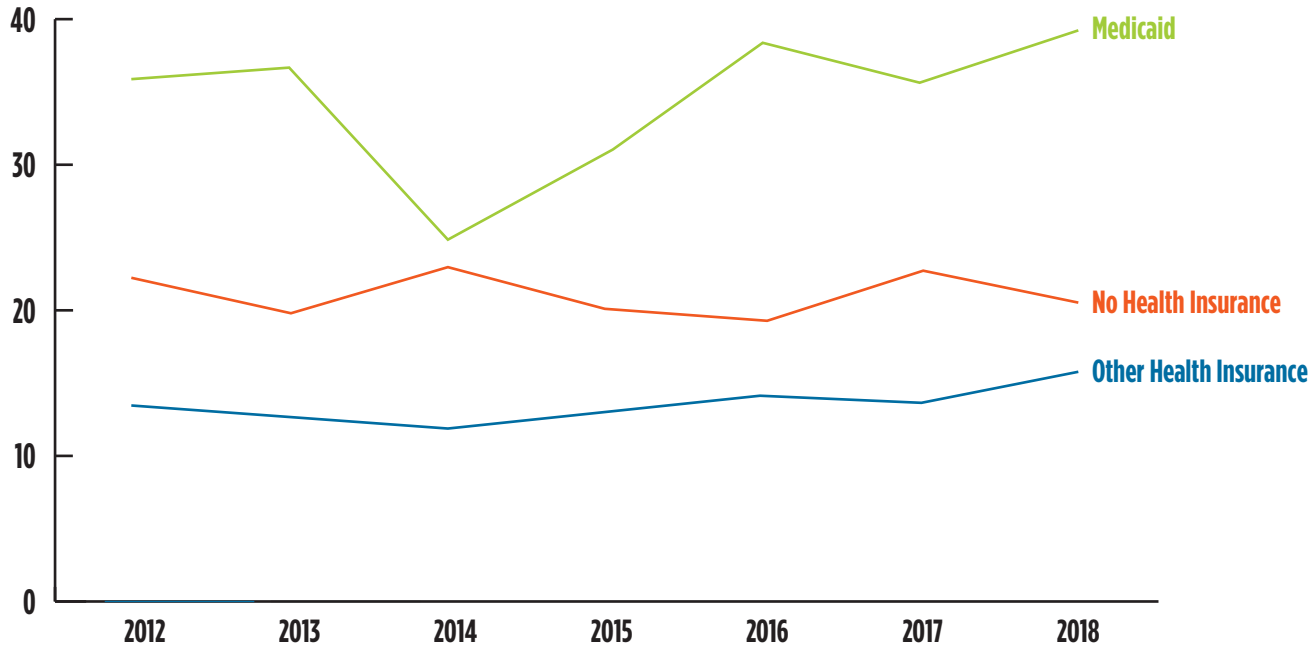
Measure Name	2016 Rates %	2017 Rates %	2018 Rates %	2019 Rates %	Comparison to 2019 National Median
Antidepressant Medication Management					
Acute Phase	55	55	55	58	★★
Continuation Phase	39	38.6	39	39	★★
Diabetes Screening for People with Schizophrenia or Bipolar Disorder Who are Using Antipsychotic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

Coordinated, Whole-person Care

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

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

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

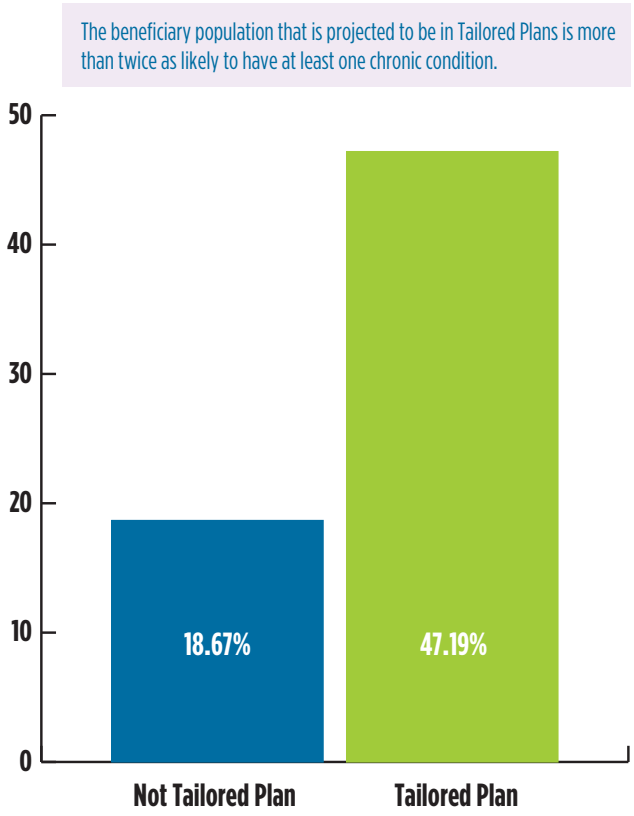


[18] *Hwang et al. Effects of integrated delivery system on cost and quality. Am J Managed Care. 2013;19(5):e175-e184*

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

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

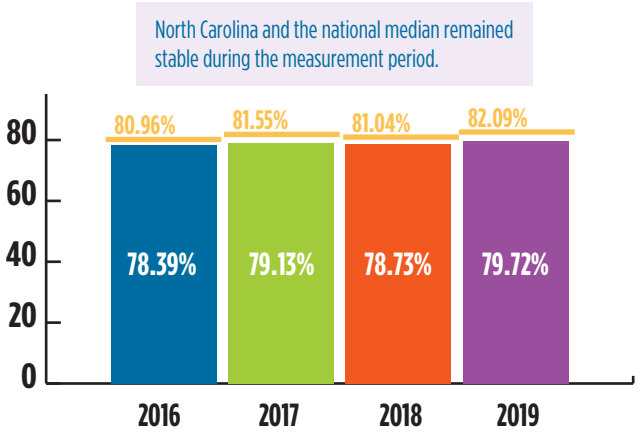
Chart 7. Population projected to be in a Behavioral Health I/DD Tailored Plan that at Least One Chronic Physical Health Condition – *This chart compares the proportion of individuals in Behavioral Health I/DD Tailored Plans with one or more chronic physical health condition(s) to individuals not in Behavioral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



Diabetes and Schizophrenia

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

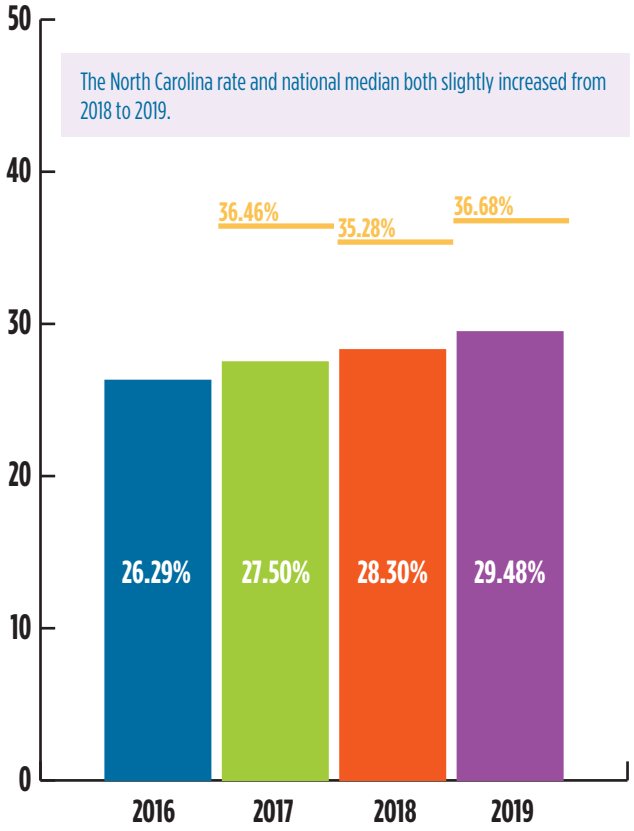
Chart 8. Diabetes Screening for People with Schizophrenia or Bipolar Disorder – *This chart illustrates the proportion of 18 to 64-year-olds in NC Medicaid with schizophrenia or bipolar disorder who were dispensed an antipsychotic medication and received a diabetes screening during the measurement year.*



[21] *North Carolina Center for Health Statistics, https://schs.dph.ncdhhs.gov/data/brfss/medicaid/docs/Medicaid_2018_tables.pdf, 2018.*
[22] *Newcomer JW et al. Abnormalities in Glucose Regulation During Antipsychotic Treatment of Schizophrenia. Arch Gen Psychiatry. 2002;59(4):337–345. doi:10.1001/archpsyc.59.4.33*

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

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



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

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

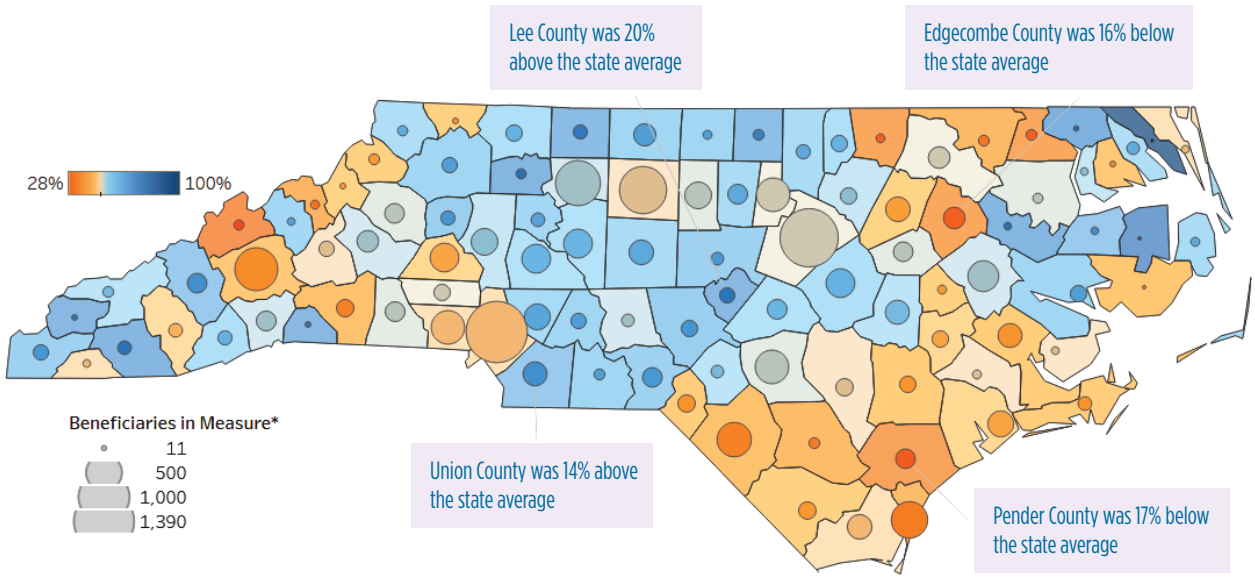
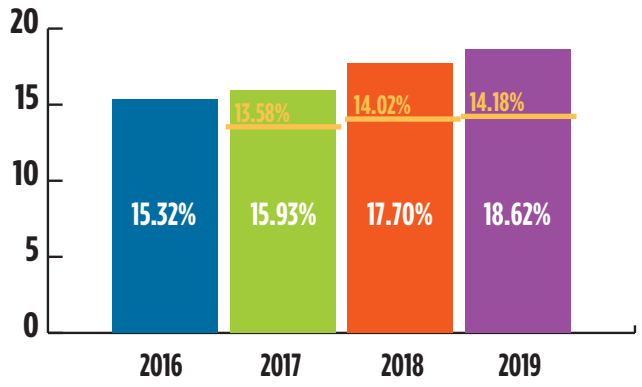


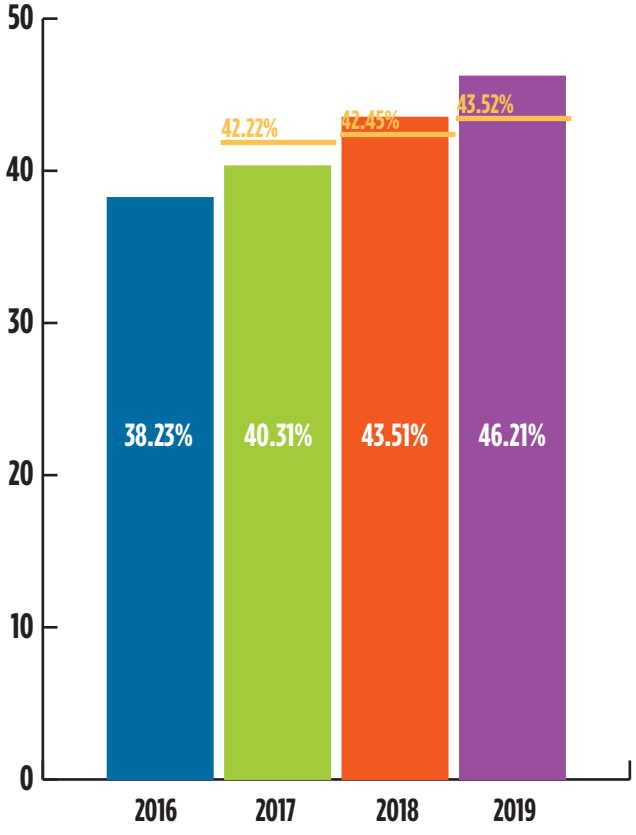
Chart 10. Initiation and Engagement of Alcohol and Other Drug Dependence (AOD) Treatment (Total Rates) – *This chart shows the percentage of beneficiaries for 2016 through 2019 the percentage of beneficiaries who; 1) initiated treatment through an inpatient AOD admission, outpatient visit, intensive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

TOTAL RATE: ENGAGEMENT OF AOD TREATMENT

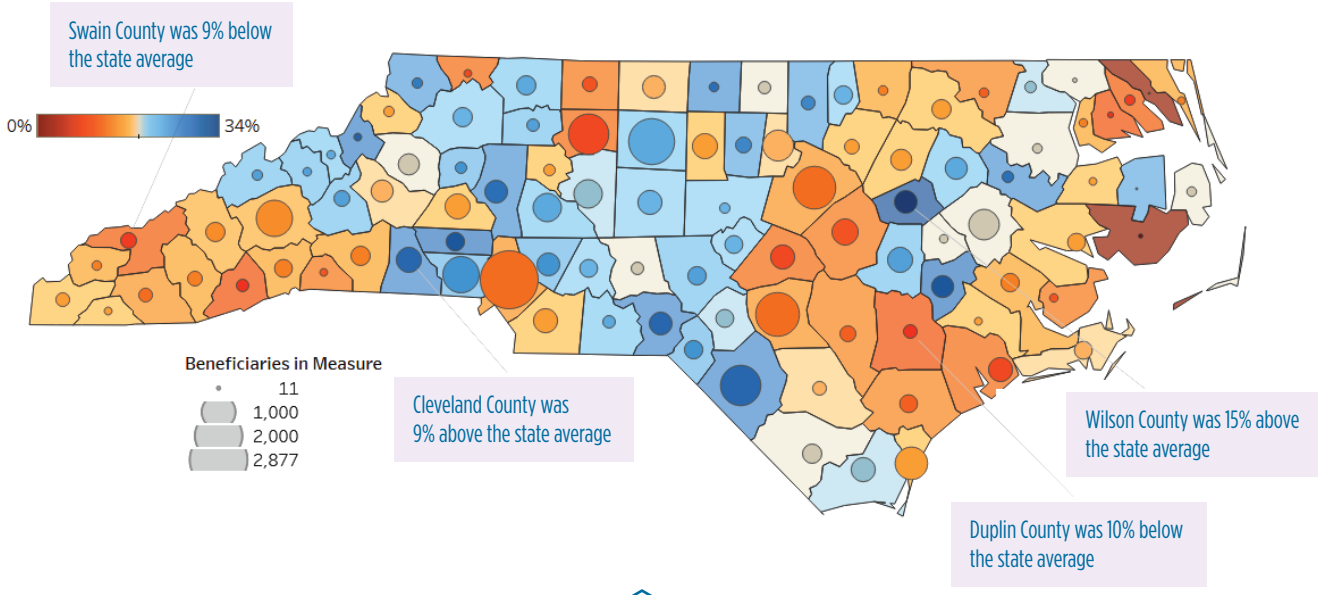
The rates at which North Carolina Medicaid beneficiaries are initiating and engaging in AOD treatment have steadily increased each year from 2016 to 2019. North Carolina was at or above the national median for both measures in 2018 and 2019.



TOTAL RATE: INITIATION OF AOD TREATMENT



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



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

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

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

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

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

A. Promote Wellness and Prevention – Children's Health

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

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

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

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

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

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

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

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

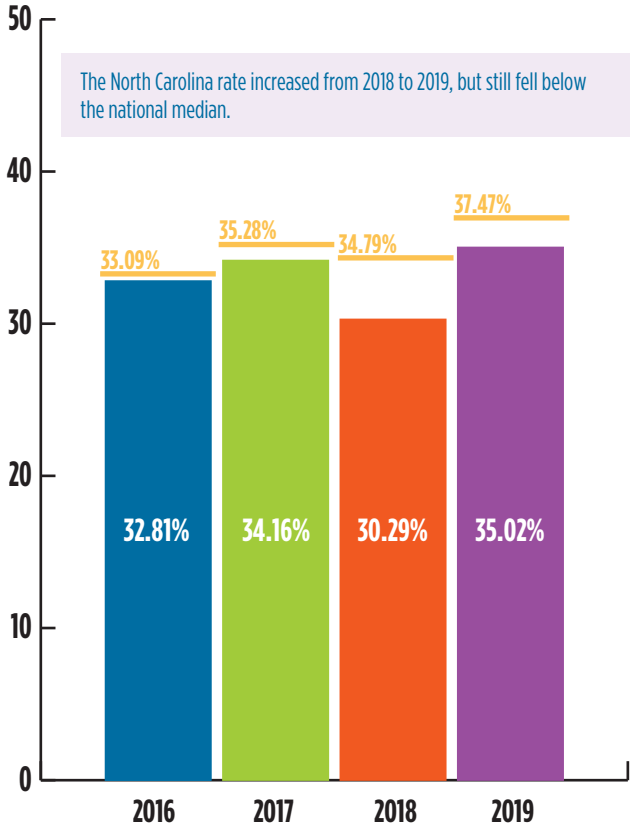
[27] *CMS Scorecard 2018. https://www.medicaid.gov/state-overviews/scorecard/ambulatory-care-emergency-department-visits/index.html*
[28] *Combination 10 includes DTaP, IPV, MMR, HiB, HepB, VZV, PCV, HepA, RV and Influenza vaccinations.*
[29] *Combination 2 includes at least one meningococcal conjugate vaccine within a date of service on or between the beneficiary's 11th and 13th birthdays, plus at least one Tdap vaccine with a date of service on or between the beneficiary's 10th and 13th birthdays, and at least two HPV vaccines with different dates of service on or between the beneficiary's 9th and 13the birthdays, with at least 146 days between the first and second dose of the HPV vaccine, or at least three HPV vaccines with different dates of service on or between the beneficiaries 9th and 13th birthdays.*
[30] *Combination 1 includes at least one meningococcal conjugate vaccine within a date of service on or between the beneficiary's 11th and 13th birthdays, plus at least one Tdap vaccine with a date of service on or between the beneficiary's 10th and 13th birthdays.*
[31] *Federal Fiscal Year 2019 Form CMS-416 report Federal Fiscal Year 2019. Calculated national rate from lines 1b and 9. https://www.medicaid.gov/medicaid/benefits/early-and-periodic-screening-diagnostic-and-treatment/index.html.*
[32] *CMS Medicaid Scorecard 2018. https://www.medicaid.gov/medicaid/benefits/early-and-periodic-screening-diagnostic-and-treatment/index.html*
[33] *Federal Fiscal Year 2019 Form CMS-416 report Federal Fiscal Year 2019. Calculated national rate from lines 1b and 12b. https://www.medicaid.gov/medicaid/benefits/early-and-periodic-screening-diagnostic-and-treatment/index.html.*

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

Immunizations

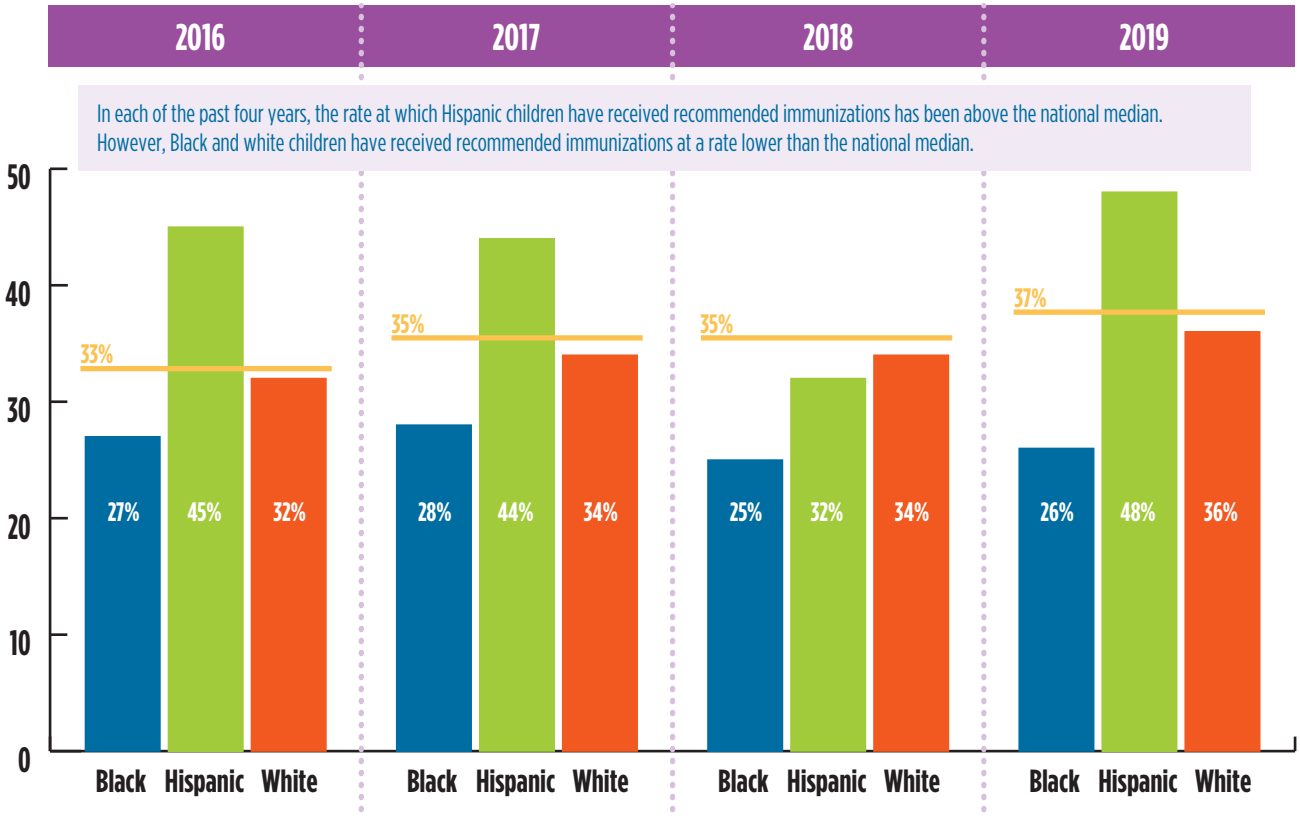
Child and adolescent immunizations promote health and wellness among pediatric populations by preventing serious illness and complications from disease.

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

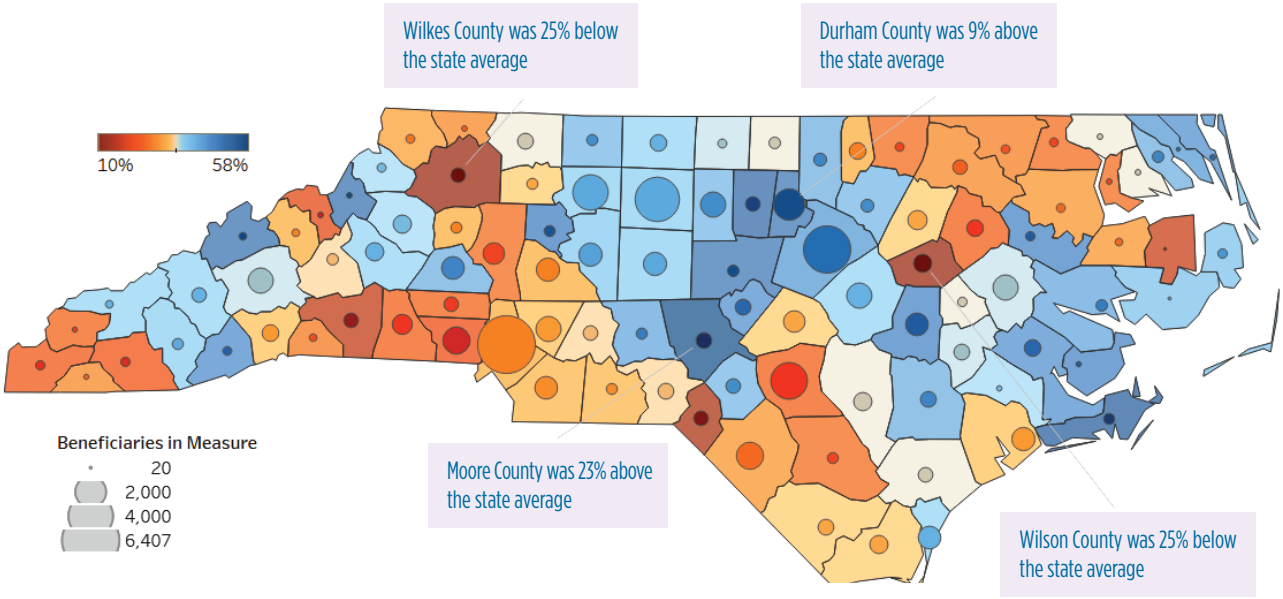


[34] *North Carolina's performance on this measure may be affected by billing documentation as not all providers document such services consistently. Better data would be available in provider electronic health records (EHRs).*

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



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



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

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

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

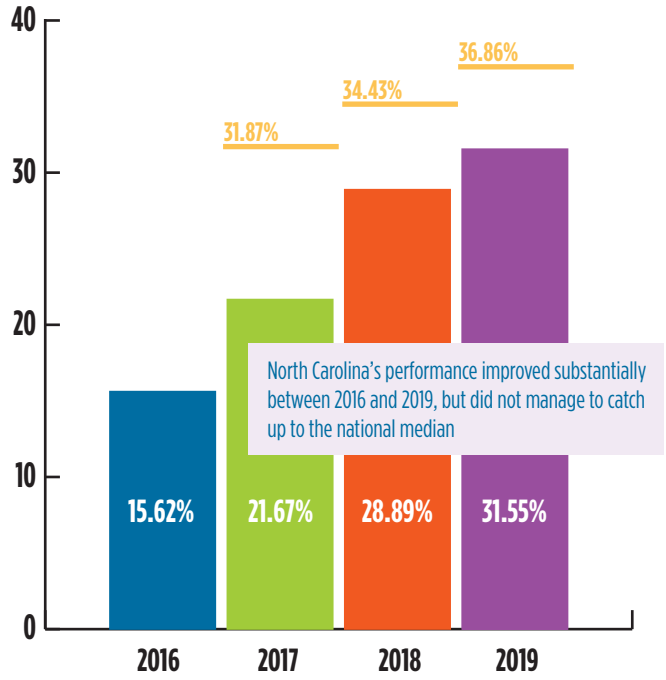
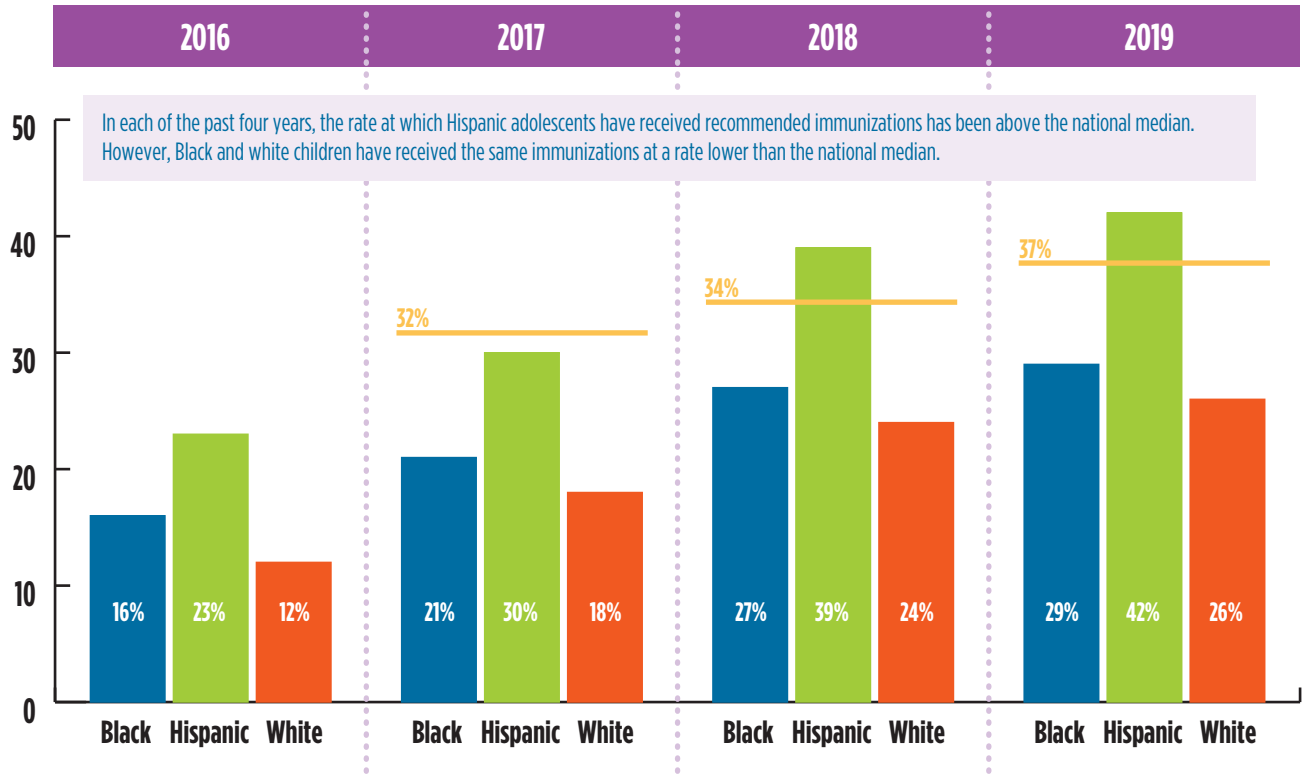


Chart 14. Immunizations for Adolescents (Combination 2) – *This chart illustrates, for 2016 through 2019, the proportion of 13 year-olds in NC Medicaid who received immunization combination two by their 13th birthday by race/ethnicity.*[36]



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

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

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

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

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

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

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

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

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

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

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

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

Health Screening for Women

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

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

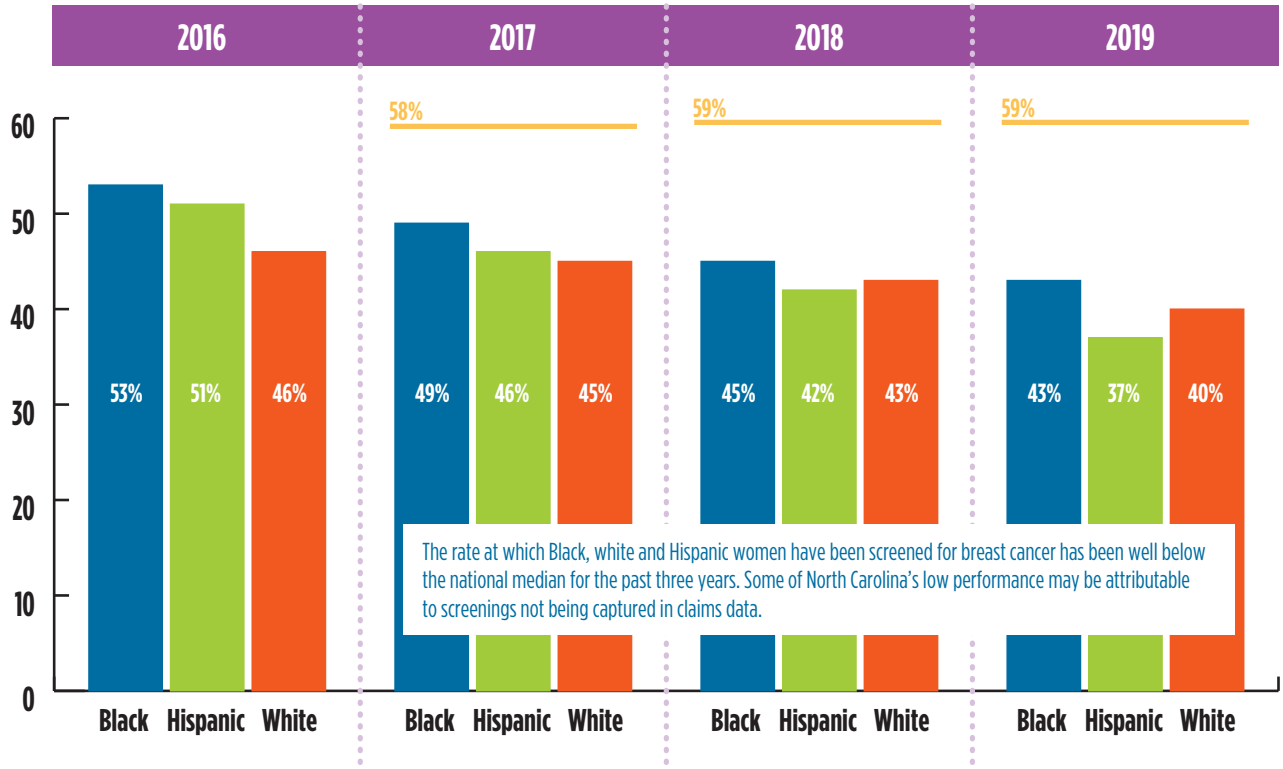
[40] *The Department is finalizing specifications for the Percentage of Low Birthweight Births measure specific to Medicaid populations at a Health Plan level.*

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

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

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

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



Maternal Health and Birth Outcomes

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

Low Birth Weight

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

Timeliness of Prenatal Care

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

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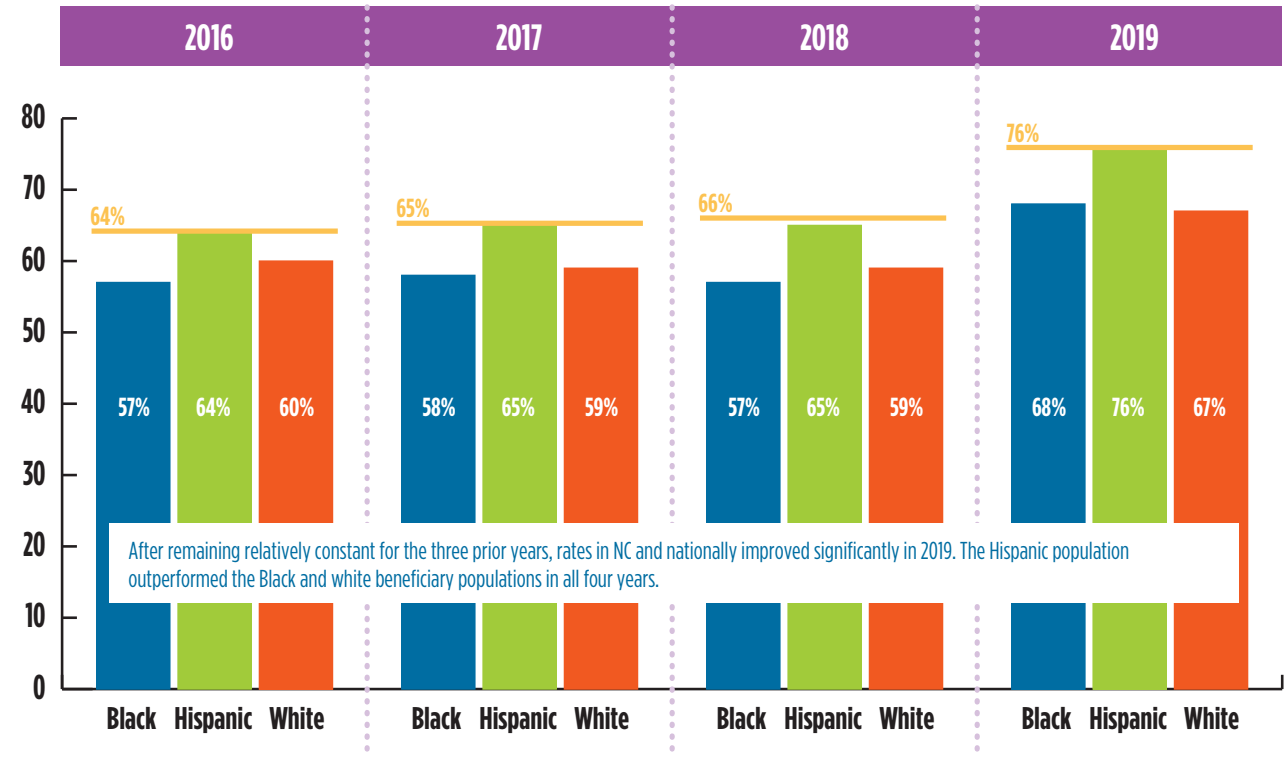
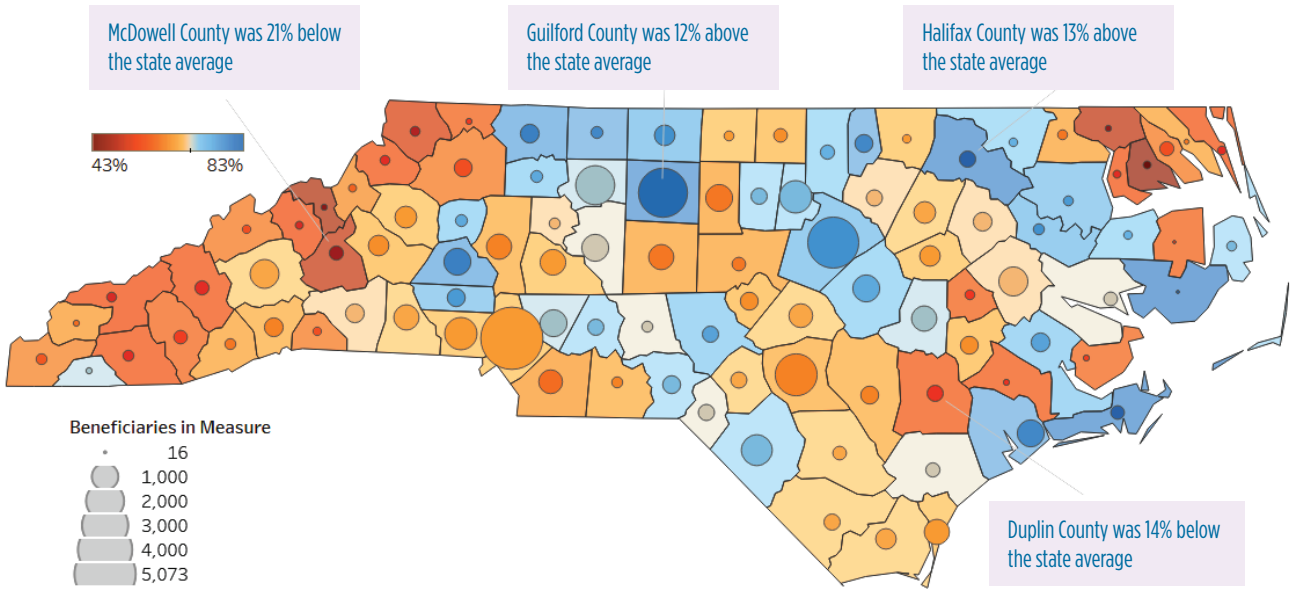
[44] *Smaller subgroups were excluded from the analysis.*

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

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



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



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

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

Moving Forward

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

Goal 4: Improve Chronic Condition Management

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

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

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

Table 5: Goal 4 - Improve Chronic Condition Management

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

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

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

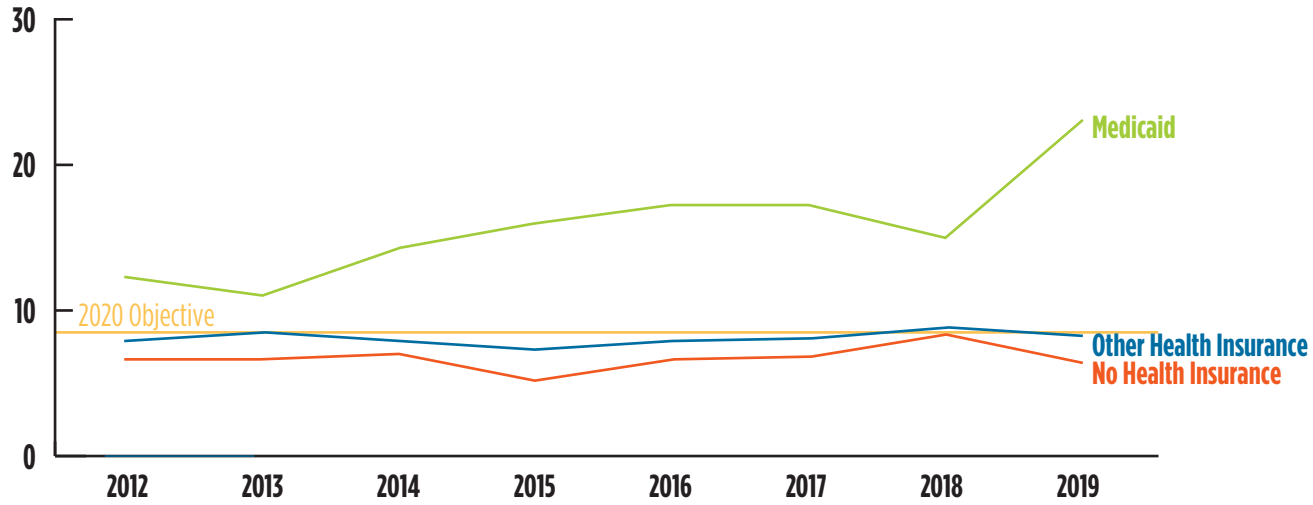
[49] *Star rating from 2018 Rates percentage as 2019 not yet available. CMS Adult Health Care Quality Measures https://www.medicaid.gov/medicaid/quality-of-care/performance-measurement/adult-and-child-health-care-quality-measures/adult-health-care-quality-measures/index.html*

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

Diabetes

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

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



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

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

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

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

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

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

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

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

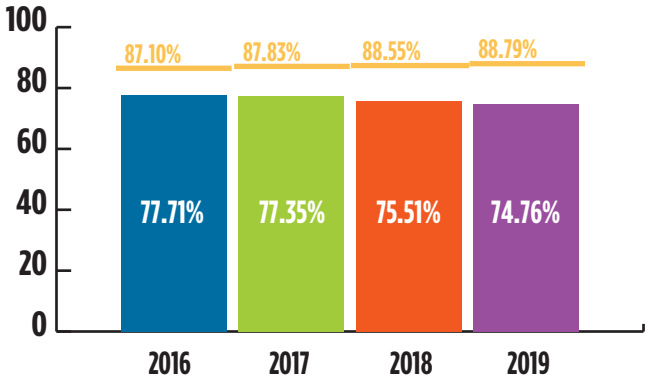
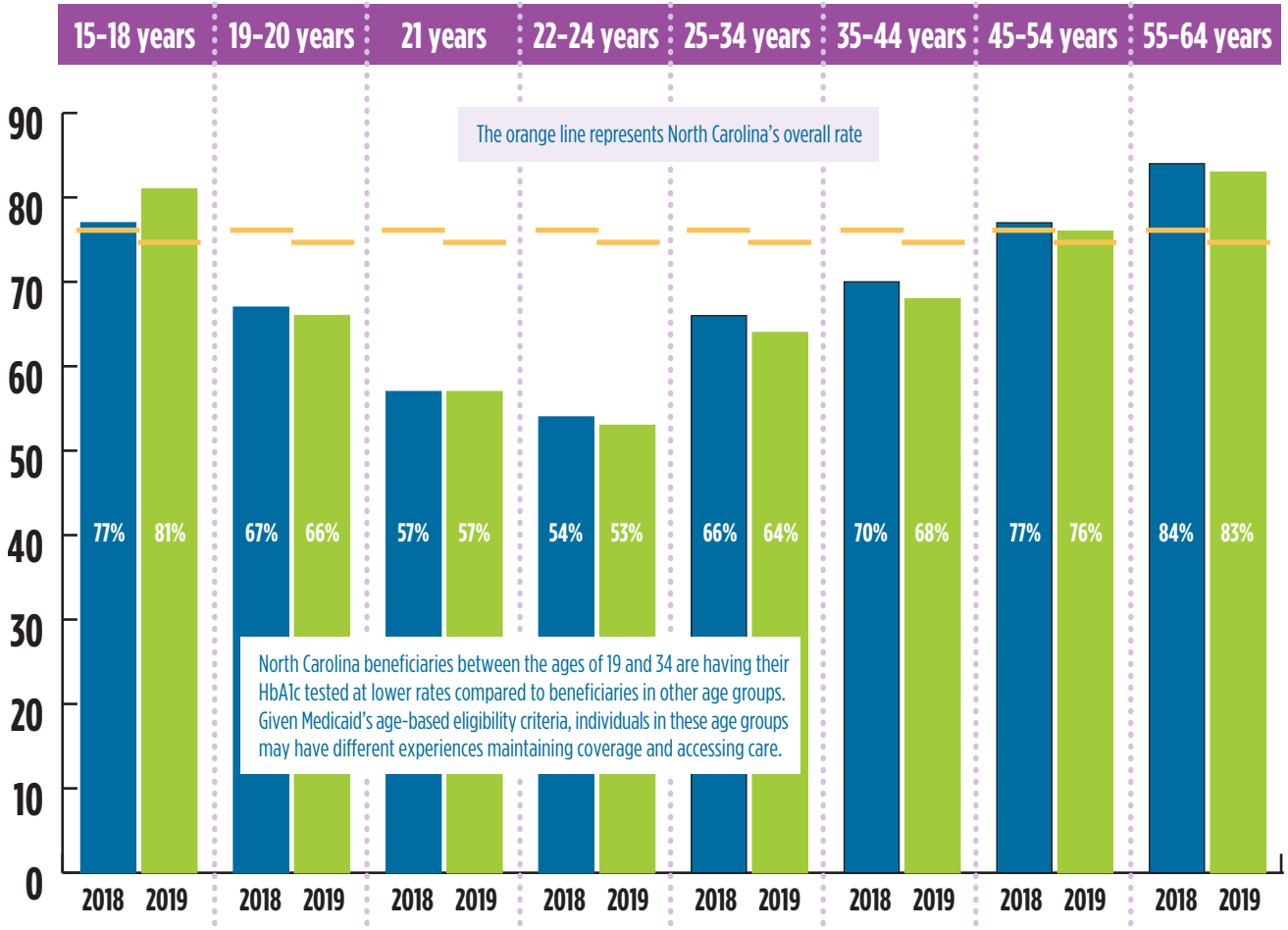


Chart 19. HbA1c Testing Age Group Disparities – *This chart illustrates, for 2018 and 2019, the proportion of individuals ages 18 to 75 in NC Medicaid with diabetes who received an HbA1c test by age group.*



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

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

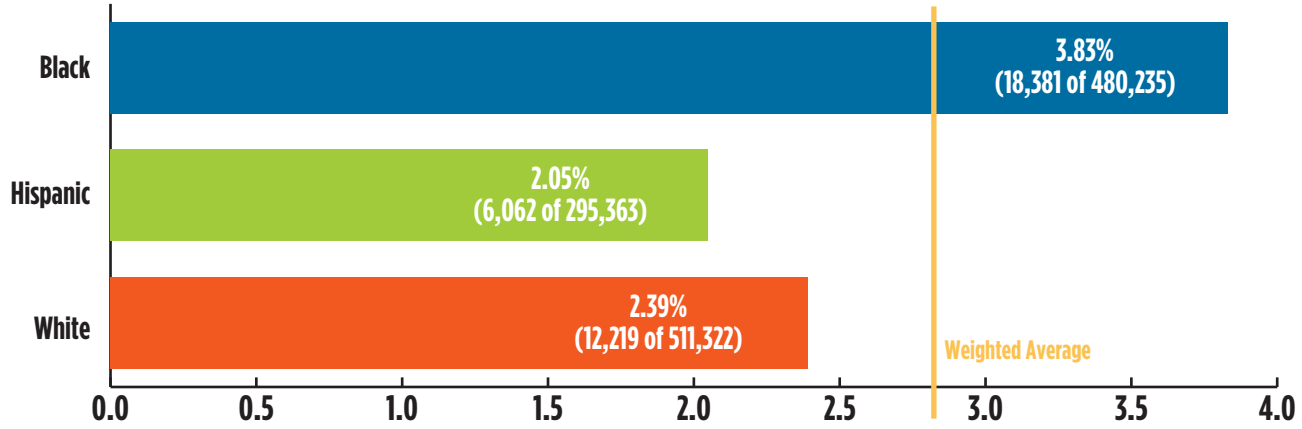
HbA1c Reporting

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

Asthma

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

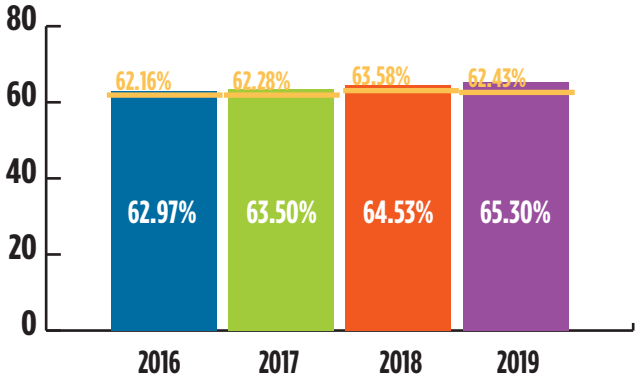
Chart 20. Asthma Prevalence – *This chart illustrates, as of October 2020, the proportion of beneficiaries ages 0 to 20 with an asthma diagnosis by race/ethnicity.*



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

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

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



[56] *North Carolina 2017 CHAMP Survey Results, available at: https://schs.dph.ncdhhs.gov/data/champ/201617/k11q01.html*
[57] *North Carolina 2018 Minority Health Report, available at: https://schs.dph.ncdhhs.gov/SCHS/pdf/MinorityHealthReport_Web_2018.pdf*
[58] *North Carolina 2017 CHAMP Survey Results, available at: https://schs.dph.ncdhhs.gov/data/champ/201617/k11q03.html*
[59] *Centers for Disease Control and Prevention. CDC Healthy Schools- Asthma in Schools, available at: https://www.cdc.gov/healthyschools/asthma/index.htm*

Goal 5: Work with Communities to Improve Population Health

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

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

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

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

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

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

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

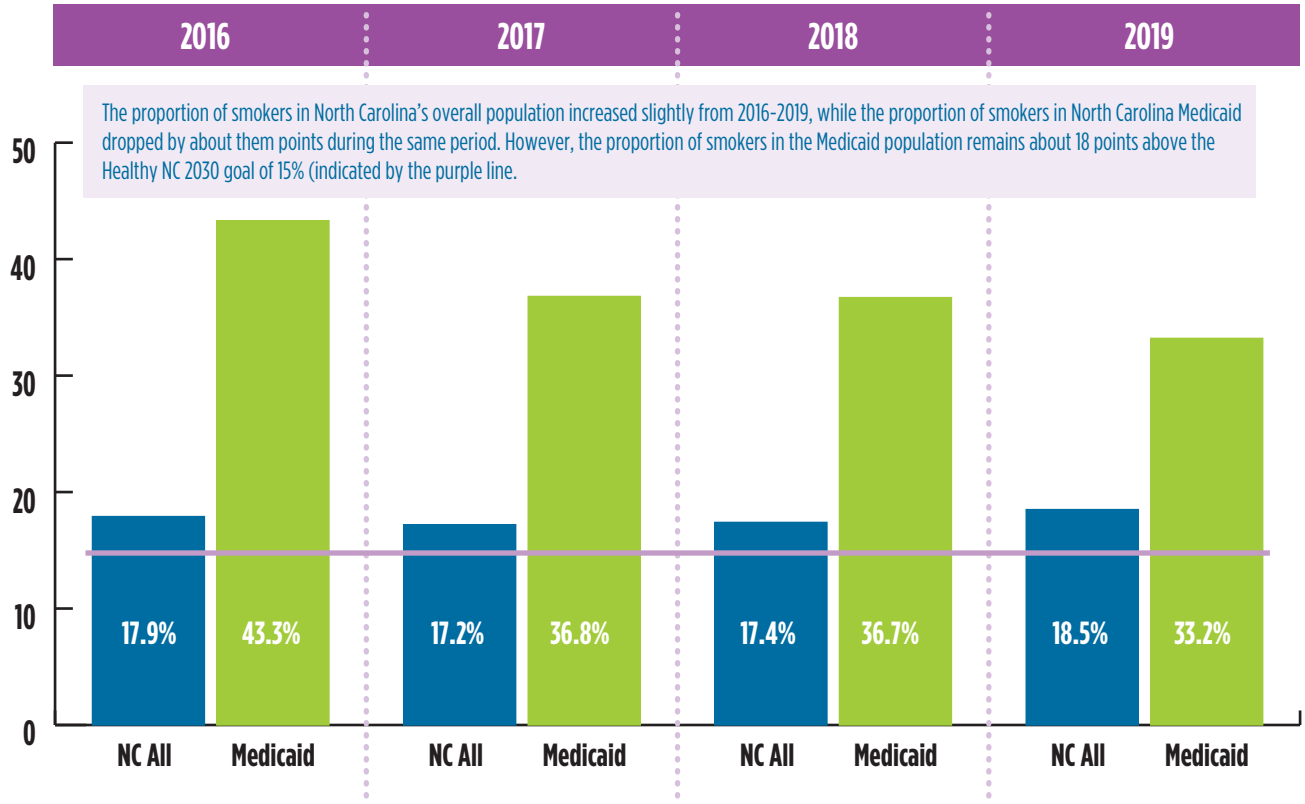
[63] *North Carolina's performance on this measure may be affected by billing documentation as not all providers document such services consistently. See discussion on page 20.*

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

Tobacco Use

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

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

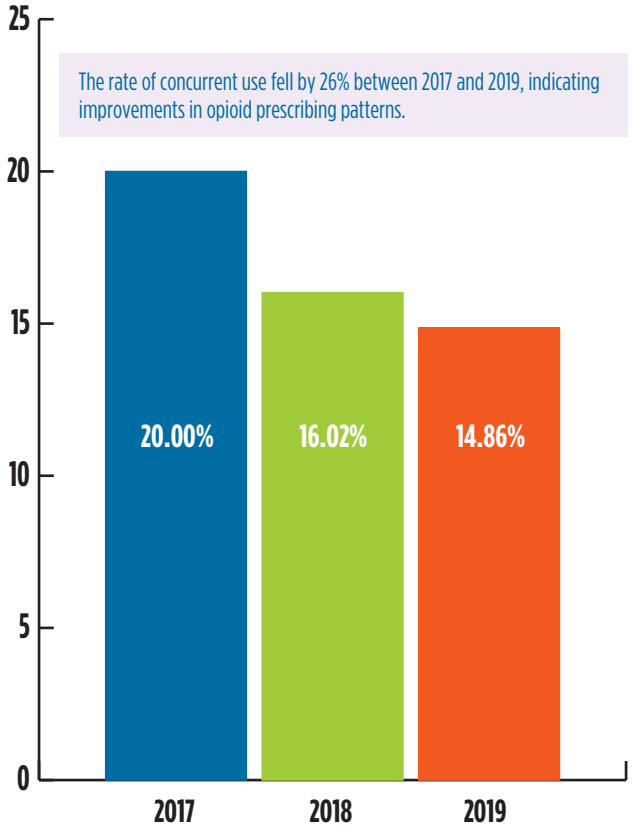


[65] *North Carolina Department of Health and Human Services. BRFSS Data for Adults in North Carolina Enrolled in Medicaid. https://schs.dph.ncdhhs.gov/data/brfss/medicaid/*

Opioid Misuse

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

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



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

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

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

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

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

Table 7: Goal 6 - Pay for Value

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

Avoidable and Preventable Utilization

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

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

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

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

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

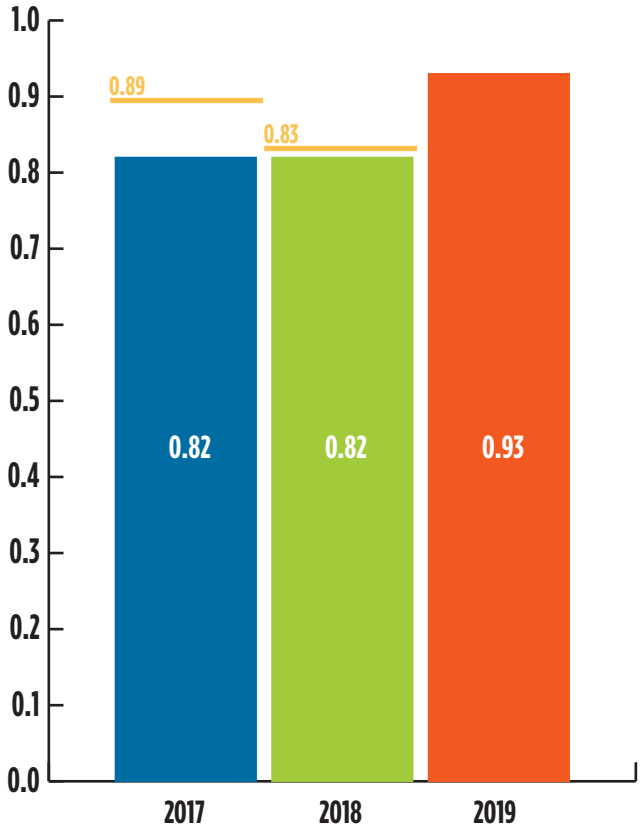
[72] *DHB is still finalizing its approach to measuring Total Cost of Care. This rate will be available in future reports.*

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

Readmission Rates

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

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



Looking Ahead

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

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

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

MOVING FORWARD: CONTINUOUS QUALITY IMPROVEMENT IN NC MEDICAID

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

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

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

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

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

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

STATEMENT ON THE COVID-19 PUBLIC HEALTH EMERGENCY

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

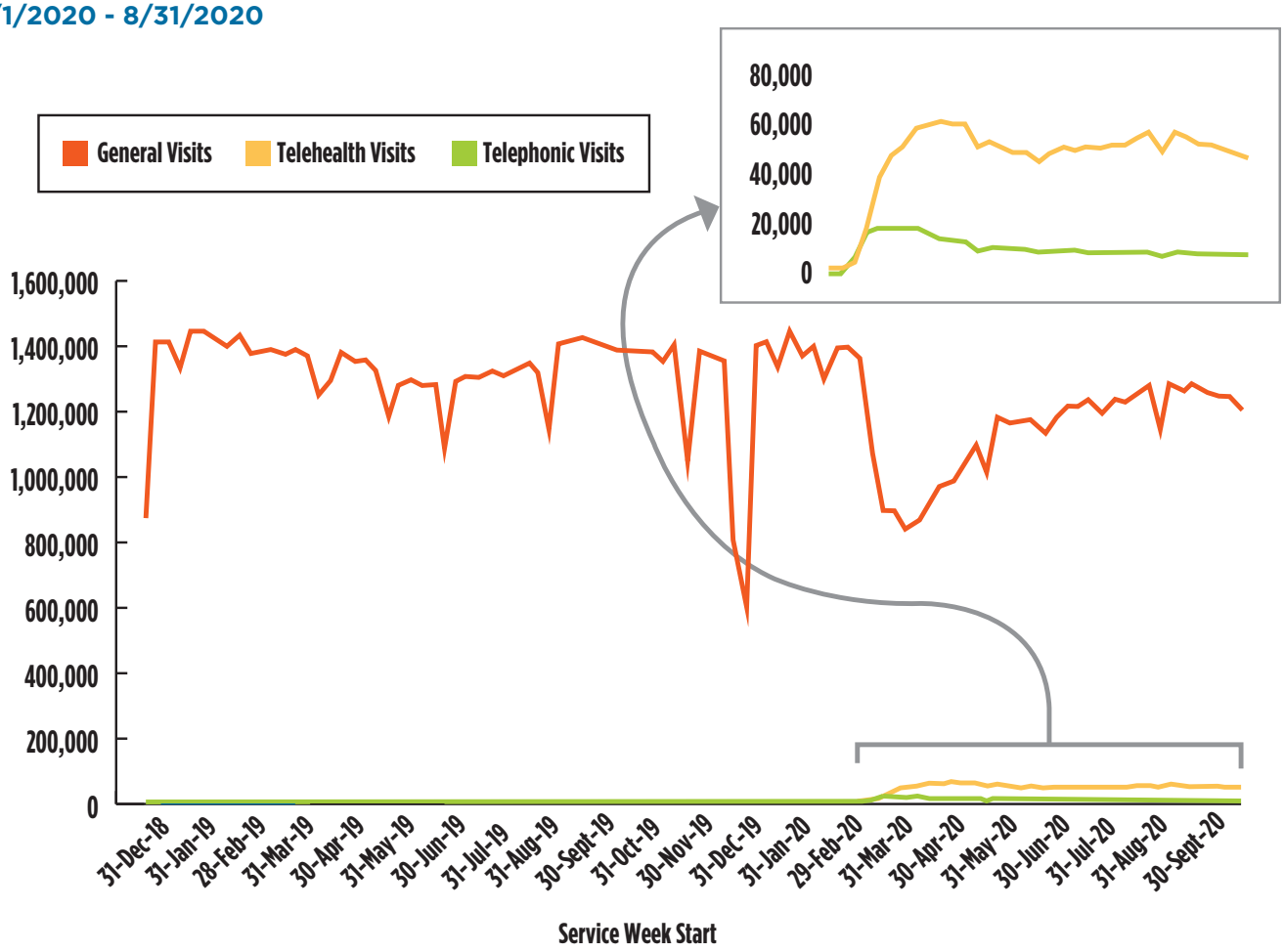
Starting March 3, 2020 through Oct. 15, 2020, 393,379 of NC Medicaid's 2,450,000 beneficiaries have been tested for the virus, with 42,060 testing positive. Throughout the COVID-19 public health emergency the Department has worked tirelessly to ensure that beneficiaries are receiving high-quality care.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

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

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

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

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



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

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

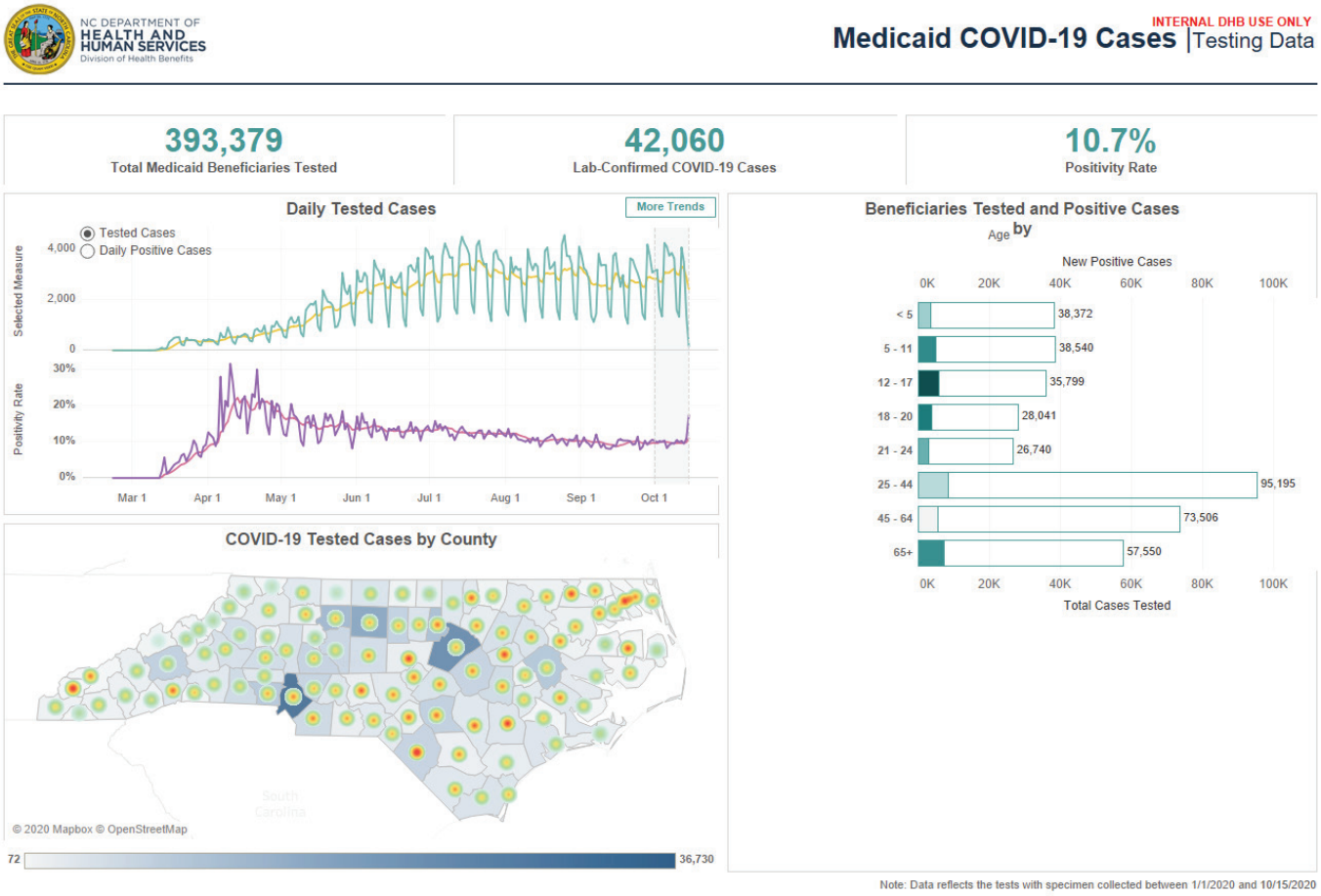
These points provide a utilization-based view of NC Medicaid's COVID-19-driven implementation of telemedicine policies. To achieve more depth, the state is taking the following approaches to obtain findings on the outcomes of telemedicine:

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

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

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

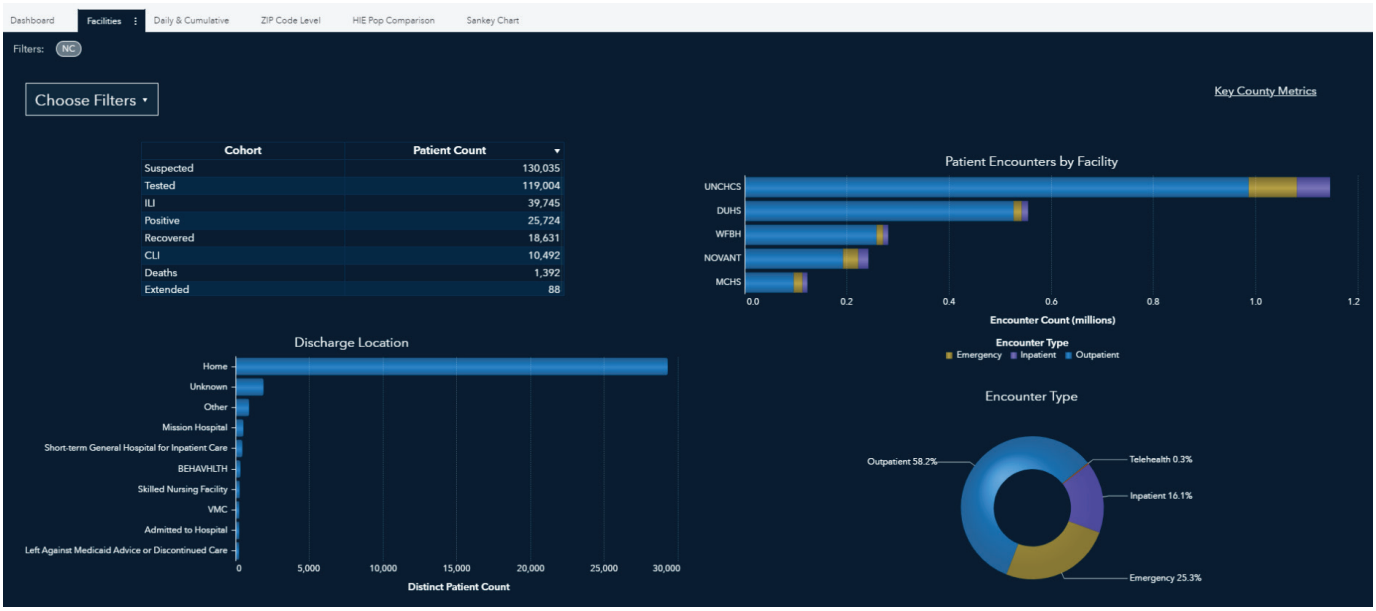
Figure 3. North Carolina Medicaid COVID-19 Active Cases Dashboard, summary tab reflecting specimens collected between 1/1/2020 and 10/15/2020



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

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

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



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

APPENDIX A. HEALTH PLAN QUALITY MEASURE SETS

1. Standard Plan Measure Set

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

2. Behavioral Health I/DD Tailored Plan Measure Set

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

[75] *Pending additional information regarding the collection of clinical data.*

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

EBCI Tribal Option Measure Set

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

CCNC Measure Set

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

APPENDIX B: NC MEDICAID MEASURE SOURCES

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

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

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

Measure Sources 1

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

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

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

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

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

Measure Sources 2

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

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

Measure Sources 3

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

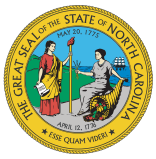
Measure	PQI	PDI
PDI-14: Asthma Admission Rate		X
PDI-15: Diabetes Short-Term Complications Admission Rate		X
PDI-16: Gastroenteritis Admission Rate		X
PDI-18: Urinary Tract Infection Admission Rate		X
PQI-01: Diabetes Short-Term Complication Admission Rate	X	
PQI-05: COPD or Asthma in Older Adults Admission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

Measure Sources 4

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

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

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



NC DEPARTMENT OF
HEALTH AND HUMAN SERVICES
Division of Health Benefits

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FORM CMS-416: ANNUAL EPSDT PARTICIPATION REPORT

State Code	Fiscal Year
NC	2020

CMS Generated Reporting of State Form CMS-416 Data Using T-MSIS — Enter X if your state gives CMS permission to generate the data for this form on behalf of your state using information reported in T-MSIS.

		Totals	Age Group <1	Age Group 1-2	Age Group 3-5	Age Group 6-9	Age Group 10-14	Age Group 15-18	Age Group 19-20
1a. Total Individuals Eligible for EPSDT	CN:	1,284,952	70,132	145,946	215,359	252,876	310,120	212,485	78,034
	MN:	2,014	46	82	129	291	492	489	485
	Total:	1,286,966	70,178	146,028	215,488	253,167	310,612	212,974	78,519
1b. Total Individuals Eligible for EPSDT for 90 Continuous Days	CN:	1,224,019	56,840	141,370	209,308	241,796	297,876	203,568	73,261
	MN:	1,472	18	65	103	224	360	326	376
	Total:	1,225,491	56,858	141,435	209,411	242,020	298,236	203,894	73,637
1c. Total Individuals Eligible Under a CHIP Medicaid Expansion	CN:	173,159	187	18,024	36,239	39,915	45,201	30,799	2,794
	MN:	0		0	0	0	0	0	0
	Total:	173,159	187	18,024	36,239	39,915	45,201	30,799	2,794
2a. State Periodicity Schedule			5	4	3	4	5	4	2
2b. Number of Years in Age Group			**1**	**2**	**3**	**4**	**5**	**4**	**2**
2c. Annualized State Periodicity Schedule			5.00	2.00	1.00	1.00	1.00	1.00	1.00
3a. Total Months of Eligibility	CN:	13,668,019	423,872	1,613,984	2,397,672	2,733,861	3,385,846	2,307,920	804,864
	MN:	15,313	149	700	1,098	2,294	3,675	3,369	4,028
	Total:	13,683,332	424,021	1,614,684	2,398,770	2,736,155	3,389,521	2,311,289	808,892
3b. Average Period of Eligibility	CN:	0.93	0.62	0.95	0.95	0.94	0.95	0.94	0.92
	MN:	0.87	0.69	0.90	0.89	0.85	0.85	0.86	0.89
	Total:	0.93	0.62	0.95	0.95	0.94	0.95	0.94	0.92
4. Expected Number of Screenings per Eligible	CN:		3.10	1.90	0.95	0.94	0.95	0.94	0.92
	MN:		3.45	1.80	0.89	0.85	0.85	0.86	0.89
	Total:		3.10	1.90	0.95	0.94	0.95	0.94	0.92
5. Expected Number of Screenings	CN:	1,412,674	176,204	268,603	198,843	227,288	282,982	191,354	67,400
	MN:	1,382	62	117	92	190	306	280	335
	Total:	1,414,056	176,266	268,720	198,935	227,478	283,288	191,634	67,735
6. Total Screens Received	CN:	1,026,251	261,515	291,251	143,919	105,079	133,031	78,417	13,039
	MN:	542	29	83	41	78	138	103	70
	Total:	1,026,793	261,544	291,334	143,960	105,157	133,169	78,520	13,109
7. SCREENING RATIO	CN:	0.73	1.00	1.00	0.72	0.46	0.47	0.41	0.19
	MN:	0.39	0.47	0.71	0.45	0.41	0.45	0.37	0.21
	Total:	0.73	1.00	1.00	0.72	0.46	0.47	0.41	0.19
8. Total Eligibles Who Should Receive at Least One Initial or Periodic Screen	CN:	1,166,077	56,840	141,370	198,843	227,288	282,982	191,354	67,400
	MN:	1,286	18	65	92	190	306	280	335
	Total:	1,167,363	56,858	141,435	198,935	227,478	283,288	191,634	67,735
9. Total Eligibles Receiving at Least One Initial or Periodic Screen	CN:	617,133	54,710	117,777	131,036	100,596	127,060	73,805	12,149
	MN:	461	8	39	40	78	134	96	66
	Total:	617,594	54,718	117,816	131,076	100,674	127,194	73,901	12,215
10. PARTICIPANT RATIO	CN:	0.53	0.96	0.83	0.66	0.44	0.45	0.39	0.18
	MN:	0.36	0.44	0.60	0.43	0.41	0.44	0.34	0.20

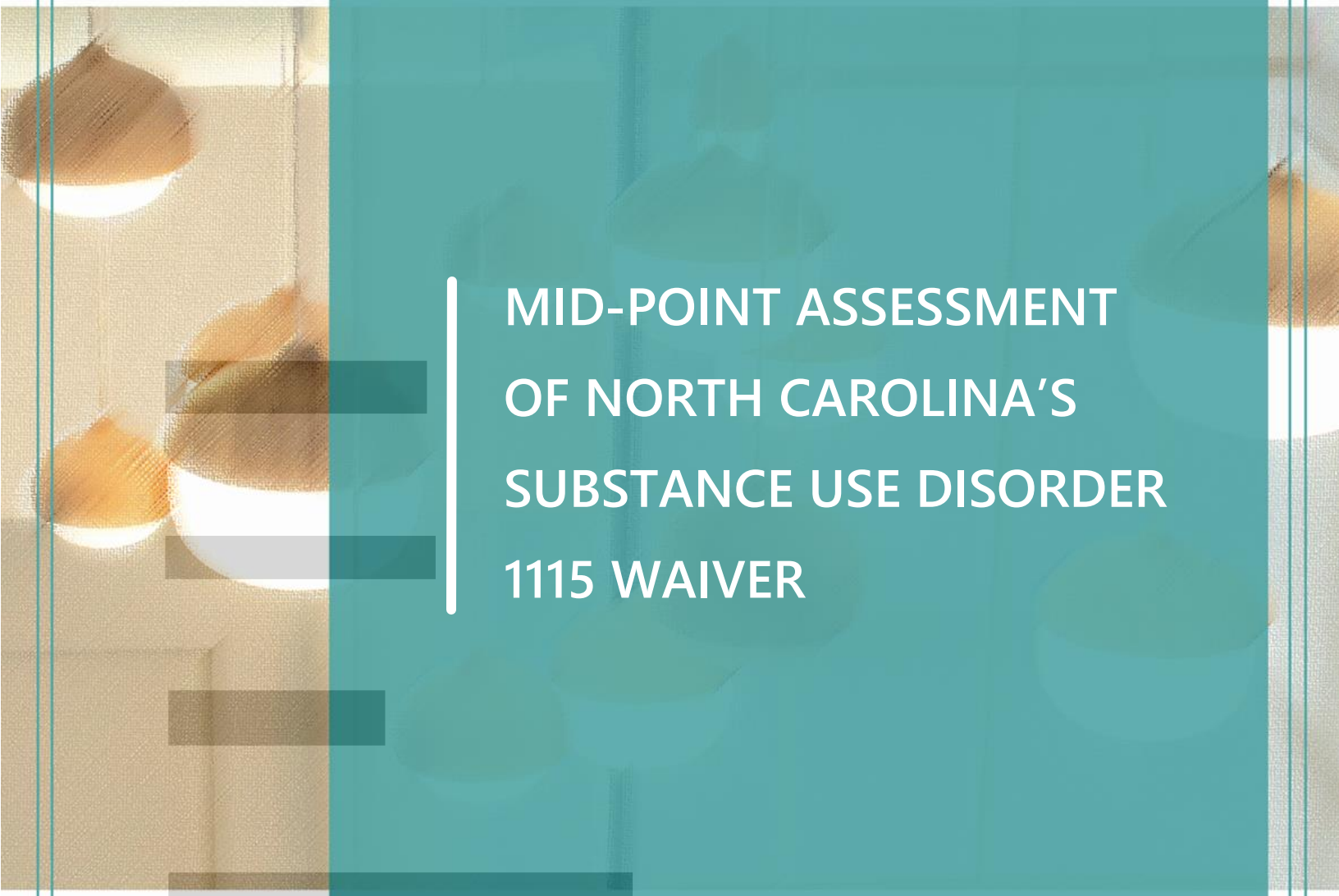
* Includes 12-month visit
Note: "CN" = Categorically Needy, "MN"= Medically Needy

FORM CMS-416: ANNUAL EPSDT PARTICIPATION REPORT

State Code	Fiscal Year								
NC	2020								
	Total:	0.53	0.96	0.83	0.66	0.44	0.45	0.39	0.18
11. Total Eligibles Referred for Corrective Treatment	CN:	316,982	51,511	84,284	50,992	40,887	49,810	33,266	6,232
	MN:	238	7	30	17	38	60	52	34
	Total:	317,220	51,518	84,314	51,009	40,925	49,870	33,318	6,266
12a. Total Eligibles Receiving Any Dental Services	CN:	566,310	685	28,605	102,540	141,682	169,141	101,777	21,880
	MN:	558	0	8	25	113	189	126	97
	Total:	566,868	685	28,613	102,565	141,795	169,330	101,903	21,977
12b. Total Eligibles Receiving Preventive Dental Services	CN:	519,751	252	27,345	98,317	134,465	156,622	86,365	16,385
	MN:	474	0	7	22	106	170	97	72
	Total:	520,225	252	27,352	98,339	134,571	156,792	86,462	16,457
12c. Total Eligibles Receiving Dental Treatment Services	CN:	242,928	286	1,941	29,233	63,795	77,537	57,372	12,764
	MN:	261	0	0	4	51	85	69	52
	Total:	243,189	286	1,941	29,237	63,846	77,622	57,441	12,816
12d. Total Eligibles Receiving a Sealant on a Permanent Molar Tooth	CN:	57,279				30417	26862		
	MN:	53				20	33		
	Total:	57,332				30,437	26,895		
12e. Total Eligibles Receiving Dental Diagnostic Services	CN:	543,605	664	28,488	101,153	137,573	162,072	93,618	20,037
	MN:	525	0	8	25	109	180	111	92
	Total:	544,130	664	28,496	101,178	137,682	162,252	93,729	20,129
12f. Total Eligibles Receiving Oral Health Services Provided by a Non-Dentist Provider	CN:	88,041	5,237	67,514	15,193	49	33	13	2
	MN:	14	1	11	2	0	0	0	0
	Total:	88,055	5,238	67,525	15,195	49	33	13	2
12g. Total Eligibles Receiving Any Preventive Dental or Oral Health Service	CN:	588,375	5,417	81,664	107,426	134,482	156,631	86,368	16,387
	MN:	486	1	16	24	106	170	97	72
	Total:	588,861	5,418	81,680	107,450	134,588	156,801	86,465	16,459
13. Total Eligibles Enrolled in Managed Care	CN:	1,201,631	52,304	139,711	207,046	239,201	294,553	200,347	68,469
	MN:	1,353	15	64	99	214	336	298	327
	Total:	1,202,984	52,319	139,775	207,145	239,415	294,889	200,645	68,796
14a. Total Number of Screening Blood Lead Tests	CN:	97,303	225	84,666	12,412				
	MN:	26	0	22	4				
	Total:	97,329	225	84,688	12,416				

* Includes 12-month visit
Note: "CN" = Categorically Needy, "MN"= Medically Needy

Attachment B



MID-POINT ASSESSMENT OF NORTH CAROLINA'S SUBSTANCE USE DISORDER 1115 WAIVER

UNC | THE CECIL G. SHEPS CENTER FOR HEALTH SERVICES RESEARCH

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Table 1. List of Abbreviations.

ASAM	American Society for Addiction Medicine
BH I/DD	Behavioral Health and Intellectual/Developmental Disabilities
CDC	Centers for Disease Control and Prevention
CFAC	Consumer and Family Advisory Committee
CMS	Centers for Medicare and Medicare Services
COVID-19	Coronavirus disease 2019
CPT	Current Procedural Terminology
CSRS	Controlled Substance Reporting System
DHB	Division of Health Benefits
DHSR	Division of Health Services Regulation
DMH or DMH/DD/SAS	Division of Mental Health, Developmental Disabilities, and Substance Abuse Services
DSOHF	Division of State Health Facilities
DY	Demonstration Year
IMD	Institute for Mental Disease
IOPH	Intensive Outpatient and Partial Hospitalization Services
LCAS	Licensed Clinical Addiction Specialist
LME/MCO	Local Management Entity/Managed Care Organization
MAT	Medication Assisted Therapy (older term for MOUD that is preserved in metric names)
MMIS	Medicaid Management Information Services
MOUD	Medications for opioid use disorder
MPA	Mid-Point Assessment
NC	North Carolina
NCDHHS	North Carolina Department of Health and Human Services
NP	Nurse Practitioner
OBOT	Office-based opioid treatment
OTP	Opioid treatment program
OUD	Opioid use disorder
PA	Physician Assistant
PDMP	Prescription Drug Monitoring Program
PHP	Prepaid Health Plans
SBIRT	Screening, Brief Intervention, and Referral to Treatment
SMI	Serious Mental Illness
SPA	State Plan Amendment
SUD	Substance Use Disorder

Executive Summary

This document represents a Mid-Point Assessment of the North Carolina Medicaid 1115 Substance Use Disorder (SUD) Waiver. As required by the Centers for Medicare and Medicaid Services (CMS), the components of the SUD Waiver are organized around 6 "Milestones," briefly described as (1) Access, (2) Placement Criteria, (3) Provider Qualifications, (4) Capacity, (5) Prescribing and Overdose, and (6) Care Coordination. Multiple sources of information were considered for this Assessment, including monitoring metrics, implementation plan action items, North Carolina Department of Health and Human Services (NCDHHS) web pages, and qualitative interviews with key stakeholders. We factored in the context of the time period examined, which was unprecedented for North Carolina and the nation, with the COVID-19 [redacted]th emergency (PHE) occurring during most of the implementation period, as well [redacted]s of North Carolina's Medicaid transformation, such as the movement of most Medicaid beneficiaries into capitated managed care Standard Plans on July 1, 2021.

Based on this information, we determined that NC is at Low risk of not meeting Milestones 2 (Use of Evidence-Based SUD-Specific Patient Placement Criteria) and 5 (Implementation of Comprehensive [redacted]ription Drug Abuse and Opioid Use Disorders). The State has made significant progress on the metrics associated with these Milestones. In addition, we believe the State is at Low/Medium risk for not meeting Milestone 4 (Sufficient Provider Capacity at Critical Levels of Care, including for Medication-Assisted Treatment for Opioid Use Disorder). We explain the reasoning behind these levels and the supporting metrics in the full document.

[redacted]ot meeting Milestone 1 (Access to Critical Levels of Care for SUD). Few of the implementation plan actions have been completed, and there has been progress in fewer than half of the monitoring metrics. Interviews revealed that policy development is the foundation of subsequent progress in SUD care improvement, so the state of Milestone 1 is concerning for the timely implementation of the remainder of the SUD waiver components. However, there are significant mediating factors, including the [redacted]ndard Plans. Flexibilities put in place during COVID-19 have [redacted]ld be commended.

The remaining Milestones 3 (Use of Nationally Recognized SUD-Specific Program Standards to Set Provider Qualifications for Residential Treatment Facilities) and 6 (Improved Care Coordination and Transitions Between Levels of Care) were assessed at Medium risk. Ensuring access to evidence-based care has been complicated by many factors, including provider turnover exacerbated by the COVID-19 crisis, limited funding to start up new facility-based services, and lack of requirements around providing medications for opioid use disorder (MOUD) at residential treatment facilities.

Recommendations for progress are provided and include: provide greater web content for providers and beneficiaries on the SUD components of the waiver; determine barriers for metrics not meeting targets and identify incentives that could address these barriers; continue COVID-19 flexibilities; use monitoring metrics to mount an adaptive response to immediate needs; triangulate code lists and service definitions going forward; prioritize minimum MAT access requirements for residential treatment facilities; streamline the licensure process for facility-based treatment; support inpatient service capacity through direct financial support and/or improved allocation of beds; consider expanding Medicaid in NC to cover those who don't have access to SUD services; and identify and reward higher levels of beneficiary engagement in care.

Chapter 1: Introduction

This document represents the independent Mid-Point Assessment of the North Carolina Medicaid Substance Use Disorder 1115 Waiver. Below, we briefly describe the history of the waiver components related to substance use disorder (SUD) and their implementation in North Carolina and provide an independent assessment of the implementation activities to date.

History of North Carolina Medicaid's SUD 1115 Demonstration

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 waiver contains both substantial changes to the substance use disorder benefits and treatment system in North Carolina, as well as components, such as a transformation from fee-for-service to capitation through Standard and Tailored Plans, and the implementation of the Healthy Opportunities Pilots, which redirect Medicaid funds to provide non-traditional services that directly address social determinants of health. This document will focus on the waiver components related to the transformation of the substance use disorders (SUD) benefits and treatment system, which began on January 1, 2019 and are currently set to expire on October 31, 2023.

Intervening Factors

There are several major events that occurred since the approval of the SUD Implementation Plan in 2019 that have substantially affected the implementation timeline. These include the COVID-19 public health emergency, which began in March 2020, just one year into the implementation of the SUD components of the waiver; the implementation of Standard managed care plans on July 1, 2021 as part of the overall waiver; planning for Tailored Plans, the comprehensive capitated plans customized for people with behavioral health conditions, which will be implemented in December 2022; and the dissolution of Cardinal Innovations, one of the Local Management Entity / Managed Care Organizations (LME/MCOs) that held a contract for carved-out capitated behavioral health services in 2020-2021. (LME/MCO is a term used by [redacted] manage behavioral health care for state- and Medicaid-funded individuals, respectively.) The counties that were served by the Cardinal LME/MCO were distributed among other LME/MCOs, causing a relatively sudden increase in service areas. The impact of these events on Medicaid beneficiaries and the dedicated employees at North Carolina Department of Health and Human Services (NCDHHS) and the LME/MCOs who run these programs cannot be overstated. COVID-19 had a particularly strong impact on substance use that disproportionately affected the SUD provider community. The Centers for Disease Control and Prevention (CDC) reports that the drug overdose death rate that had been increasing prior to the COVID-19 PHE further escalated during this time[1]. We are mindful of this context as we describe the changes in metrics and timelines throughout this report.

Goals of the Demonstration

We begin by reviewing the stated goal of the SUD components of the 1115 Medicaid waiver. This goal is to strengthen the SUD delivery system by:

[1] Centers for Disease Control and Prevention, "Overdose Deaths Accelerating During COVID-19" https://www.cdc.gov/media/releases/2020/p1218-overdose-deaths-covid-19.html. Published December 2020, Accessed April 22, 2022.

- Expanding SUD benefits to the full American Society of Addiction Medicine (ASAM) continuum of care
- Obtaining a waiver of the Institution for Mental Disease (IMD) exclusion that prohibits federal financial participation for care for non-elderly adult Medicaid beneficiaries aged 21-64 receiving SUD care in an IMD
- Modernizing licensure standards
- Increasing provider capacity
- Strengthening care coordination and care management
- Improving the prescription drug monitoring program (PDMP), referred to as the Controlled Substances Reporting System (CSRS) in North Carolina

[redacted]s center around six milestones established by the Centers for Medicare and Medicaid Services (CMS):

- Milestone 1: Access to Critical Levels of Care for SUD ("Access")
- Milestone 2: Use of Evidence-Based SUD-Specific Patient Placement Criteria ("Placement [redacted]
- [redacted]3: Use of Nationally Recognized SUD-Specific Program Standards to Set Provider Qualifications for Residential Treatment Facilities ("Provider Qualifications")
- Milestone 4: Sufficient Provider Capacity at Critical Levels of Care, including for Medication-Assisted Treatment for Opioid Use Disorder (OUD) ("Capacity")
- [redacted]tone 5: Implementation of Comprehensive Strategies to Address Prescription Drug [redacted]e and Opioid Use Disorders ("Prescribing and Overdose")
- Milestone 6: Improved Care Coordination and Transitions Between Levels of Care ("Coordination")

Role of the Independent Evaluator

[redacted]The Cecil G. Sheps Center for Health Services Research at UNC-Chapel Hill is serving as the Independent Evaluator for the 1115 and SUD waiver evaluations. Sheps Center faculty and staff have decades of experience in policy evaluation, including mixed methods evaluations with claims data analysis, survey data fielding and analysis, and qualitative interview and focus group analysis. The multidisciplinary team has expertise on a number of dimensions important to this project, including behavioral health, CMS processes and procedures, federal waivers, financial and economic analyses, administrative data analytics, organizational behavior, quality of care metrics, data visualization, implementation science, social determinants of health, and safety net providers.

Relationship to the Status Update and Mitigation Plan

The Division of Health Benefits recently contracted with Manatt Health to evaluate the status of the SUD Waiver implementation and develop a mitigation plan. This assessment was carried out contemporaneously with the Mid-Point Assessment (MPA), though the two assessments were largely performed independently. Manatt contractors participated in some of the key stakeholder interviews with state representatives. In addition, they provided the MPA team with drafts of their Status Update and Mitigation Plan, which contained extensive information on the status of the implementation plan action items.

Information that is contained in this document and not the Status Update and Mitigation Plan includes:

- An analysis of monitoring metrics that assesses progress since the beginning of the SUD Waiver
- Synthesis of interviews with LME/MCOs and SUD treatment providers
- Focus groups with Medicaid beneficiaries receiving SUD services

Further, the Sheps Center evaluation team independently assessed the risk of not meeting each milestone, although we were provided Manatt's assessment of this risk. The Sheps Center's risk assessment follows the CMS guidance, described further below, in terms of basing risk levels (low, medium, and high) on the proportion of critical metrics for each milestone that are moving in the target direction, while Manatt's assessment is based on the completion of key implementation dates. Thus, the two reports are

Chapter 2: Assessment Methodology

We used several methods and sources to evaluate North Carolina's progress towards achieving the implementation milestones (Table 2). The monitoring metrics form the main quantitative assessment of progress to date and have been prepared by the Sheps Center for the quarterly reports to CMS since the beginning of the evaluation contract. We used these data to assess impacts of any policy changes taken to date, identify gaps in North Carolina's SUD service delivery system, and to assist in the development of recommendations. We interpret changes in the metrics since the waiver baseline period, described below, in the context of the intervening factors, and account for this in our analyses when possible.

Table 2. Sources and types of data used in this report.

Type of Data	Description	Data Source
Critical monitoring metrics	A subset of monitoring metrics identified by CMS that must be in the MPA.	Analysis of Medicaid administrative data provided to the Sheps Center by NCDHHS
Other monitoring metrics	Non-critical metrics that are included in the approved monitoring protocol.	Analysis of Medicaid administrative data provided to the Sheps Center by NCDHHS
Global review of information on NCDHHS	A review for availability of content related to SUD waiver components on NCDHHS (DHB and DMH web sites)	https://medicaid.ncdhhs.gov https://www.ncdhhs.gov/divisions/mental-health-developmental-disabilities-and-substance-abuse-services
Stakeholder perspectives	Results from rapid qualitative analysis of key stakeholder interviews.	The MPA team interviewed: ♦ Representatives from NCDHHS ♦ Representatives from the LME/MCOs ♦ Providers of SUD treatment services ♦ Medicaid beneficiaries with SUD
Implementation Plan action items	A list of all action items intended to be completed by the waiver mid-point (taken to be January 1, 2022 for the purposes of this assessment).	The list of action items was extracted from the CMS-approved Implementation Plan. The status of each item was extracted from the Manatt Report and consulting with DHB representatives.

Monitoring Metrics

Data Sources

The primary data source for the monitoring metrics is the Sheps Center's calculations from Medicaid claims, encounter, membership, and provider participation data. These data are provided to the Sheps

Center by NCDHHS on a monthly basis. A description of all Critical Monitoring Metrics is provided in Attachment 3.

The Sheps Center began reporting SUD metrics after the start of the demonstration due to delays in the procurement process, so initial monitoring reports were reported to CMS by NCDHHS. In some cases, prior reports were resubmitted by the Sheps Center because of feedback received from CMS. In all cases, the most recent metrics reported to CMS for each period and metric were used.

Analytic Methods

We calculated changes in metrics from baseline for both the required Critical Monitoring Metrics and selected additional metrics.

[redacted] report the unadjusted absolute and relative change from baseline for all metrics. The central methodology recommended by CMS does not incorporate a denominator such as all Medicaid beneficiaries at risk for SUD. Therefore, the metrics reported are generally to be interpreted as the distinct number of beneficiaries receiving a service or diagnosis. We occasionally provide additional context on these metrics, for example by comparing the growth of the number of individuals with a SUD with the [redacted]ulation during the same time period, but this context does not factor into our assignment of risk.

The absolute change is reported as:

[redacted] Absolute Change = Value at mid-point - Value at baseline

The relative percent change is reported as:

Percent Change = (Value at mid-point - Value at baseline) / Value at baseline

For metrics reported annually according to the demonstration year (CMS metrics), the **baseline period** is [redacted]or metrics reported by calendar year, we use 2018 as the baseline period. For metrics reported quarterly, the baseline period is November 1, 2018 to January 31, 2019 (DY1Q1). Because CMS agreed to a timeline for the Mid-Point Assessment that is slightly longer than the mid-point of the study, we used the latest reported estimates that were available at this writing as the mid-point for this analysis, which include data from November 1, 2020 through October 31, 2021 (DY3) for demonstration year metrics, 2020 for calendar year metrics, and monthly and quarterly data from August to October 2021.

For selected metrics, we include figures demonstrating longitudinal trends since October 2015 from the SUD Data Dashboard the Sheps Center creates monthly for the Demonstration Evaluation. These figures help to provide greater context about trends in the metrics than just providing information from the two required time points at baseline and mid-point.

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[2] Centers for Medicare & Medicaid Services (CMS). *Medicaid Section 1115 Substance Use Disorder (SUD) and Serious Mental Illness and Serious Emotional Disturbance (SMI/SEC) Demonstrations Mid-Point Assessment Technical Assistance.* https://www.medicaid.gov/medicaid/section-1115-demo/downloads/evaluation-reports/1115-sud-smised-mid-point-assessment-ta.pdf. Published October 2021. Accessed February 6, 2022.

In the second analysis, we report the unadjusted change by subpopulations of interest, which includes age groups, pregnant beneficiaries, criminally involved beneficiaries, or Medicaid/Medicare dual eligible beneficiaries, depending on the metric.

Stakeholder Input

Data Sources

We identified key stakeholders as employees of North Carolina state agencies within NCDHHS, LME/MCO representatives, NC providers of SUD services whose caseloads include at least some Medicaid beneficiaries, and Medicaid beneficiaries receiving SUD services. We reached out to state agencies and LME/MCOs directly via phone and email and utilized professional networks to gain additional referrals. For [redacted] beneficiaries, we used a variety of recruitment methods, including consulting with providers known to the study team, snowball sampling, searching the provider directories provided on LME/MCO websites, and distributing recruitment materials through professional email lists. Our goal for the provider sample was to identify individuals representing various roles, types of organizations, and geographic areas within the state.

[redacted] guides for this report by adapting the interview guides used by the qualitative team of the Sheps Center's overall 1115 waiver evaluation. Draft guides were reviewed and edited by the entire study team and, in the case of the provider interview guide, piloted with a SUD expert at UNC-Chapel Hill.

[redacted] o recruit at least one representative from each division of interest within NCDHHS to obtain diverse perspectives: the Division of Health Benefits (DHB), the Division of Mental Health, Developmental Disabilities, and Substance Abuse Services (DMH/DD/SAS), the Department of State-Operated Health Facilities (DSOHF), and the Controlled Substance Reporting System (CSRS). We were able to interview a total of 10 state representatives across 4 agencies: three representatives from DHB, three representatives from DMH/DD/SAS, two representatives from CSRS, and two from DSOHF. Because an [redacted] s on the SUD-specific health information technology system, we attempted to interview the health information technology lead, but were unable to do so because of a personnel change that occurred prior to the completion of the MPA.

LME/MCOs. We aimed to recruit at least one participant from each of the 6 extant LME/MCOs (Vaya, Eastpointe, Sandhills, Partners, Trillium, and Alliance) and the one LME/MCO that dissolved after the initiation of the SUD waiver (Cardinal). Ultimately, we were able to interview 11 LME/MCO representatives across five LME/MCOs: one representative from Vaya, three representatives from Eastpointe, two from Partners, three from Trillium, and two representatives from Alliance. We were not able to recruit study participants from Sandhills or Cardinal Health.

SUD Providers. We interviewed 13 SUD providers across geographic regions (Mountains, Coastal Plain, and Piedmont), professional training (psychiatrist, primary care providers, Licensed Clinical Addiction Counselors (LCASs), social workers, and advanced practice providers [nurse practitioners (NPs) and physician assistants (PAs)], and practice type (inpatient, outpatient, and opioid treatment programs (OTPs)).

Medicaid beneficiaries receiving SUD services. In order to include the beneficiary voice, we conducted two focus groups, which included a total of 13 participants, and one individual interview with Medicaid

beneficiaries with self-reported SUD. Beneficiaries were recruited by a) requesting that interviewed providers and others share flyers with their clients who may be eligible, b) direct outreach to providers at local SUD/SMI treatment organizations, and c) outreach to peer support providers and associated organizations.

Analytic Methods

The overarching analysis method for the stakeholder interviews was Rapid Qualitative Analysis, as described by Alison B. Hamilton and others.[3] Briefly, we defined *a priori* domains for each stakeholder type based on the interview guides. Two members of the study team then summarized each interview according to these domains, which are shown in Table 3. The domain-related summaries were copied into a matrix [redacted] w and one domain per column. For state agencies and LME/MCOs, these matrices [redacted] eated a summary memo that described the key points from each interview. For the provider and beneficiary interviews, further summaries were derived, both overall and by certain characteristics. Finally, for all four stakeholder types, we mapped insights from the interviews onto the six Milestones. These insights were divided into whether they indicated "Successes" or "Challenges" related to each Milestone.

[redacted] In the results, if a particular topic did not arise in the interviews or participants did not provide an answer to a planned question, we report "Not discussed." If a general topic was discussed but stakeholders responses could not be classified as either successes or challenges, we report "None mentioned." If we deemed ahead of time that a topic was not relevant to that stakeholder, we report "NA," for "not [redacted]

Table 3. Analysis domains for stakeholder interview summaries.

State Agencies	LME/MCOs	SUD Providers	Medicaid SUD Service Beneficiaries
♦ Overall Implementation Status ♦ COVID-19 Effects ♦ Provider and Beneficiary Awareness ♦ Milestones: Successes ♦ Milestones: Challenges ♦ Milestones: Priorities ♦ Tailored Plans	♦ Overall Implementation Status ♦ Interaction with State Agencies ♦ Engagement with Providers ♦ Raising Patient Awareness ♦ COVID-19 Effects ♦ Waiver Components: Successes and Challenges ♦ Waiver Components: Strategies and Priorities ♦ Planning for Tailored Plans	♦ Overall Perception of SUD Change ♦ Preparation for Change ♦ Engagement with State/LME/MCOs ♦ Uptake of New Services ♦ Tailored Plans ♦ Effects of COVID-19	♦ Accessing SUD Services ♦ Required Adjustments ♦ Experience with Insurance Plan ♦ Experience with State

[3] Hamilton AB. Qualitative Methods in Rapid Turn-Around Health Services Research. *Health services research & development cyberseminar*. Published online 2013:42. https://www.hsrd.research.va.gov/for_researchers/cyber_seminars/archives/780-notes.pdf

Implementation Plan Action Items

Data Sources

The list of action items and intended completion dates was obtained from the CMS-approved Implementation Protocol.[4] The status of each action item was determined by reviewing the revised draft of the Manatt Report (received 3/19/2022), which determined the status of each item based on interviews with NCDHHS staff and review of documents. Changes in status of actions since the receipt of the Manatt Report are not captured.

Analytic Methods

[redacted]ch action item as follows:

- Complete: the action item is complete; no work remains to be done
- In Progress: work on this action item has begun, but is not complete
- Open: work has yet to begin on achieving this action item.[5]

[redacted]ded to be completed by January 1, 2022, we included this item in the denominator; if it was intended to be completed after the demonstration midpoint, it is not included in our calculations for this assessment.

We calculated the number of action items intended to be completed by the midpoint, then calculated the number and percentage of complete action items. In the text, we also report the number of in-progress [redacted]s, and the number of action items intended to be completed after the midpoint assessment.

Risk Assessment Methodology

We assessed the level of risk for non-completion of a milestone by following CMS's technical assistance [redacted]ments[6], CMS requires that risk categories are assessed based on the proportion of metrics that demonstrate progress toward the program goals as shown in Table 4. However, we deviate somewhat from these categories when (a) relative percent changes were modest; (b) there were significant external factors that may have contributed to directional effects (such as the COVID-19 PHE on metrics tracking the overdose death rate); (c) progress towards the implementation plan action items are substantially different from the picture given by metric changes alone; and (d) if we received information from key stakeholders that modify the information in the metrics. We provide additional context based these factors for each Milestone.

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[4] NCDHHS Division of Health Benefits. *Substance Use Disorder Implementation Plan Protocol*. March 8, 2019. 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

[5] In the Manatt report, these items are reported as "to be completed." We have adjusted the terminology for consistency with the CMS Mid-Point Assessment Technical Assistance document.

[6] Centers for Medicare & Medicaid Services (CMS). *Medicaid Section 1115 Substance Use Disorder (SUD) and Serious Mental Illness and Serious Emotional Disturbance (SMI/SEC) Demonstrations Mid-Point Assessment Technical Assistance.* https://www.medicaid.gov/medicaid/section-1115-demo/downloads/evaluation-reports/1115-sud-smised-mid-point-assessment-ta.pdf. Published October 2021. Accessed February 6, 2022.

Table 4. Methodology for Assignment of Risk for Not Meeting Milestones.

	Risk of not Meeting Milestone		
Data Source	Low	Medium	High
Critical Monitoring Metrics	More than 75% of critical metrics are trending in the expected direction	Between 25 and 75% of critical metrics are trending in the expected direction	Less than 25% of critical metrics are trending in the expected direction
[redacted]items	More than 75% of action items were completed by January 1, 2022	Between 25 and 75% of action items were completed by January 1, 2022	Less than 25% of action items were completed by January 1, 2022
Stakeholder Feedback	Few stakeholders identified risks; risks easily addressed	Several stakeholders identified risks; risks may cause challenges in meeting Milestone	Many/all stakeholders identified significant risks that are likely to cause challenges in meeting Milestone

[redacted]PA Technical Assistance Version 1.0, Table 2 (p. 10).

Limitations

[redacted]rehensive set of data, our approach is not without its limitations. While the evaluation [redacted]xperience working with administrative data from Medicaid programs, the encounter data from the Standard Plans that were launched in July 2021 has become usable to the evaluation team within the last two months and a comprehensive set of quality reporting has not been completed as of this writing. While the qualitative data provides nuance and context to the quantitative findings, the perspectives represented do not represent all stakeholders.

[redacted]

Chapter 3: Results

In this chapter, we report the results of our analysis of critical monitoring metrics, Implementation Plan action items, and stakeholder feedback. In Chapter 4, we summarize our assessment of risk and provide recommendations to the state to consider during the remainder of the SUD waiver demonstration.

Although not linked to a Milestone, we begin by reporting metrics counting the number of Medicaid beneficiaries with administrative diagnoses of SUD at baseline and midpoint (Table 5). This is a denominator of potential SUD treatment service users that underlies many of the subsequent metrics, so tracking its change over this time period is critical to understanding the subsequent trends.

[redacted] and Qualification for SUD Treatment Services

Table 5. Metric 3: Medicaid beneficiaries with SUD diagnoses.

Metric #	Metric name	Monitoring metric rate or count[a,b]				State's demonstration target	Directionality at mid-point	Progress (Yes/No)
		At baseline	At midpoint	Absolute change	Percent change			
[redacted] 3	Medicaid beneficiaries with SUD diagnoses (monthly)	67,838	79,043	11,205	16.5%	Increase[c]	Increase	Yes

[redacted]019 (DY1) for CMS-constructed demonstration year metrics; calendar year [redacted]nuary 31, 2019 (DY1Q1) for quarterly metrics.

[b]Midpoint periods are October 31, 2021 (DY3) for CMS- constructed demonstration year metrics; calendar year 2020 for established metrics, and August - October 31, 2021 for quarterly metrics.

[c]The short-run target for metric 3 is an increase although the long-run target is a decrease. We list the short-run target here.

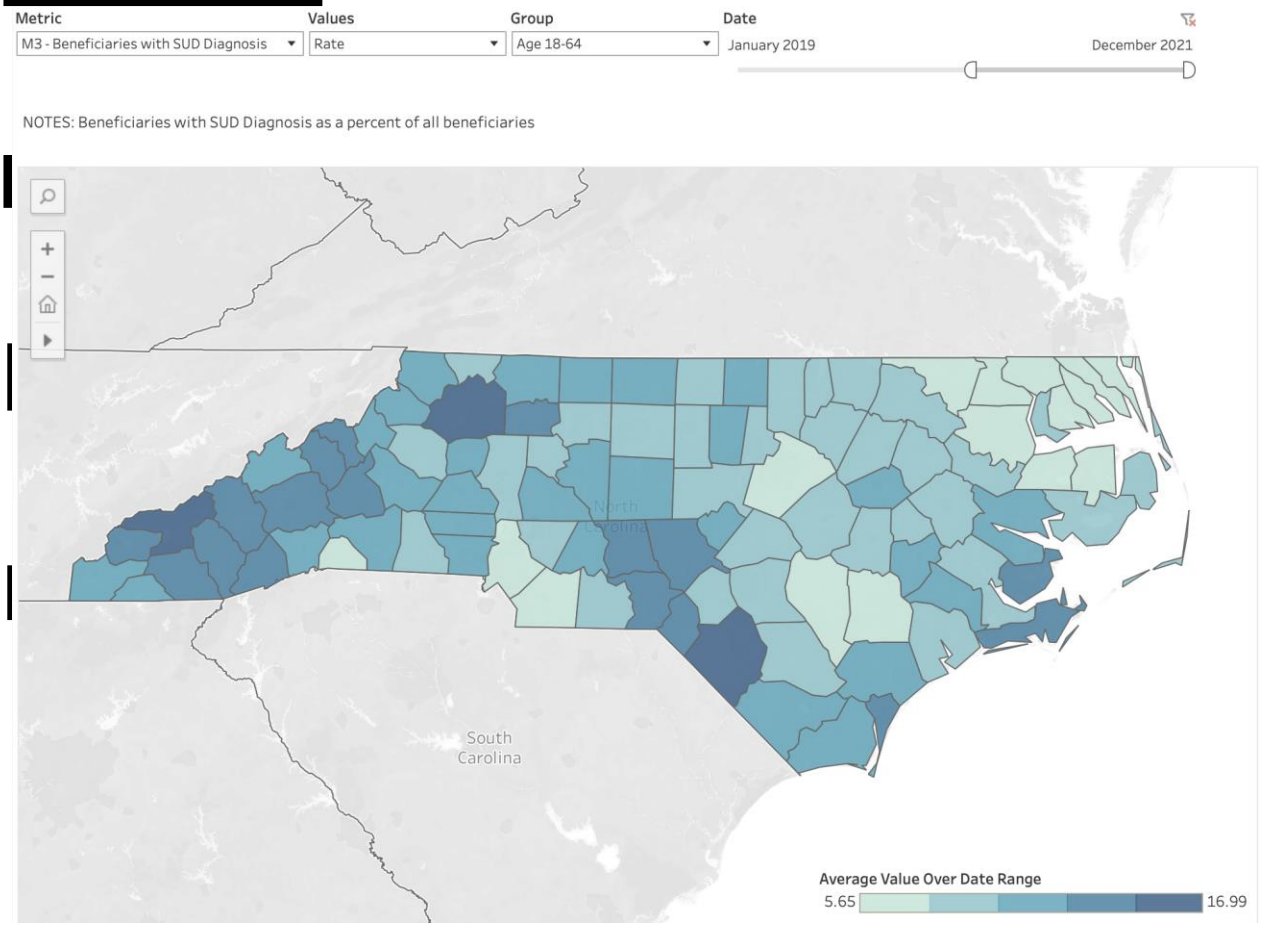
The number of Medicaid beneficiaries with a SUD diagnosis as measured monthly increased by over 11,000 individuals, a 16.5% increase. This indicates progress in the intended direction, in that a larger absolute number of NC residents are identified with SUD through Medicaid-funded services. This is concordant with the goal of the demonstration to expand access to SUD services. The long-run target is a decrease, which reflects the intention to have a greater emphasis on prevention of SUD.

Assessing the change in overall Medicaid enrollment during the waiver period helps to contextualize these changes. In particular, there is evidence that, while the absolute number of Medicaid beneficiaries receiving SUD services has increased, the *proportion* of Medicaid beneficiaries receiving these services has decreased. During the public health emergency, the discontinuation of eligibility redetermination and disenrollment from Medicaid resulted in a greater total number of Medicaid beneficiaries remaining enrolled in Medicaid. We estimate that the total number of Medicaid beneficiaries during August–October 2021 is 22.1% higher than the number of Medicaid beneficiaries in November 2018 – January 2019. Thus, the *proportion* of Medicaid beneficiaries who have a SUD diagnosis has declined as a percent of the

Medicaid population. Even limiting this estimate to non-elderly adult Medicaid beneficiaries, we calculate a 33.7% increase in Medicaid enrollment during this time period, further showing evidence of a decline in the relative *proportion* of beneficiaries with an administrative diagnosis of SUD. However, without additional analysis of the composition of this population, we conclude that Metric 3 trending in the direction of the intended short-run target is promising.

We also map out the county-level rates of non-elderly adult beneficiaries with SUD as a proportion of the Medicaid population in Figure 1 below. There is substantial variation in this rate throughout the state, with a higher proportion of beneficiaries diagnosed with SUD in the western and southern parts of the state.

Figure 1: Non-elderly adult beneficiaries with SUD as a proportion of the Medicaid population from January 2019 – December 2021.



Milestone 1: Access to critical levels of care for SUD

Critical Monitoring Metrics

The set of metrics relevant to Milestone 1 examine the use of different types of services for SUD treatment or prevention (Table 6).

Table 6. Critical monitoring metrics for Milestone 1.

Metric #	Metric name	Monitoring metric rate or count[a,b]				State's demonstration target	Directionality at mid-point	Progress (Yes/No)
		At baseline	At midpoint	Absolute change	Percent change			
7	Early Intervention	231	3	-228	-98.7%	Increase	Decrease	No
8	Outpatient Services	16,795	16,993	198	1.2%	Increase	Increase	Yes
9	Intensive Outpatient and Partial Hospitalization Services	1,333	1,187	-146	-10.9%	Increase	Decrease	No
10	Residential and Inpatient Services	351	222	-129	-36.7%	Increase	Decrease	No
11	Withdrawal Management	128	129	1	0.8%	Increase	Increase	Yes
12	Medication-Assisted Treatment	12,025	15,163	3138	26.1%	Increase	Increase	Yes
22	Continuity of Pharmacotherapy for Opioid Use Disorder	24.64%	22.88%	-1.76% points	-7.2%	Increase	Decrease	No

[a]Baseline periods are November 1, 2018 to October 31, 2019 (DY1) for CMS-constructed demonstration year metrics; calendar year 2018 for established metrics; and November 1, 2018 to January 31, 2019 (DY1Q1) for quarterly metrics.
[b]Midpoint periods are October 31, 2021 (DY3) for CMS-constructed demonstration year metrics; calendar year 2020 for established metrics, and August - October 31, 2021 for quarterly metrics.

Early Intervention: The number of beneficiaries receiving early intervention services dropped substantially by the end of calendar year 2019. At mid-point, we only observe 3 individuals receiving services in the last quarter, a 99% decrease. The CPT codes used by NC are contained within the value set for Metric 7 (99408 and 99409), so this change is not the result of codes used. Beginning in February 2021, NC increased the number of provider types that can bill for early intervention, or Screening, Brief Intervention and Referral to Treatment (SBIRT) codes. To date, that increase has not shown up in the administrative data sources. Upon review of code usage longitudinally, we determined that a relatively small number of providers were

offering SBIRT and a bubble of use occurred in early 2019 and returned to prior levels by 2020 (see Appendix Figure 1).

Outpatient Services: There has been a modest 1.2% increase in the number of beneficiaries who have received outpatient SUD services. Because the size of the population with SUD diagnoses increased by 16.5% over this time period, this is a relative decrease in the proportion of Medicaid beneficiaries with an SUD diagnosis who have received outpatient services for SUD. There was a drop in outpatient service users during the initial months of the PHE, then an increase until March of 2021, prior to Standard Plan implementation, at which point the number of users declined (see Appendix Figure 2).

Intensive Outpatient and Partial Hospitalization Services: There has been a 10.9% percent decrease in the [redacted]ho have received IOPH services. This may be a coding issue because the state uses a different set of codes to code intensive outpatient and partial hospitalization services from those provided in the CMS value set. Future analyses will examine the trends in the codes used by NC for these services.

Residential and Inpatient Services: There has been a large 36.7% relative decrease in the number of [redacted] SUD receiving these services over the first half of the waiver demonstration. The number of individuals has remained close to 325 each month since waiver implementation, with a substantial decline beginning in August 2019, well before the PHE. A longer time series on this variable (Appendix Figure 3) demonstrates that the level of use of residential and inpatient services returned to the [redacted] June 2020 but has declined since the July 2021 implementation of Standard Plans.

Withdrawal management: The number of Medicaid beneficiaries receiving these services has remained constant throughout the waiver period.

Medication Assisted Treatment (or what is more commonly now referred to as Medications for OUD): We [redacted] of MOUD. This is a greater increase than the number of [redacted]at a greater proportion of beneficiaries with SUD are receiving medication treatment.

Continuity of Pharmacotherapy for Opioid Use Disorder: The rate of individuals receiving MOUD who have been retained for 180 days has declined by 1.8 percentage points, or a 7.2% relative decrease since study baseline. This is a calendar year metric that was last reported in 2020, so does not reflect any changes that may have occurred in 2021, such as the increase in access to MOUD noted above.

Implementation Plan Action Items

The list of implementation plan action items for Milestone 1 is the largest out of all the milestones and is included in Table 7.

Table 7. Implementation plan action items for Milestone 1.

ASAM Level of Care	Action Item Description	Date to be Completed*	Current Status
Level 0.5 (Early Intervention)	Implement MMIS modifications	Apr-20	Complete
Level of Care 1 (Outpatient Services)	Amend current Medicaid clinical coverage policies 8-A Diagnostic Assessment and 8-C to reflect ASAM Criteria	Apr-20	In progress
	Submit SPA for 8A Diagnostic Assessment	Apr-20	Open
Level of Care 2.1 (Intensive Outpatient Services)	Amend current Medicaid clinical coverage policy 8-A to reflect 2013 ASAM Criteria, add parameters for adolescents, require the presence of a full-time licensed professional, and permit the service to be reimbursed in an IMD	Oct-20	In progress
	Update MMIS to permit this service to be reimbursed for individuals residing in an IMD	Apr-19	Open
	Develop a licensure rule waiver process	Oct-20	Open
	Revise licensure rule	*Oct-22*	*Open*
	Revise LME/MCO contracts	Oct-20	Open
Level of Care 2.5 (Partial Hospitalization Services)	Amend current Medicaid clinical coverage policy 8-A to align with ASAM criteria, require the presence of full-time licensed professional, and permit this service to reimbursed in an IMD	Oct-20	In progress
	Update MMIS to permit this service to be reimbursed for individuals residing in an IMD	Apr-19	Open
	Develop a licensure rule waiver process	Oct-20	Open
	Revise licensure rule	*Oct-22*	*Open*

ASAM Level of Care	Action Item Description	Date to be Completed*	Current Status
	Revise LME/MCO contracts	Oct-20	Open
Level of Care 3.1 (Clinically Managed Low-Intensity Residential Treatment Services)	Develop a Medicaid clinical coverage policy	Oct-20	In progress
	Create a licensure rule waiver process	Oct-20	Open
	Create licensure rule	*Oct-22*	*Open*
	Implement MMIS modifications	Oct-20	Open
	Submit SPA	Oct-20	Open
Level of Care 3.3 (Clinically Managed Population-Specific High-Intensity Residential Programs)	Develop a Medicaid clinical coverage policy	Oct-20	In progress
	Create a licensure rule waiver process	Oct-20	Open
	Create licensure rule	*Oct-22*	*Open*
	Implement MMIS modifications	Oct-20	Open
	Submit SPA	Oct-20	Open
Level of Care 3.5 (Clinically Managed High-Intensity Residential Services)	Amend current Medicaid clinical coverage policy 8-A to reflect 2013 ASAM criteria, add adolescents as a population eligible to receive service, include IMDs as eligible service providers, and extend coverage for treatment services provided in a therapeutic community	Oct-20	In progress
	Implement MMIS modifications to permit this service to be reimbursed in an IMD	Apr-19	Open
	Develop a licensure rule waiver process	Oct-20	Open
	Revise existing licensure rules and create new licensure rules	*Oct-22*	*Open*
	Revise LME/MCO contracts	Oct-20	Open
	Submit SPA	Oct-20	Open
Level of Care 3.7 (Medically Monitored Intensive Inpatient Services)	Amend current Medicaid clinical coverage policy 8-A to reflect ASAM criteria, add adolescents as a population eligible to receive service, and include IMDs as eligible service providers	Oct-20	In progress

ASAM Level of Care	Action Item Description	Date to be Completed*	Current Status
	Implement MMIS modifications to permit this service to be reimbursed in an IMD	Apr-19	Open
	Develop a licensure rule waiver process	Oct-20	Open
	Revise and create licensure rules	*Oct-22*	*Open*
	Revise LME/MCO contracts	Oct-20	Open
	Submit SPA	Oct-20	Open
Level of Care 4 (Medically Managed Intensive Inpatient Services)	Amend current Medicaid clinical coverage policy 8-B to reflect ASAM criteria and include IMDs as eligible service providers for SUD treatment	Jul-20	In progress
	Implement MMIS modifications to permit this service to be reimbursed in an IMD	Apr-19	Open
	Revise LME/MCO contracts	Jul-20	Open
Level of Care OTP (Opioid Treatment Programs)	Amend current Medicaid clinical coverage policy 8-A to reflect ASAM criteria, permit service to be reimbursed in an IMD, and create integrated service model	Apr-20	In progress
	Implement MMIS modifications to permit this service to be reimbursed in an IMD	Apr-19	Open
	Develop a licensure rule waiver process	Apr-20	Open
	Revise licensure rule	*Oct-22*	*Open*
	Submit SPA	Apr-20	Open
	Revise LME/MCO contracts	Apr-20	Open
Level of Care 1-WM (Ambulatory Withdrawal Management Without Extended On-Site Monitoring)	Develop new Medicaid clinical coverage policy to align with ASAM criteria	Jul-20	In progress
	Develop a licensure rule waiver process	Jul-20	Open
	Revise licensure rules	*Oct-22*	*Open*
	Submit SPA	Jul-20	Open
	Revise LME/MCO contracts	Jul-20	Open

ASAM Level of Care	Action Item Description	Date to be Completed*	Current Status
Level of Care 2-WM (Ambulatory Withdrawal Management With Extended On-Site Monitoring)	Develop a Medicaid clinical coverage policy	Jul-20	In progress
	Develop a licensure rule waiver process	Jul-20	Open
	Create licensure rule	*Oct-22*	*Open*
	Implement MMIS modifications	Jul-20	Open
	Submit SPA	Jul-20	Open
	Revise LME/MCO contracts	Jul-20	Open
Level of Care 3.2-WM (Clinically Managed Residential Withdrawal)	Develop a Medicaid clinical coverage policy	Jul-20	In progress
	Develop a licensure rule waiver process	Jul-20	Open
	Revise licensure rule	*Oct-22*	*Open*
	Implement MMIS modifications	Jul-20	Open
	Submit SPA	Jul-20	In progress
	Revise LME/MCO contracts	Jul-20	Open
Level of Care 3.7-WM (Medically Monitored Inpatient Withdrawal Management)	Amend current Medicaid clinical coverage policy 8-A to reflect ASAM criteria and include IMDs as eligible service providers	Jul-20	In progress
	Implement MMIS modifications to permit this service to be reimbursed in an IMD	Apr-19	Unknown^
	Develop a licensure rule waiver process	Jul-20	Open
	Revise licensure rule	*Oct-22*	*Open*
	Submit SPA	Jul-20	In progress
	Revise LME/MCO contracts	Jul-20	Open
Level of Care: Medically Supervised or Alcohol and Drug Abuse Treatment Center (ADATC) Detoxification Crisis Stabilization	Amend current Medicaid clinical coverage policy 8-B to reflect ASAM criteria	Jul-20	Open
	Implement MMIS modifications to permit this service to be reimbursed in an IMD	Apr-19	Open
Level of Care: 4-WM (Medically Managed Intensive Inpatient Withdrawal)	Amend current Medicaid clinical coverage policy 8-B to reflect ASAM criteria and include IMDs as eligible service providers	Jul-20	In progress

ASAM Level of Care	Action Item Description	Date to be Completed*	Current Status
	Implement MMIS modifications to permit this service to be reimbursed in an IMD	Apr-19	Open
	Revise LME/MCO contracts	Jul-20	Open

*The intended completion dates are as reported in the CMS-approved Implementation Plan. *Action items with intended completion dates set after the MPA window of analysis are italicized.*
^In the draft of the Manatt Report received by our team on 3/19/2022, this was marked as "for discussion," the term Manatt used to denote unknown status.

[redacted]2 Milestone 1 implementation action items, 61 were intended to be completed by Jan 1, 2022. Of these 61, 1 has been completed, 17 are currently in progress, and 42 items are open. The status of one item is unknown. A total of 11 items (all related to the creation and revision of licensure rules) have an intended completion date of October 2022; although we do not formally include them in our mid-point assessment of risk, their chance of timely completion is low, given that many of the preceding items [redacted]

Stakeholder Input

Stakeholder input relevant to Milestone 1 is displayed in Table 8. We summarize major themes of the interviews and focus groups below. Although the implementation of Tailored Plans is relevant to all [redacted]e stakeholder feedback on Tailored Plans here. In addition, we discuss Medicaid [redacted]Milestone, which was a theme raised by several stakeholders. In most of the discussion, we include input from all stakeholders; however, two themes unique to beneficiaries were the benefits they have experienced from Medicaid enrollment and the difficulties they have personally experienced in accessing Medicaid treatment.

[redacted] 1.

Milestone 1		
Stakeholder	**Successes**	**Challenges**
State agencies		
DHB	♦ Milestone 1 has been the main focus so far. "Policy foundation has to happen first"	♦ Tailored Plan launch pushed to December 1, 2022, largely due to Cardinal's exit. ♦ Policies' go-live planned for July 1, 2022 (later than planned)
DMH	♦ Some policies already implemented (ASAM 0.5, ending IMD exclusion).	♦ Movement of policies slowed by implementation of Standard Plans. ♦ Policy implementation has been challenging since "people don't want to change". Policies have not changed significantly since around 2006. ♦ Rate-setting has been the biggest challenge, especially for new services.
DSOHF	♦ IMD waiver has allowed for SUD treatment in ADATCs.	♦ Difficulty keeping up with changes to ASAM continuum.

CSRS	NA	NA
LME/MCOs	♦ Good ASAM continuum available currently. ♦ COVID-related flexibilities (telehealth, verbal consent, take-home for methadone) have improved access to care and reduced administrative burden.	♦ Waiting for new policies to be updated on July 1, 2022. ♦ Preparing for Tailored Plans has been extremely time-intensive.
SUD providers	♦ Telehealth has been critical during COVID-19, and many providers hope the policies and reimbursements will not be changed back. Take-home methadone has also been helpful.	♦ Some feel that communication from state/LMEs has been lacking with providers, and one interviewee mentions communication has been lacking for patients (mailings not reaching them or too complex to understand). ♦ ASAM continuum is disjointed – on paper, looks nice, but people only do a piece of it. Service definitions are also often very strict, with large impacts on billing for small deviations from protocol (e.g. 240 minutes/day for SACOT). ♦ Some suggest that utilization review by the PHPs is not supporting the continuum of care. One provider mentions almost all MAT dosing has been denied coverage. Another states that changes to formularies and prior authorizations have led to delays in accessing medications. ♦ Providers are mixed on whether they will be Tailored Plan providers, with one stating that they don't have the resources for the required care management.
Medicaid SUD service beneficiaries	♦ Access to SUD care is good overall and has subjectively improved during the waiver period. ♦ Recent improvements include more flexible take-home MOUD during COVID-19.	♦ Difficulties include finding providers who accept Medicaid and travel distance to those who accept Medicaid. ♦ Providers less available in rural areas. ♦ In some cases, services are not available for those who are not currently intoxicated or positive on drug screens, so beneficiaries have felt the need to use drugs to get care.

Access to Services (Beneficiaries)

In focus groups, beneficiaries reported that Medicaid offers access to a variety of services that would not be accessible without coverage. One beneficiary said:

> *"Just having access to treatment and having those barriers be addressed has been a big help, because most of us who struggle with substance abuse are not extremely wealthy and can't really, if it wasn't for Medicaid, we wouldn't be able to afford to get treatment."*

Similarly, one declared:

> *"I would say without Medicaid I would not be doing well with my substance abuse help or my mental health, or even having my back surgeries that I've had to have…"*

Another reported that Medicaid allowed her to get both SUD treatment and prenatal care while incarcerated:

> *"I was able to get great prenatal care, I was able to get substance abuse treatment while incarcerated. Yeah. So, it was really, really, really helpful for me."*

Several beneficiaries reported good, timely access to Medicaid SUD services:

> [redacted]*OP group really quick, and it was more geared to moms and stuff, but it's been really helpful with my recovery. I'm only five months clean. So I think without them getting to me so quickly, I would've ended up using again."*

However, this experience was not universal as others reported difficulty in finding practices that accept Medicaid patients. One beneficiary reported, *"A lot of places don't accept Medicaid."* Similarly, some [redacted] access to SUD services has improved during the waiver period—*"I have seen that it's more available these days"*—whereas others reported access has become a problem:

> *"I had a provider, two providers that stopped accepting Medicaid, so I had to find somebody different. So yeah…And my understanding was that they didn't want to...And it was the LME, they [redacted]h the local management of care. They didn't want to jump through the hoops to accept my insurance."*

Overall, beneficiaries reported being very appreciative of the Medicaid program; however, accessing services was challenging for some participants.

Coverage Policies (State Agencies and LME/MCOs)

[redacted] The importance of coverage policies was emphasized by the state and the LME/MCOs. First, DHB reported that developing the policies relevant to Milestone 1 has been their main focus so far, emphasizing that "the policy foundation has to happen first." Representatives from DHB and DMH reported that multiple events have slowed the development and implementation of policies, including COVID-19, the dissolution of Cardinal Innovations, and the launch of Standard Plans. The policies that have been implemented already include the 0.5 ASAM level (SBIRT) and ending the IMD exclusion. The tentative date for implementation of the remainder of the policies regarding ASAM levels is July 1, 2022. The state agencies recognized that stakeholder feedback is essential but reported that the many steps involved in policy development has slowed their launch.

Setting payment rates for existing and new services is one step in the chain of policy development, and both DHB and DMH report that setting rates has been very difficult. This is true especially for services that are new to North Carolina or services that are usually paid for through state funds. As DMH reports:

> *"…Usually the claims and billing history is how you kind of help build the rate, but we've got three or four levels of care that we've never had in North Carolina before, or we've only had on the state side where there was limited billing, because we have much more limited funding. And so, you know, it*

takes a little bit more to try and figure out a rate, and an appropriate rate that, you know, is going to keep a program viable and…totally support an evidence-based program."

Several of the LME/MCOs report that they are waiting for new coverage policies to be implemented on July 1, 2022, and are not able to advance before they see the new service definitions. This presents a potential risk for delay for coverage launch even after the new coverage policies are approved.

Overall, LME/MCOs, providers, and beneficiaries do not report many effects of policies specific to the SUD waiver itself. This is consistent with the fact that most of the new clinical coverage policies (e.g., around the new ASAM continuum services) have not been implemented. However, several LME/MCOs and providers mentioned that ending the IMD exclusion has been a positive step forward for accessing inpatient SUD [redacted]E/MCOs reported that they feel that the networks for currently implemented [redacted]cient, and the main concerns are around the policies to be newly implemented.

COVID-19 (All Stakeholders)

The impact of the COVID-19 pandemic on the SUD waiver implementation has been overall negative, with one LME/MCO stating "*it's impacted everything*" and another saying that it has been the "*biggest barrier* [redacted]also report that much time and attention had to be paid to maximizing the flexibility of current policies, rather than implementing new policies. That being said, the stakeholders contributed to a rapid and successful response to the COVID-19 public health emergency. In particular, the policy flexibilities that have been a focus of DHB over the past two years have expanded the care available during COVID-19.

[redacted]d overwhelming support for these flexibilities, with one provider stating that the *"flexibilities that have been offered throughout COVID as a result have been really successful for our clients."* The most helpful flexibilities mentioned were relaxed regulations around telehealth and take-home MOUD and increased reimbursements for telehealth services.

Telehealth

[redacted]alth was initially difficult, but then it became a natural and sustainable part of the practice. One provider reported:

> *"[telehealth has] been great for us, we can reach so many more people, people we would never ever reach before, people who live more rurally or in areas where there's absolutely no MOUD, where there're counties where there's no MOUD, or people that will take folks that are unstable. So we really feel like we've been able to reach a lot more people."*

This provider reported that they were *"never going to go back to in-person entirely,"* and that they were *"probably always going to stay majority virtual."* Specific benefits for providers around telehealth included reduced no-show rates and greater patient retention overall. However, one provider noted a decrease in engagement with virtual group treatment, which may have translated less well to the virtual setting than individual treatment.

Some providers also mentioned difficulties reaching clients who did not have video capability, data plans, or wireless internet. One organization had received a telehealth-related grant prior to COVID-19, which supported them in providing devices to clients and expanding their Wi-Fi service to include the parking lot, while not every organization had the resources to provide this kind of support.

One beneficiary discussed ambivalence around telehealth, which made treatment more convenient but less personal for them:

> *"Yeah, I don't know. It's tough…now it's more convenient, and I don't have to worry about getting sick…It's [of] course less personal, but I get back to my other life…"*

Several providers expressed concern that telehealth would be less sustainable if reimbursement policies returned to pre-COVID-19 levels. This feedback was largely obtained prior to North Carolina's announcement through a Special Bulletin on March 2, 2022, that telehealth policies will be made permanent[7].

Take-home MOUD

[redacted]UD reported unanimous support for the new flexibilities during COVID-19. Specifically, instead of going to an OTP every day, they were able to bring more doses of medication home. This was much more convenient, with one beneficiary stating *"it sure helps me only going once a month now opposed to four days a week."* Another provider specifically referenced new flexibility around screening for THC:

[redacted]*o have been in treatment and stable in their recovery for eight or ten years who have never been eligible for take-homes, but under the COVID exemptions they were, because we didn't have to penalize for THC usage."*

Several providers appreciated the more flexible take-home policies as well, with one saying *"It worked well* [redacted]*ople felt much more respected."*

Medicaid Expansion (LME/MCOs and Providers)

Many of the LME/MCOs and providers strongly advocated for Medicaid expansion, arguing that the lack of expansion interfered with the implementation of the SUD Waiver. The MPA team did not specifically ask about Medicaid expansion in our interviews, but 3 out of 5 LME/MCOs and 4 out of 11 providers [redacted]ore providers referencing difficulty in providing services to uninsured patients. One LME/MCO representative stated that *"North Carolina not expanding Medicaid is a barrier to implementation."* Another LME/MCO representative remarked that funding new services in the presence of non-expansion can be an issue because clients who are uninsured may want to access these services but funding may not be available through Medicaid or elsewhere. This generates uncertainty about whether the LME/MCOs can cover the cost of new services.

Many providers reported that high percentages of their caseload were uninsured (often between 40% and 60%). There were differences in the services available to those with insurance and those without, especially on the full continuum of behavioral, mental, and primary care. In a representative quote, a provider stated:

> *"Our patients are pretty high need and like I said, 30% Medicaid, but about 60% uninsured. So when people have Medicaid, it's like a huge relief because I can get them primary care really easily, I can*

[7] SPECIAL BULLETIN COVID-19 #234: UPDATE to Permanent Changes Made for PHE Flexibilities and Plan for Sunsetting of Temporary Policies - March 4, 2022. https://medicaid.ncdhhs.gov/media/10972/download?attachment Accessed April 22, 2022.

get them aftercare and they don't have to pay for it, which is great. And all the places we refer to are happy to take people with Medicaid."

Another provider said that providing services to people not able to enroll in Medicaid is one of their *"ongoing challenges,"* and it is difficult to find "*what is available for them."*

Some of the specific services within the SUD treatment continuum unavailable to the uninsured include office-based opioid treatment (OBOT):

> *"…Medicaid expansion is so important, because then you get a consistent program across the board that you can, in that case, pay for an OBOT when you couldn't do that, except unless they had Medicaid."*

[redacted]ers felt that the lack of Medicaid expansion meant that there was a limit on the potential benefits of Medicaid transformation. One provider stated:

> *"We are not serving our community. We are not serving our people who need it most. And, in particular, people with substance use disorders need it more than any other group."*

[redacted]pansion as a "rate-limiting step":

> *"I think until we actually tap into those folks having the full breadth of services that Medicaid can provide, I think we will continue to see, I think, similar numbers of overdoses and even deaths, because I think we're not reaching a critical part of the population."*

[redacted]ppears to be strong support for Medicaid expansion among LME/MCOs and behavioral health providers. The question of expansion was not raised in interviews with state agencies or beneficiaries.

Standard Plan Implementation (State Agencies, LME/MCOs, and Providers)

[redacted]the Medicaid SUD 1115 Waiver at the same time as the overall Medicaid 1115 Waiver. A central goal of the Transformation under the overall 1115 Waiver is the shift to managed care for nearly all beneficiaries. The Standard Plans offered by 5 Prepaid Health Plans (PHPs) were launched in July 2021, after delays related to the NC legislature budget impasse and COVID-19. Most Medicaid beneficiaries with SUD are eligible for Tailored Plans, so they theoretically should have not been heavily impacted by Standard Plan launch. However, DHB is responsible both for managing Standard Plans and the SUD waiver, and several stakeholders reported that the implementation of Standard Plans in July 2021 slowed development of policies around the ASAM continuum. The LME/MCO representatives mentioned Standard Plan development in relation to preparing for Tailored Plans, which we discuss more in the next section.

Interviews with providers revealed that Standard Plan implementation has had widespread impacts. The most salient themes were concerns about how well-informed beneficiaries are about plan details, burdens of explaining plan details falling on providers, and how beneficiaries may or may not be assigned to the correct plans.

Lack of Information and Burden on Providers

Many providers endorsed that beneficiaries often were unclear on the details of Standard Plans and that these details were not sufficiently communicated to them, leaving the providers to do so. Regarding the Standard Plan implementation, one provider stated *"That was hell….that was awful,"* and expressed concern that they also would be responsible for explaining Tailored Plans to beneficiaries. Several providers perceived that sending postal mail was the main strategy of state agencies for disseminating information, but that many of their clients change addresses frequently and had not received the mailings. One provider stated that:

> *"A lot [of clients] just don't know. And sending out mail when we have people that have 40 addresses in three years is not effective. We still have people that came in and said they didn't know* [redacted] *ansformation."*

This lack of information has led to service denials for beneficiaries with SUD: *"patients across the board ... had so little information in choosing those plans that they didn't know,"* which has led to their services not being covered at OTPs.

[redacted] beneficiaries about the service options available, but this is made difficult by the fact that most people seeking SUD treatment are not in an optimal state for retaining information – that information is better provided when people are not in crisis.

In addition, providers themselves had very little knowledge about the components of the SUD waiver and were often unaware of the changes that had either been implemented, such as the IMD waiver, or were [redacted] ew of NCDHHS web pages also revealed very little information on the SUD components of the waiver on DMH's web pages outside of the forthcoming transition to Tailored Plans. We could not locate any documents advising SUD treatment providers or beneficiaries of how changes from the IMD waiver and new benefits related to the ASAM levels of care could affect treatment options.

Correct Plan Assignment

[redacted] eficiaries were not being enrolled in the correct plan type, as well as uncertainty about how this process was decided. One provider mentioned that those seeking SUD services for the first time may have been switched to Standard Plans and then were not able to access the recommended SUD services. This same provider found that the PHPs allowed clients to access MOUD but not SAIOP until they switched back to Medicaid Direct. Overall, this process has complicated access.

Another provider stated that *"the transition was kind of difficult on our patients"* and led to interruptions in provider and pharmacy access. In an extreme case, one provider at an OTP has not been able to contract with PHPs, which has led to almost all of their MOUD services being denied reimbursement by Medicaid. This has led to a decrease in their Medicaid population from 60% down to 40% as a proportion of the caseload.

Similarly, one LME/MCO expressed that it was unclear to them how beneficiaries with SUD would be assigned to a Standard Plan or Tailored Plan based on the severity of their SUD diagnosis, and how they might transition between Standard Plans and Tailored Plans if the severity changed.

Tailored Plans (State agencies, LME/MCOs, and Providers)

The launch of Tailored Plans was pushed to December 1, 2022, and DHB reports that the primary cause of this was the dissolution of the LME/MCO Cardinal Innovations. The counties served by Cardinal were picked up by other LME/MCOs, and the process "took a lot of focus." DHB representatives reported some concern with the development of Tailored Plans, particularly because the LME/MCOs have historically focused on only mental and behavioral health. They state, *"fully integrated health plans from just behavioral health plans is very different."* This was echoed by some of the LME/MCO representatives, with one describing a very steep learning curve. DMH representatives believe that the push to December 2022 will work out well, giving DMH and other agencies some additional cushion if unexpected delays occur.

[redacted]tives report spending large amounts of time and effort preparing for the launch [redacted]ber 2022, though most report being confident that they will be prepared for the launch. One LME/MCO representative stated that the push to December 2022 has not changed the urgency of their preparation, and another described that the size of their agency has doubled in preparation for the launch.

[redacted]ntatives reported that much of their effort has been on the technological details [redacted]interoperability of systems. Although the state has been helpful in this regard, it is still difficult for the LME/MCOs to *"know what they don't know"* about providing physical health and the data analytics required.

Some of the LME/MCO representatives did raise concerns about the communication given by the state, [redacted]at the conversations have been helpful overall. One LME/MCO representative felt that the state has offered *"changing guidance, changing timelines, changing expectations,"* and that has made it difficult to prepare. Another LME/MCO representative stated that the guidance from the state has seemingly encouraged partnering with Standard Plans but has not offered regulation or guidance on how to do this. The same organization also reported that the state has presented PHPs as paradigms of physical [redacted]al resources than LME/MCOs, so the LME/MCOs are not [redacted]

Most providers reported some level of preparation for Tailored Plans, although some denied any awareness of them. The majority of efforts are directed toward discussions with their LME/MCO partners and educating staff at the practices. Providers generally expect that a large proportion of their clients will be enrolled in Tailored Plans, though one provider stated they do not plan to contract with Tailored Plans at all. Providers also report difficult decisions around becoming a Tailored Plan provider and/or providing their own care management services.

Milestone 1 Risk Assessment

In summary, three of the seven metrics for Milestone 1 have demonstrated progress in terms of moving in the target direction, while four of the seven metrics are moving in the opposite direction. In addition, the magnitude of the direction is much larger for those metrics not demonstrating progress. Stakeholder input suggests that COVID-19 impacts, such as capacity limitations in inpatient facilities, could have influenced the direction of some of these metrics. Access to MOUD is a notable exception in that the state has made substantial progress on this metric.

Out of 61 Implementation Plan action items intended to be completed by January 1, 2022, only 1 has been completed, with 17 in progress and 42 open items. This is suggestive of higher risk of not meeting Milestone 1 than indicated in the monitoring metrics.

Stakeholder feedback from beneficiaries indicates several positive developments during the SUD Waiver implementation period, including flexibilities related to COVID-19, as well as a general perception that SUD care is more available than previously. In terms of policy implementation, state agencies plan to implement coverage policies by July 1, 2022, much later than previously intended, and LME/MCOs report that they are unable to begin developing networks for new services before they see the service definitions. In addition, both state agencies and LME/MCOs report concerns about the launch of Tailored Plans, given the complexity involved in the transition of organizations with an exclusive behavioral health focus to providing [redacted]nd behavioral health care. Stakeholder feedback is suggestive of higher risk of not meeting Milestone 1 than indicated in the monitoring metrics.

In summary, because few of the critical metrics associated with Milestone 1 are moving in the expected direction, most Implementation Plan Action items are open, and stakeholders express significant concerns, we believe the state is at High risk for not meeting demonstration milestones.

Milestone 2: Use of Evidence-Based SUD-Specific Patient Placement Criteria

Critical Monitoring Metrics

[redacted]

Table 9. Critical monitoring metrics for Milestone 2.

Metric #	Metric name	Monitoring metric rate or count[a,b]				State's demonstration target	Directionality at mid-point	Progress (Yes/No)
		At baseline	At mid-point	Absolute change	Percent change			
5	Medicaid Beneficiaries Treated in an IMD for SUD	638	718	80	12.5%	Increase	Increase	Yes
36	Average Length of Stay in IMDs	8.70	9.17	0.41	4.7%	Decrease	Increase	No

[a]Baseline periods are November 1, 2018 to October 31, 2019 (DY1) for CMS-constructed demonstration year metrics; calendar year 2018 for established metrics; and November 1, 2018 to January 31, 2019 (DY1Q1) for quarterly metrics.
[b]Midpoint periods are October 31, 2021 (DY3) for CMS-constructed demonstration year metrics; calendar year 2020 for established metrics, and August - October 31, 2021 for quarterly metrics.

Summary

Milestone 2 is associated with two metrics (Table 9). The number of Medicaid beneficiaries treated in an IMD for SUD according to the technical specifications provided by CMS has increased from 638 to 718, which increases this metric in the target direction. We note that the technical specifications substantially limit the number of persons in an IMD to a small subset of the revenue codes used in an IMD, thus substantially reducing the numbers. Separately, our team estimates that over 7000 non-elderly adults age 21-64 have received Medicaid-funded stays in an IMD since the start of the SUD waiver. The average length of stay has shown a small increase of less than half of a day, though we believe the length of stay has not changed appreciably. In addition, CMS's guidance for this metric indicates that "if the state's ALOS in IMDs is known to be less than 30 days prior to the demonstration… CMS understands that the state may observe [redacted]the ALOS as the state expands coverage for care in IMDs during the

Implementation Plan Action Items

There were 10 implementation plan action items related to Milestone 2 (Table 10). Of these, 3 were completed prior to implementation plan approval, 3 were completed after approval, 3 are in progress, and [redacted]items relate to clinical coverage policies – specifically, that a determination of the ASAM level must be part of the diagnostic assessment and that SUD providers must receive and document their training on the ASAM criteria. In addition, the department has yet to update LME/MCO contracts.

Table 10: Implementation plan action items for Milestone 2.

Category	Action item description	Date to be completed	Current status
Enrollee Assessments	Revise clinical coverage policies to require that (1) an ASAM determination is part of the diagnostic assessment and CCA and (2) licensed providers providing SUD services or assessments document their training with respect to the ASAM criteria	Apr-20	In progress
	Contractually require Standard Plans to comply with the provisions related to behavioral health assessments included in Medicaid clinical coverage policies 8-A and 8-C	Completed before implementation plan approval	Completed
	Contractually require Tailored Plans to comply with the provisions related to behavioral health assessments included in Medicaid clinical coverage policies 8-A and 8-C:	Jul-21	Completed

Person-Centered Plan	Contractually require Standard Plans to comply with the provisions related to person-centered planning included in Medicaid clinical coverage policies 8-A and 8-C	Completed before implementation plan approval	Completed
	Contractually require Tailored Plans to comply with the provisions related to person-centered planning included in Medicaid clinical coverage policies 8-A and 8-C	Jul-21	Completed
Utilization Management	Revise clinical coverage policies to require that (1) an ASAM determination is part of the diagnostic assessment and CCA and (2) licensed providers providing SUD services or assessments document their training with respect to the ASAM criteria	Apr-20	In progress
	Submit SPAs as needed to reflect updated utilization management requirements	Oct-20	In progress
	Update LME/MCO contracts, as necessary	Oct-20	Open
	Require Standard Plans to follow clinical coverage policies 8-A and 8-C	Completed before implementation plan approval	Completed
	Require Tailored Plans to follow clinical coverage policies 8-A and 8-C	Jul-21	Completed

Stakeholder Input

A summary of stakeholder input relevant to Milestone 2 is displayed in Table 11. Most of the stakeholder input was related to the ASAM continuum trainings, with the state reporting a significant number of [redacted] as high as hoped. Some of the LME/MCO representatives reported that the fee associated with the training was a barrier. Most of the providers had an overall positive perception of the trainings.

Several Medicaid beneficiaries reported a troubling pattern related to proper placement with negative drug screens. Specifically, they report that when seeking treatment after not using for a number of days, and their urine drug screen is negative, they have been told that they cannot access treatment without a positive screen. In one beneficiary's words:

> *"I've had that happen where I hadn't used in a couple days, so I would've had a negative result. So, I've had it before where I had to use just to get help."*

It is possible that this represents a pattern in locations where there is a very limited selection of services available (e.g., with mostly detox facilities available). Regardless, it is concerning that multiple beneficiaries reported being turned away from treatment due to a negative drug screen. As they reported, this may lead some individuals with SUD to use drugs in an effort to qualify for treatment.

Table 11: Stakeholder input relevant to Milestone 2.

Milestone 2		
Stakeholder	**Successes**	**Challenges**
State agencies		
DHB	♦ ASAM trainings: have had around 600 providers trained	♦ Training turnout has not been as high as hoped
DMH	♦ Did "massive" training around the ASAM criteria.	None mentioned.
DSOHF	Not discussed	Not discussed
CSRS	NA	NA
LME/MCOs	♦ The ASAM training was well implemented and helpful.	♦ The fee associated with the ASAM training was a barrier, especially during COVID-19 revenue struggles.
SUD providers	♦ Most providers interviewed have been through ASAM training and had an overall positive perception.	♦ Some mention that the ASAM trainings are too general or too long for their staff to benefit. ♦ Some providers mentioned that they did not perceive a need for the trainings, given their level of in-house knowledge.
Medicaid SUD service beneficiaries	None mentioned.	♦ Some beneficiaries report not being able to access services unless they have a positive drug screen, which acted as an inducement to use.

Milestone 2 Risk Assessment

The state has made progress on one out of two (50%) of critical metrics relevant to Milestone 2. The state has completed six out of ten (60%) of Implementation Plan action items relevant to Milestone 2. There was relatively little stakeholder feedback relevant to Milestone 2. There are some concerns about fewer [redacted] than hoped, but this concern is relatively minor given the substantial number of providers trained.

> **While only one of the two metrics has achieved progress in the target direction, the other metric is relatively flat, more than half of the action items are complete, and no concerns were raised by stakeholders, so we believe the state is at Low risk for not meeting Milestone 2.**

Milestone 3: Use of Nationally Recognized SUD-Specific Program Standards to Set Provider Qualifications for Residential Treatment Facilities

Critical Monitoring Metrics

No critical monitoring metrics are reported for Milestone 3.

Implementation Plan Action Items

There were four implementation plan action items relevant to Milestone 3 (Table 12). Of these 4, 3 were intended to be completed by January 1, 2022. Of the 3, 2 are open and 1 is in progress.

Table 12. Implementation plan action items for Milestone 3.

Category	Action item description	Date to be completed	Current status
Provider Licensure	Develop a licensure rule waiver process to incorporate ASAM criteria	Oct-20	Open
	Revise existing licensure rules to align provider qualifications with 2013 ASAM criteria	Oct-22	Open
Monitoring of SUD Treatment Providers	Revise DHSR Mental Health Licensure and Certification Section's annual survey process to provide the ability to assess compliance with 2013 ASAM standards	Oct-20	Open
Requirement That Residential Treatment Providers Offer MAT On-Site or Facilitate Access to Off-Site Providers	Develop requirement for residential treatment providers to be able to refer patients to MAT within a minimum number of miles or minutes	Oct-20	In progress

Stakeholder Input

Stakeholder input relevant to Milestone 3 is displayed in Table 13. LME/MCO representatives reported concern about the prolonged licensure process for facility-based services. On the other hand, a SUD provider reported concerns that even some licensed programs offering higher-level care do not offer evidence-based treatment like MOUD.

One provider (an OTP) reported that their practice was audited by their LME/MCO, which led to changes in their staffing practices; specifically, they dropped one certified alcohol and drug counselor and added one more licensed clinical addiction specialist. They also received constructive criticism about their care coordination practices during the audit. Overall, they applauded their experience in this audit despite the criticism, stating they hope it changes perceptions of OTPs.

Table 13. Stakeholder input relevant to Milestone 3.

Milestone 3		
Stakeholder	**Successes**	**Challenges**
State agencies		
DHB	Not discussed	Not discussed
DMH	♦ Working with partners at DHSR to get licensure rules in place	None mentioned.
DSOHF	Not discussed	Not discussed
CSRS	NA	NA
LME/MCOs	♦ State's presentations have been helpful for understanding licensing requirements.	♦ The licensure process for residential facilities is very prolonged (18 months). During this period, the provider has to pay staff and capital costs. Changes to licensing may further complicate startup.
SUD providers	♦ Overall, providers did not have strong opinions about changes to provider qualifications. ♦ One provider reported they had changed staffing to have one fewer LCAS and one more LCSW in response to the new standards, and felt it was a positive change.	♦ One participant mentioned many programs offering higher-level care still do not offer evidence-based treatment - for example, not offering medication for alcohol or opioid use disorder treatment.
Medicaid SUD service beneficiaries	Not discussed	Not discussed

Milestone 3 Risk Assessment

There are no metrics to inform this Milestone and stakeholder input was limited, so the only data available is the number of implementation actions completed.

> **Given that none of the required Implementation Plan action items have been completed, but at least some are in progress, we determine that the state is at Medium risk of not achieving Milestone 3.**

Milestone 4: Sufficient Provider Capacity at Critical Levels of Care, including for Medication-Assisted Treatment for Opioid Use Disorder

Critical Monitoring Metrics

Both metrics on provider availability have demonstrated progress (

Table 14). While further progress is likely necessary due to the continued shortages of providers available to meet the needs of the growing SUD and OUD demands, both metrics are moving in the right direction.

Table 14. Critical monitoring metrics for Milestone 4.

Metric #	Metric name	Monitoring metric rate or count[a,b]				State's demonstration target	Directionality at mid-point	Progress (Yes/No)
		At baseline	At mid-point	Absolute change	Percent change			
13	Provider Availability	5,871	6,181	310	5.3%	Increase	Increase	Yes
14	Provider Availability – MAT	1,110	1,511	401	36.1%	Increase	Increase	Yes

[a]Baseline periods are November 1, 2018 to October 31, 2019 (DY1) for CMS-constructed demonstration year metrics; calendar year 2018 for established metrics; and November 1, 2018 to January 31, 2019 (DY1Q1) for quarterly metrics.
[b]Midpoint periods are October 31, 2021 (DY3) for CMS-constructed demonstration year metrics; calendar year 2020 for established metrics, and August - October 31, 2021 for quarterly metrics.

Implementation Plan Action Items

There are three implementation plan action items relevant to Milestone 4, all planned to be completed before January 1, 2022 (Table 15). Of these, 2 remain open and 1 is in progress.

Table 15: Implementation plan action items for Milestone 4.

Category	Action item description	Date to be completed	Current status
Sufficient provider capacity at critical levels of care	Conduct an assessment of all Medicaid-enrolled providers, to include the identification of providers that are accepting new patients at the critical levels of care	Oct-19	Open
	Work to build Medicaid provider networks for new Medicaid levels of care	Oct-20	In progress
	Develop BH I/DD Tailored Plan network adequacy standards for SUD treatment services, taking into account results of provider assessment	Oct-19	Open

Stakeholder Input

Themes from the stakeholder interviews relevant to Milestone 4 are displayed in Table 16. Overall, major themes included perceived poor access to residential services, some limitations in outpatient service capacity and medication access, positive experiences with the state's support of MOUD, and positive effects of expanded telehealth on capacity.

Low Residential Service Capacity

Multiple stakeholders expressed concerns with the available capacity of residential services. Staffing residential programs as well as OTPs is a major concern that has been exacerbated by COVID-19. Several stakeholders report high turnover at OTPs, specifically, as well as trouble hiring at residential treatment programs.

DHB representatives expressed concern for LME/MCOs establishing capacity for new and residential services, which is corroborated by the LME/MCOs themselves. A concern for many of the LME/MCOs is a lack of startup funds for these capital-intensive facility-based services. They find that the providers they contract with are unable to afford the startup costs needed to finance these programs.

[redacted]culty referring Medicaid beneficiaries to inpatient treatment. For example, one provider recognized that the state is trying to make changes but reported that it has not helped the situation so far: *"There's always a waiting list, and so it's easier to just send them to the ER."*

Another provider reports severe difficulties finding inpatient beds for their clients. They reported that for each client they have to call inpatient treatment programs every day for up to 2 weeks, and then frequently [redacted]pt Medicaid. This organization has resorted to sending clients out of state for inpatient treatment, but this is not paid for by Medicaid.

Another provider reports that a key barrier to expanding inpatient treatment options is that most hospitals across the state do not offer evidence-based addiction services, and most do not even offer MOUD. This [redacted]at many inpatient programs that do exist still do not offer medications for OUD or

Medicaid beneficiaries also perceive that inpatient services are less available than outpatient services, and that this has been exacerbated by COVID-19. This is even more acute of a problem in rural areas, where most facilities have long waiting lists, and other options are several counties away. One beneficiary [redacted]

> *"What usually takes a week to get into a detox, it was taking double or three times that amount of time just because of space and that stuff. Or going on lockdown. I remember places being on lockdown because there was an outbreak of COVID or something."*

A major step forward, however, is the ending of the IMD waiver exclusion, which allows for Medicaid payment for SUD treatment in IMDs. DSOHF also reports expanding services at several of the ADATCs, which is improving the continuity of care.

Community-based services

Several state agencies and providers also endorsed perceived shortages of outpatient care. DSOHF representatives stated that discharging their patients to outpatient services can be difficult, due to outpatient provider shortages.

Like inpatient services, beneficiaries also report more difficulty accessing care in rural regions. One beneficiary stated:

"I know that North Carolina has a lot of treatment places. I think that there's so many in a particular area that some areas have nothing and it's like three or four pop up in one place, and then there's this place over here that people might not have the resources to get out here and they go without."

Overall, however, Medicaid beneficiaries reported greater perceived access to outpatient services than prior to the waiver.

Capacity for MOUD

Several providers positively describe the state's support for MOUD and innovative delivery approaches. However, some feel that there are still shortages specifically in providers that offer OBOT. An advanced practice provider (APP) reported that the policies written by the state and LME/MCOs are largely targeted [redacted]r recommends that Medicaid and the LME/MCOs reimburse other providers for MOUD services in addition to physicians. Also, this provider reported frustration with regulations around advertising MOUD services; specifically, they felt that they do not get sufficient referrals from the LME/MCO. One provider from the eastern part of the state reported that some of her clients still are not aware that Medicaid covers MOUD, so they will purchase it off the street.

[redacted]ers report optimism about the ability of the SUD waiver to improve access to MOUD. Similarly, the LME/MCO representatives report that the state has been very supportive of MOUD expansions and innovative delivery methods, like mobile MOUD services. One LME/MCO is in the process of developing 6 mobile MOUD clinics, which are fairly new to the state.

Telehealth

As discussed more in Milestone 1, many providers endorse that telehealth and other COVID-19 flexibilities have improved provider capacity and access to care, and hope that these flexibilities continue.

Table 16. Stakeholder input relevant to Milestone 4.

[redacted]

Milestone 4		
Stakeholder	**Successes**	**Challenges**
State agencies		
DHB	None mentioned.	♦ Staffing has been a challenge at OTPs due to turnover. ♦ Concern about LME/MCOs establishing capacity, especially for services new to NC and residential services.
DMH	Not discussed	Not discussed
DSOHF	♦ Expanded services at several of the ADATCs, like a full outpatient program and a peer support outpatient program.	♦ Community outpatient provider shortages exacerbated by COVID-19. ♦ Budgetary concerns led to contracting with SME to improve business model.
CSRS	NA	NA

LME/MCOs	♦ State has been very supportive of MAT expansions and innovative service delivery methods (mobile clinics, etc.)	♦ Facility-based treatment is overall more challenging, due to lack of startup funds. ♦ COVID-19 has reduced residential staffing. ♦ Funding is an issue, especially for new services since most people with SUD are uninsured and may want or need to access new services also. State funds are important for this.
SUD providers	♦ Several providers are planning to expand existing services or add new services due to the waiver. ♦ Telehealth increases provider capacity and improves access to care. Recommend continuing COVID-19 flexibilities.	♦ Participants identified a lack of inpatient SUD beds, especially for those with Medicaid, with staff having to call daily for days or weeks to get a bed. ♦ Others identified a lack of outpatient care and OBOT. ♦ Many hospitals in the state do not offer addiction treatment, or even MAT.
Medicaid SUD service beneficiaries	♦ Most beneficiaries report better access to outpatient treatment overall.	♦ COVID-19 has negatively impacted access to inpatient ♦ Accessing any type of SUD service in rural areas is still very difficult

Milestone 4 Risk Assessment

In summary, both of the metrics for Milestone 4 have demonstrated progress in terms of moving in the target direction. Out of three Implementation Plan action items, none have been completed. In particular, the required assessment of SUD provider availability has not been completed, which is a critical step for [redacted] NC. However, our concerns about the lack of a [redacted] the positive trends seen in the critical monitoring metrics for this milestone. Stakeholder feedback reveals significant concerns about current and future capacity, especially regarding inpatient services and services in rural areas. In the absence of a completed comprehensive provider availability assessment, it is difficult to compare these subjective assessments with objective data. However, the concerns appear substantial.

> **In summary, all of the critical metrics associated with Milestone 4 are moving in the target direction, but all action items remain open and stakeholders express significant concerns. We determine that the state is at Low/Medium risk for not meeting Milestone 4.**

Milestone 5: Implementation of Comprehensive Strategies to Address Prescription Drug Abuse and Opioid Use Disorders

Critical Monitoring Metrics

The estimates for critical monitoring metrics relevant to Milestone 5 are shown in

Table 17, and are summarized narratively below.

Use of Opioids at High Dosage in Persons Without Cancer tracks the "Percentage of beneficiaries age 18 and older who received prescriptions for opioids with an average daily dosage greater than or equal to 90 morphine milligram equivalents (MME) over a period of 90 days or more." This measure has decreased [redacted] of the waiver.

Concurrent Use of Opioids and Benzodiazepines has shown a marked decrease since the start of the SUD waiver.

Emergency Department Utilization for SUD per 1,000 Medicaid Beneficiaries has shown a modest increase since SUD waiver implementation. This measure could have been affected by the implementation of [redacted] 021.

Overdose Death Rate in North Carolina, as in most states, has shown a marked increase during the COVID-19 pandemic. The national increase from April 2020 to April 2021 was 28.5%,[8] consistent with NC's overdose death rate increase since waiver implementation.

[redacted]

Table 17. Critical monitoring metrics for Milestone 5.

Metric #	Metric name	Monitoring metric rate or count[a,b]				State's demonstration target	Directionality at mid-point	Progress (Yes/No)
		At baseline	At mid-point	Absolute change	Percent change			
18	Use of Opioids at High Dosage in Persons Without Cancer (NQF #2940)	6.46%	6.25%	-0.21% points	-3.2%	Decrease	Decrease	Yes
21	Concurrent Use of Opioids and Benzodiazepines (NQF #3175)	19.51%	13.53%	-5.98% points	-30.7%	Decrease	Decrease	Yes

[8] CDC, National Center for Health Statistics, Office of Communication. *Drug Overdose Deaths in the U.S. Top 100,000 Annually.* https://www.cdc.gov/nchs/pressroom/nchs_press_releases/2021/20211117.htm. Published November 2021. Accessed March 31, 2022.

23	Emergency Department Utilization for SUD per 1,000 Medicaid Beneficiaries	1.50	1.51	0.008	0.55%	Decrease	Increase	No
27	Overdose Death Rate	0.27	0.35	0.08	29.6%	Decrease	Increase	No

[a]Baseline periods are November 1, 2018 to October 31, 2019 (DY1) for CMS-constructed demonstration year metrics; calendar year 2018 for established metrics; and November 1, 2018 to January 31, 2019 (DY1Q1) for quarterly metrics.
[b]Midpoint periods are October 31, 2021 (DY3) for CMS-constructed demonstration year metrics; calendar year 2020 for established metrics, and August - October 31, 2021 for quarterly metrics.

Implementation Plan Action Items

There is only one implementation plan action item relevant to Milestone 5, and it has been completed (Table 18).

Table 18: Implementation plan action items for Milestone 5.

Category	Action item description	Date to be completed	Current status
Prescription Drug Abuse and OUD	Continue Implementation of the STOP Act provisions on an ongoing basis	Oct-20	Completed

Stakeholder Input

Themes from stakeholder interviews are displayed in Table 19.

n (CSRS) has made improvements to its prescription drug monitoring program (PDMP) database, and there is a consensus among providers that the changes to the PDMP have been positive. However, these changes were not directly related to the SUD waiver.

The LME/MCOs also report new, innovative services and collaborations to improve access to naloxone and reduce the risk of fatal overdose. Examples include collaborations with North Carolina Harm Reduction Coalition and increased efforts in distributing naloxone.

A number of beneficiaries reported that the pharmacy lock-in program occasionally makes it difficult for them to obtain MOUD. One beneficiary mentioned one case in which their locked-in pharmacy was out of MOUD, and they were not able to transfer their prescription to another pharmacy. A provider had similar concerns and advocated for the removal of combination buprenorphine and naloxone from the pharmacy lock-in program due to their perception of care disruption related to this program. Several other providers reported additional problems with the pharmacy lock-in program around the time of the transition to Standard Plans.

Table 19. Stakeholder input relevant to Milestone 5.

Milestone 5		
Stakeholder	**Successes**	**Challenges**
State agencies		
DHB	Not discussed	Not discussed
DMH	Not discussed	Not discussed
DSOHF	NA	NA
CSRS	♦ Use and functionality of PDMP have increased, continue to work on new reports and flags.	♦ CSRS cannot identify who in the PDMP is prescribing to Medicaid beneficiaries. ♦ 1115 waiver did not "have a huge impact" on CSRS work since they were already working toward similar goals
LME/MCOs	♦ State has been very supportive of MAT expansions ♦ Preparing for Tailored Plan has included opioid misuse treatment and prevention planning (addresses use of PDMP/CSRS). ♦ Pursuing collaborations with other local organizations (e.g. NCHRC) to promote "never use alone" and to raise awareness of access to naloxone.	None mentioned.
SUD providers	♦ There is a consensus that improvements to the PDMP have been very successful, being easier to use, more information-rich, and better integrated into EHR.	♦ One provider mentions that methadone is not shown in the PDMP. Has led to some OTP patients being prescribed benzodiazepines, etc., at outside clinics. ♦ Concern that pharmacy lock-in of combination buprenorphine-naloxone negatively affects MOUD access
Medicaid SUD service beneficiaries	None mentioned.	♦ Pharmacy lock-in can interrupt continuity of medication treatment.

Milestone 5 Risk Assessment

In summary, half of the four metrics for Milestone 5 have demonstrated progress in terms of moving in the target direction, and one that has not demonstrated progress (metric 23) is essentially unchanged. Furthermore, increases in the overdose death rate reflect national trends during the COVID-19 public health emergency. The state has completed all implementation plan action items relevant to Milestone 5. Stakeholders report that the functionality and utility of the PDMP has vastly improved and commend the state for its encouragement of innovative methods for overdose prevention. There are some concerns about the pharmacy lock-in program, but these do not significantly impact the risk of completion.

> **In summary, given progress on two out of four monitoring metrics, underlying national trends in overdose deaths, and substantial progress as reflected by action items and stakeholder input, the state is at Low risk of not meeting Milestone 5.**

Milestone 6: Improved Care Coordination and Transitions Between Levels of Care

Critical Monitoring Metrics

The critical monitoring metrics relevant to Milestone 6 are described in

Table 20, and are summarized narratively below.

Initiation of Alcohol and Other Drug Dependence Treatment: There has been an appreciable increase in the initiation of treatment services since waiver implementation.

Engagement of Alcohol and Other Drug Dependence Treatment: While more people are initiating in [redacted]ged in services, defined as those who initiated and engaged in on-going

Follow-up after Emergency Department visit for SUD at 7 and 30 days: 7-day follow-up rates declined while 30 days rates increased since waiver implementation.

Follow-up after Emergency Department visit for mental health at 7 and 30 days: Rates of follow up at [redacted]reased since waiver implementation.

Readmissions Among Beneficiaries with SUD: This metric has decreased by 4.1% since baseline.

Table 20. Critical monitoring metrics for Milestone 6.

Metric #	Metric name	Monitoring metric rate or count[a,b]				State's demonstration target	Directionality at mid-point	Progress (Yes/No)
		At baseline	At mid-point	Absolute change	Percent change			
15	Initiation of Alcohol and Other Drug Dependence Treatment (NQF #0004)	38.29%	41.13%	2.83% points	7.40%	Increase	Increase	Yes
15	Engagement of Alcohol and Other Drug Dependence Treatment (NQF #0004)	18.71%	15.52%	-3.19% points	-17.07%	Increase	Decrease	No
17.1	Follow-up at 7 days after Emergency Department Visit for Alcohol or Other Drug Dependence (NQF #2605)	13.87%	13.61%	-0.26% points	-1.91%	Increase	Decrease	No
17.1	Follow-up at 30 days after Emergency Department Visit for Alcohol or Other Drug Dependence (NQF #2605)	24.02%	24.29%	0.27% points	1.14%	Increase	Increase	Yes

17.2	Follow-up at 7 days after Emergency Department Visit for Mental Illness (NQF #2605)	24.27%	24.74%	0.47% points	1.92%	Increase	Increase	Yes
17.2	Follow-up at 30 days after Emergency Department Visit for Mental Illness (NQF #2605)	44.05%	45.47%	1.42% points	3.22%	Increase	Increase	Yes
25	Readmissions Among Beneficiaries with SUD	23.41%	22.46%	-0.95% points	-4.06%	Decrease	Decrease	Yes

[a]Baseline periods are November 1, 2018 to October 31, 2019 (DY1) for CMS-constructed demonstration year metrics; calendar year 2018 for established metrics; and November 1, 2018 to January 31, 2019 (DY1Q1) for quarterly metrics.
[b]Midpoint periods are October 31, 2021 (DY3) for CMS-constructed demonstration year metrics; calendar year 2020 for established metrics, and August - October 31, 2021 for quarterly metrics.

Implementation Plan Action Items

There are three implementation plan action items relevant to Milestone 6 (Table 21). Of these, 2 are completed and 1 is in progress. The item remaining to be completed is authorizing the creation of behavioral health homes through a SPA.

Table 21: Implementation plan action items for Milestone 6.

Category	Action item description	Date to be completed	Current status
Care management and transitions	Incorporate care management provisions into standard plan contracts	Nov-19	Completed
	Incorporate care management provisions into BH I/DD Tailored Plan contracts	Jul-21	Completed
	Submit a health home SPA to authorize the creation of behavioral health homes	Mar-20	In progress

Stakeholder Input

A summary of the stakeholder input relevant to Milestone 6 is shown in Table 22. Stakeholders generally agreed that care coordination could be improved, with one provider reporting it is "not there yet." One LME/MCO also feels that there are "cliffs" between levels of the ASAM continuum, which can make care disjointed. One provider felt that there is not a designated actor that can *"pick a person up and kind of track them through the different levels of care."*

Several stakeholders report that a co-location model has been useful for care coordination, including at the ADATCs and elsewhere. DSOHF reports that care coordination has been a central motivation in their launch of new outpatient services at the ADATCs. Other innovative models for care coordination and continuity of care include efforts such as a one LME/MCO's "Welcome Program" with tokens of appreciation. This organization found that such programs improved appointment attendance. Another organization recommended greater use of the NCCARE360 platform for enhanced care management.

Other providers report much deliberation on care management and Tailored Plans, with one reporting that they have decided to not be a Tailored Plan provider due to the amount of care coordination required, and one reporting they wish there was more funding available. One provider reported that uncertainty about upheavals related to politics and state decisions makes them hesitant to face the large upfront cost that [redacted]s.

For their part, beneficiaries report some difficulty with care continuity, especially during life transitions such as transitioning out of the justice system. Several Medicaid beneficiaries in a high-intensity treatment program expressed their desire for more transitional (step-down) care:

> [redacted]*cus our time on our treatment and even when we can work, your opportunities are kind of slim and you're looking back at trying to reestablish transportation, move to another safe environment that you can maintain the structure and consistency you picked up here, and that's like, I think transitional programs would be really good for folks."*

Overall, stakeholders are optimistic that the SUD waiver will improve care coordination and will allow for [redacted]keholders need to improve it. Regarding more continuous services, one LME/MCO representative said *"I think that's going to be feasible; I think the waiver allows for some flexibility with that."*

Table 22: Stakeholder information relevant to Milestone 6.

[redacted]

Milestone 6		
Stakeholder	**Successes**	**Challenges**
State agencies		
DHB	♦ There have started to be more conversations with addiction professionals around care coordination	♦ Given the focus on transitions of care in Tailored Plans, the launch was pushed after Cardinal's dissolution.
DMH	Not discussed	Not discussed
DSOHF	♦ Establishing outpatient services at several of the ADATCs has improved care coordination, including outpatient peer support programs.	None mentioned.
CSRS	NA	NA
LME/MCOs	♦ Some LMEs report innovative programs, like improving continuity of care for people exiting the judicial system and a welcome program with food/"token of appreciation" that improved appointment attendance.	♦ Perception that ASAM criteria have "cliffs" between them, which can make care disjointed. ♦ Wish more funding was available for care coordination and patient tracking.

	♦ Perception that waiver will allow for flexibility to support continuum of care	
SUD providers	♦ Several providers operate in an co-location model, where several behavioral and physical health services are offered at the same site – has been successful.	♦ Hard decisions around practices doing their own care management, given the large up-front investment. ♦ Several providers feel that care coordination is "not there yet", with one saying that there's nobody to track individuals through the different levels of care.
Medicaid SUD service beneficiaries	None mentioned.	♦ There is a need for more transitional programs after high-level care. ♦ Continuity of care can be difficult when exiting the justice system.

Milestone 6 Risk Assessment

[redacted]en metrics for Milestone 6 have demonstrated progress in terms of moving in the target direction, while two of the seven metrics are moving in the opposite direction. One of these two, 7-day follow-up after ED visits for SUD, has a very small decrease. Two of the three implementation action items are complete, with only submitting a health home SPA in progress. Overall, stakeholders did not have concerns about care coordination that impact the risk of achieving Milestone 6, though providers report [redacted] care coordination overall.

> **Because most but not all of the critical metrics associated with Milestone 6 are moving in the expected direction, we believe the state is at Medium/Low risk for not meeting Milestone 6.**

[redacted]

Chapter 4: Summary and Recommendations

Summary

Table 23 summarizes the percent of action items complete and the proportion of monitoring targets met for each Milestone. In summary, North Carolina is at Low risk for not meeting two of the six milestones: Placement Criteria (Milestone 2) and Prescribing and Overdose (Milestone 5). The state is at Low/Medium risk of not meeting Milestone 4 (Capacity). The assessment of Milestone 4 depends on the relative importance of changes in the metrics (number of providers providing SUD and MOUD services to Medicaid beneficiaries from claims data) and completion of the implementation activities specified in the [redacted] STCs. Required network adequacy assessments and provider outreach have not [redacted] Milestone 4 metrics are advancing in the intended direction (implying Low risk of not meeting the milestone), while the implementation activities have not been completed (implying Medium risk).

The State is at Medium risk for not completing Milestone 3, Qualifications, based solely on implementation [redacted] dium risk on Milestone 6 on Coordination of Care. Finally, the state is at High risk [redacted] ne 1 on Access to Critical Levels of Care for SUD based on a lack of progress in achieving targets for a number of metrics reflecting service use and most implementation activities not being completed.

Table 23. Assessed risk of not achieving milestones.

Milestone	Proportion of monitoring metric goals met (# metrics / total)	Percentage of fully completed action items (# completed / total)	Key themes from stakeholder feedback	Risk level
1. Access	**43% (3/7)**	2% (1/61)	♦ Milestone 1 has been a main focus of DHHS agencies. ♦ Several factors contributed to delays, including COVID-19, Standard Plan launch, the exit of one LME/MCO, and preparing for Tailored Plans. ♦ Providers and LME/MCOs report waiting for finalized policies for new services before beginning to establish networks and care standards. ♦ Multiple stakeholders express concerns about preparedness for Tailored Plans. ♦ Beneficiaries report good access to SUD care overall and improved access to care as a result of COVID-19 flexibilities.	High
2. Placement Criteria	**50% (1/2)**	60% (6/10)	♦ NCDHHS agencies have made significant efforts around training providers in ASAM criteria, with over 600 trained. Turnout has not been as high as hoped, which may be	Low

			partially attributable to the small fee for training.	
3. Qualifications	--	0% (0/4)	♦ The state's presentations have clarified licensure requirements. ♦ LME/MCOs have concerns about the licensure process for residential facilities, which is long and costly. ♦ Some programs in NC still do not offer medication to treat opioid or alcohol use disorder.	Medium
4. Capacity	**100% (2/2)**	0% (0/4)	♦ Staffing inpatient facilities and ensuring sufficient outpatient provider supply is a persistent concern for both state agencies and LMEs. Providers perceived shortages of inpatient beds, outpatient care, and OBOT. ♦ LMEs report that developing capacity for facility-based treatment is overall more challenging, especially with lack of startup funds. ♦ Funding services is an issue, given that most people with SUD in NC are uninsured. State funds are critical for this, and the ongoing lack of Medicaid expansion threatens funding streams for new services.	Low/ Medium
5. Prescribing and Overdose	**50% (2/4)**	100% (1/1)	♦ There is a broad consensus that improvements to the PDMP have been very successful.	Low
6. Coordination	**71% (5/7)**	66% (2/3)	♦ Both providers and state agencies report co-locating services has improved care coordination. ♦ Several providers report needing to make hard decisions about care management going forward, especially with the coming launch of Tailored Plans.	Medium

Recommendations

We have focused our recommendations on the four Milestones (1, 3, 4, and 6) with the highest levels of risk for not achieving benchmarks.

Milestone 1: Access

1. ***Create more user-friendly content for providers and beneficiaries related to the changes in treatment availability, benefit expansions, and payment rates on NCDHHS and in particular DMH's website*.** Many providers attended the ASAM trainings and rated them positively but frequenly did not understand the changes in the benefit package for their patients with SUD. This is even more likely to be needed by primary care providers, who may have less occasion to refer their Medicaid [redacted] treatment.
2. ***Determine available providers and barriers to entry*** to each of the service types represented as critical metrics for Milestone 1 and ***identify incentives that could address these barriers*** in order to create an adequate supply of providers to meet State targets.
3. ***Continue COVID-19 flexibilities for the foreseeable future*.** Providers report that telehealth, take-[redacted] and other policy flexibilities have improved access to care and their ability to care [redacted] continuation of the COVID-19 pandemic, continuing these flexibilities will help to maintain these successes. This recommendation is generally consistent with the State's March 2022 policy announcement of a continuation of many of the PHE flexibilities. However, there is a possibility that telehealth and care delivery methods with less oversight may not fully meet people's [redacted] a possibility that long-term telehealth may lead to weaker attachments to the SUD [redacted] Therefore, we also recommend that, going forward, NCDHHS develop SUD-specific monitoring metrics of telehealth use and the use of other flexibilities to ensure that these services are consistent with quality standards. CMS points to other COVID-19 related flexibilities in their COVID-19 State Implications document.
4. ***Use the metrics to mount an adaptive response.*** In addition to the Manatt Report's suggestion to [redacted] the waiver changes, we believe the owner state agency should carefully use the measures reported each quarter as part of a rapid assessment to react to areas without change.
5. ***Triangulate code lists and service definitions going forward.*** As new services and service definitions are added, the state and independent evaluator should triangulate with existing code lists and technical specifications to ensure that service use is captured in on-going SUD monitoring reports.

Milestone 3: Qualifications

1. ***Prioritize minimum MOUD access requirements for residential treatment facilities.*** Given the large increase in opioid overdoses observed in NC and around the country, ensuring that Medicaid beneficiaries have access to life-saving treatment is of utmost importance. Although the number of providers offering MOUD has increased, providers report a perception that many of the facilities at higher ASAM levels do not offer or refer to MOUD, which is inconsistent with modern treatment

guidelines, especially given the High risk for overdose after discharge from residential facilities.[9] Ensuring access to MOUD and OBOT should be a priority.

2. ***Streamline the licensure process for facility-based treatment*.** Although licensure and oversight are critical, as mentioned in the previous point, the length of the licensure process for new residential facilities may be prohibitive. Because efforts are being made to expand access, shortening and/or simplifying the licensure process for residential facilities may facilitate this aim. NCDHHS should strive to maintain quality and qualification standards while reducing the risk and effort required in facility start-up and licensing.

Milestone 4: Capacity

1. ***Support inpatient service capacity*.** The state agencies and LME/MCOs concur that capacity for [redacted]vices is a concern, and one provider reported immense difficulty in referring patients to inpatient beds. Several LME/MCOs mention that starting up new facilities is expensive and risky, and there are no startup funds available. We make the following recommendations:
    a. ***As possible, the state should provide or facilitate financial support for introduction of new facility-based services*.** If sufficient funds are not available directly through the State, agencies [redacted]acilitate grant applications and other funding procurement efforts.
    b. ***Work to support awareness and allocation efforts of higher-level services*.** If financial support of startup of new services is not available, enhanced efforts to raise awareness and allocate beds to those in most need may increase the effective access to the services that are available. Cross-region and cross-LME/MCO collaboration may facilitate this process.
    [redacted]***id to childless adults.*** Many providers report that most of the SUD patients they see [redacted], and that improvements to the Medicaid program will not improve outcomes among this population. Furthermore, failing to expand Medicaid is a barrier to implementation of new services, because if those who are currently uninsured obtained Medicaid coverage, these new services would be nearly fully subsidized by the federal government. As it stands, uninsured clients access SUD services that are financed through state funds. The services themselves do not have the [redacted] supports that Medicaid has, and the funds themselves are limited. Without Medicaid expansion, there may be a ceiling on the improvements in SUD mortality and morbidity that are possible through the 1115 SUD Waiver alone.

Milestone 6: Coordination

1. ***Identify and reward higher levels of beneficiary engagement in care.*** One of the largest declines in the Coordination metrics was the 17% relative decline in engagement in SUD treatment after initiation. This is a critical metric, since literature shows repeatedly that greater retention in SUD treatment is associated with better outcomes. Achieving greater engagement can be a complex task, but an HIT infrastructure could provide early warnings to providers whose patients have not followed up with treatment through prescription fills or missed appointments that would allow for early opportunities for intervention. Incorporating engagement rates into Tailored Plan contracts or with LME/MCOs could also provide a mechanism for innovation that may improve retention rates.

[9] See, for example, Morgan JR, Wang J, Barocas JA, et al. Opioid overdose and inpatient care for substance use disorder care in Massachusetts. *Journal of Substance Abuse Treatment*. 2020;112:42-48. doi:10.1016/j.jsat.2020.01.017

Conclusions

In summary, we determined that North Carolina Medicaid is at the following risk levels:

- High risk of not achieving demonstration Milestone 1
- Medium risk of not achieving Milestones 3 and 6
- Medium/Low risk of not achieving Milestone 4
- Low risk of not achieving Milestones 2 and 5

We have provided recommendations for mitigating the risk of not achieving these Milestones. The state of North Carolina should determine next steps based on input from CMS, their own Mitigation Plan, and this

[redacted]

[redacted]

[redacted]

[redacted]

Attachment 1: Independent Assessor Description

The Team conducting this Mid-Point Assessment consisted of faculty and staff from the UNC Sheps Center Medicaid Evaluation team and graduate students at UNC-Chapel Hill:

- Kathleen Thomas, PhD
- Chris Shea, PhD
- Marisa Elena Domino, PhD
- Jamie Jackson
- Caleb Easterly, MD/PhD student
- [redacted]udent

[redacted]bers of the Sheps Center Evaluation team reviewed and provided critical feedback on this report. We are grateful for their assistance.

The Sheps Center Mid-Point Assessment team worked with the Division of Health Benefits at North Carolina's Department of Health and Human Services in the following ways. We discussed the format and [redacted]o its initiation, but once a design was agreed upon, we conducted the work and developed recommendations independently. Staff from Manatt participated in the interviews with NCDHHS staff in order to reduce the burden on staff from having separate interviews related to the MPA and the Mitigation Plan. Several staff at NCDHHS and from Manatt reviewed the first draft of this report and provided critical feedback for consideration but did not influence the risk assessments or [redacted]e are grateful for their thoughtful and sensitive feedback.

[redacted]

Conflict of Interest Statement

Organization: University of North Carolina at Chapel Hill, Cecil B. Sheps Center for Health Services Research
Activity/Title: NC 1115 Medicaid Waiver: Mid-Point Assessment

All faculty and staff involved in conducting the mid-point assessment have been reviewed for conflict of interests and a status of "No conflict" has been determined and confirmed based on their responses.

Marisa Domino, PhD, principal investigator

[redacted] 4/22/2022

Signature Date

Kathleen Thomas, PhD, MPH, co-investigator

[redacted] 4/22/2022

Signature Date

Chris Shea, PhD, co-investigator

[redacted] 4/22/2022

Signature Date

Jamie Jackson, BS, project manager

[redacted] 4/22/2022

Signature Date

Attachment 2: Data Collection Tools

NCDHHS Interview Guide

Opening Questions

1. Overall, how would you describe the status of the implementation of the Medicaid Transformation SUD components?
2. Some elements of the SUD transformation have been in effect for several months. Has implementation of these elements gone as expected?
[redacted]D providers of the elements of SUD transformation?
[redacted]se changes are patients using SUD services?

Milestones

5. Which milestones have been most challenging so far?
[redacted] the specific strategies being used to overcome these challenges?
[redacted]nes being prioritized by your agency?
8. Have additional changes to the SUD delivery or benefits system been identified that were not included in the original implementation plan?
    a. If so, what are these changes? How do these changes relate to the milestones in the [redacted]al plan?
[redacted], do you anticipate any additional changes? If so, what might these be?
9. Do you anticipate any other changes to demonstration activities that we haven't discussed so far?

Planning for Tailored Plans

10. [redacted]was pushed to July 1, 2022. How would you describe the [redacted]on of the Tailored Plans?
11. What are the most challenging aspects of preparing for implementation of the Tailored Plans?

LME/MCO Interview Guide

Opening Questions

1. Can you tell us a little about your agency and briefly describe the level of interaction and support that your agency receives from the State agencies, such as the DMH and DHB?
2. Overall, how would you describe the status of the implementation of the SUD components of Medicaid Transformation?
3. Some elements of the transformation related to SUD have been in effect for several years, since early 2019. Has implementation of these elements gone as expected?
4. How has your agency engaged differently with SUD providers because of the new features of the SUD elements of Medicaid transformation?
5. What is your agency doing to help raise awareness among patients of the changes of SUD services?
6. How has COVID-19 affected the status of the implementation of these components?

Waiver Components

7. Which components of the waiver have been most successful so far?
8. Which components of the waiver have been the most challenging so far?
9. Could you describe the specific strategies being used to overcome these challenges?
10. Are certain components being prioritized by your agency?
11. Have additional changes to the SUD delivery or benefits system been identified that were not included in the original transformation plan?
    c. If so, what are these changes? How do these changes relate to the components in the original plan?
    d. If not, do you anticipate any additional changes? If so, what might these be?

[redacted] any other changes to demonstration activities that we haven't discussed so far?

Planning for Tailored Plans

13. The implementation of Tailored Plans was pushed to December 1, 2022. How would you describe the status of preparation for implementation of the Tailored Plans?

[redacted] escribe what types of activities you are undertaking in reaching out to primary care providers?

    b. Can you describe how you are working with the State agencies on Tailored Plan implementation.
14. What are the most challenging aspects of preparing for implementation of the Tailored Plans?

[redacted]

1. Are there topics or issues that you think it's important to ask in our next round of provider and beneficiary interviews?
2. Is there anything else you'd like to provide feedback on that we haven't touched on?

[redacted]

Provider Interview Guide

For context, we'd like to learn a little about you:

1. What is your title, role, and responsibilities at your organization?
2. How long have you been in this role?
3. Approximately what percentage of your patients are Medicaid beneficiaries? What percentage of your Medicaid beneficiaries have substance use disorders?
4. What are the names of the practices/clinics that you work in? Are they part of a larger health system?
5. Which counties does your practice serve?
6. Do you or any providers in your practice have a DATA 2000 waiver for buprenorphine prescribing?

Questions

7. What does Medicaid transformation of SUD care mean to you?
8. Here are the expanded services (slide). What are your general impressions of each of these expanded services?

9. How have you been preparing for changes to the SUD care delivery system from Medicaid Transformation?
10. How have you engaged with the state and your local LME/MCO around changes to the SUD delivery system?
    a. For example, have you and your staff attended the state-sponsored ASAM levels-of-care trainings?
        i. How accessible were they?
        ii. What was your opinion of those trainings?
    b. How closely do you work with your local LME/MCO(s) surrounding the care of your Medicaid patients with behavioral health disorders?

[redacted]oing to offer any new service options being implemented by Medicaid?
    c. What effects do you think these new Medicaid SUD services will have on process, quality of care, and outcomes for patients with SUD?
    d. Will it make it easier for Medicaid patients to get MAT or MOUD?
12. How are you preparing for the implementation of the Tailored Plans?

[redacted]demic brought about a lot of changes. Can you tell us how the COVID-19 pandemic impacted your practice or preparation for Medicaid SUD services expansion?
    e. [prompt] Positive changes as a result of COVID-19?

Closing

[redacted] any recommendations to the state around Medicaid Transformation, what would they be?
2. Is there anything else about the Medicaid program that you would like to share? Anything else we should know that we haven't asked about?

Focus Group Guide [redacted]

1. Thinking about your experience with substance use disorder services paid for by Medicaid over the last few years (since spring of 2019), what has gone well for you?
    a. Provide a slide that shows all of the SUD services we are discussing (In-patient/residential, PHP, etc.).
2. Have you experienced any problems with receiving Medicaid-funded substance use services?
3. Have you noticed any changes in the availability of substance use disorder services through the Medicaid program over the last few years?
    a. For example, changes to getting an appointment in a timely manner.
4. Have you had to do anything differently to get the Medicaid-funded substance use disorder services you need?
    a. For example, have you had to change providers in the last year?
5. Has the COVID-19 pandemic changed your ability to receive Medicaid substance use disorder services? Made it easier or harder?
6. Is there anything else you would like to share with us about Medicaid substance use disorder changes over the last few years?

Attachment 3: Description of All Critical Monitoring Metrics

Details for each metric are reported based on the CMS-approved SUD monitoring metric protocol (approved 10/30/2019 and available at https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/nc/Medicaid-Reform/nc-medicaid-reform-demo-cms-appvl-sud-monitoring-metrics-10302019.xlsx). The assignment of metrics to Milestones in the table below is based on the 1115 SUD MPA Technical Assistance document, Version 1.0.

Attachment 3 Table: Description of All Critical Monitoring Metrics

Number	Name	Description	Data Source	Measurement Period
Milestone 1: Access to Critical Levels of Care for SUD ("Access")				
7	Early Intervention [redacted]	Number of beneficiaries who used early intervention services (such as procedure codes associated with SBIRT) during the measurement period	Claims and encounters	Month
8	Outpatient Services [redacted]	Number of beneficiaries who used outpatient services for SUD (such as outpatient recovery or motivational enhancement therapies, step down care, and monitoring for stable patients) during the measurement period	Claims and encounters	Month
9	Intensive Outpatient and Partial Hospitalization [redacted]	Number of unique beneficiaries who used intensive outpatient and/or partial hospitalization services for SUD (such as specialized outpatient SUD therapy or other [redacted]es) during the measurement period	Claims and encounters	Month
10	Residential and Inpatient Services	Number of beneficiaries who use residential and/or inpatient services for SUD during the measurement period	Claims and encounters	Month
11	Withdrawal Management	Number of beneficiaries who use withdrawal management services (such as outpatient, inpatient, or residential) during the measurement period	Claims and encounters	Month
12	Medication Assisted Treatment (MAT)	Number of beneficiaries who have a claim for MAT for SUD during the measurement period	Claims and encounters	Month
22	Continuity of Pharmacotherapy for Opioid Use Disorder [USC; NQF #3175]	Percentage of adults 18 years of age and older with pharmacotherapy for OUD who have at least 180 days of continuous treatment	Claims and encounters	Calendar Year

Number	Name	Description	Data Source	Measurement Period
Milestone 2: Use of Evidence-Based SUD-Specific Patient Placement Criteria ("Placement Criteria")				
5	Medicaid Beneficiaries Treated in an IMD for SUD	Number of beneficiaries with a claim for residential treatment for SUD in an IMD during the reporting year	Claims and encounters	Demonstration Year
36	Average Length of Stay [redacted]	The average length of stay for beneficiaries discharged from IMD inpatient/residential treatment for SUD.	Claims and encounters, and state-specific IMD data	Demonstration Year
Milestone 3: Use of Nationally Recognized SUD-Specific Program Standards to Set Provider Qualifications for Residential Treatment Facilities ("Provider Qualifications")				
[redacted]	[redacted] defined for Milestone 3			
Milestone 4: Sufficient Provider Capacity at Critical Levels of Care, including for Medication-Assisted Treatment for Opioid Use Disorder (OUD) ("Capacity")				
13	SUD Provider Availability	The number of providers who were enrolled in Medicaid and qualified to deliver SUD services during the measurement period	Provider enrollment database; Claims and encounters	Demonstration Year
14	SUD Provider Availability – MAT	The number of providers who were [redacted] Medicaid and qualified to deliver SUD services during the measurement period and who meet the standards to provide buprenorphine or methadone as part of MAT	Provider enrollment database; Claims and encounters	Demonstration Year
Milestone 5: Implementation of Comprehensive Strategies to Address Prescription Drug Abuse and Opioid Use Disorders ("Prescribing and Overdose")				
18	Use of Opioids at High Dosage in Persons Without Cancer (OHD-AD) [PQA, NQF #2940; Medicaid Adult Core Set]	Percentage of beneficiaries age 18 and older who received prescriptions for opioids with an average daily dosage greater than or equal to 90 morphine milligram equivalents (MME) over a period of 90 days or more. Beneficiaries with a cancer diagnosis, sickle cell disease diagnosis, or in hospice are excluded.	Claims and encounters	Calendar Year

Number	Name	Description	Data Source	Measurement Period
21	Concurrent Use of Opioids and Benzodiazepines (COB-AD) [PQA, NQF #3389; Medicaid Adult Core Set]	Percentage of beneficiaries age 18 and older with concurrent use of prescription opioids and benzodiazepines. Beneficiaries with a cancer diagnosis, sickle cell disease diagnosis, or in hospice are excluded.	Claims and encounters	Calendar Year
[redacted]	Emergency Department [redacted]UD per 1,000 Medicaid Beneficiaries	Total number of ED visits for SUD per 1,000 beneficiaries in the measurement period	Claims and encounters	Month
27	Overdose Deaths (rate)	Rate of overdose deaths during the measurement period among adult Medicaid beneficiaries living in a geographic area covered by the demonstration. The state is encouraged to report the cause of overdose death as specifically as possible (for example, prescription vs. illicit opioid).	State data on cause of death	Demonstration Year
Milestone 6: Improved Care Coordination and Transitions Between Levels of Care ("Coordination")				
15	[redacted] and Other Drug (AOD) Dependence Treatment (IET) [NCQA; NQF #0004; Medicaid Adult Core Set]	1. Initiation of AOD Treatment—[redacted] of beneficiaries who initiated treatment through an inpatient AOD admission, outpatient visit, intensive outpatient encounter or partial hospitalization, telehealth, or MAT within 14 days of the diagnosis.	Claims and encounters	Calendar Year
15	Initiation and Engagement of Alcohol and Other Drug (AOD) Dependence Treatment (IET) [NCQA; NQF #0004; Medicaid Adult Core Set]	2. Engagement of AOD Treatment—percentage of beneficiaries who initiated treatment and who had two or more additional AOD services or MAT within 34 days of the initiation visit	Claims and encounters	Calendar Year

Number	Name	Description	Data Source	Measurement Period
17(1)	Follow-up after Discharge from the Emergency Department for Mental Health or Alcohol or Other Drug Dependence [NCQA; NQF #2605; Medicaid [redacted]	Percentage of ED visits for mental illness for which the beneficiary received follow-up within 7 days of the ED visit (8 total days).	Claims and encounters	Calendar Year
	Follow-up after Discharge from the Emergency Department for Mental Health or [redacted] Drug Dependence [NCQA; NQF #2605; Medicaid Adult Core Set]	Percentage of ED visits for mental illness for which the beneficiary received follow-up within 30 days of the ED visit (31 total days).	Claims and encounters	Calendar Year
25	[redacted] ns Among Beneficiaries with SUD	The rate of all-cause readmissions during the measurement period among beneficiaries with SUD.	Claims and encounters	Demonstration Year

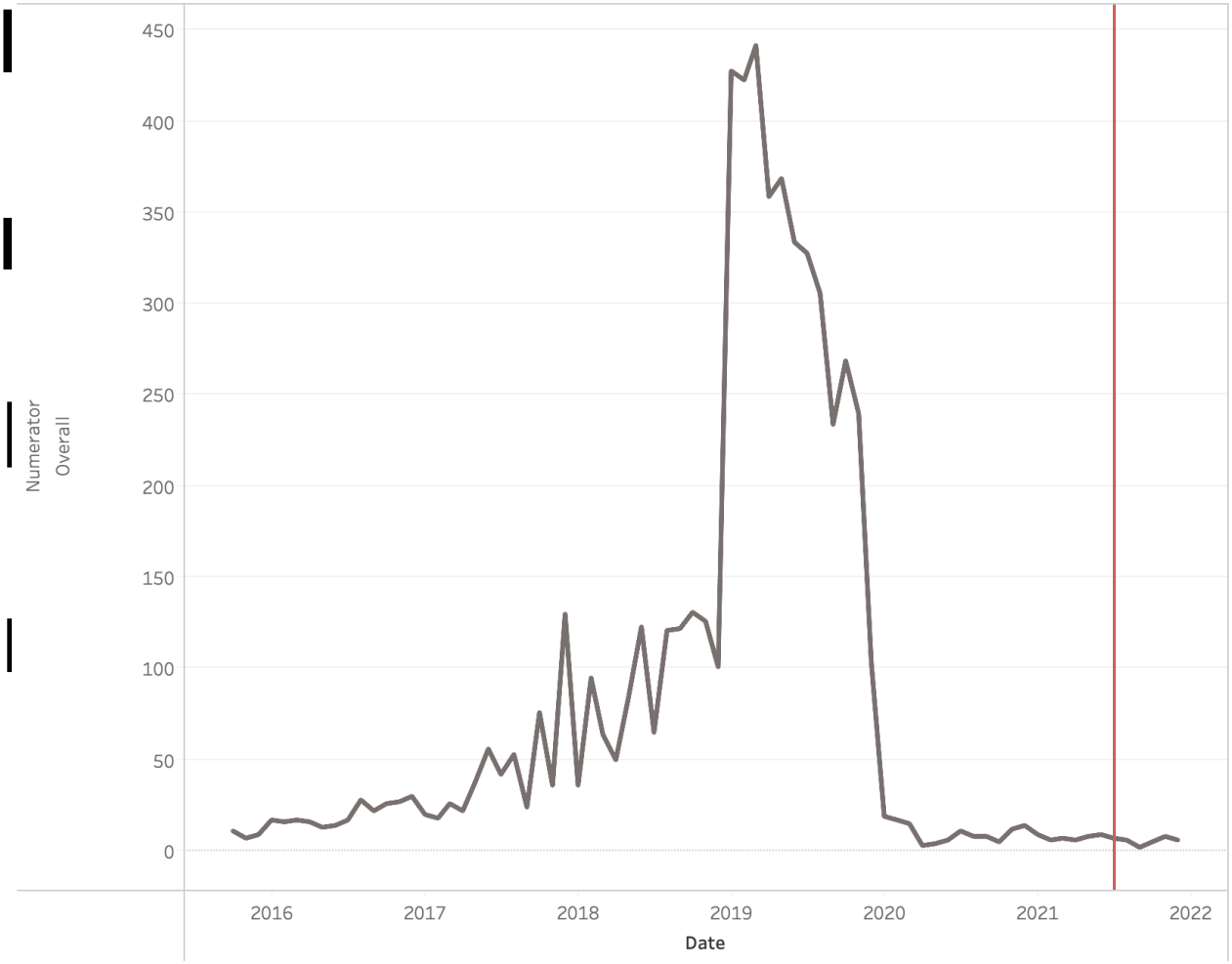
[redacted]

Appendix Figure 1

Appendix Figure 1: Trends in users of early intervention services (metric 7) by month*

Metric	Values	County	Show Reference Lines
M7 - Beneficiaries receiving early intervention ...	Numerator	Total	True

NOTES: Number of beneficiaries receiving early intervention services



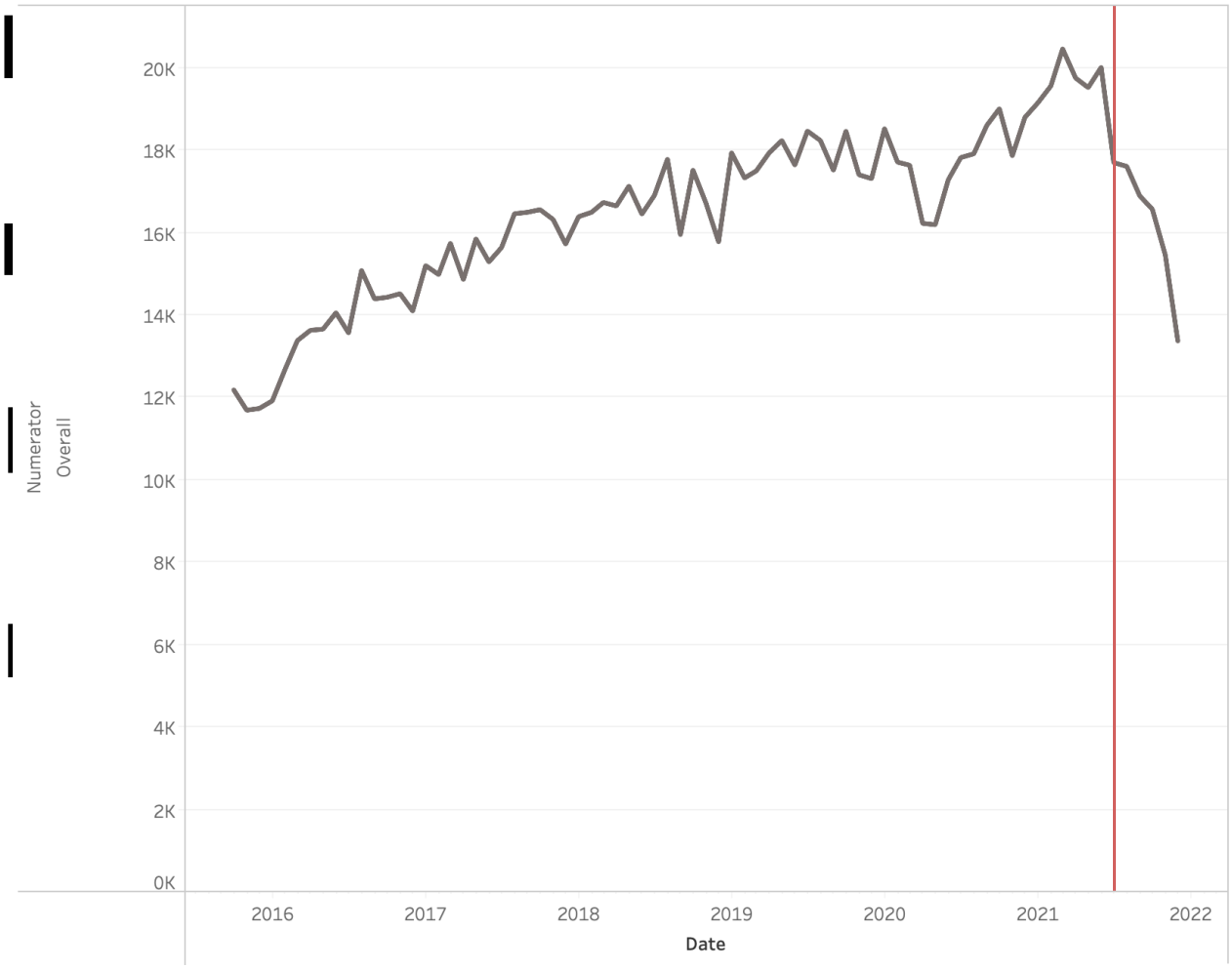
* Vertical red line identifies the implementation of Standard Plans and the incorporation of encounters from Standard Plans for metrics

Appendix Figure 2

Appendix Figure 2: Trends in users of outpatient SUD services (metric 8) by month*

Metric	Values	County	Show Reference Lines
M8 - Beneficiaries receiving outpatient SUD se...	Numerator	Total	True

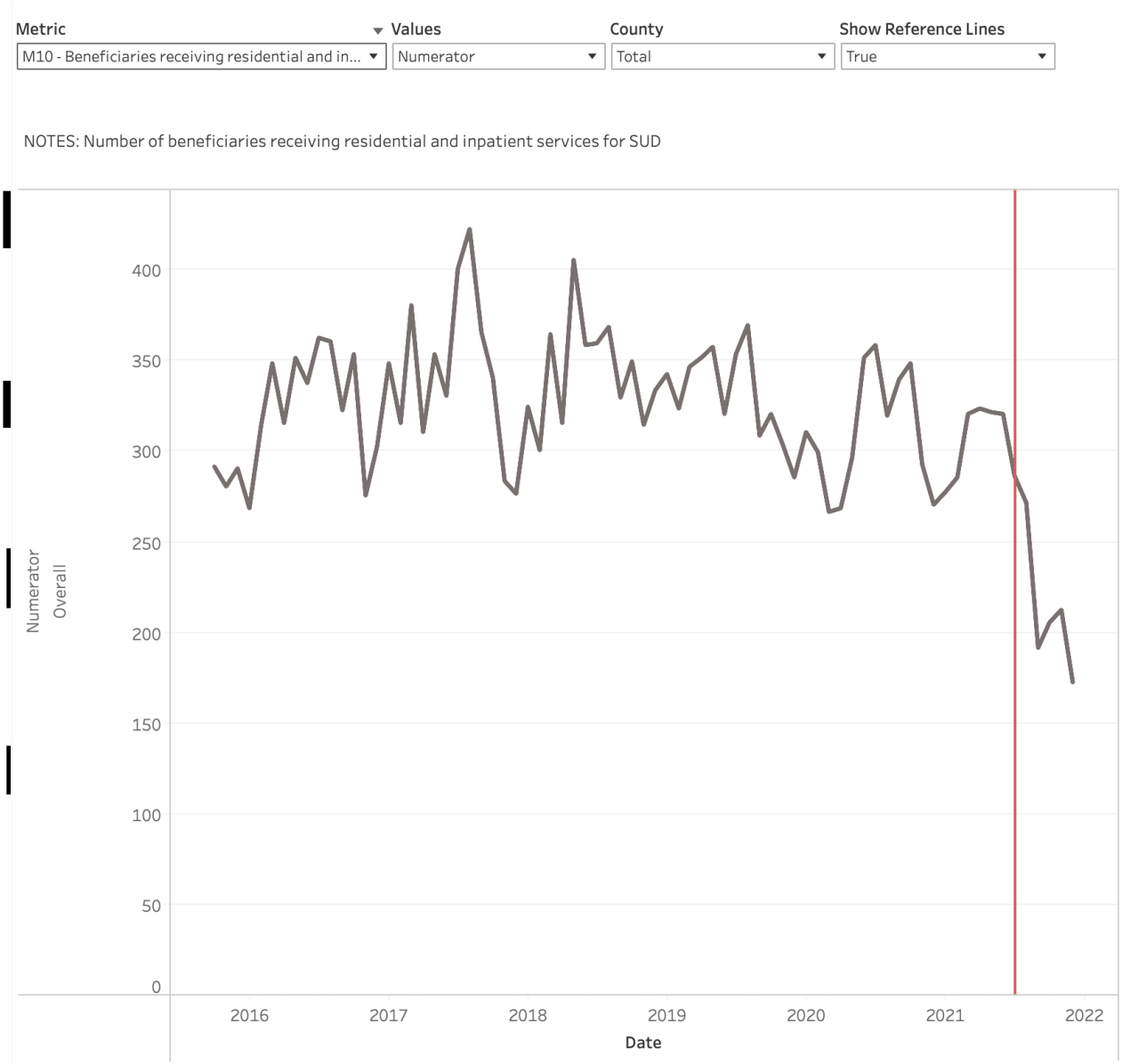
NOTES: Number of beneficiaries receiving outpatient SUD services



* Vertical red line identifies the implementation of Standard Plans and the incorporation of encounters from Standard Plans for metrics

Appendix Figure 3

Appendix Figure 3: Trends in users of residential and inpatient SUD services (metric 10) by month*



* Vertical red line identifies the implementation of Standard Plans and the incorporation of encounters from Standard Plans for metrics

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

UNC | THE CECIL G. SHEPS CENTER FOR HEALTH SERVICES RESEARCH

Table of Contents

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.

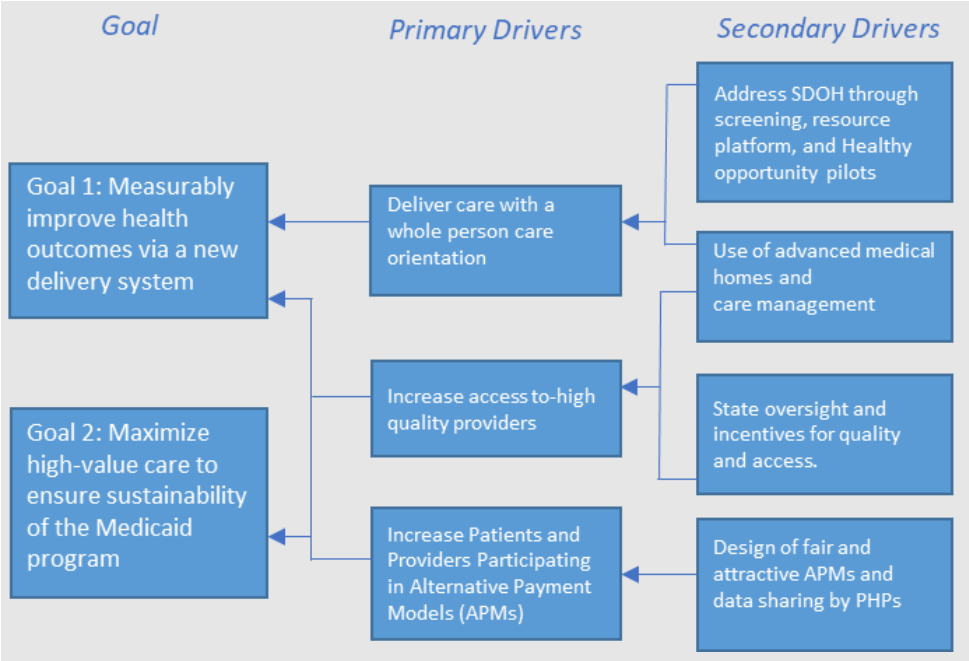
It is well known that medical care is only responsible for a fraction of a person's health; other factors like social determinants of health and the environment are also considerable drivers. An increased emphasis on a whole person orientation will improve beneficiary outcomes. A number of managed care 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.



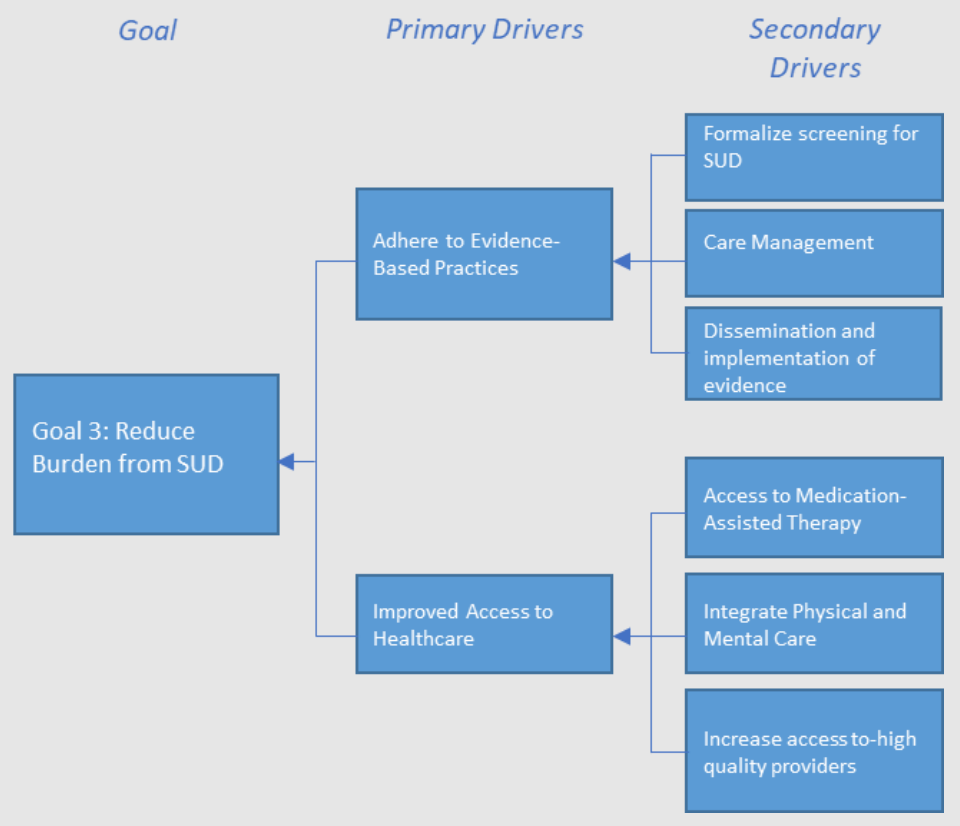
Goal 3 is "reduce the burden of substance use disorder." In Figure 2, we provide additional detail on this goal, which includes reducing the burden of substance use disorder, both in terms of reductions in mortality and morbidity. The primary intention of the SUD components of the waiver is to provide 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

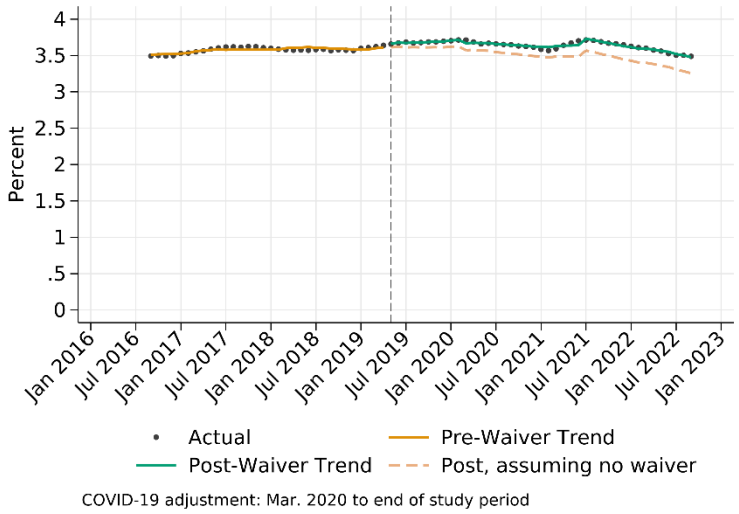
#	Measure (Metric abbreviation)	State's demonstration target+	Directionality at mid-point (Oct 2021)	Adjusted waiver effects at Sept 2022	Progress * (Yes/No)
3.1.1	Medicaid Beneficiaries with SUD Diagnosis (M3)	Increase then decrease	Increase	Increase	Yes
3.1.2	Medicaid Beneficiaries Treated in an IMD 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		

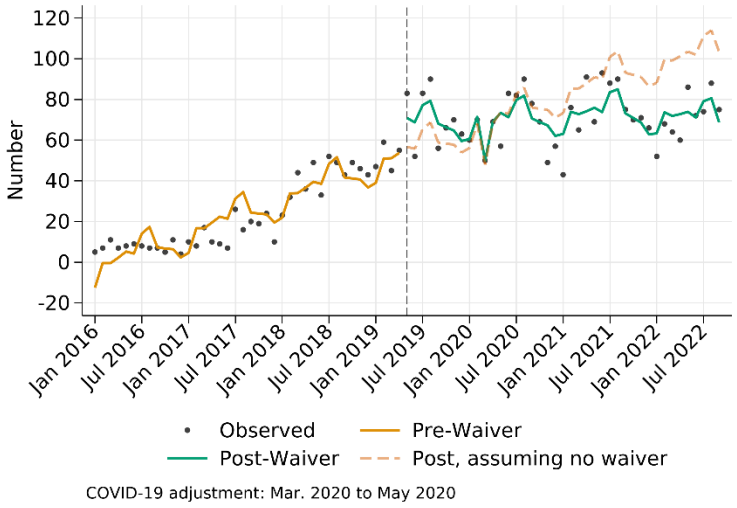
*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation 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		

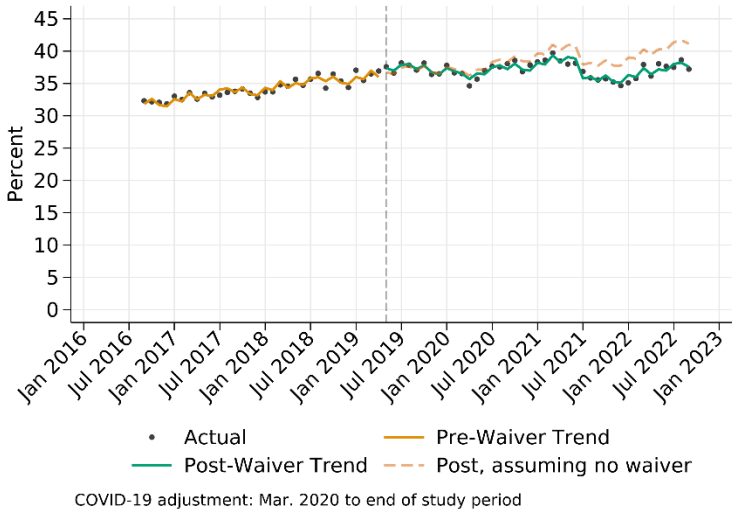
*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation 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		

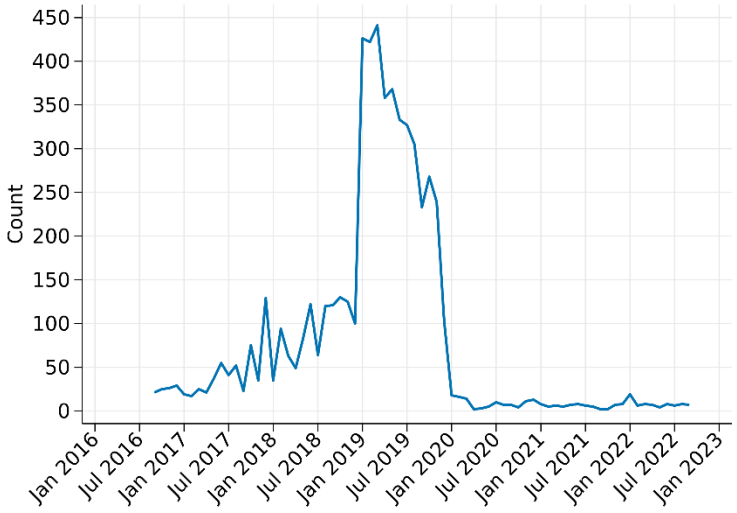
*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation 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

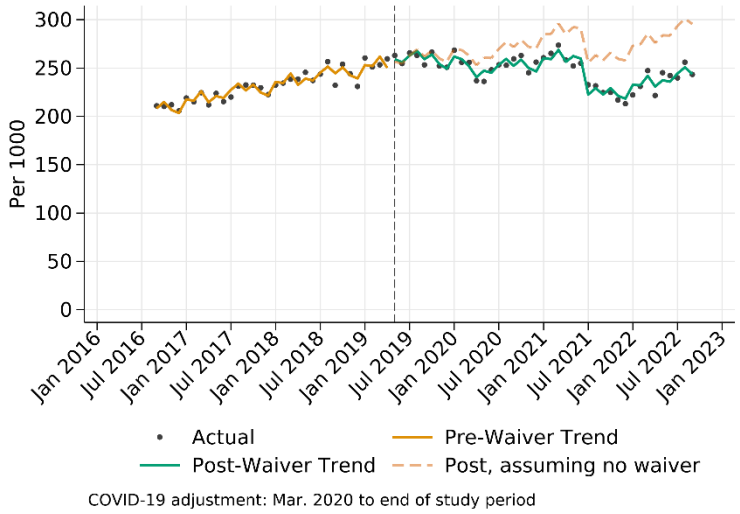
Figure 3.1.4. Trends in Early intervention services for SUD.



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		

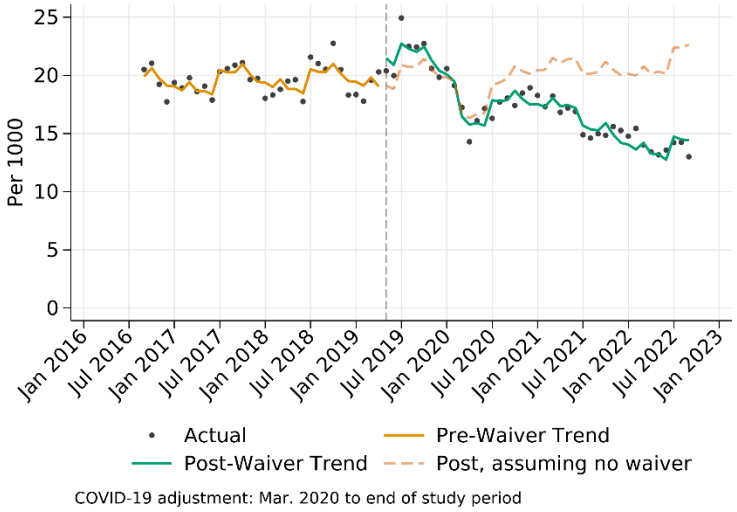
*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation 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.

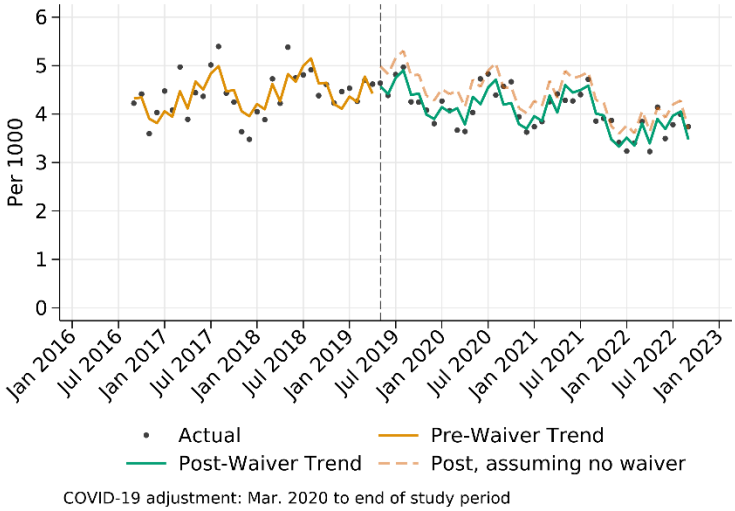
	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	19.98* (19.34, 20.63)	22.34* (21.33, 22.34)	2.35* (1.25, 3.46)
Slope	0.0391* (0.0067, 0.0714)	-0.225* (-0.400, -0.049)	-0.264* (-0.444, -0.083)
N	5,260,516		

*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.

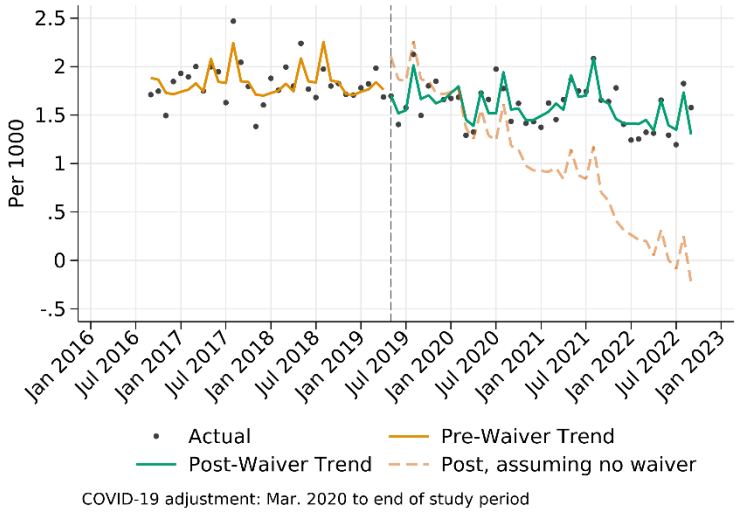
	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	4.67* (4.45, 4.89)	4.26* (3.92, 4.60)	-0.416* (-0.800, -0.032)
Slope	0.0122* (0.0014, 0.0231)	0.0172 (-0.0430, 0.0773)	0.0049 (-0.0565, 0.0664)
N	5,260,516		

*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		

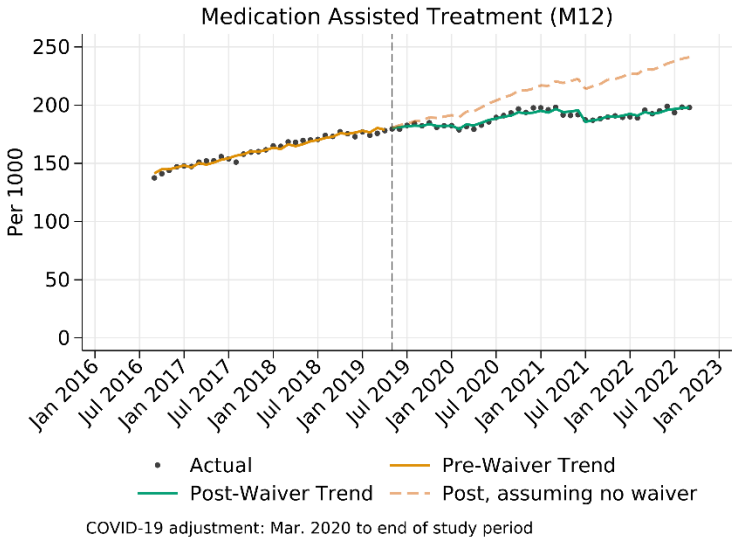
*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation 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.

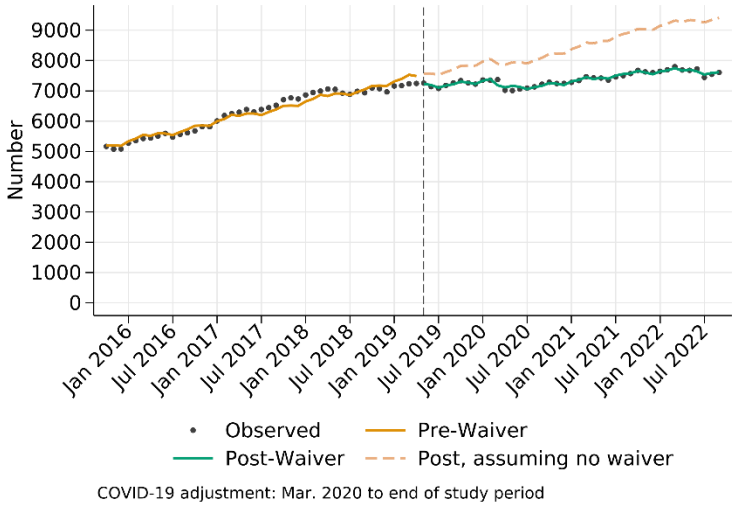
	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	188.83* (186.19, 191.47)	188.40* (185.67, 191.13)	-0.44 (-2.64, 1.77)
Slope	1.41* (1.30, 1.51)	0.336* (0.020, 0.653)	-1.07* (-1.42, -0.72)
N	5,260,516		

*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

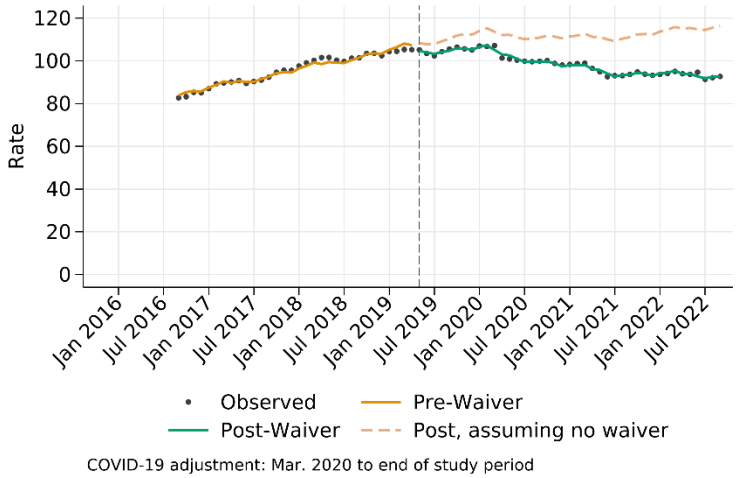
	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	7517.64* (7398.07, 7637.22)	7174.82* (7108.48, 7241.16)	-342.83* (-463.68, -221.98)
Slope	54.96* (50.94, 58.97)	18.75* (5.44, 32.06)	-36.20* (-50.90, -21.51)
N	84		

*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		

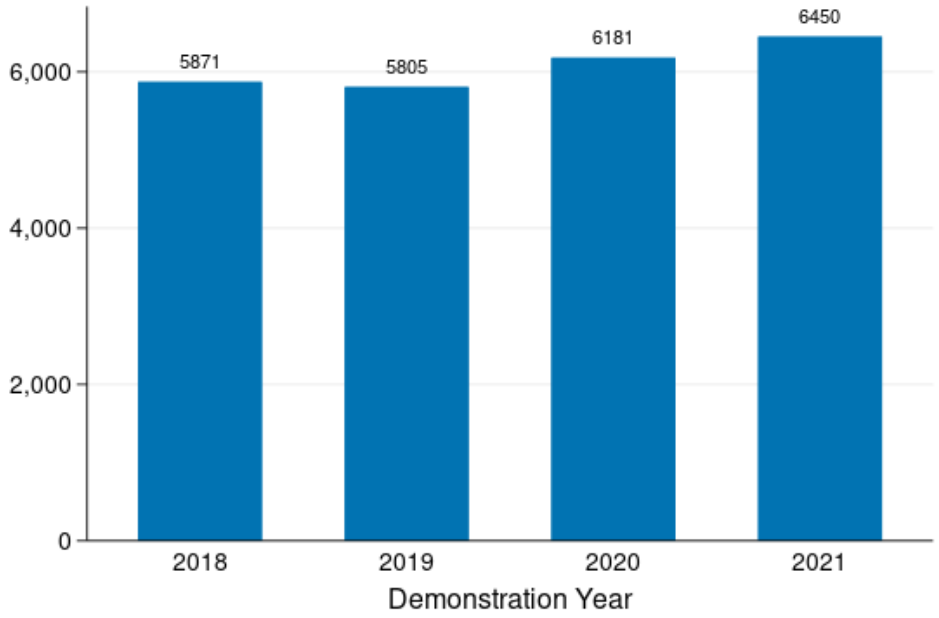
*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation 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.

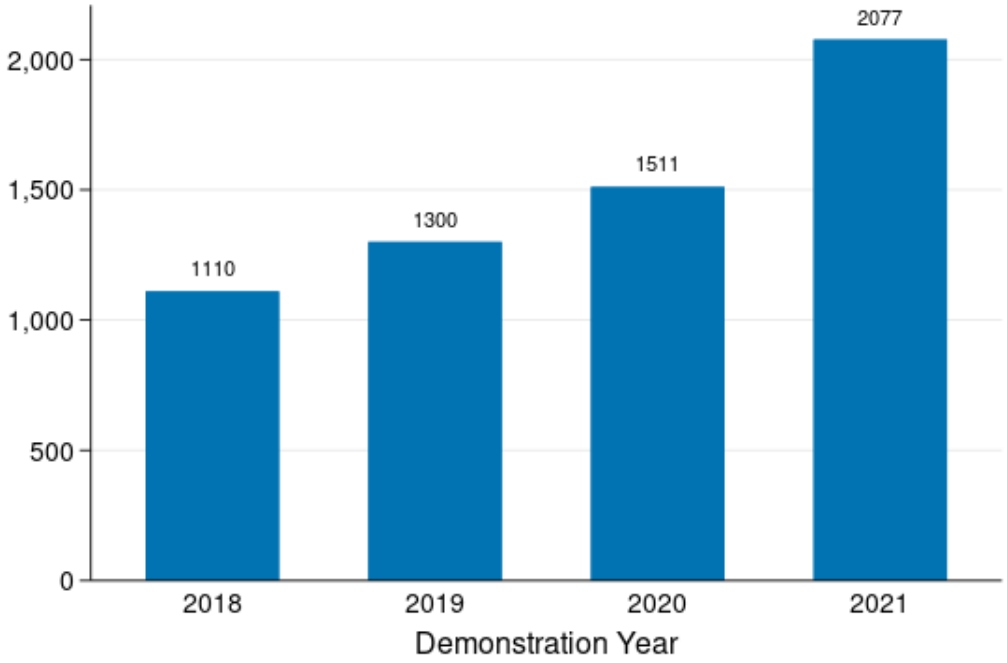
Figure 3.1.12. Trends in annual provider availability.



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.

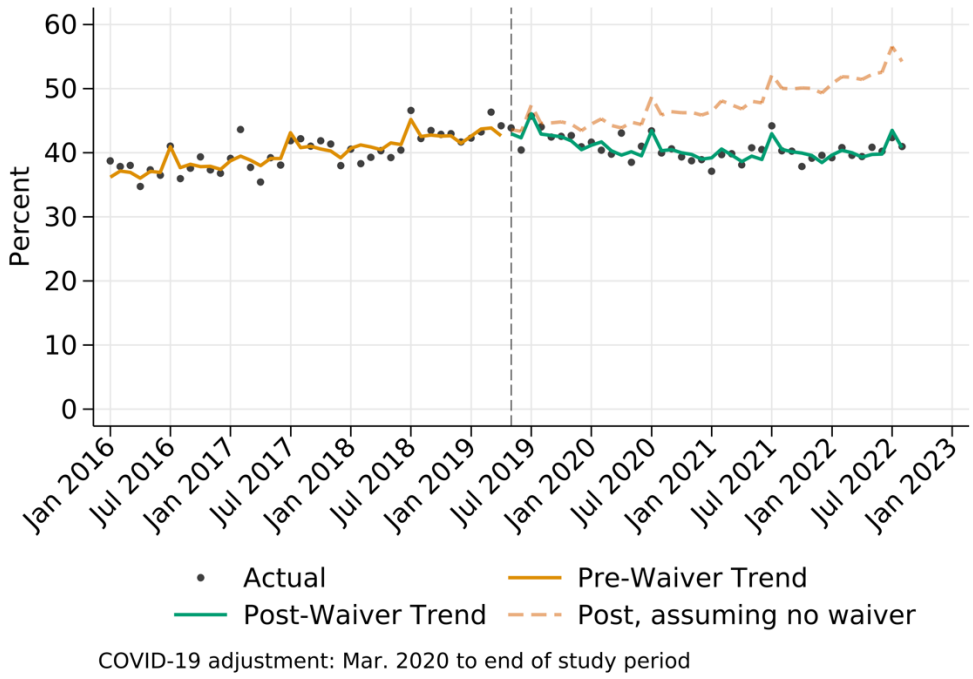
Figure 3.1.13. Trends in annual provider availability for MOUD



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)

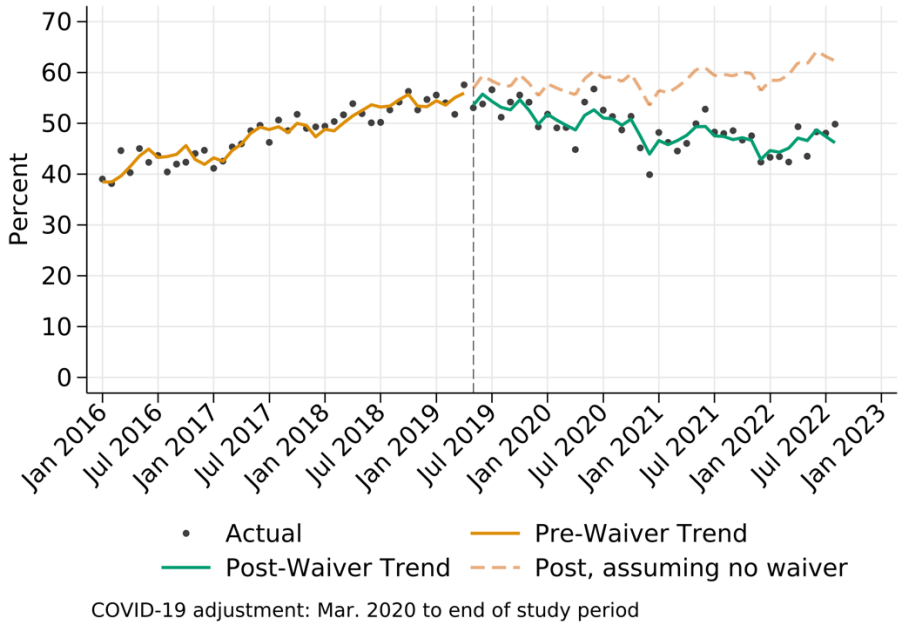
	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	43.64* (42.69, 44.59)	42.98* (41.30, 44.66)	-0.66 (-2.55, 1.23)
Slope	0.18* (0.14, 0.22)	-0.15 (-0.47, 0.17)	-0.33* (-0.65, -0.002)
N	101,348		

*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		

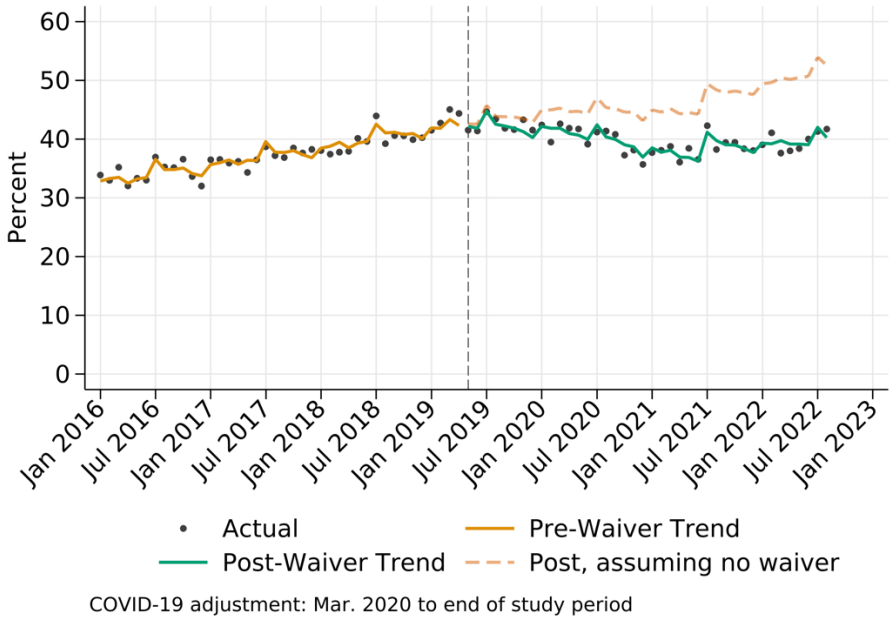
*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation 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)

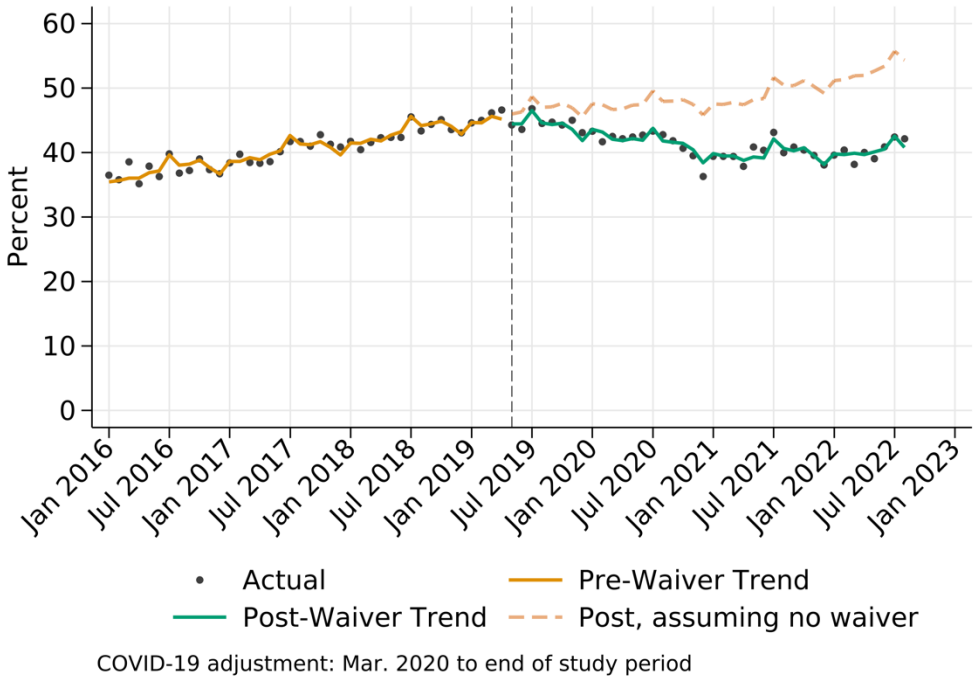
	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	42.69* (41.97, 43.41)	42.29* (41.00, 43.58)	-0.40 (-1.87, 1.07)
Slope	0.26* (0.23, 0.29)	-0.05 (-0.29, 0.20)	-0.30* (-0.55, -0.06)
N	169,183		

*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

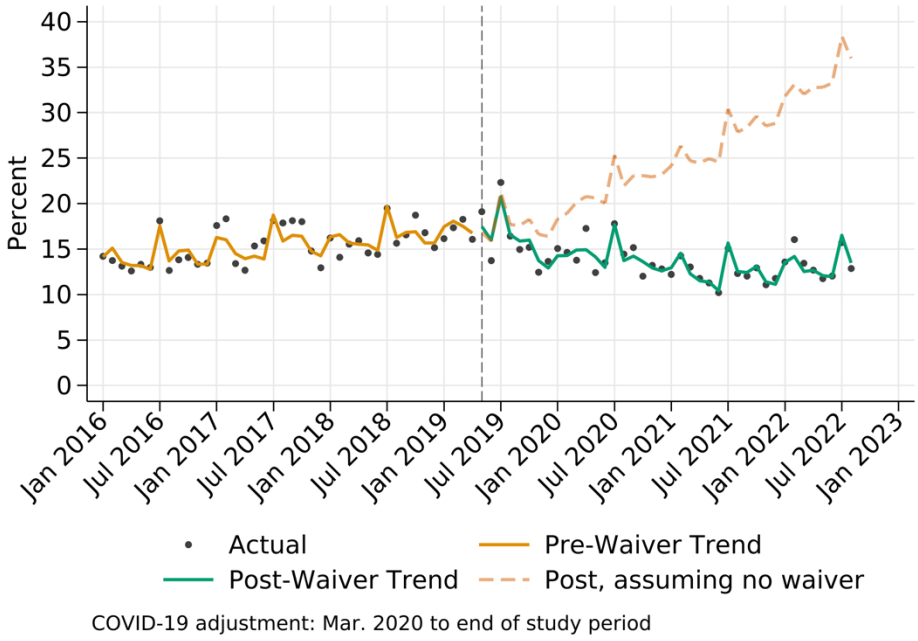
	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	46.02* (45.48, 46.56)	44.49* (43.54, 45.45)	-1.53* (-2.61, -0.45)
Slope	0.26* (0.24, 0.28)	-0.05 (-0.23, 0.14)	-0.31* (-0.49, -0.12)
N	323,695		

*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)

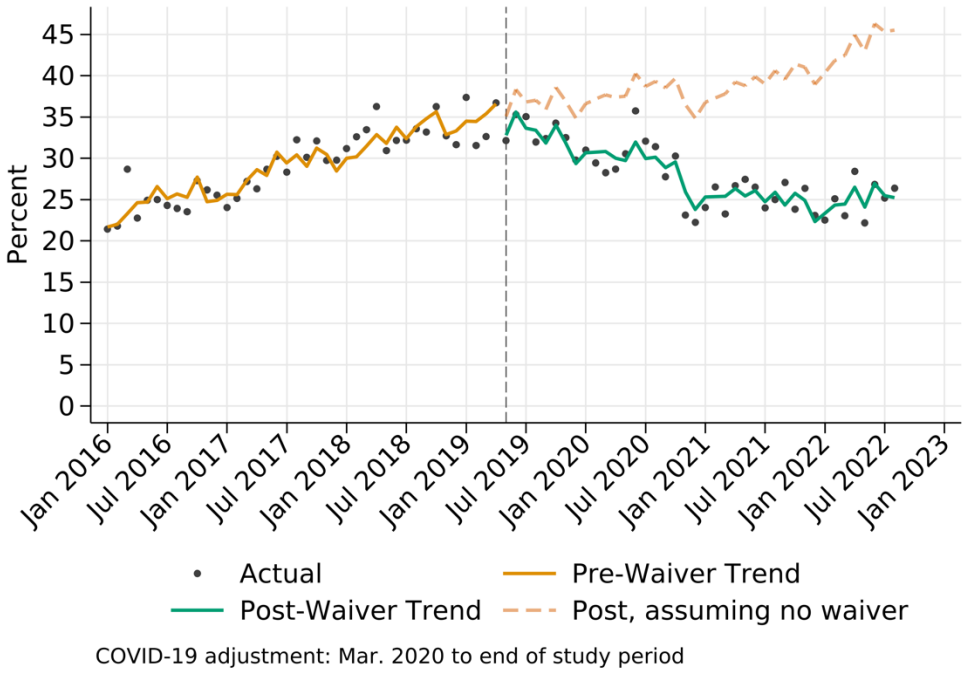
	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	17.33* (16.65, 18.01)	18.01* (16.77, 19.24)	0.68 (-0.71, 2.07)
Slope	0.10* (0.07, 0.13)	-0.50* (-0.73, -0.26)	-0.59* (-0.83, -0.36)
N	101,348		

*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		

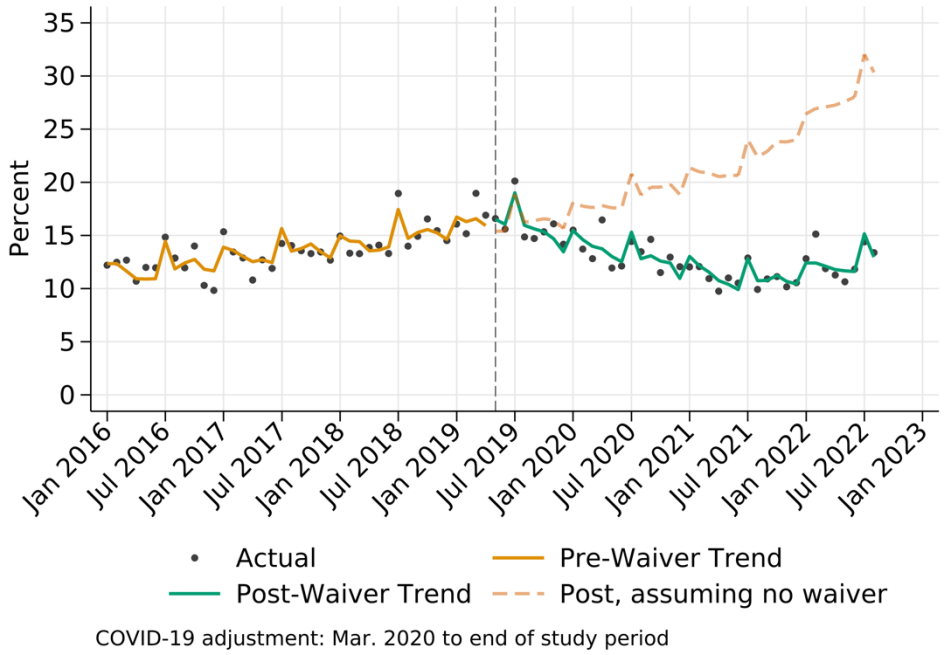
*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation 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		

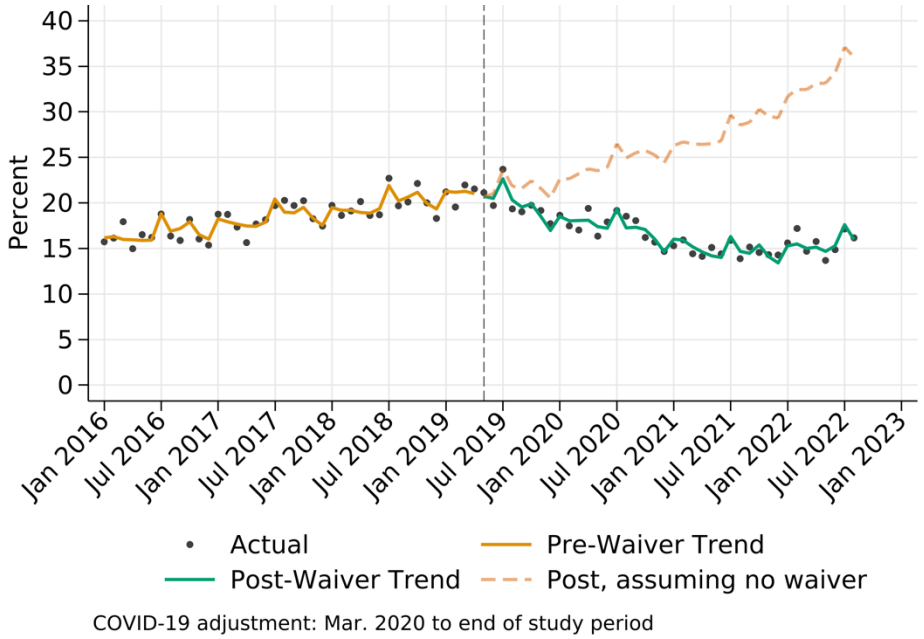
*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in*

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		

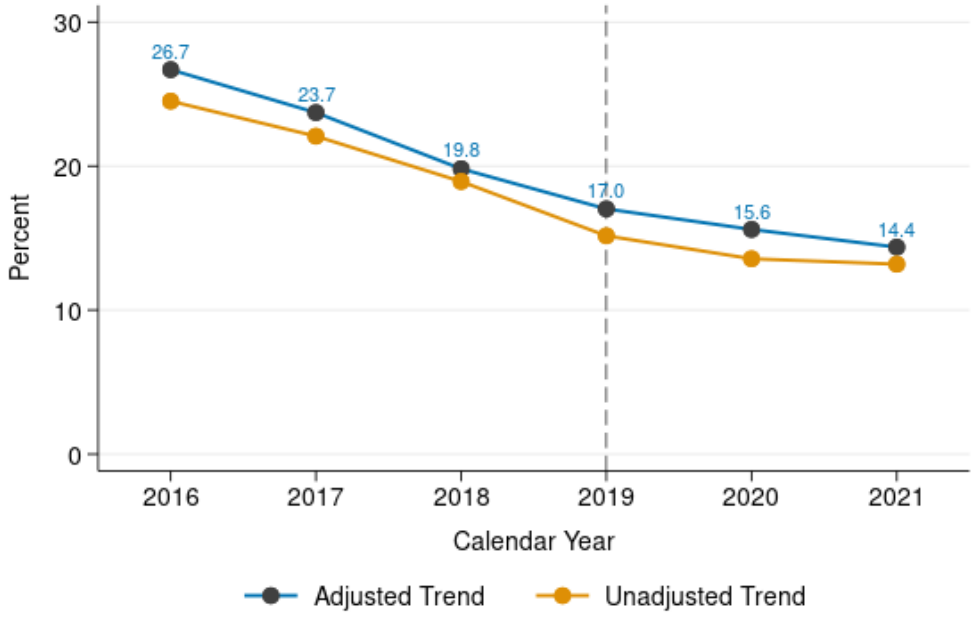
*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation 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.



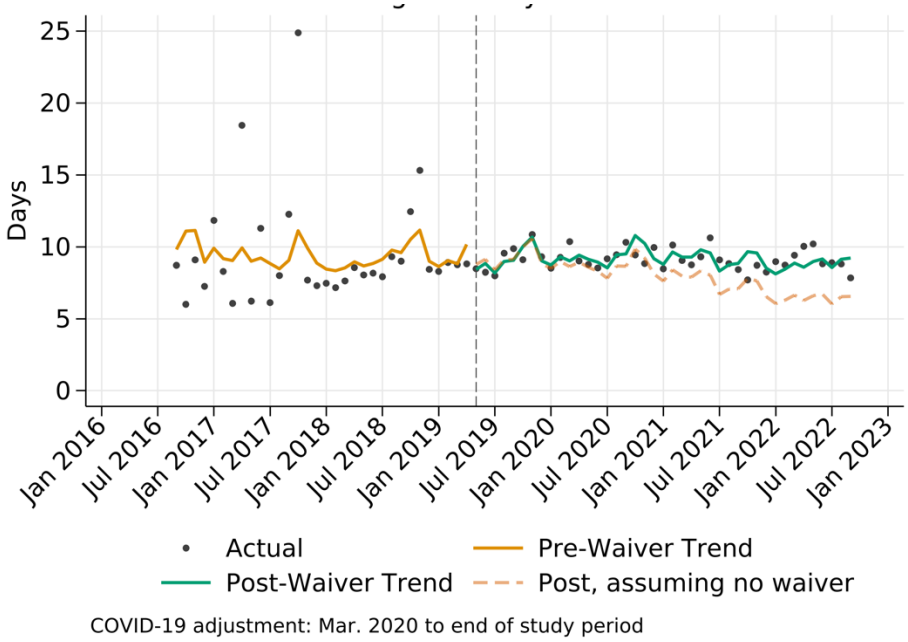
Notes: Adjusted model includes age (quadratic), sex, urban location, race specific indicator variables and the Chronic Illness and Disability Payment System (CDPS + Rx) risk adjustment scores.

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		

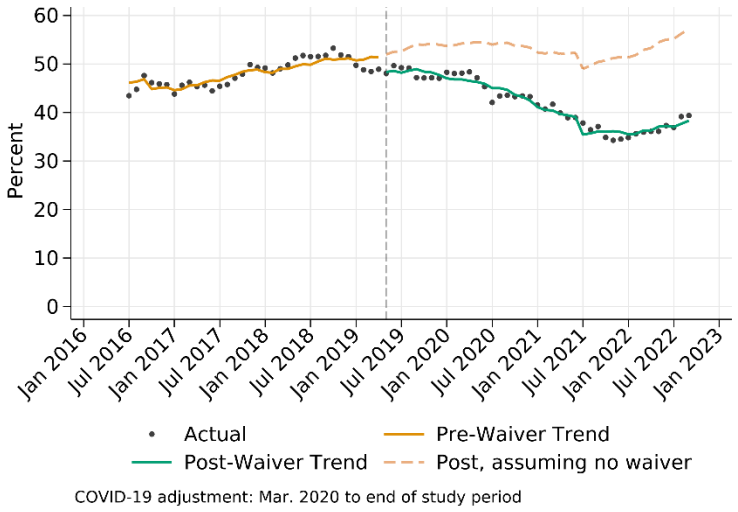
[15] The Medicaid Outcomes Distributed Research Network (MODRN) (2021). Use of Medications for Treatment of Opioid Use Disorder Among US Medicaid Enrollees in 11 States, 2014-2018. JAMA, 326(2), 154-164. doi:10.1001/jama.2021.7374

*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		

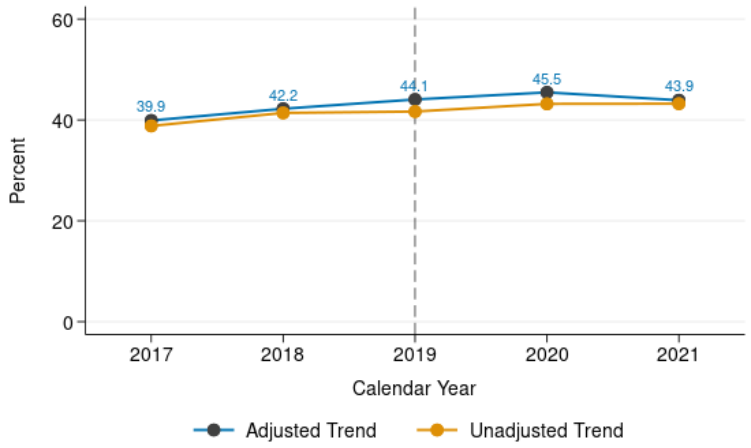
*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation 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



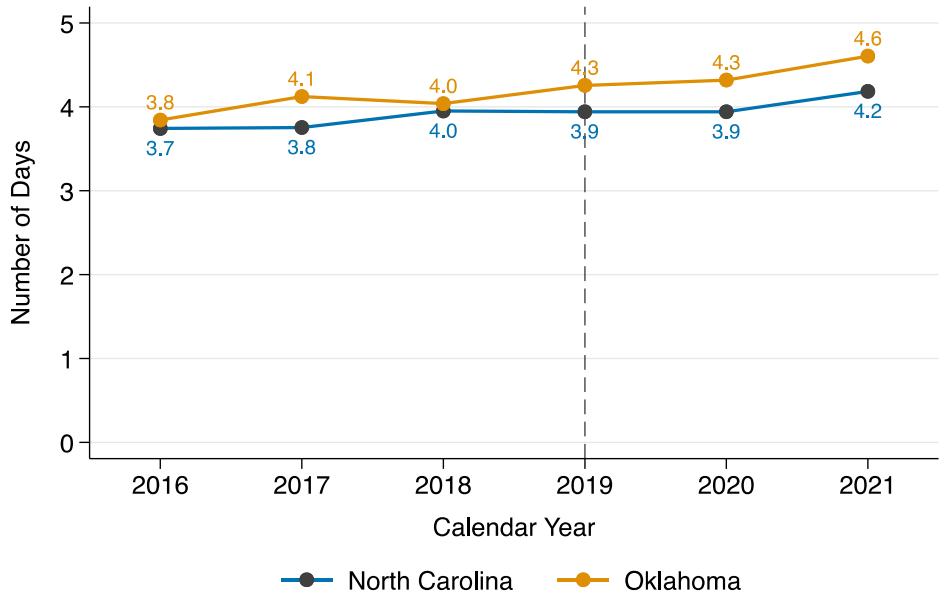
Notes: Adjusted model includes age (quadratic), sex, urban location, race specific indicator variables and the Chronic Illness and Disability Payment System (CDPS + Rx) risk adjustment scores.

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

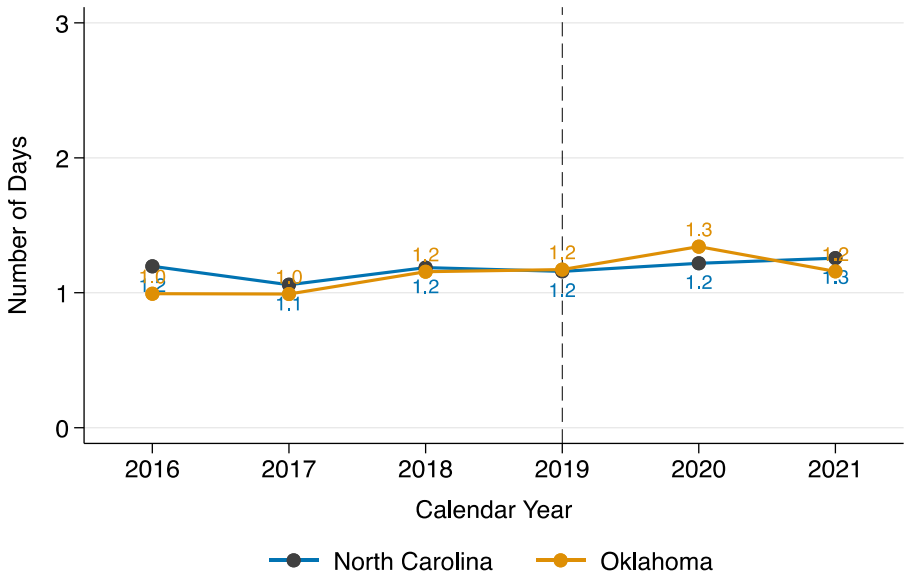
Notes: Adjusted model includes sex, age groups, employment, educational and marital status variables as well as year and state fixed effects. The sample consists of individuals who resided either in North Carolina or Oklahoma and had a valid response to a question (N=62,991). Due to small sample size 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.

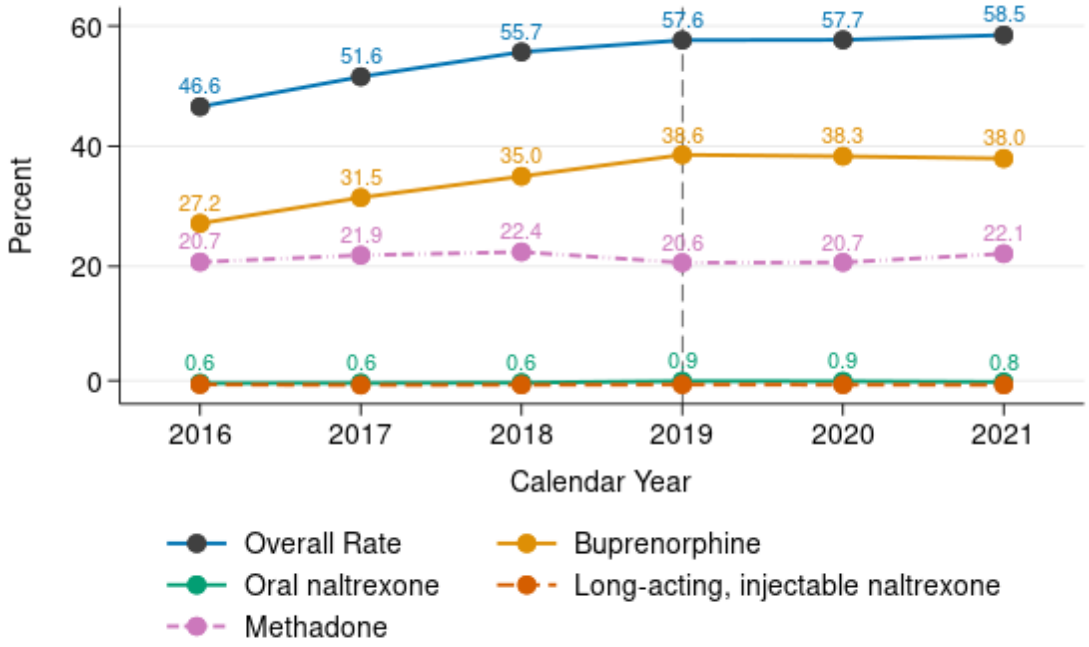
Table 3. Summary of SUD Metric Results for Hypothesis 3.2

#	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]

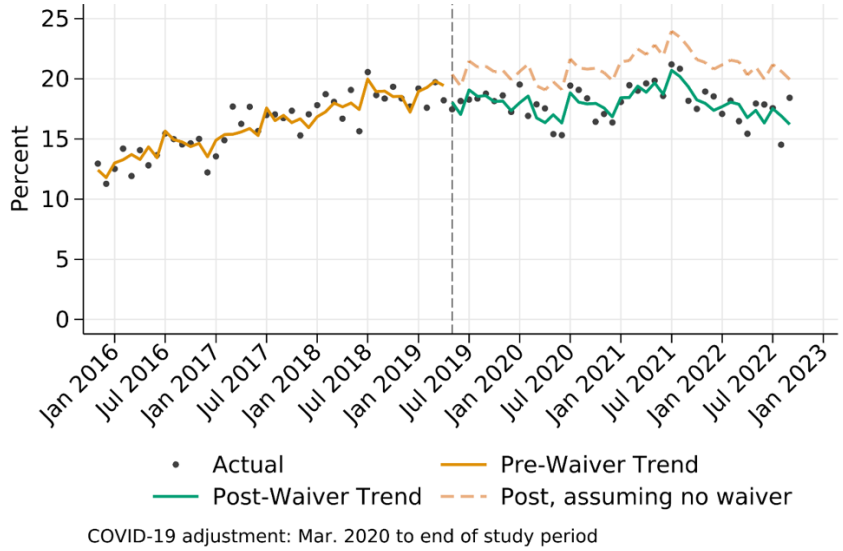
Buprenorphine, typically prescribed by outpatient providers and dispensed in retail pharmacies, comprised more than half of the use of MOUD in NC, although its use has not grown as a percent of

[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

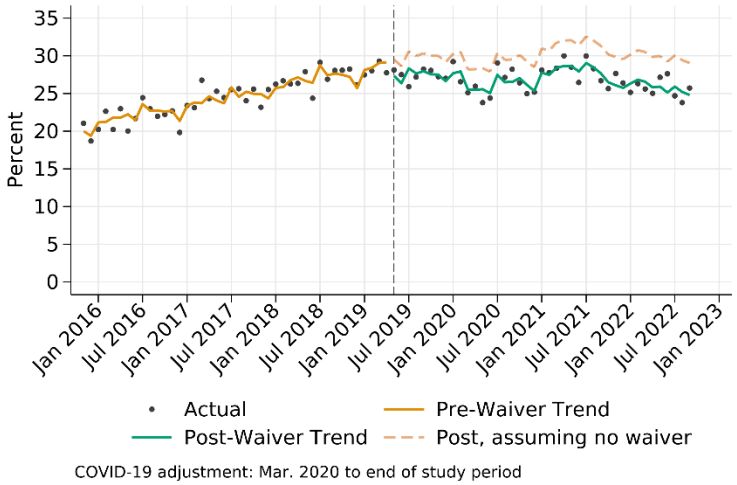
	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	19.81 (19.02, 20.61)	17.50 (16.05, 18.96)	-2.31* (-3.94, -0.69)
Slope	0.16* (0.13, 0.19)	0.13 (-0.15, 0.41)	-0.036* (-0.317, -0.246)
N	83,037		

*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

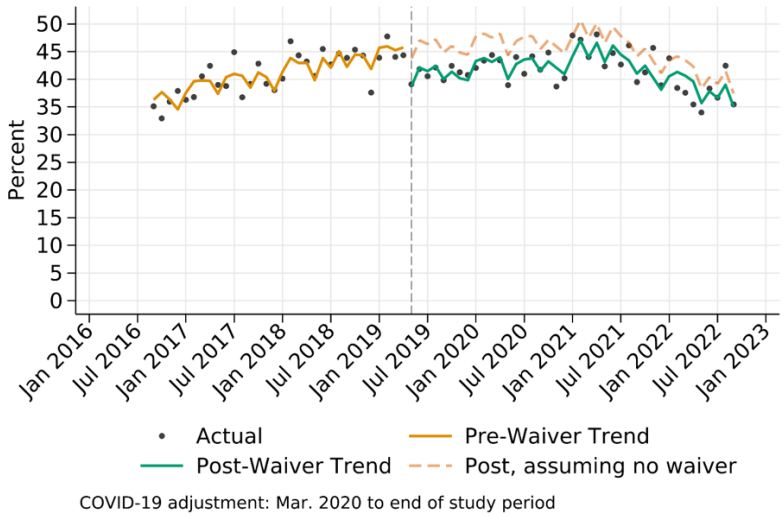
	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	28.94 (28.01, 29.88)	26.77 (25.06, 28.47)	-2.17* (-4.08, -0.27)
Slope	0.20* (0.16, 0.23)	0.15 (-0.18, 0.47)	-0.052 (-0.384, 0.280)
N	83,037		

*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

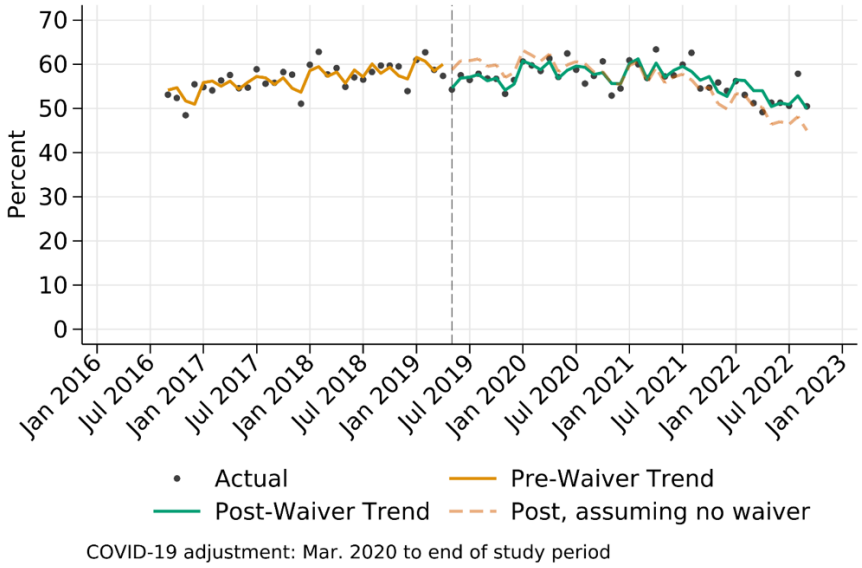
	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	45.02 (43.46, 46.84)	39.99 (38.76, 42.44)	-5.03* (-8.19, -1.88)
Slope	0.23* (0.15, 0.32)	0.30* (0.03, 0.28)	0.067 (-0.466, 0.599)
N	32,184		

*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

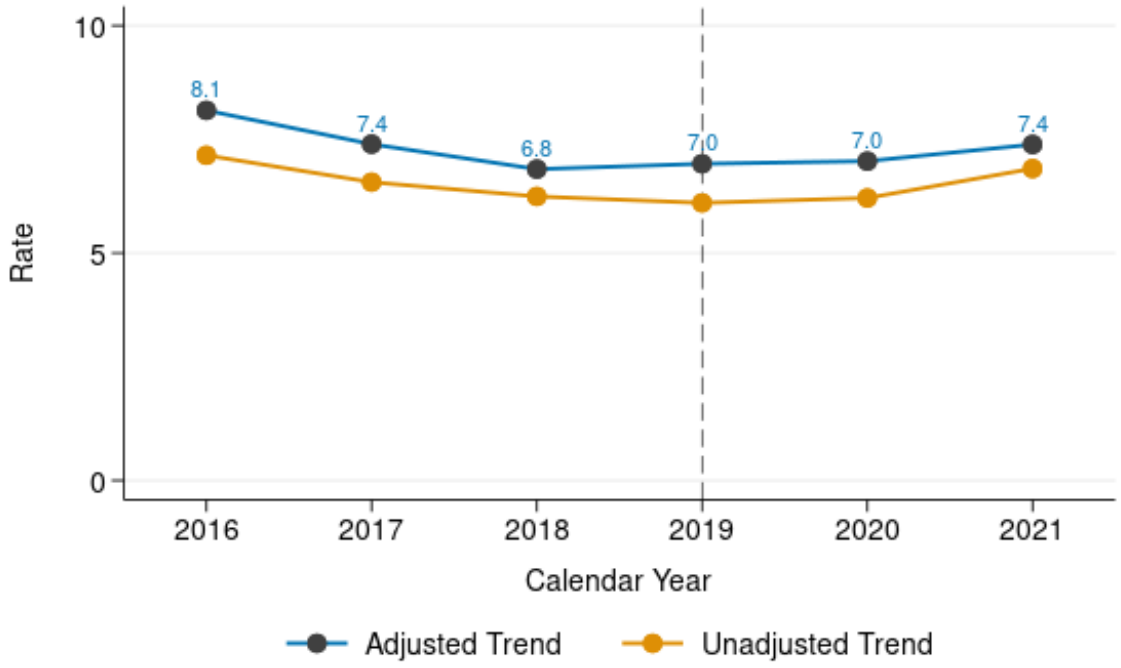
	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	59.29 (57.61, 60.96)	55.10 (52.38, 57.82)	-4.19* (-7.35, -1.02)
Slope	0.15* (0.061, 0.24)	0.38 (-0.15, 0.90)	0.23 (-0.30, 0.76)
N	32,184		

*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

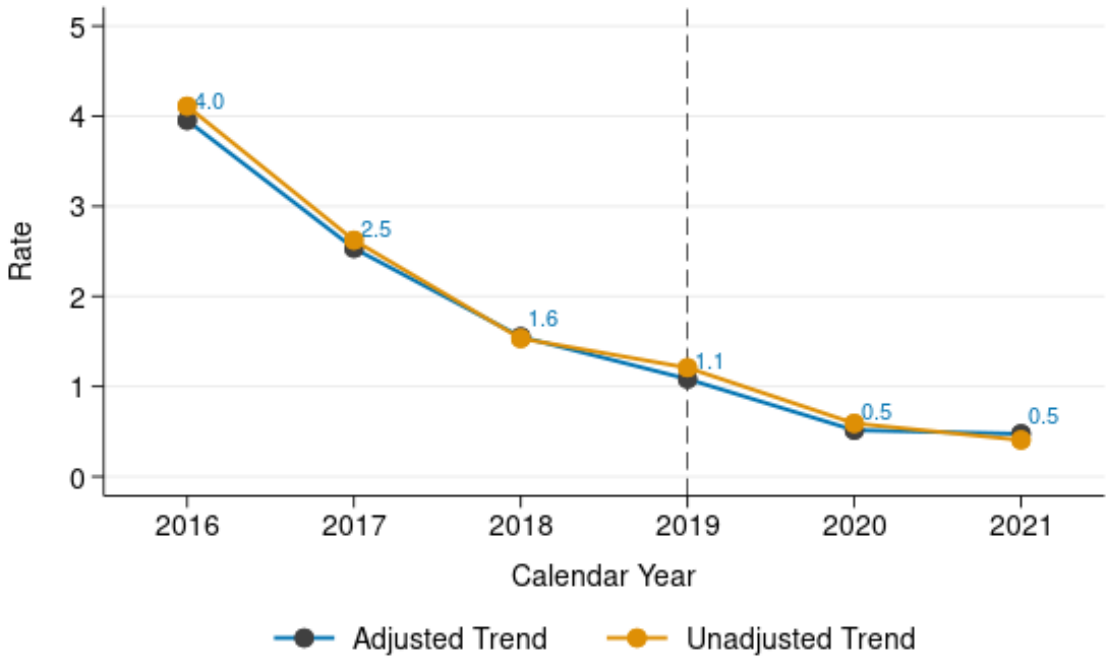


Notes: The adjusted model includes age (quadratic), sex, urban location, race specific indicator variables and the Chronic Illness and Disability Payment System (CDPS + Rx) risk adjustment scores.

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

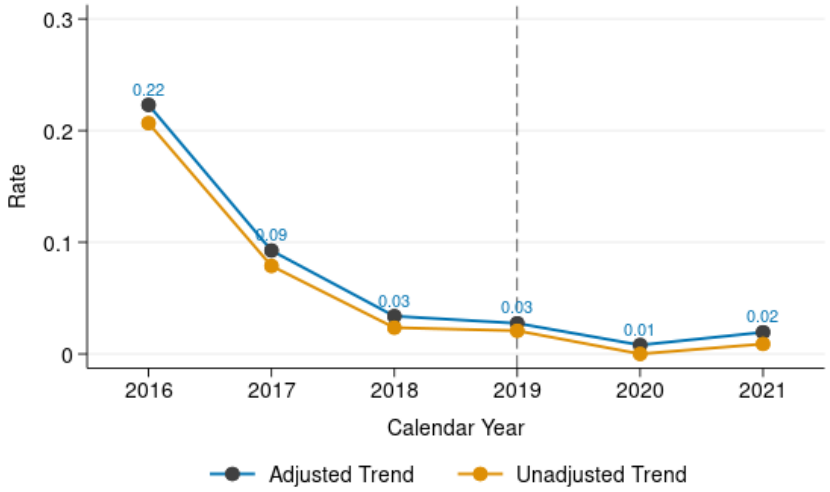


Notes: The adjusted model includes age (quadratic), sex, urban location, race specific indicator variables and the Chronic Illness and Disability Payment System (CDPS + Rx) risk adjustment scores.

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

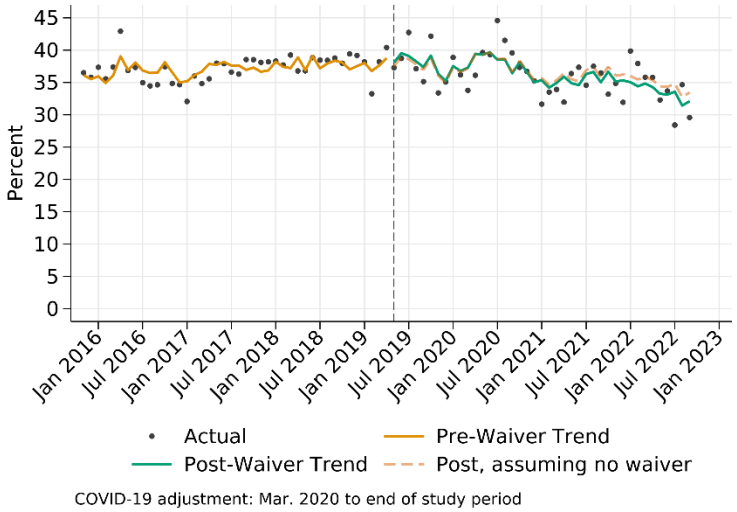


Notes: Adjusted model includes age (quadratic), sex, urban location, race specific indicator variables and the Chronic Illness and Disability Payment System (CDPS + Rx) risk adjustment scores.

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		

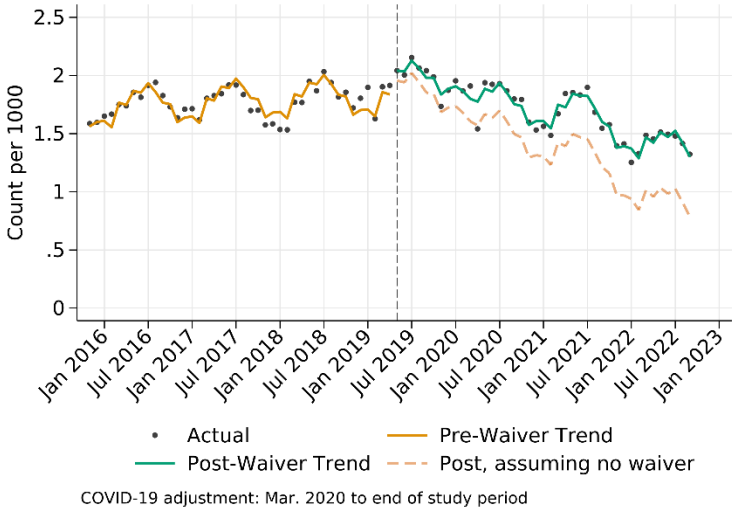
*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation 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

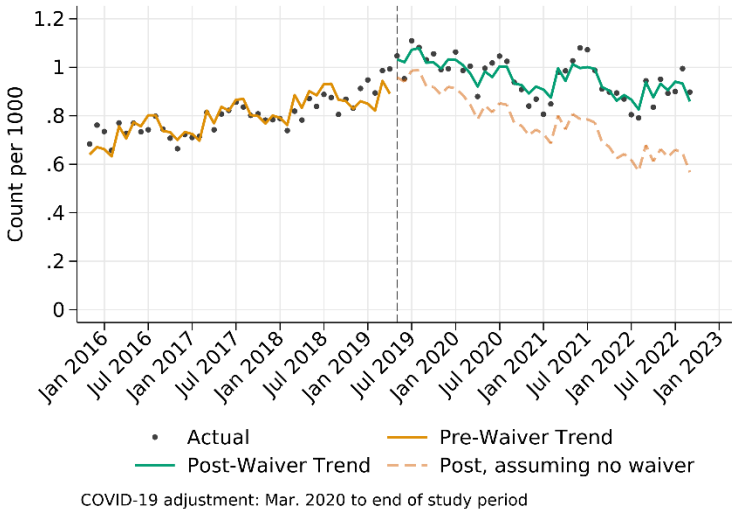
	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	1.83 (1.78, 1.88)	1.92 (1.85, 1.98)	0.086* (0.021, 0.150)
Slope	0.0016* (0.0001, 0.0032)	0.0125* (0.0022, 0.0229)	0.0109* (0.0002, 0.0215)
N	164,573,205		

*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.

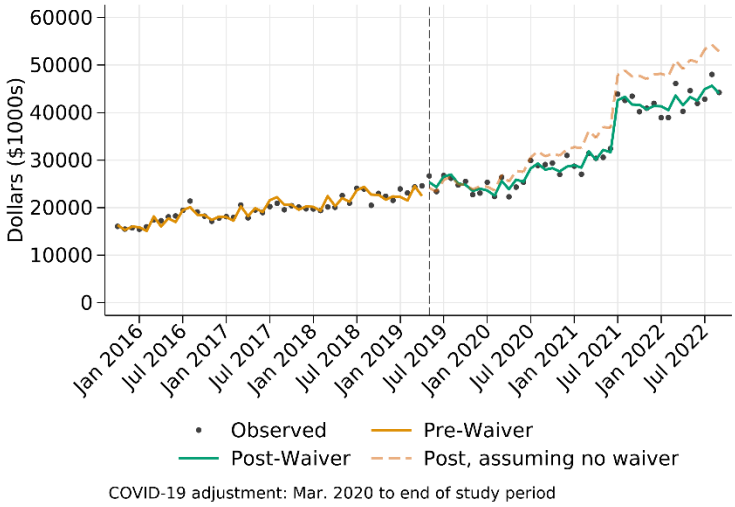
We examined six measures reflecting total spending, per beneficiary spending, and out-of-pocket costs overall for SUD services and specifically for IMD services. We found that total spending on SUD services increased after SUD waiver implementation, as expected. This reflects both the greater number 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)

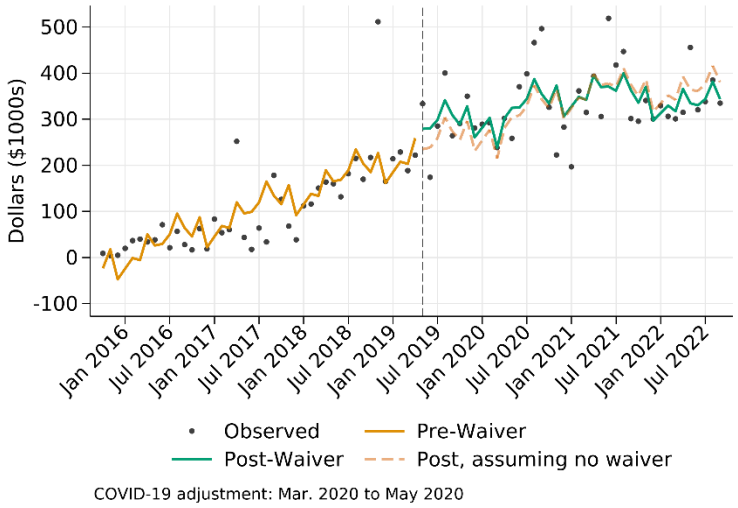
	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	$23,972.13 (22,980.53, 24,603.72)	$25,005.77 (22,584.97, 26,426.58)	$1,213.65 (-1595.11, 743.84)
Slope	$177.63* (149.50, 205.75)	-$74.32 (-361.42, 212.78)	-$251.94 (-542.08, 38.19)
N	84		

*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		

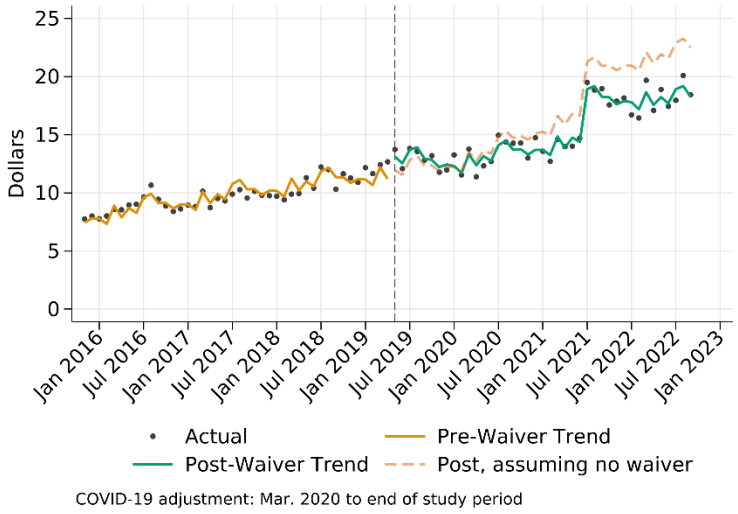
*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation 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		

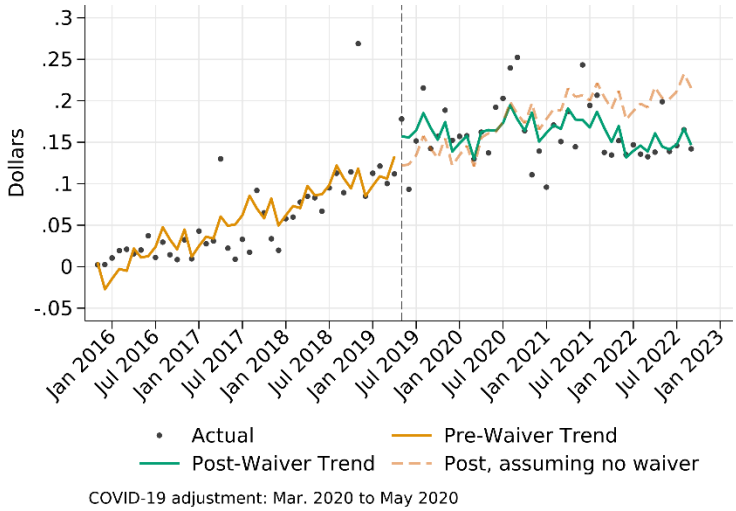
*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation 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		

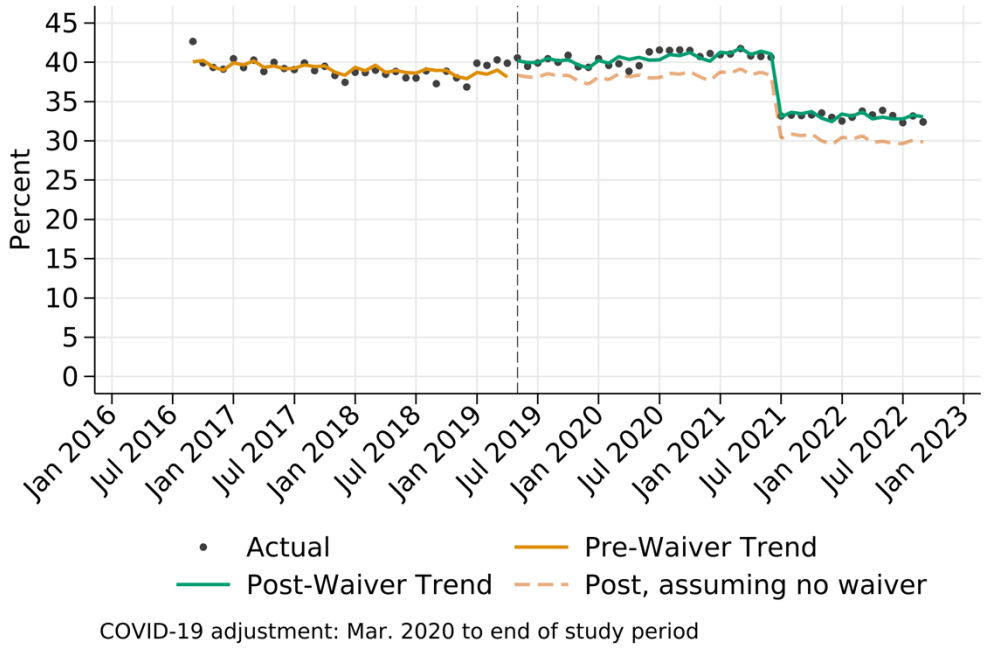
*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation 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

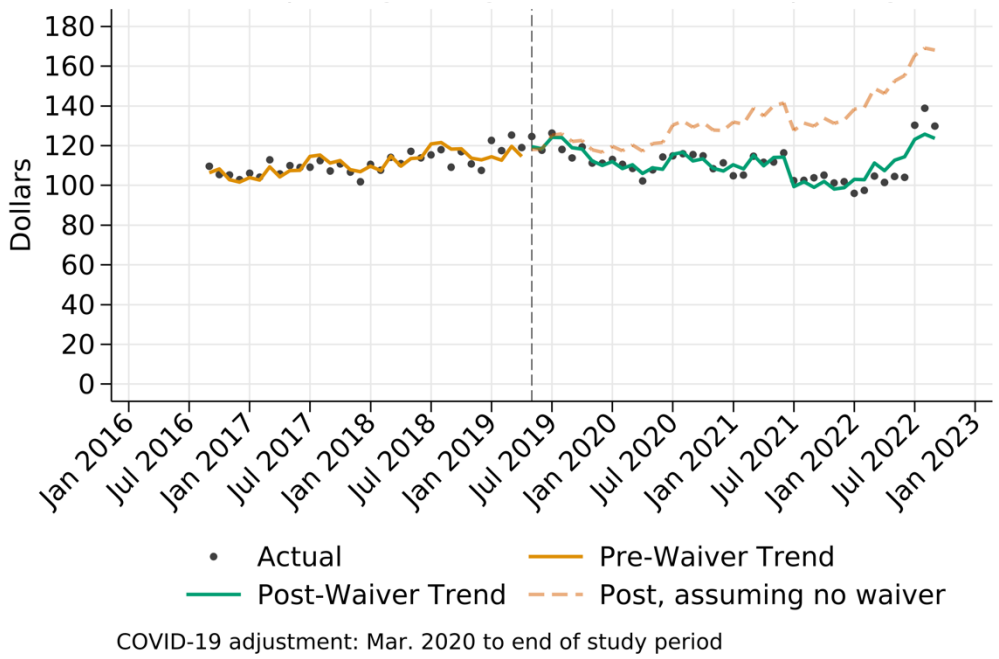
	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	38.47 (38.14, 38.80)	40.28 (39.92, 40.65)	1.82* (1.46, 2.17)
Slope	-0.05* (-0.06, -0.03)	-0.01 (-0.07, 0.04)	0.03 (-0.02, 0.09)
N	3,719,652		

*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.

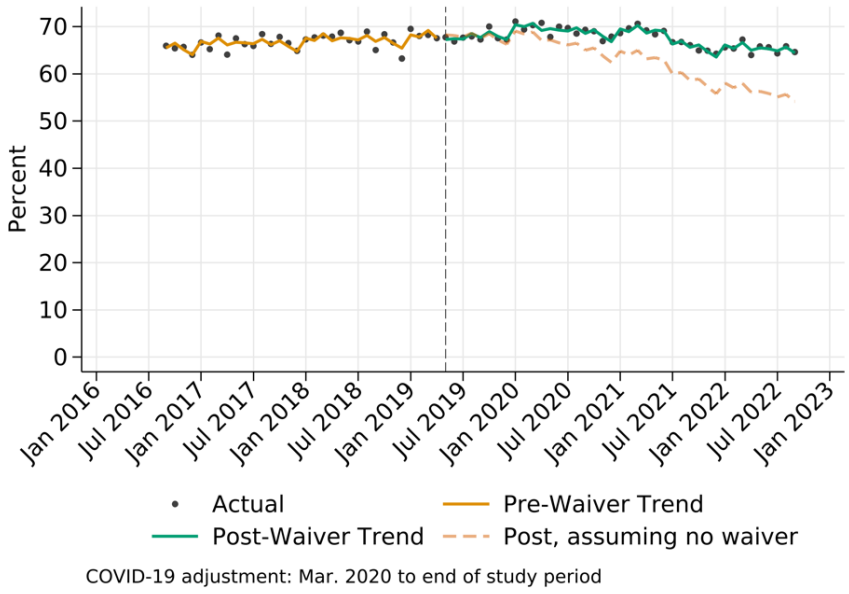
We examined eight measures reflecting general health care quality and health outcomes in order to test the effect of the SUD waiver implementation on overall health. We note that the largest component of the SUD waiver intended to improve overall health among beneficiaries with SUD, Tailored Plans, were 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

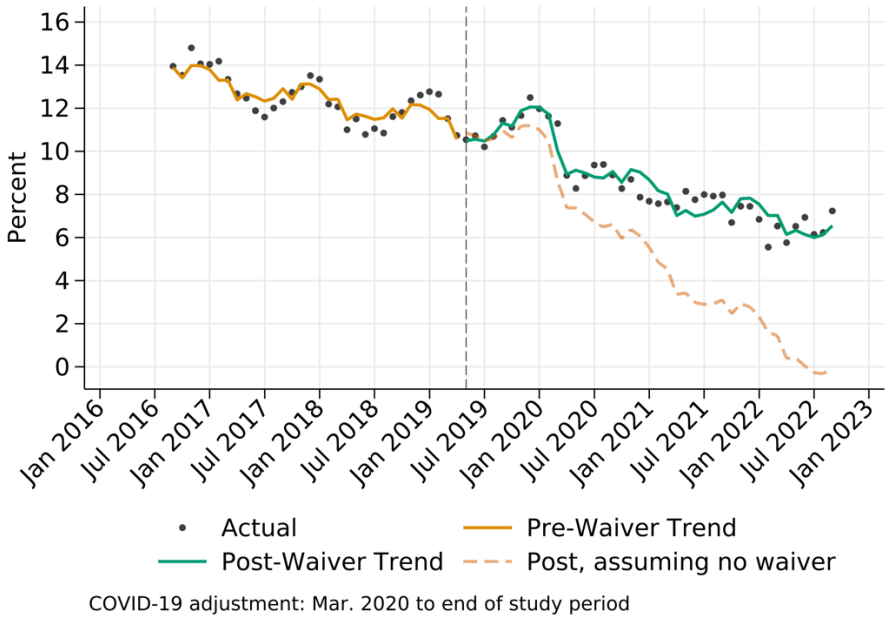
	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	67.68 (67.29, 68.08)	66.71 (66.24, 67.17)	-0.98* (-1.44, -0.51)
Slope	0.03* (0.01, 0.05)	0.31* (0.24, 0.38)	0.28* (0.21, 0.36)
N	1,775,250		

*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

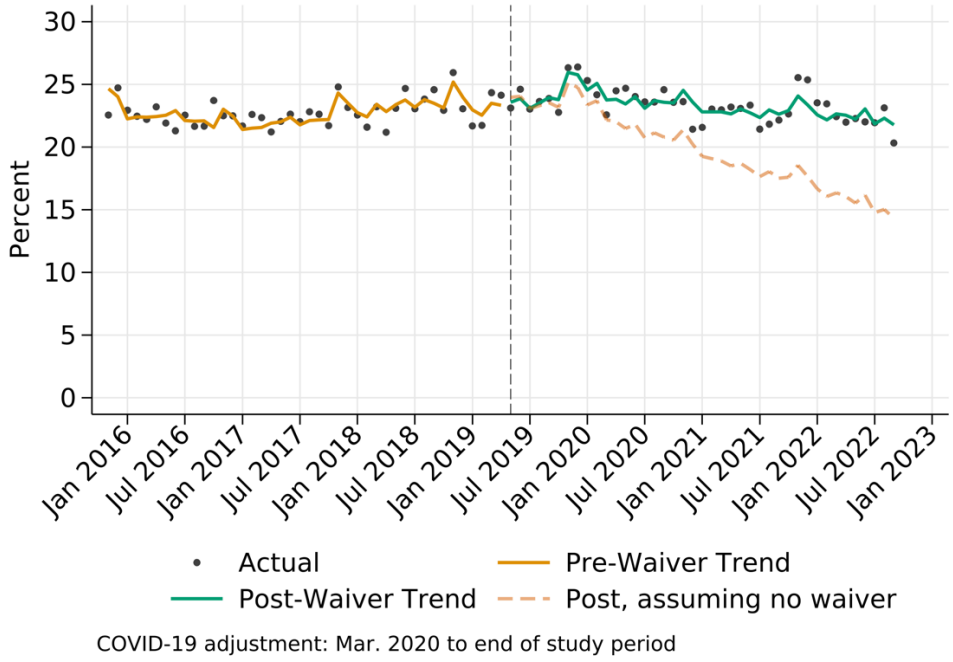
	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	11.18 (10.92, 11.44)	10.83 (10.43, 11.23)	-0.35 (-0.81, 0.12)
Slope	-0.07* (-0.09, -0.06)	0.10* (0.03, 0.18)	0.17* (0.10, 0.25)
N	712,557		

*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

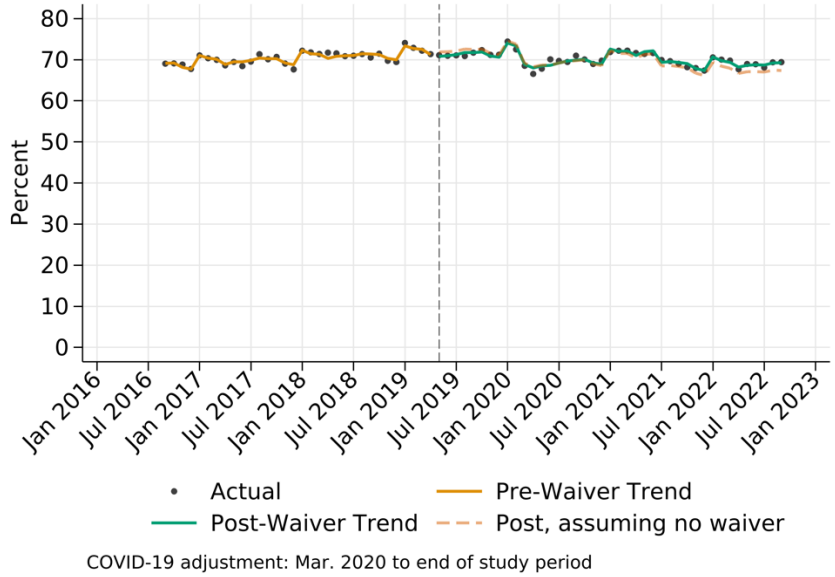
	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	23.27 (22.51, 24.03)	22.90 (21.77, 24.03)	-0.37 (-1.61, 0.86)
Slope	0.05* (0.02, 0.08)	0.25* (0.05, 0.45)	0.20 (-0.01, 0.40)
N	225,920		

*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

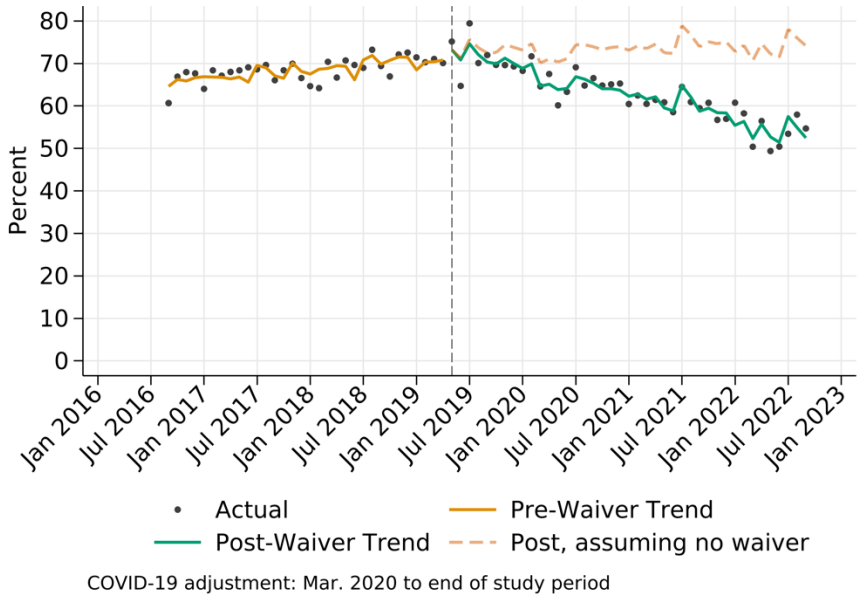
	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	71.92 (71.53, 72.30)	70.86 (70.39, 71.34)	-1.05* (-1.53, -0.57)
Slope	0.07* (0.05, 0.08)	0.14* (0.06, 0.21)	0.07 (-0.01, 0.15)
N	1,693,475		

*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

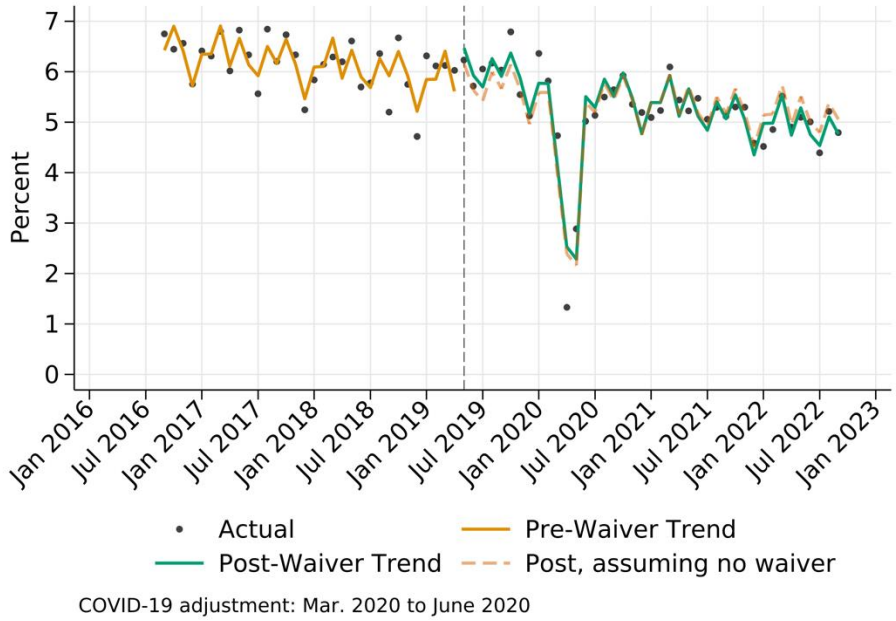
	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	71.57 (69.81, 73.33)	71.61 (68.56, 74.67)	0.05 (-3.54, 3.63)
Slope	0.16* (0.07, 0.26)	-0.38 (-0.97, 0.22)	-0.54 (-1.14, 0.05)
N	22,243		

*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

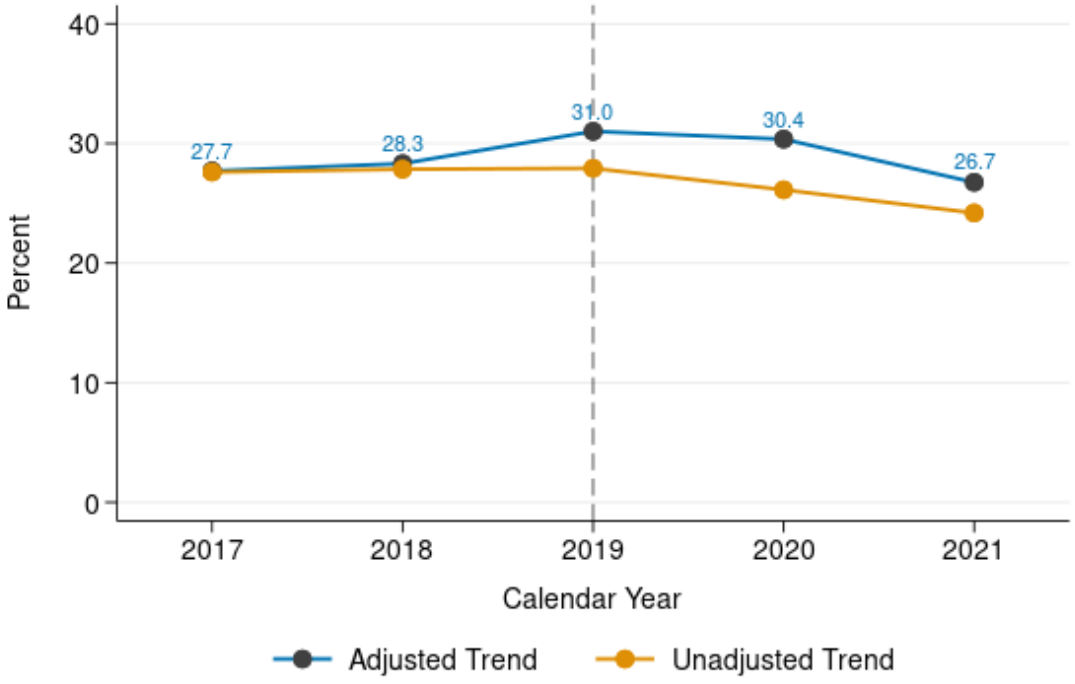
	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	5.82 (5.73, 5.92)	6.13 (6.03, 6.23)	0.30* (0.18, 0.43)
Slope	-0.02* (-0.03, -0.02)	-0.03* (-0.04, -0.03)	-0.01* (-0.02, -0.01)
N	5,244,429		

*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

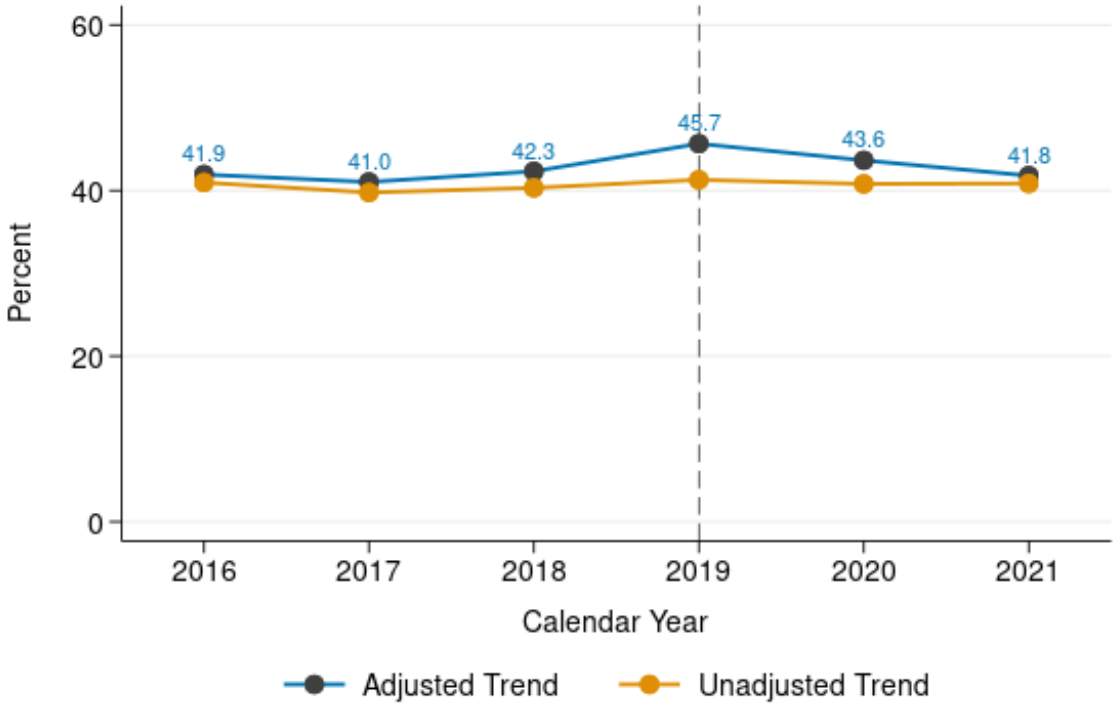


Notes: Adjusted model includes age (quadratic), urban location, race specific indicator variables and the Chronic Illness and Disability Payment System (CDPS + Rx) risk adjustment scores.

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

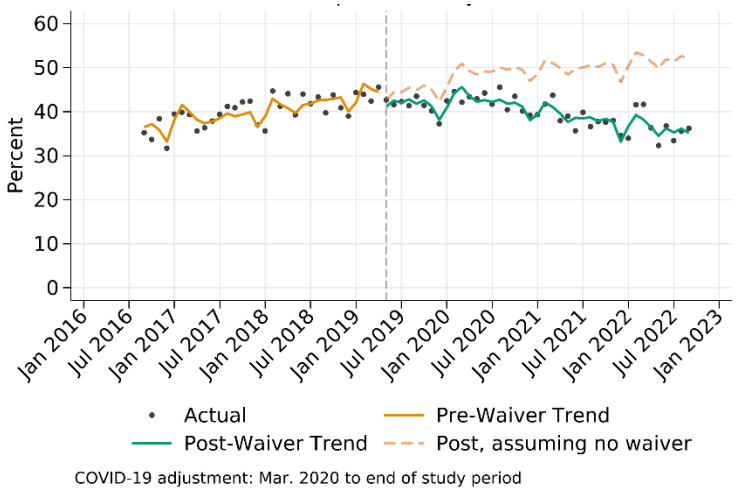
on access to and quality of behavioral health care for beneficiaries with SUD diagnoses using 18 measures, including 13 that had been used in prior hypotheses (see Table 1). One of the measures was unaffected by the Medicaid SUD transformation (antidepressant management during the acute phase), while 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.*

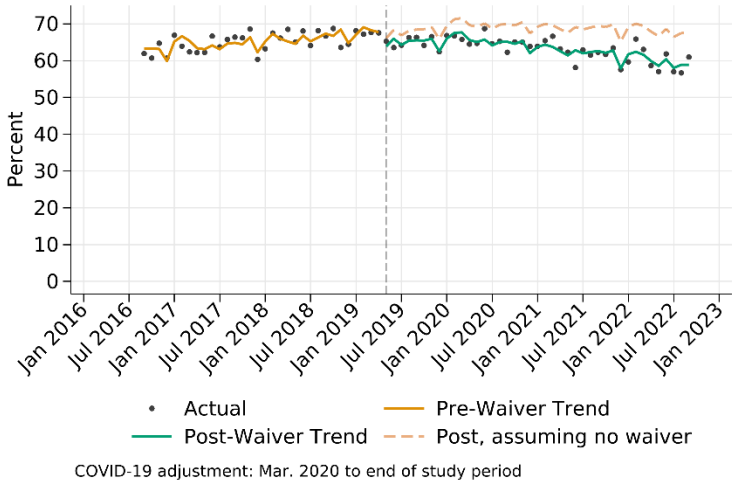
The rate of follow-up within seven days with a mental health specialist, a primary care provider, or through the receipt of enhanced behavioral health services after discharge from a psychiatric hospitalization had been slowly increasing during the baseline period, ranging from 30% to 45%. We do not 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		

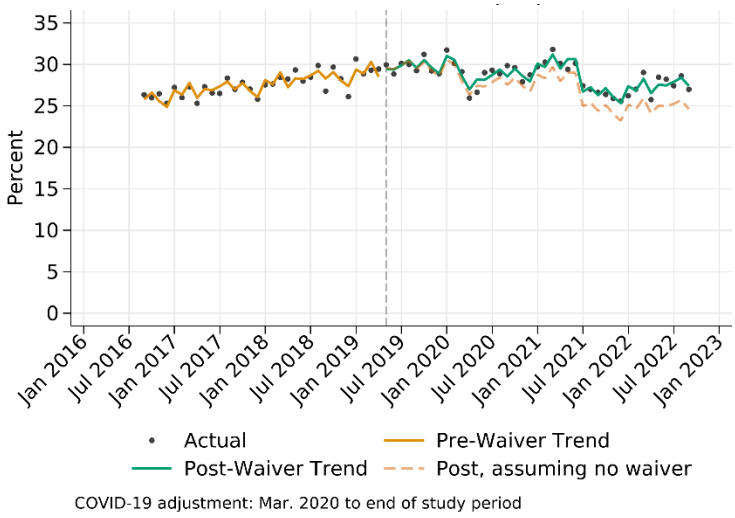
*Notes: 95% confidence intervals in brackets. *=p<0.05. The Predicted Average Outcome (May 2019) represents the difference between the pre- and post-SUD waiver implementation trend lines in May 2019, while slope change represents the difference in slopes between the two periods. The SUD Waiver Implementation 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

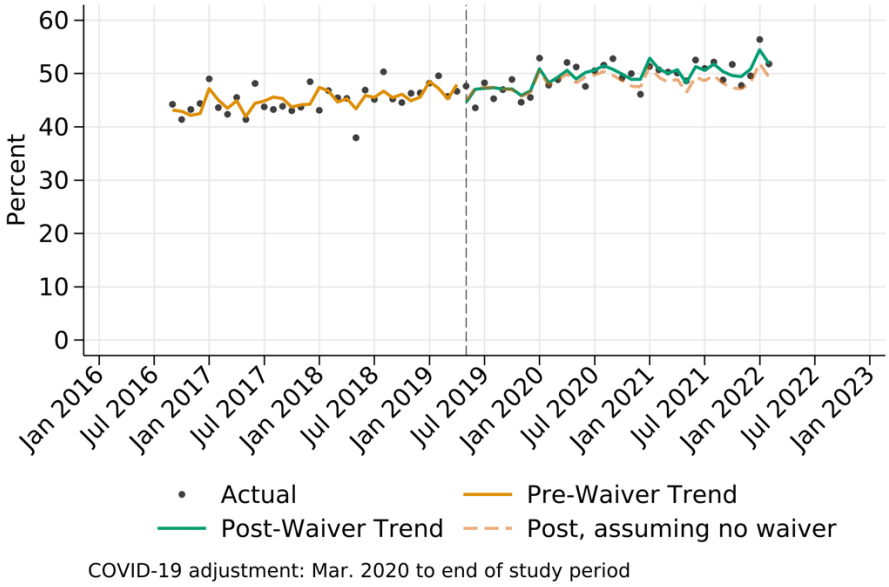
	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	29.30 (29.04, 29.56)	29.15 (28.85, 29.45)	-0.15 (-0.44, 0.15)
Slope	0.104* (0.092, 0.115)	0.18* (0.13, 0.22)	0.073* (0.026, 0.121)
N	5,074,019		

*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

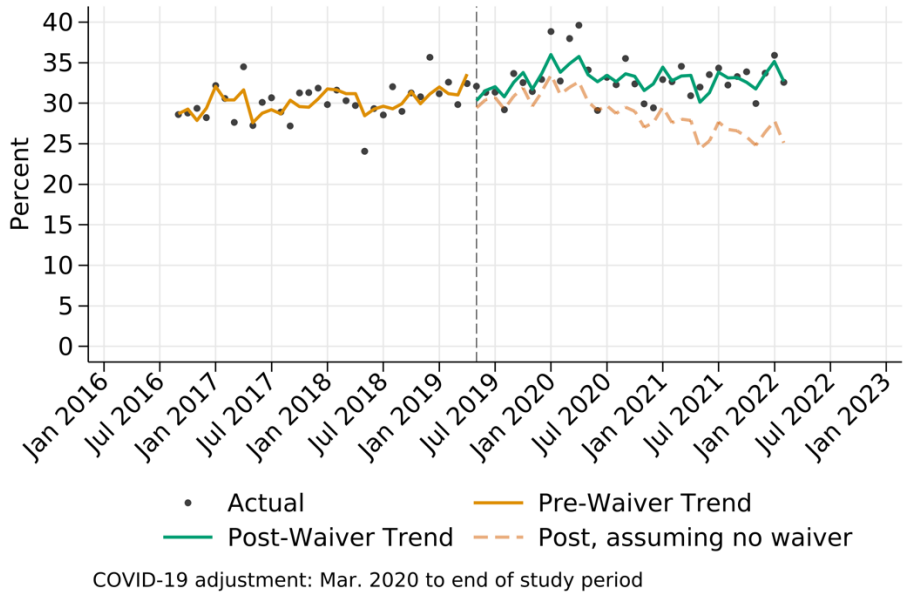
	Baseline	SUD Waiver Implementation	Difference
Predicted Average Outcome (May 2019)	46.32* (44.57, 48.07)	45.98* (43.26, 48.70)	-0.34 (-3.60, 2.92)
Slope	0.08 (-0.01, 0.17)	0.17 (-0.37, 0.71)	0.09 (-0.46, 0.64)
N	31,871		

*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

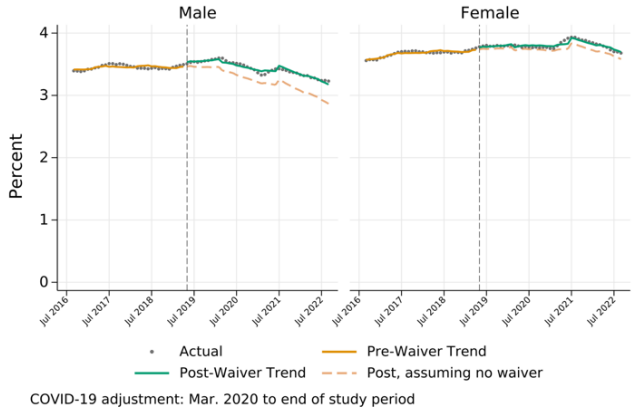
associated with about a 0.5% point increase in the rate of diagnoses in contrast with their referent group.

- 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

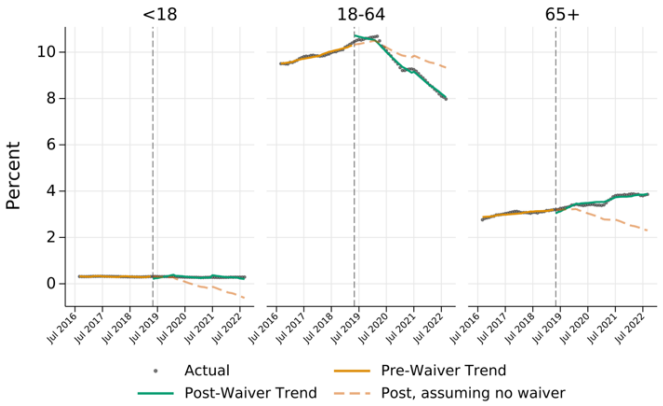
Comparison groups	Difference in the overall effect of the SUD waiver	Difference in the Trend by subpopulations	Avg. Outcome, Sept 2022 (Diff.)
Male vs. Female	0.0412 (-0.0076, 0.0900)	0.0039* (0.0008, 0.0069)	0.1957* (0.0587, 0.3327)
18-64 vs. <18	0.50* (0.42, 0.57)	-0.065* (-0.069, -0.060)	-2.10* (-2.30, -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



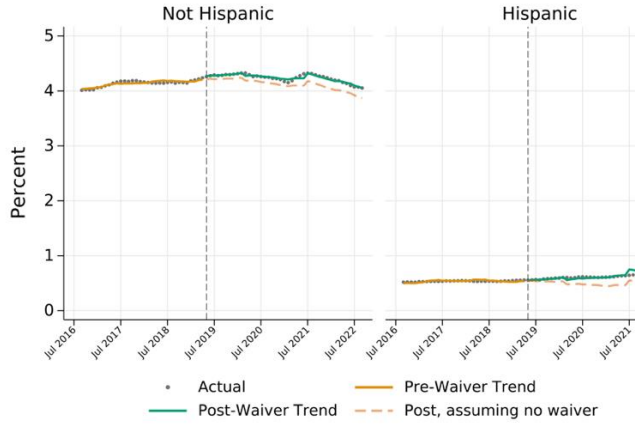
COVID-19 adjustment: Mar. 2020 to end of study period

Age



COVID-19 adjustment: Mar. 2020 to end of study period

Race/Ethnicity



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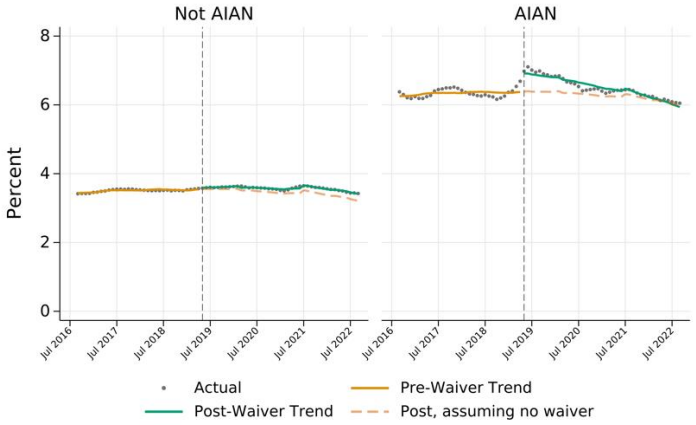
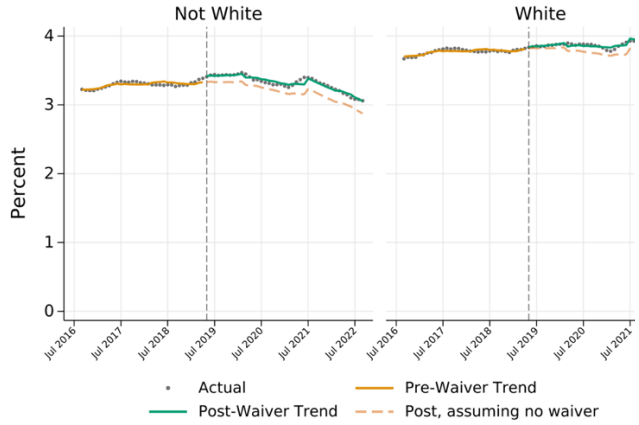


COVID-19 adjustment: Mar. 2020 to end of study period



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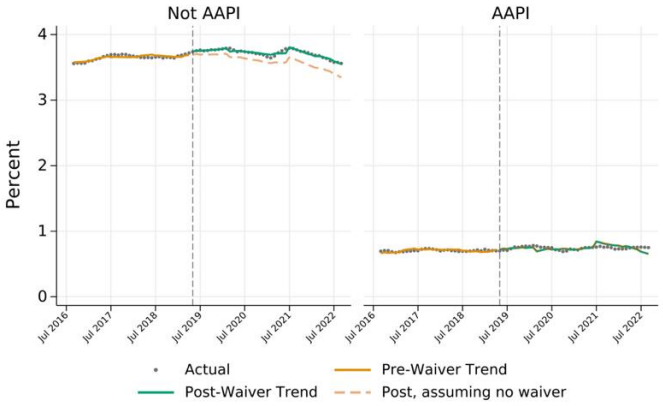

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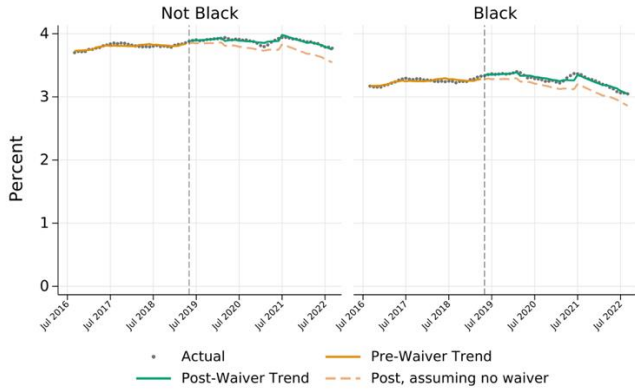
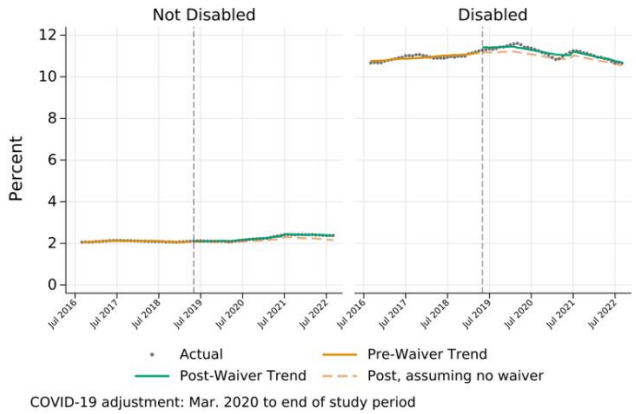
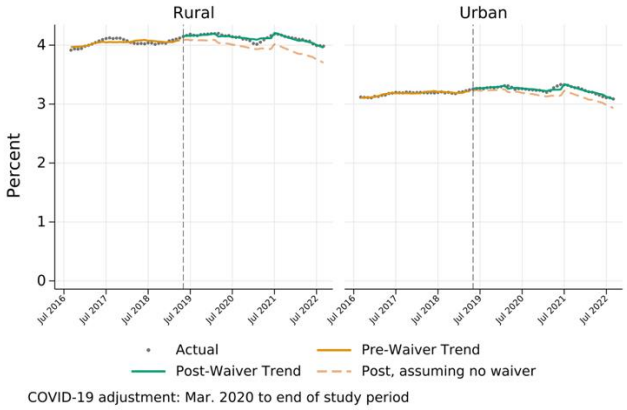


COVID-19 adjustment: Mar. 2020 to end of study period

Disability



Urban/Rural



4.1 Percent Medicaid Beneficiaries with a SUD Diagnosis who receive any type of SUD treatment

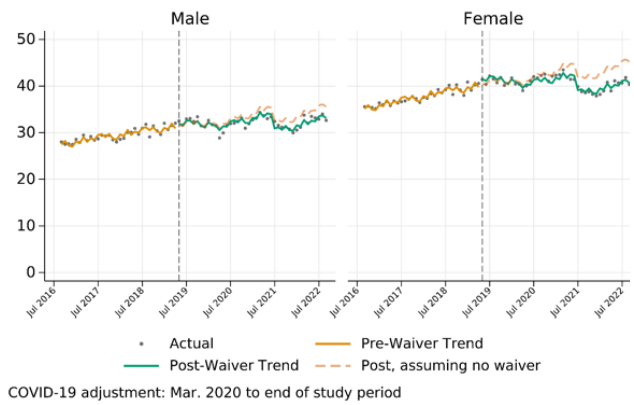
In examining the effect of the SUD waiver implementation on the percent of beneficiaries diagnosed with SUD who receive any treatment, we find:

- 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.

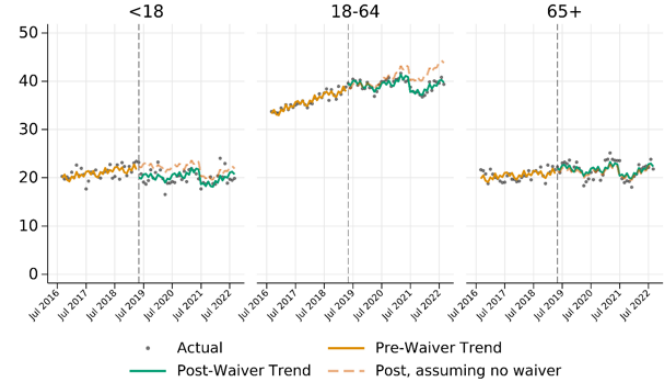
Table 4.2 Percent Medicaid Beneficiaries with a SUD Diagnosis who receive any type of SUD treatment

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)

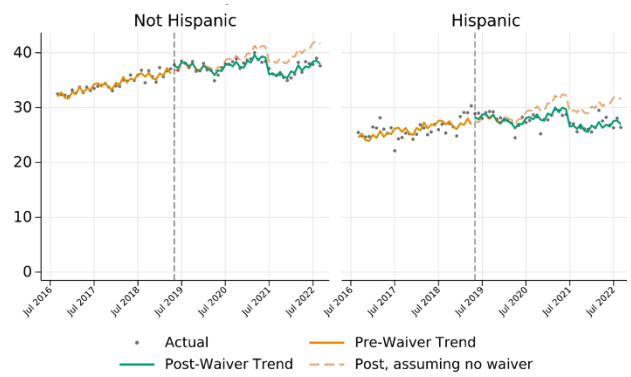
Sex



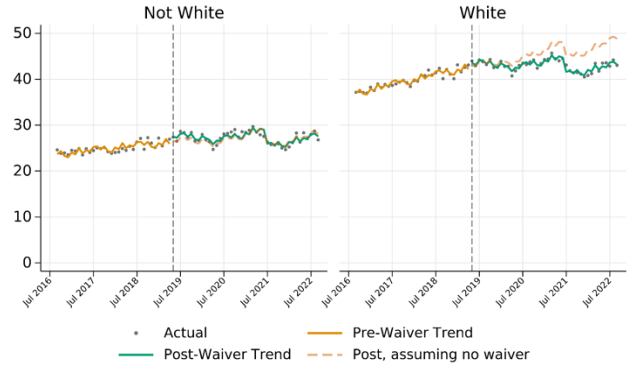
Age



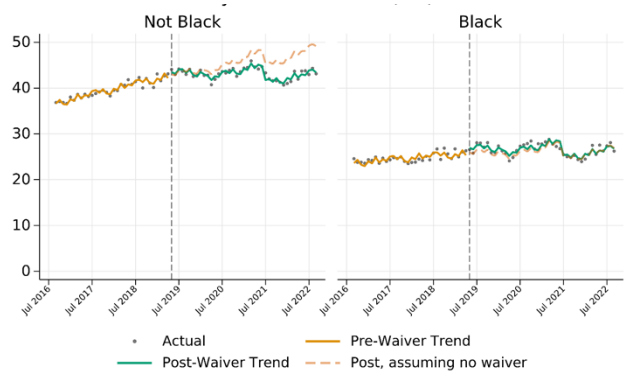
Race/Ethnicity



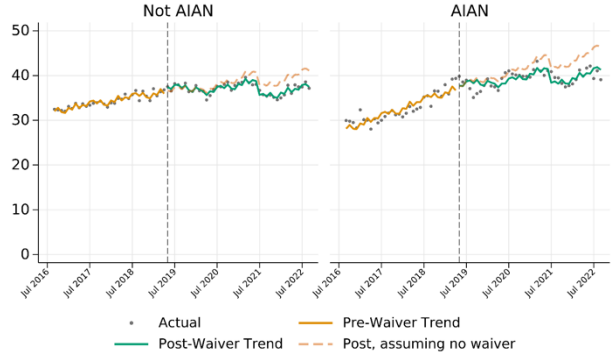
COVID-19 adjustment: Mar. 2020 to end of study period



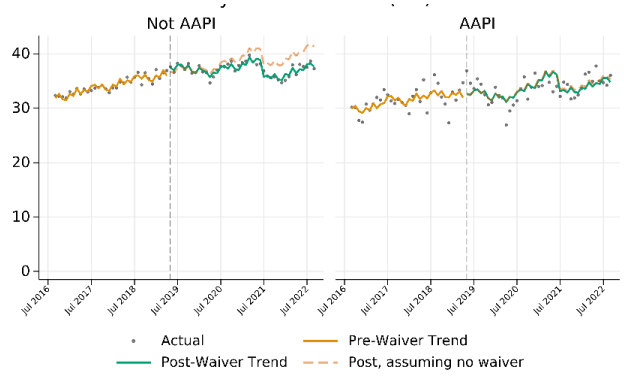
COVID-19 adjustment: Mar. 2020 to end of study period



COVID-19 adjustment: Mar. 2020 to end of study period

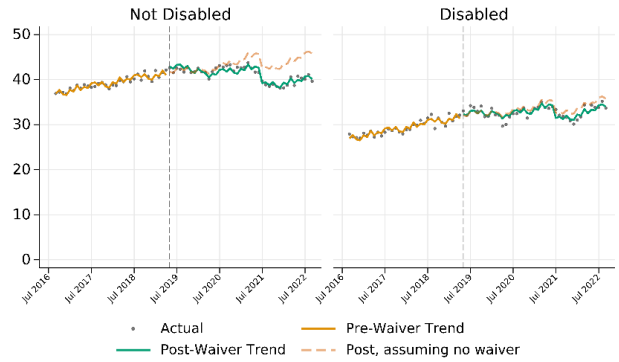


COVID-19 adjustment: Mar. 2020 to end of study period



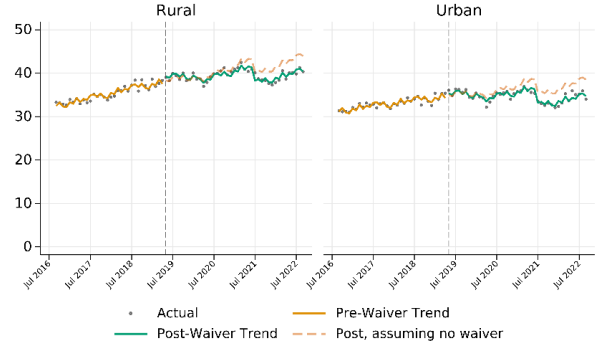
COVID-19 adjustment: Mar. 2020 to end of study period

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)

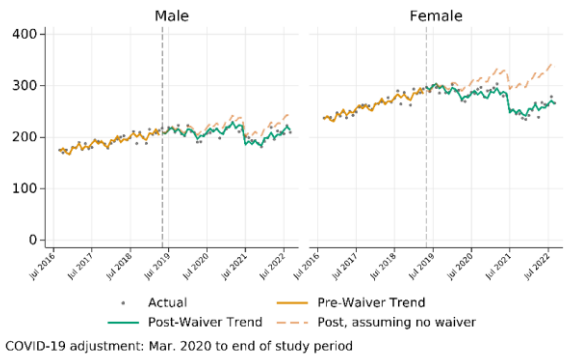
We examined differences in the effect of SUD waiver implementation on the percent of beneficiaries diagnosed with SUD who receive outpatient services. We found:

- 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.

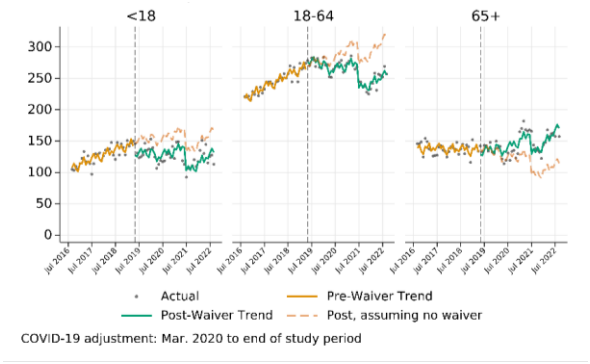
Table 4.3 Outpatient Services for SUD

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)

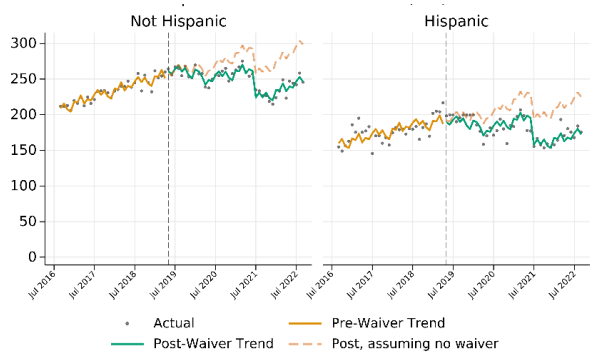
Sex



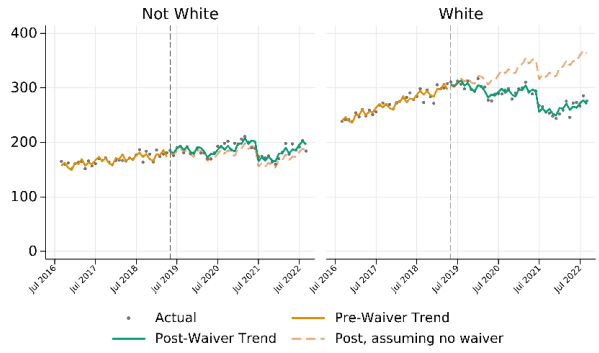
Age



Race/Ethnicity



COVID-19 adjustment: Mar. 2020 to end of study period



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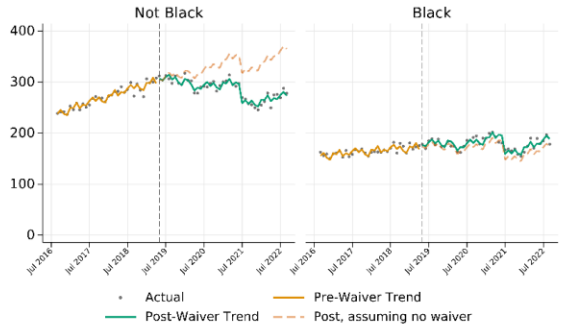
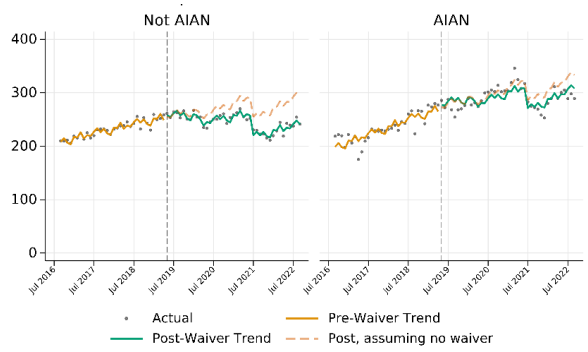


COVID-19 adjustment: Mar. 2020 to end of study period



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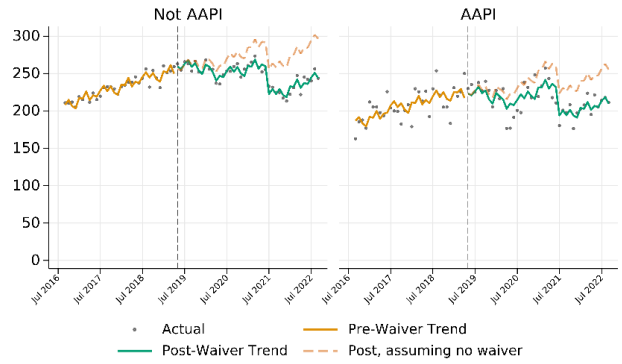
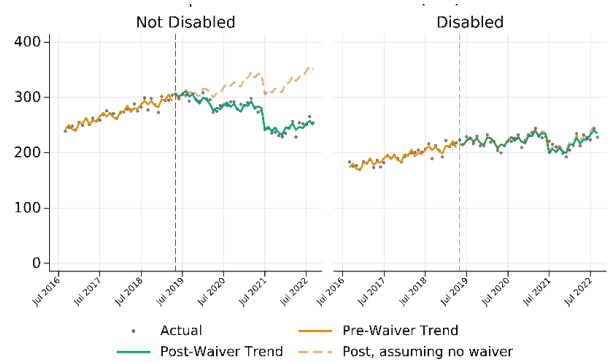


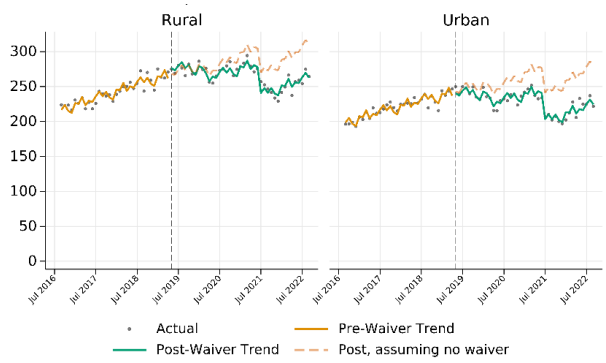
COVID-19 adjustment: Mar. 2020 to end of study period

Disability



COVID-19 adjustment: Mar. 2020 to end of study period

Urban/Rural



COVID-19 adjustment: Mar. 2020 to end of study period

4.4 Medication-Assisted Treatment (M12)

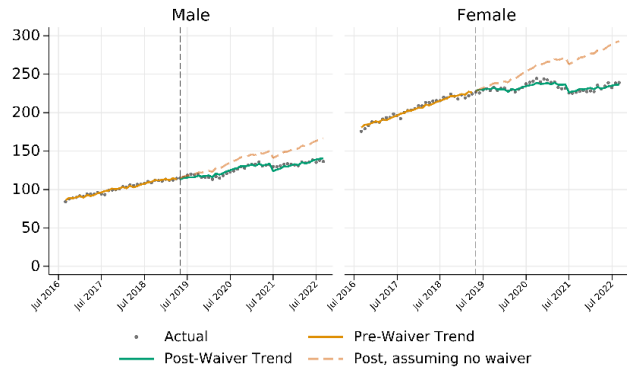
We examined differences in the effect of SUD waiver implementation on the percent of beneficiaries diagnosed with SUD who receive MAT. We found:

- 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

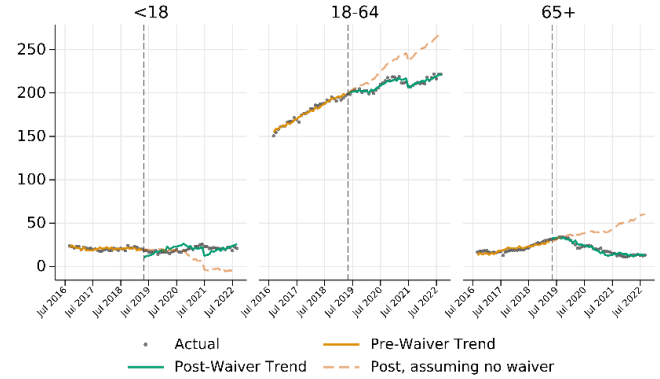
Comparison groups	Difference in the overall effect of the SUD waiver	Difference in the Trend by subpopulations	Avg. Outcome, Sept 2022 (Diff.)
Male vs. Female	-2.17 (-6.49, 2.14)	0.83* (0.55, 1.11)	30.91* (18.35, 43.46)
<18 vs. 18-64	-8.97* (-15.08, -2.86)	2.16* (1.78, 2.55)	77.56* (59.76, 95.37)
65+ 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



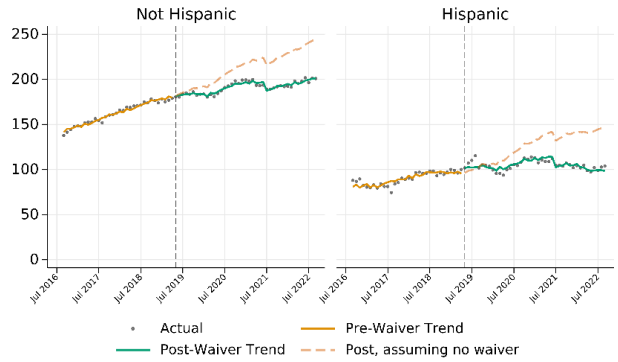
COVID-19 adjustment: Mar. 2020 to end of study period

Age

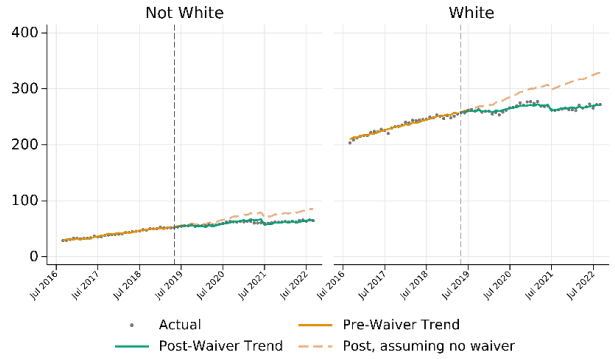


COVID-19 adjustment: Mar. 2020 to end of study period

Race/Ethnicity



COVID-19 adjustment: Mar. 2020 to end of study period



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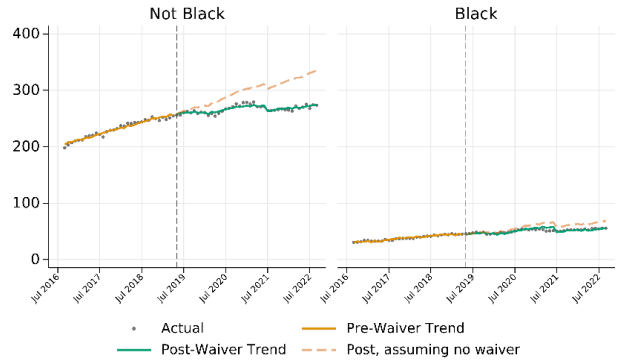

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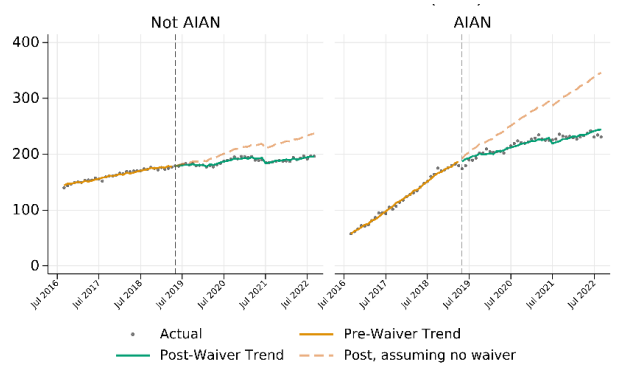

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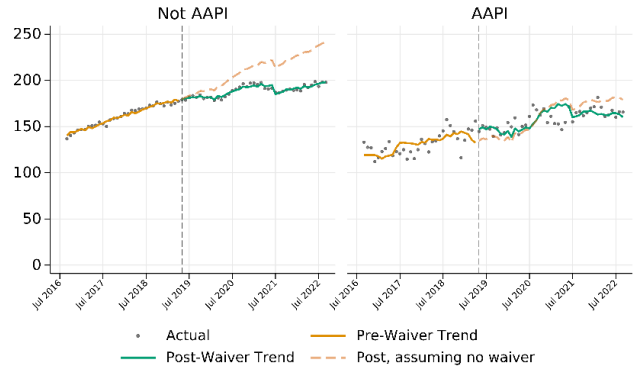
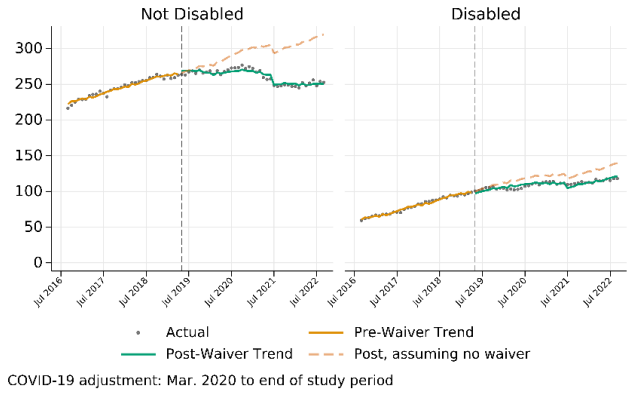


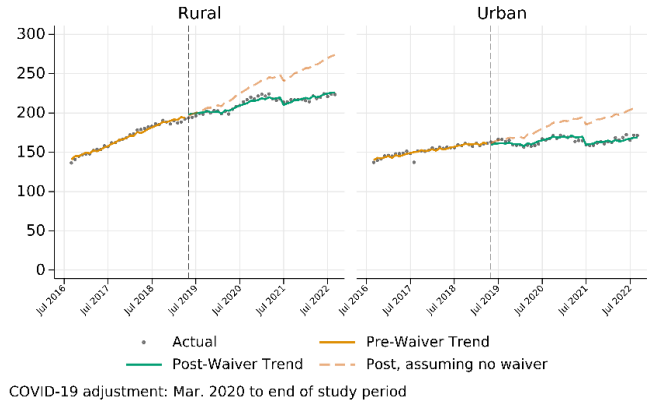
COVID-19 adjustment: Mar. 2020 to end of study period

Disability



COVID-19 adjustment: Mar. 2020 to end of study period

Urban/Rural



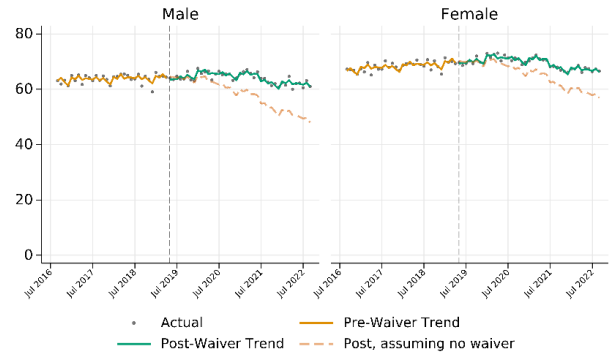
COVID-19 adjustment: Mar. 2020 to end of study period

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

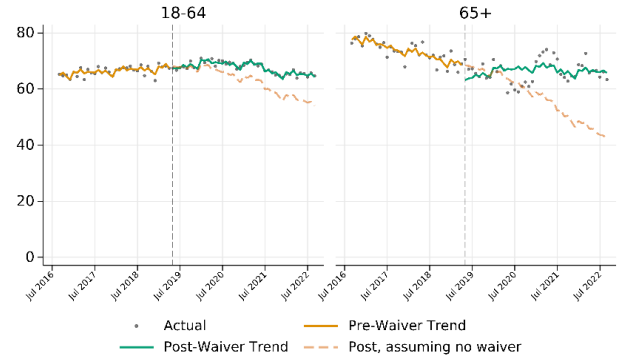
Comparison groups	Difference in the overall effect of the SUD waiver	Difference in the Trend by subpopulations	Avg. Outcome, Sept 2022 (Diff.)
Male vs. Female	-0.3296 (-1.1288, 0.4696)	0.1012 (0.0520, 0.1504)	3.7165 (1.4503, 5.9826)
<18 vs. 18-64			
65+ vs. 18-64	-4.4938 (-6.3329, -2.6548)	0.4527 (0.3423, 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



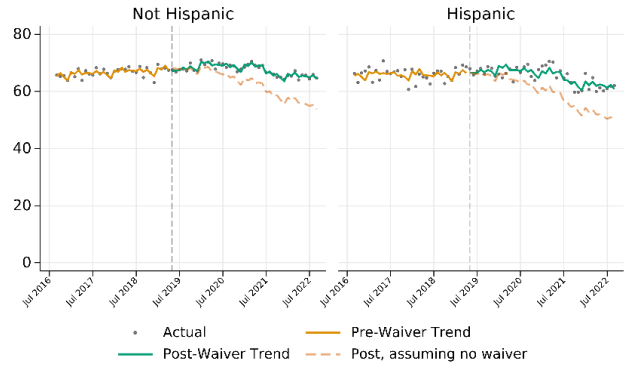
COVID-19 adjustment: Mar. 2020 to end of study period

Age

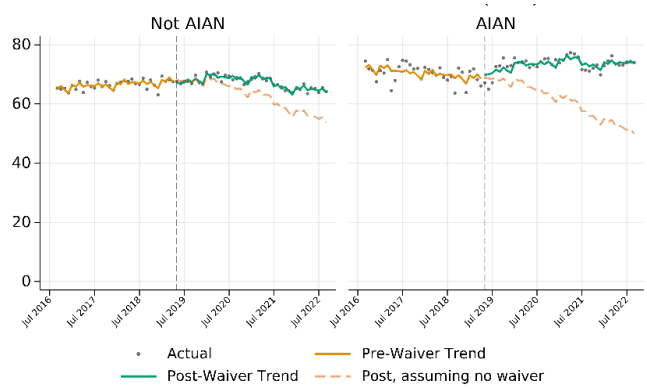


COVID-19 adjustment: Mar. 2020 to end of study period

Race/Ethnicity



COVID-19 adjustment: Mar. 2020 to end of study period



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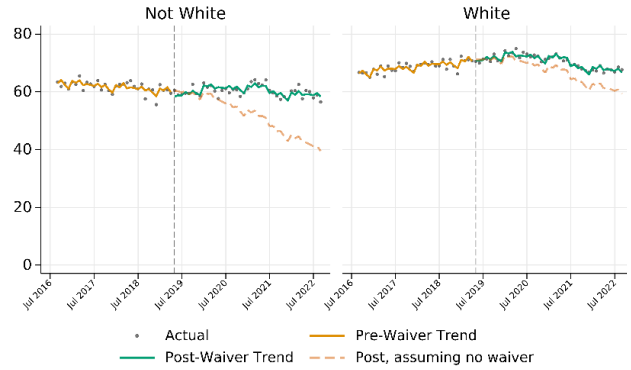

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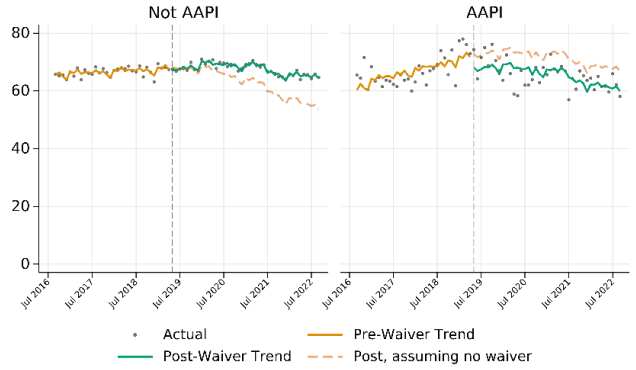

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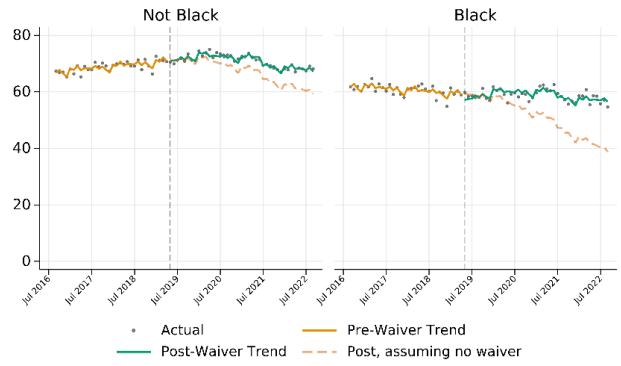
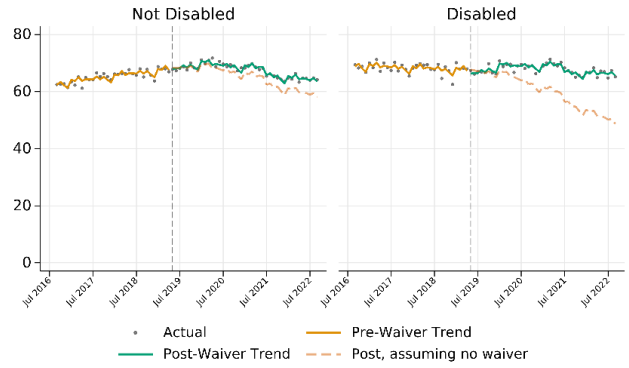


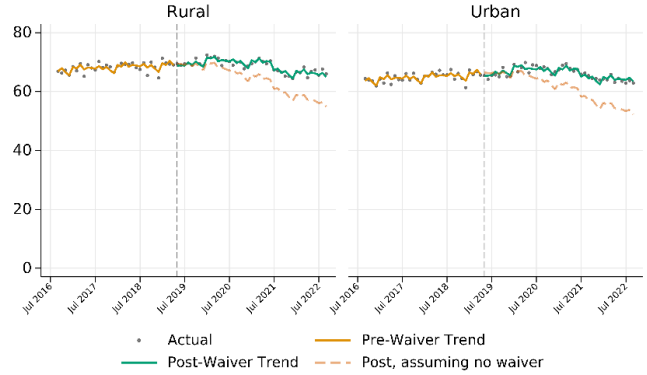
COVID-19 adjustment: Mar. 2020 to end of study period

Disability



COVID-19 adjustment: Mar. 2020 to end of study period

Urban/Rural



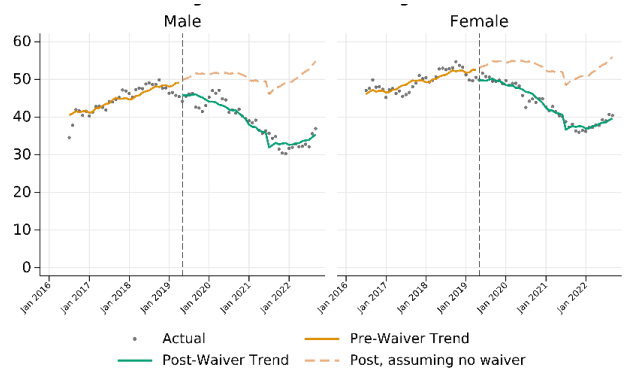
COVID-19 adjustment: Mar. 2020 to end of study period

4.6 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

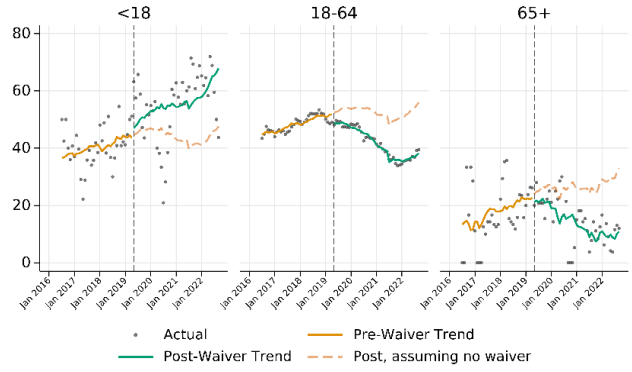
Comparison groups	Difference in the overall effect of the SUD waiver	Difference in the Trend by subpopulations	Avg. Outcome, Sept 2022 (Diff.)
Male vs. Female	-0.6507 (-4.4706, 3.1692)	-0.063 (-0.2716, 0.1456)	-3.1715 (-13.0986, 6.7555)
<18 vs. 18-64	5.9957 (-7.3913, 19.3828)	0.8016 (0.0921, 1.5112)	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



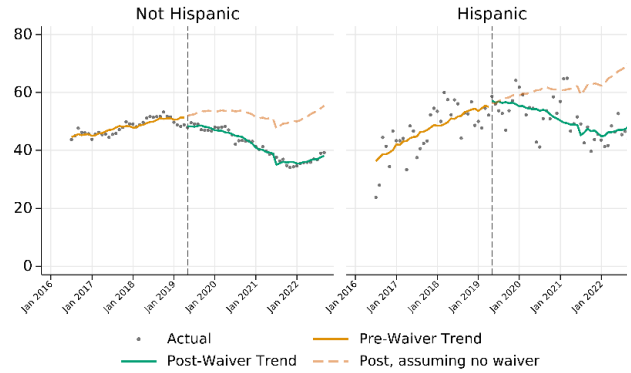
COVID-19 adjustment: Mar. 2020 to end of study period

Age

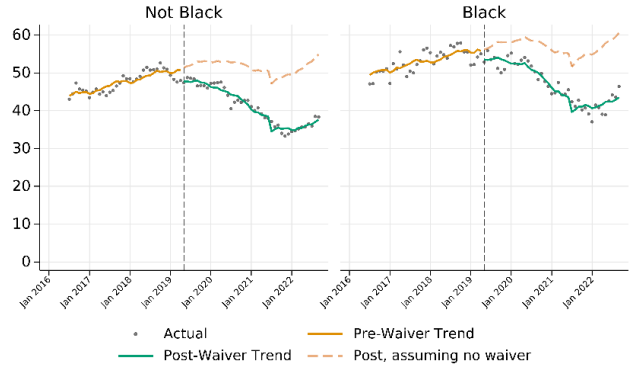


COVID-19 adjustment: Mar. 2020 to end of study period

Race/Ethnicity



COVID-19 adjustment: Mar. 2020 to end of study period



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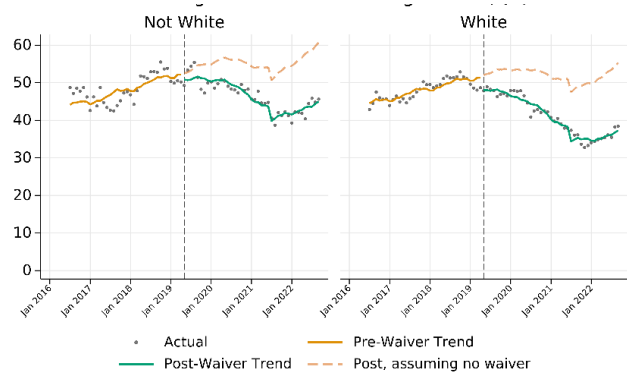

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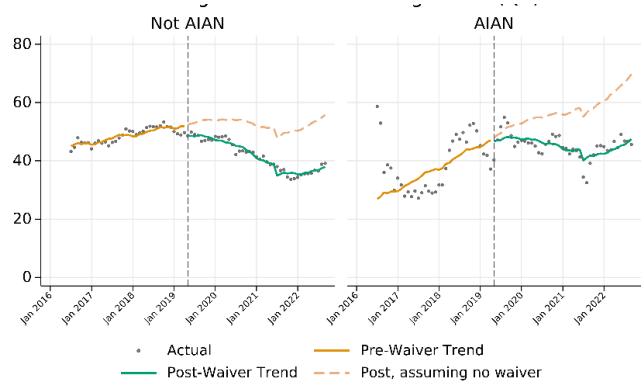

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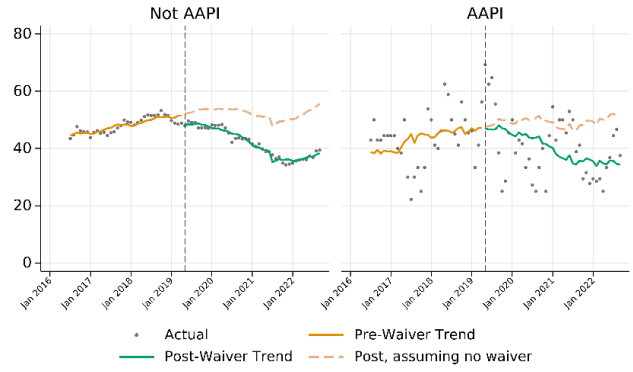
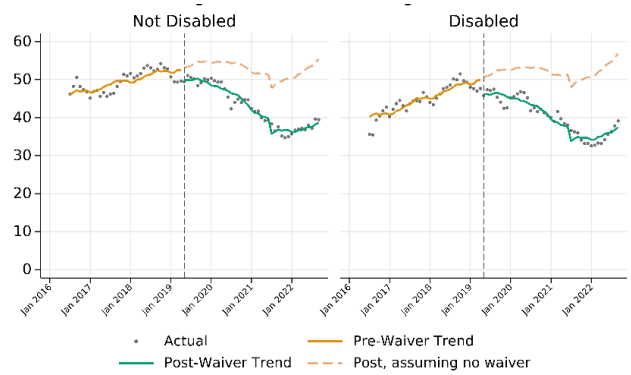


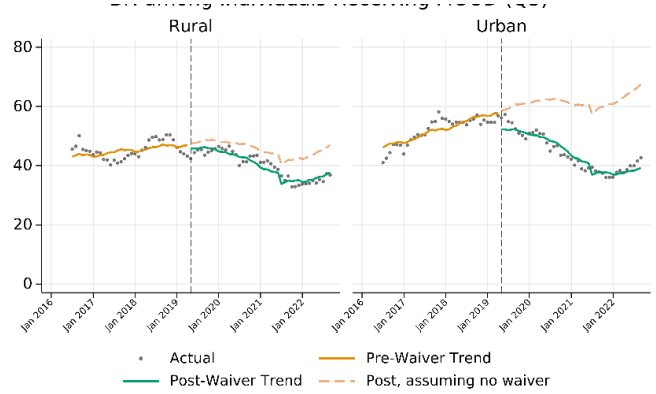
COVID-19 adjustment: Mar. 2020 to end of study period

Disability



COVID-19 adjustment: Mar. 2020 to end of study period

Urban/Rural



COVID-19 adjustment: Mar. 2020 to end of study period

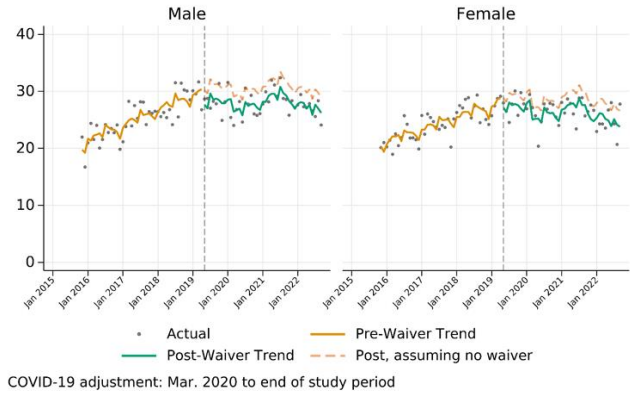
4.7 30-Day Follow-Up After Emergency Department Visit for Alcohol and Other Drug Abuse or Dependence (M17.1)

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)

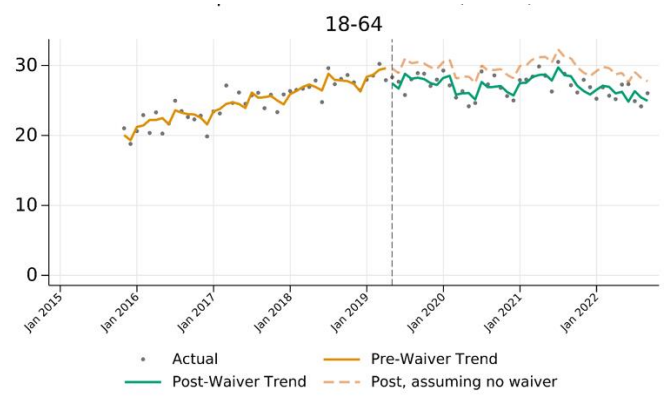
Comparison groups	Difference in the overall effect of the SUD waiver	Difference in the Trend by subpopulations	Avg. Outcome, Sept 2022 (Diff.)
Black vs. Not Black	-0.8669 (-3.4346, 1.7007)	-0.0474 (-0.1609, 0.0660)	-2.7638 (-7.8897, 2.3622)
AAPI vs. Not AAPI	17.9758 (-0.2371, 36.1888)	0.1235 (-0.6361, 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



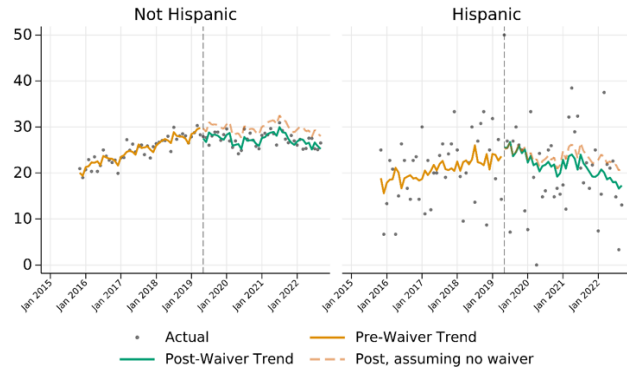
COVID-19 adjustment: Mar. 2020 to end of study period

Age

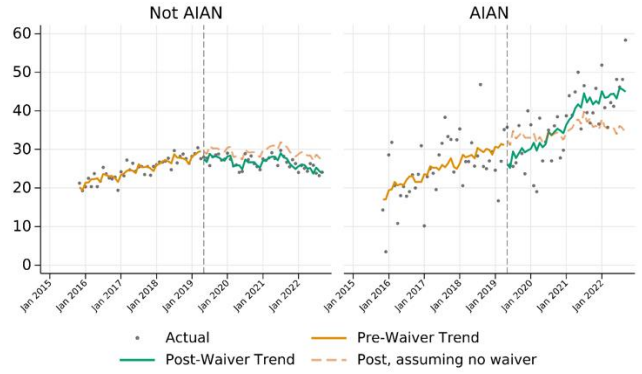


COVID-19 adjustment: Mar. 2020 to end of study period

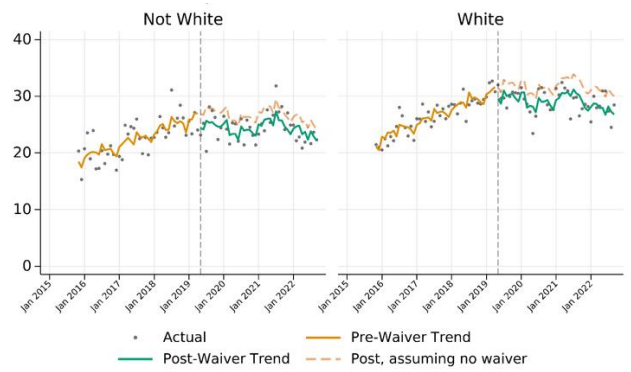
Race/Ethnicity



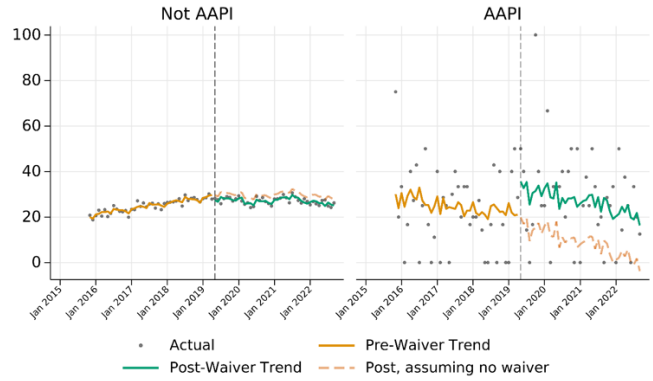
COVID-19 adjustment: Mar. 2020 to end of study period



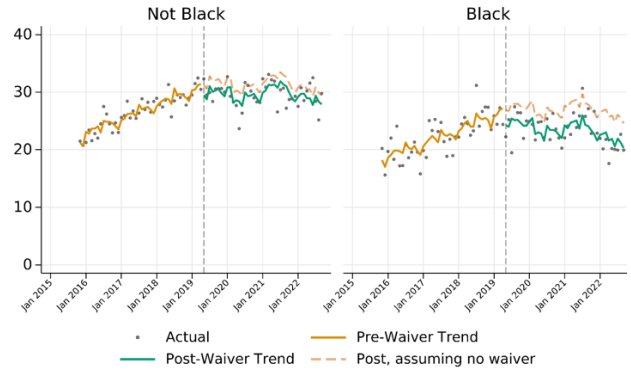
COVID-19 adjustment: Mar. 2020 to end of study period



COVID-19 adjustment: Mar. 2020 to end of study period

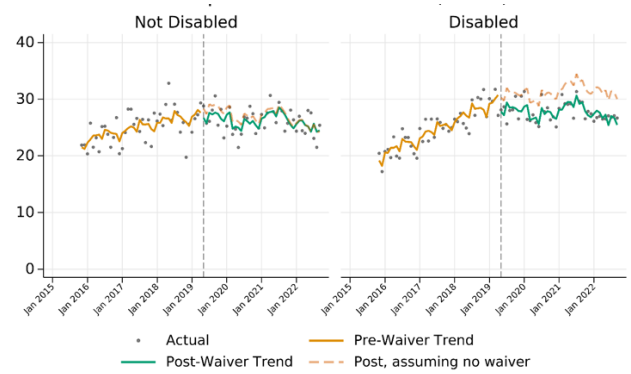


COVID-19 adjustment: Mar. 2020 to end of study period



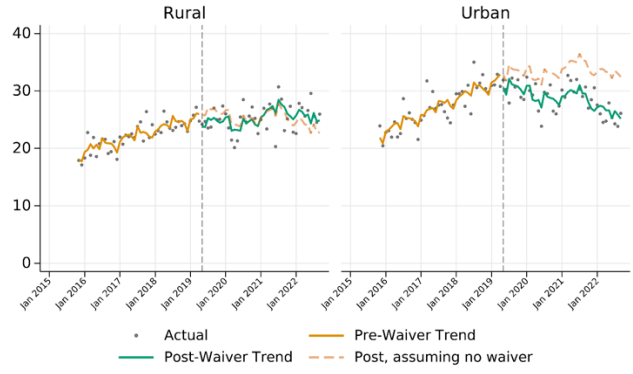
COVID-19 adjustment: Mar. 2020 to end of study period

Disability



COVID-19 adjustment: Mar. 2020 to end of study period

Urban/Rural



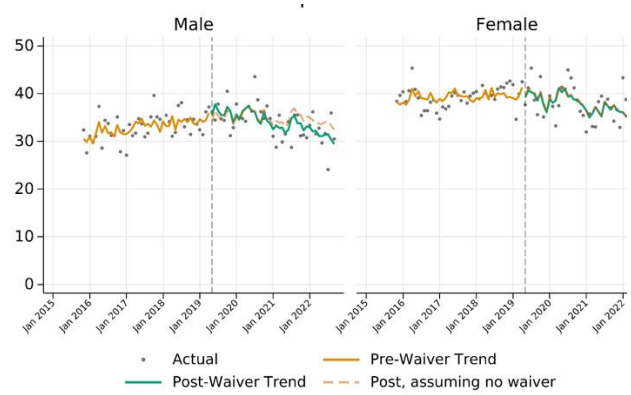
COVID-19 adjustment: Mar. 2020 to end of study period

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

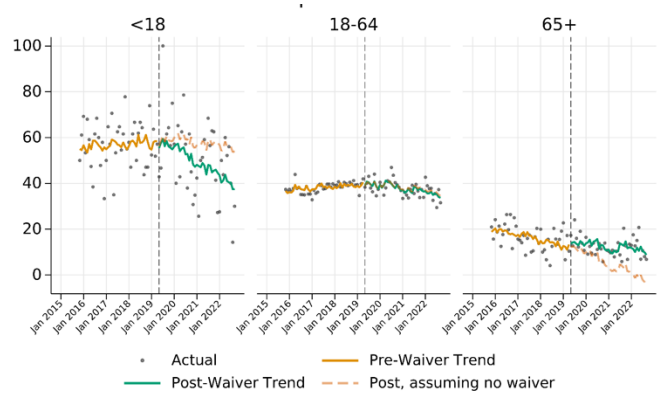
Comparison groups	Difference in the overall effect of the SUD waiver	Difference in the Trend by subpopulations	Avg. Outcome, Sept 2022 (Diff.)
Male vs. Female	1.7842 (-1.1102, 4.6785)	-0.1215 (-0.2377, -0.0054)	-3.0769 (-8.2062, 2.0525)
<18 vs. 18-64	-0.8301 (-10.5421, 8.8819)	-0.3697 (-0.7635, 0.0240)	-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



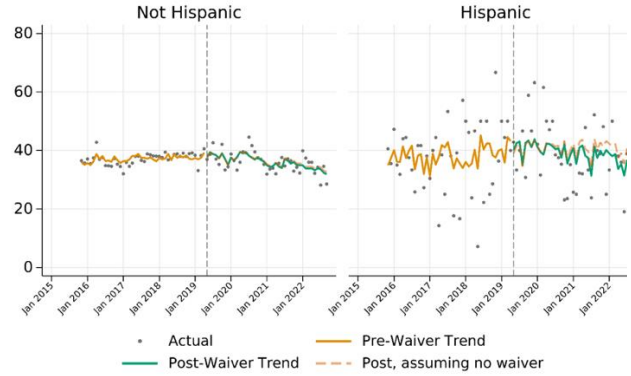
COVID-19 adjustment: Mar. 2020 to end of study period

Age

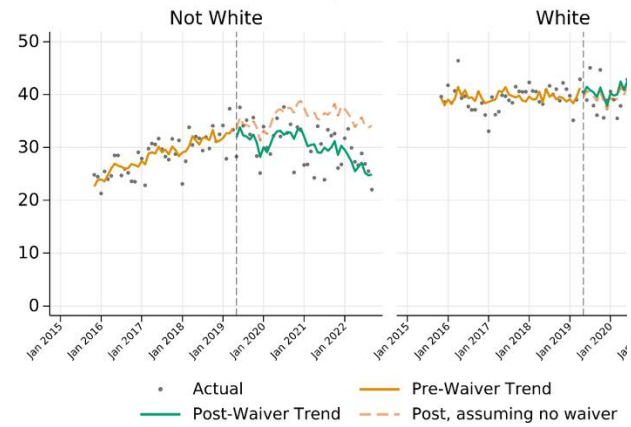


COVID-19 adjustment: Mar. 2020 to end of study period

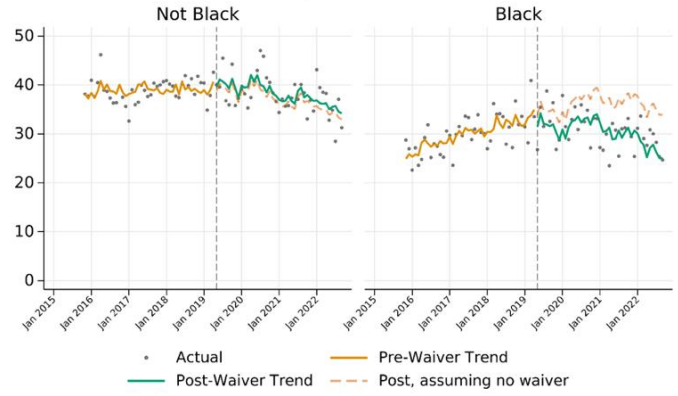
Race/Ethnicity



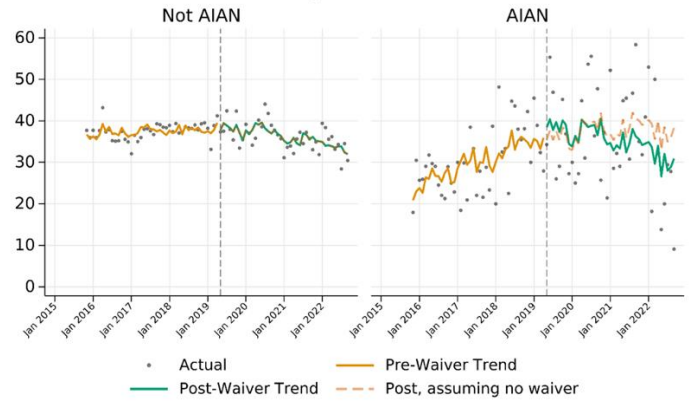
COVID-19 adjustment: Mar. 2020 to end of study period



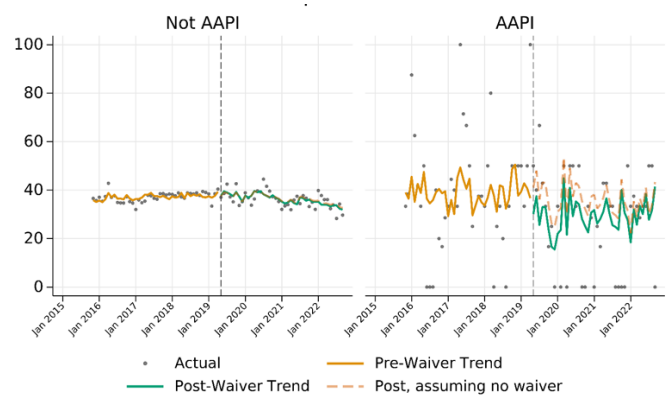
COVID-19 adjustment: Mar. 2020 to end of study period



COVID-19 adjustment: Mar. 2020 to end of study period

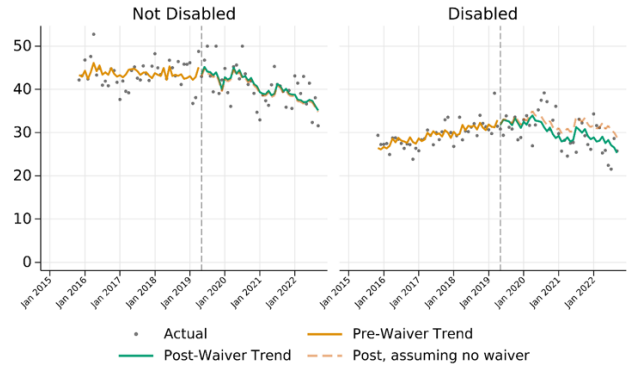


COVID-19 adjustment: Mar. 2020 to end of study period



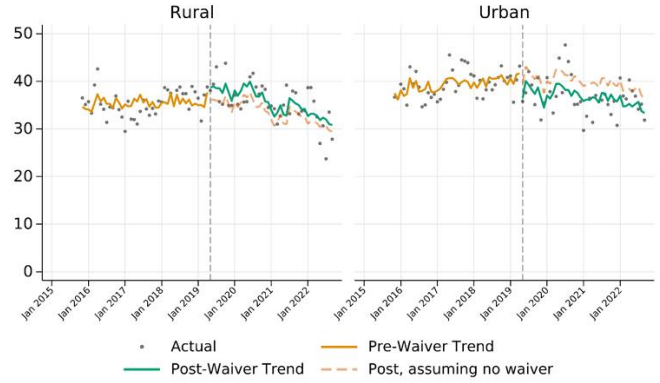
COVID-19 adjustment: Mar. 2020 to end of study period

Disability



COVID-19 adjustment: Mar. 2020 to end of study period

Urban/Rural



COVID-19 adjustment: Mar. 2020 to end of study period

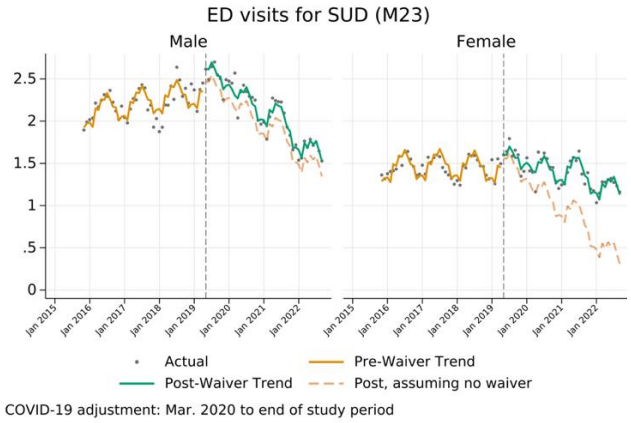
4.9 Emergency Department Utilization for SUD per 1000 beneficiaries (M23)

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)

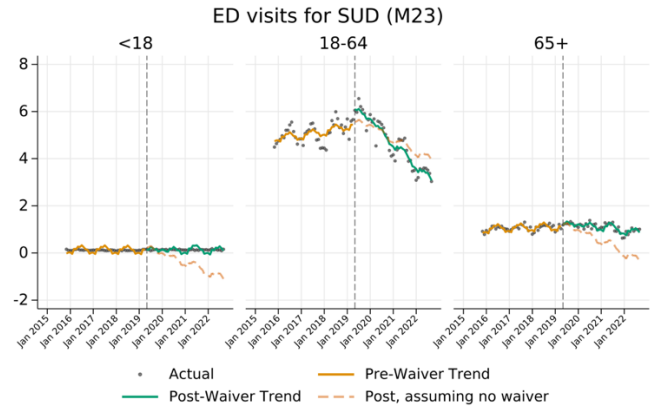
Comparison groups	Difference in the overall effect of the SUD waiver	Difference in the Trend by subpopulations	Avg. Outcome, Sept 2022 (Diff.)
Black vs. Not Black	0.0066 (-0.0923, 0.1055)	-0.0077 (-0.0126, -0.0029)	-0.3031 (-0.5254, -0.0808)
AAPI vs. Not AAPI	-0.2542 (-0.4444, -0.0640)	0.0077 (-0.0017, 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



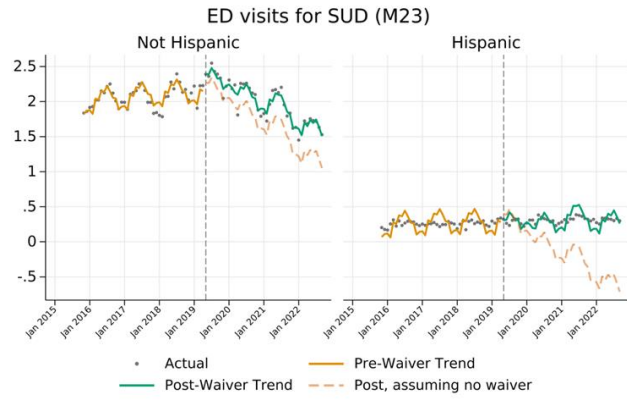
COVID-19 adjustment: Mar. 2020 to end of study period

Age

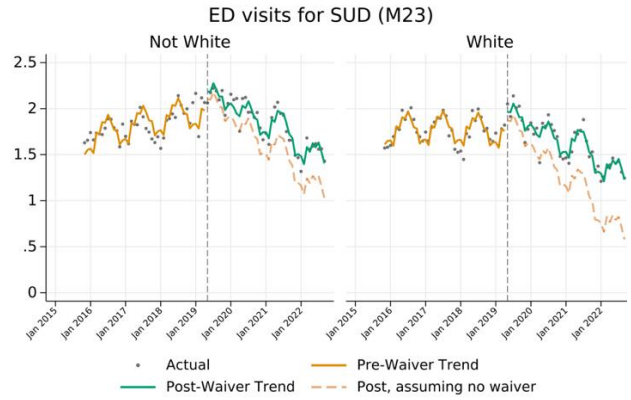


COVID-19 adjustment: Mar. 2020 to end of study period

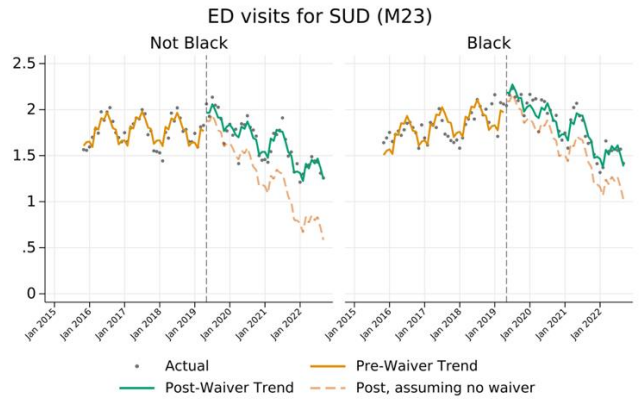
Race/Ethnicity



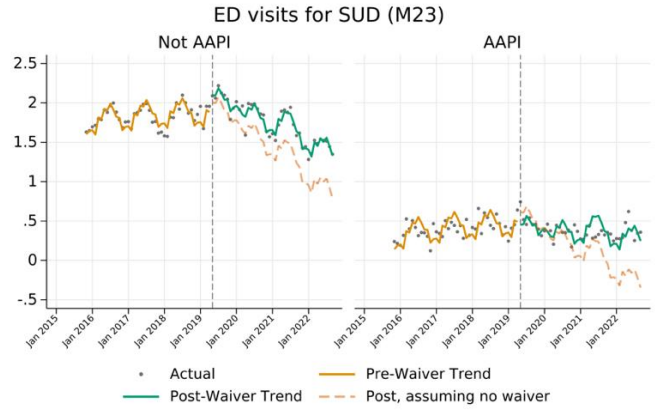
COVID-19 adjustment: Mar. 2020 to end of study period



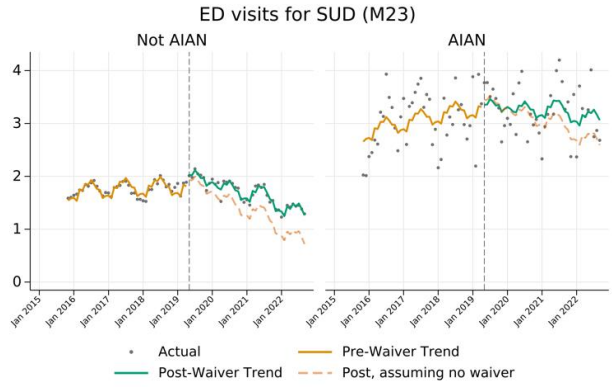
COVID-19 adjustment: Mar. 2020 to end of study period



COVID-19 adjustment: Mar. 2020 to end of study period

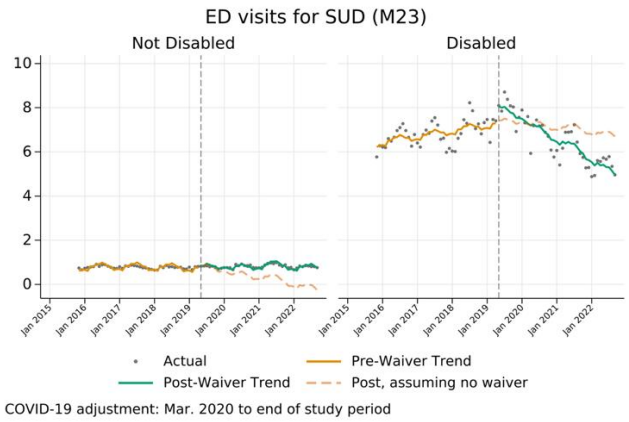


COVID-19 adjustment: Mar. 2020 to end of study period

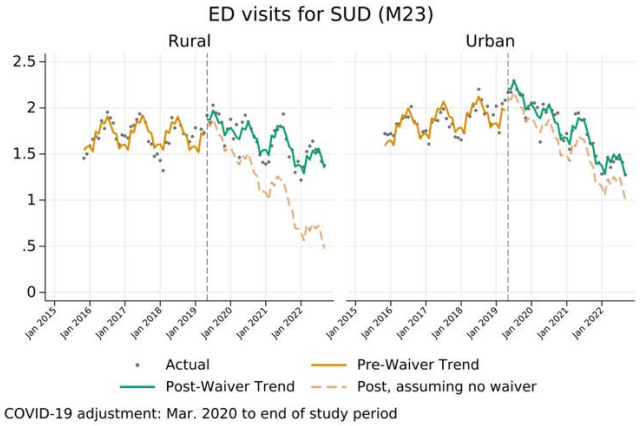


COVID-19 adjustment: Mar. 2020 to end of study period

Disability



Urban/Rural

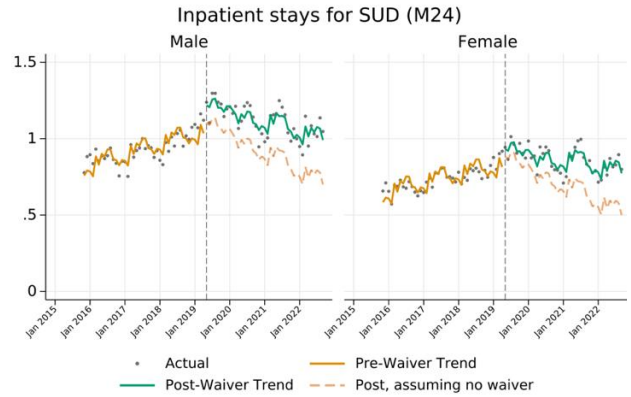


4.10 Inpatient Stays for SUD per 1000 beneficiaries (M24)

Table 4.10

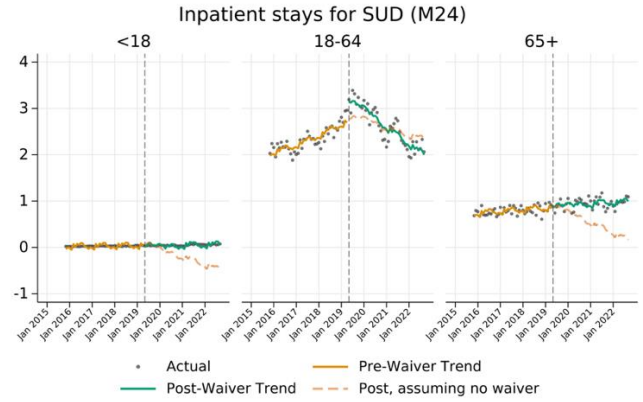
Comparison groups	Difference in the overall effect of the SUD waiver	Difference in the Trend by subpopulations	Avg. Outcome, Sept 2022 (Diff.)
Male vs. Female	0.0643 (0.0162, 0.1124)	-0.0011 (-0.0033, 0.0011)	0.0192 (-0.0770, 0.1154)
<18 vs. 18-64	0.4237 (0.3522, 0.4953)	-0.0328 (-0.0359, -0.0296)	-0.8872 (-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



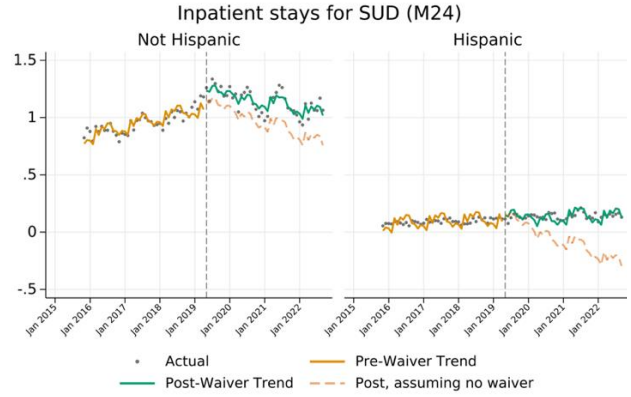
COVID-19 adjustment: Mar. 2020 to end of study period

Age

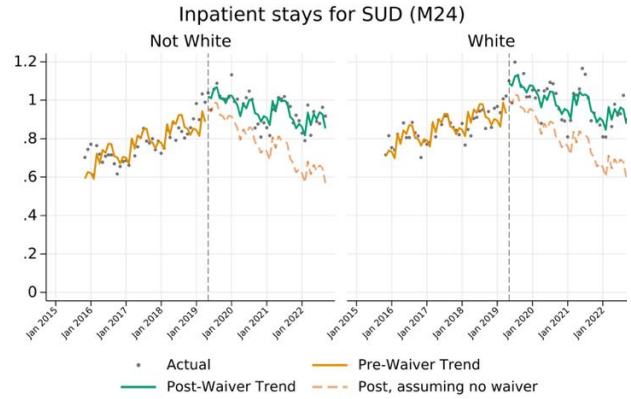


COVID-19 adjustment: Mar. 2020 to end of study period

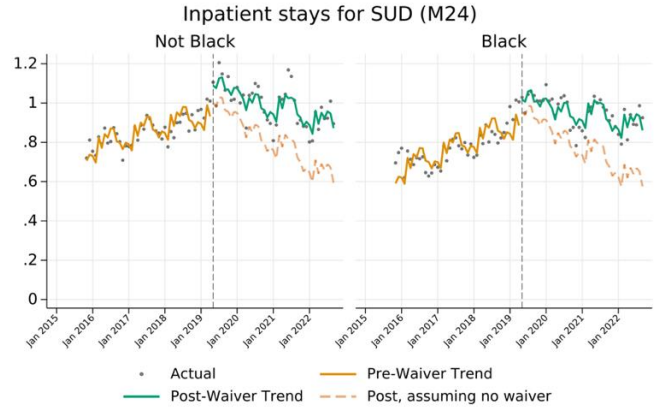
Race/Ethnicity



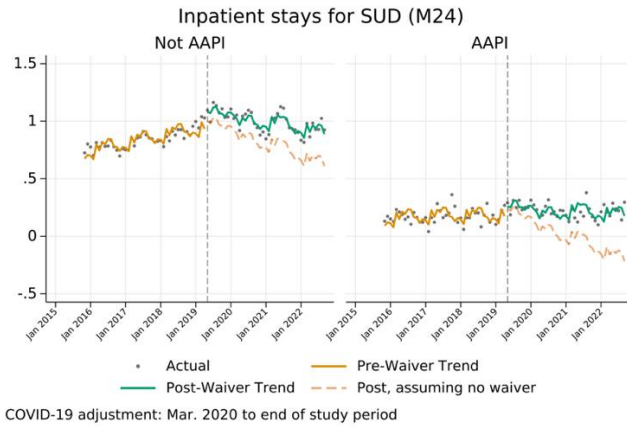
COVID-19 adjustment: Mar. 2020 to end of study period



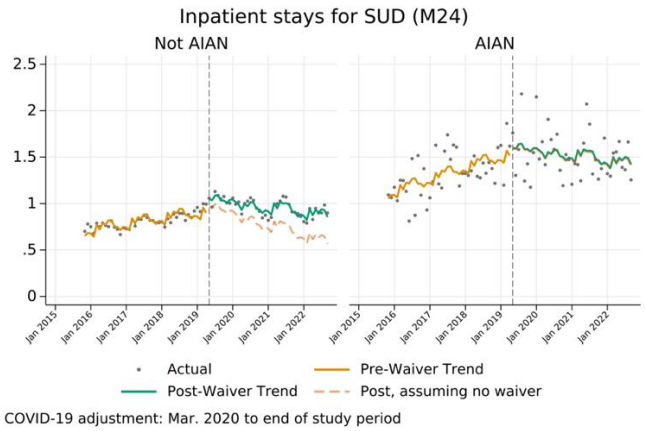
COVID-19 adjustment: Mar. 2020 to end of study period



COVID-19 adjustment: Mar. 2020 to end of study period

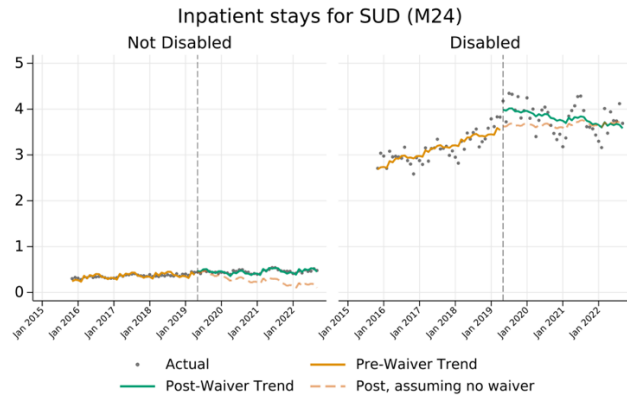


COVID-19 adjustment: Mar. 2020 to end of study period



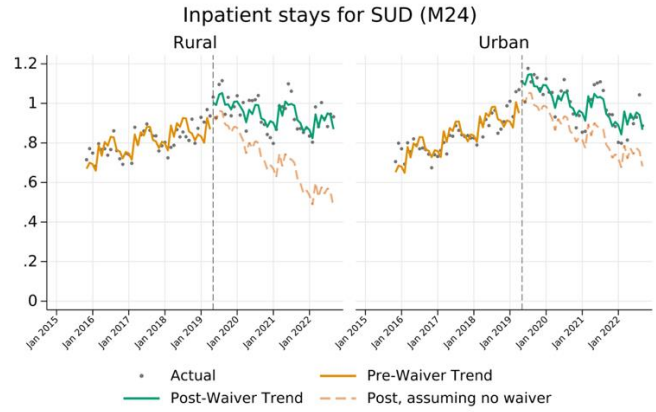
COVID-19 adjustment: Mar. 2020 to end of study period

Disability



COVID-19 adjustment: Mar. 2020 to end of study period

Urban/Rural



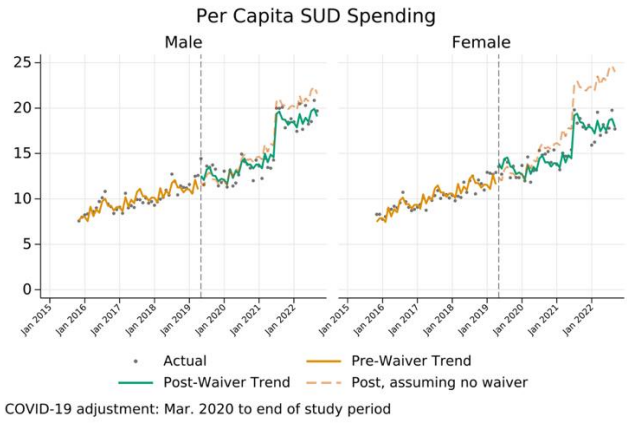
COVID-19 adjustment: Mar. 2020 to end of study period

4.11 Per capita SUD spending (M30)

Table 4.11

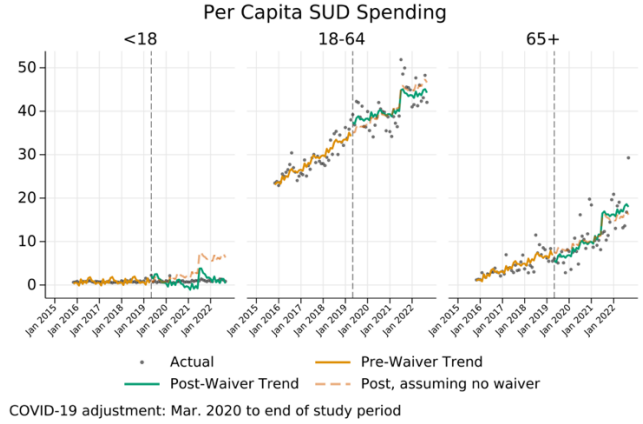
Comparison groups	Difference in the overall effect of the SUD waiver	Difference in the Trend by subpopulations	Avg. Outcome, Sept 2022 (Diff.)
Male vs. Female	-0.7783 (-1.4864, -0.0701)	0.1086 (0.0744, 0.1428)	3.5655 (2.2556, 4.8753)
<18 vs. 18-64	1.1899 (0.3874, 1.9924)	0.0606 (0.0228, 0.0983)	3.6122 (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



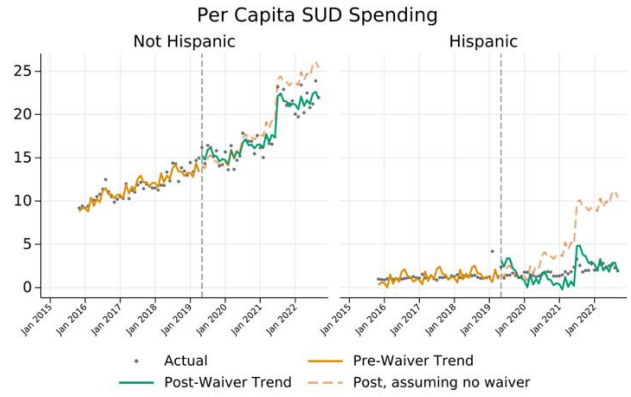
COVID-19 adjustment: Mar. 2020 to end of study period

Age

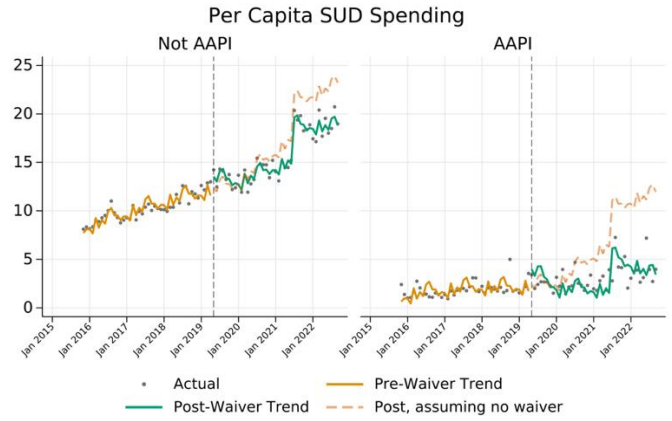


COVID-19 adjustment: Mar. 2020 to end of study period

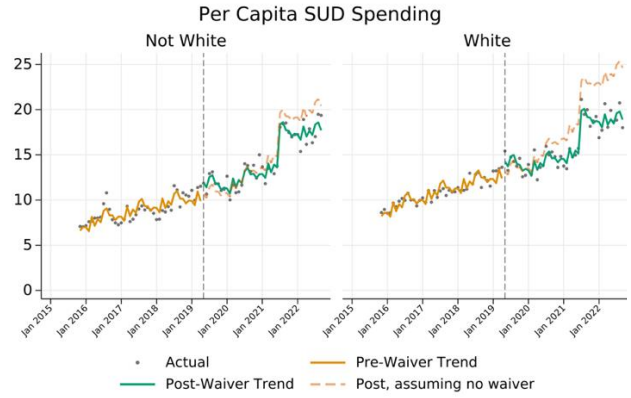
Race/Ethnicity



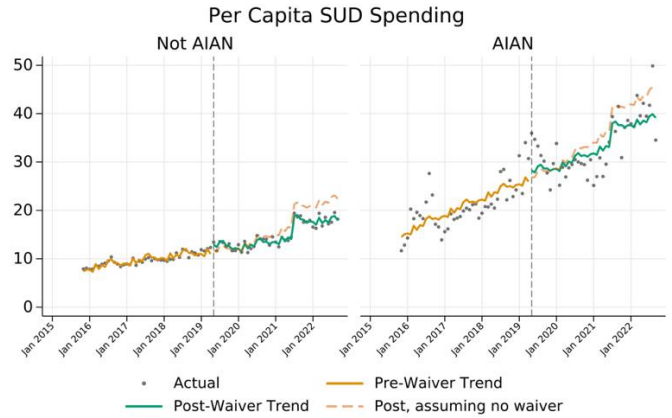
COVID-19 adjustment: Mar. 2020 to end of study period



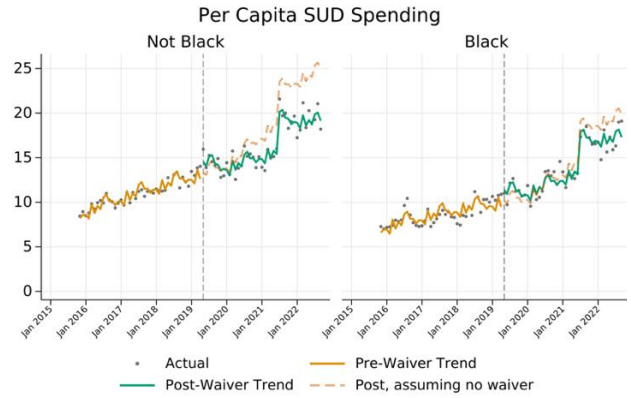
COVID-19 adjustment: Mar. 2020 to end of study period



COVID-19 adjustment: Mar. 2020 to end of study period

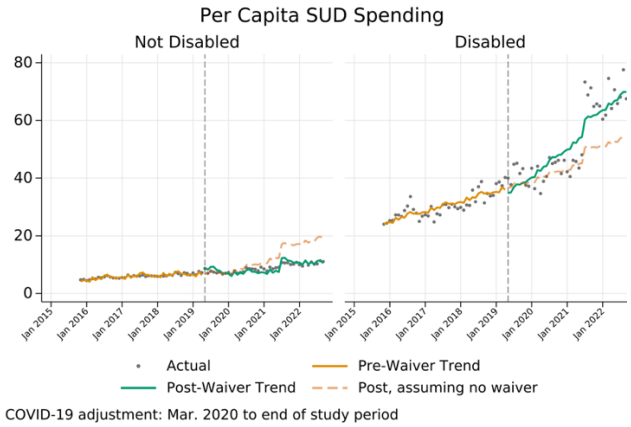


COVID-19 adjustment: Mar. 2020 to end of study period

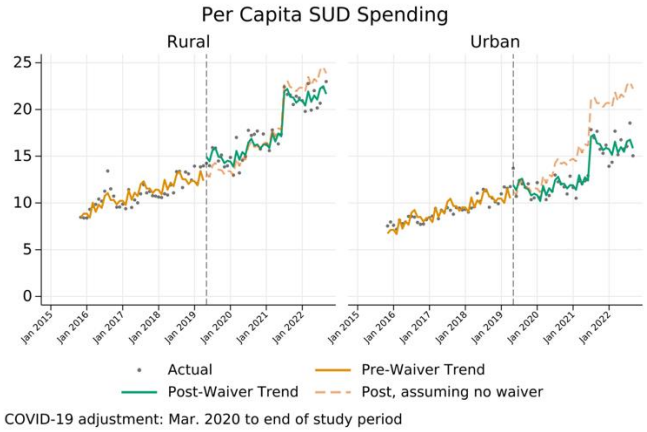


COVID-19 adjustment: Mar. 2020 to end of study period

Disability



Urban/Rural

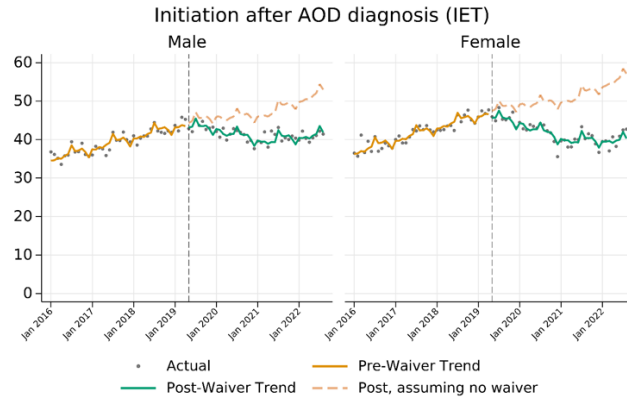


4.12 Initiation in care (IET/M15) (combined SUD only)

Table 4.12

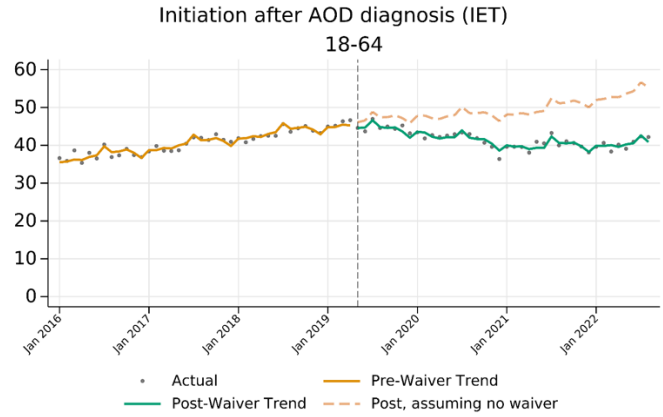
Comparison groups	Difference in the overall effect of the SUD waiver	Difference in the Trend by subpopulations	Avg. Outcome, Sept 2022 (Diff.)
Male vs. Female	0.6079 (-0.8086, 2.0244)	0.1309 (0.0677, 0.1941)	5.7115 (2.8326, 8.5904)
<18 vs. 18-64			
65+ vs. 18-64			
Hispanic vs. Not Hispanic	2.7114 (-2.0502, 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



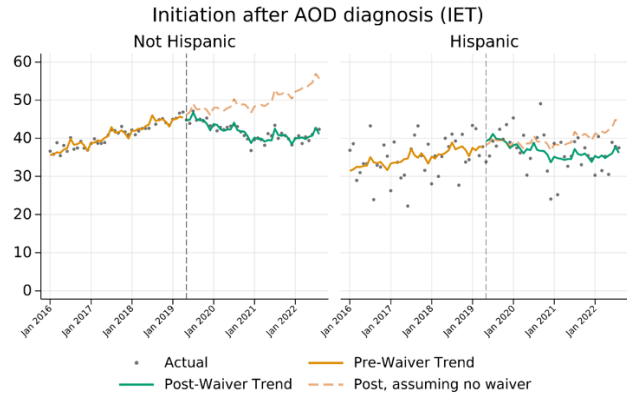
COVID-19 adjustment: Mar. 2020 to end of study period

Age

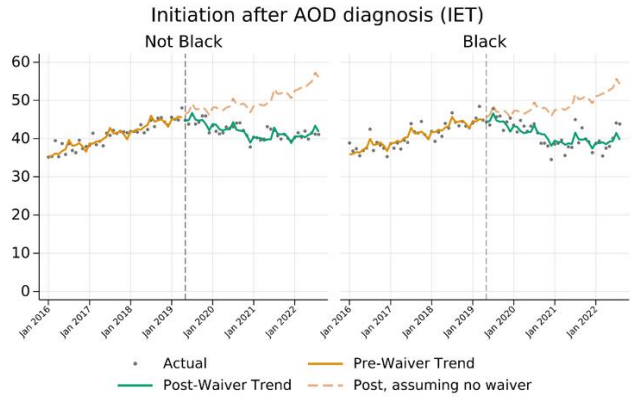


COVID-19 adjustment: Mar. 2020 to end of study period

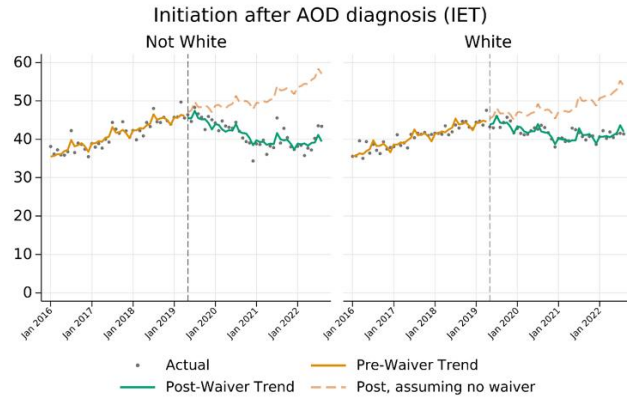
Race/Ethnicity



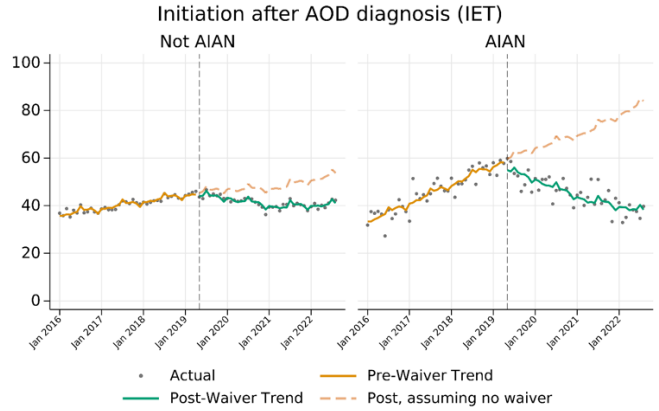
COVID-19 adjustment: Mar. 2020 to end of study period



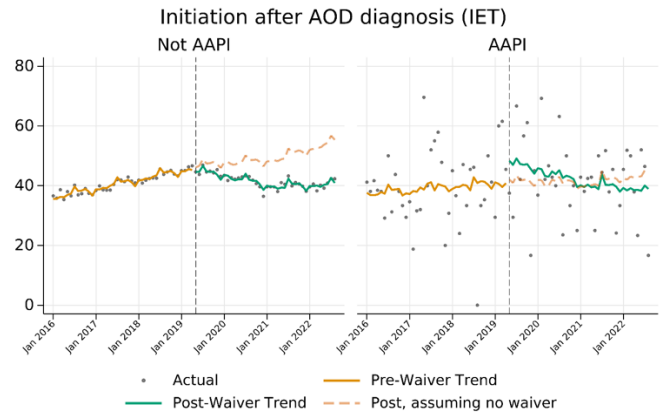
COVID-19 adjustment: Mar. 2020 to end of study period



COVID-19 adjustment: Mar. 2020 to end of study period

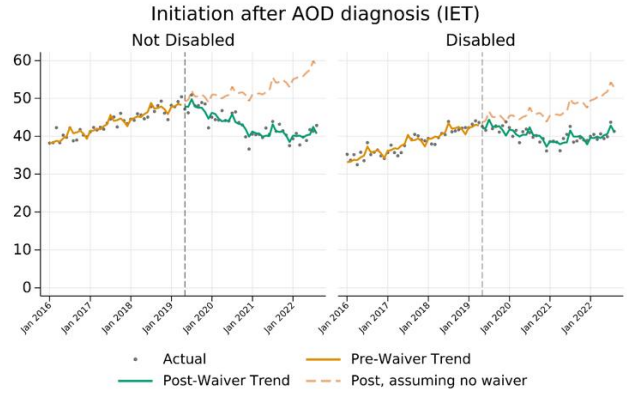


COVID-19 adjustment: Mar. 2020 to end of study period



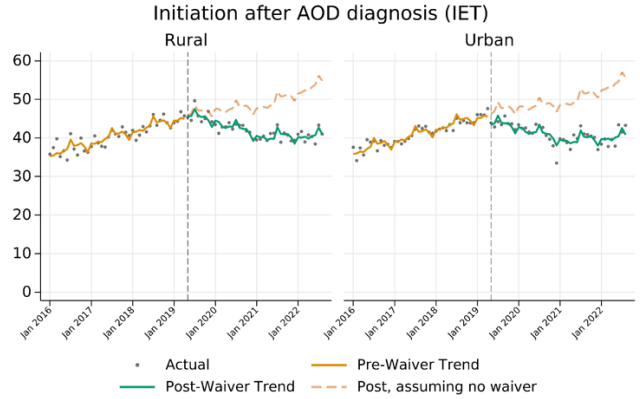
COVID-19 adjustment: Mar. 2020 to end of study period

Disability



COVID-19 adjustment: Mar. 2020 to end of study period

Urban/Rural



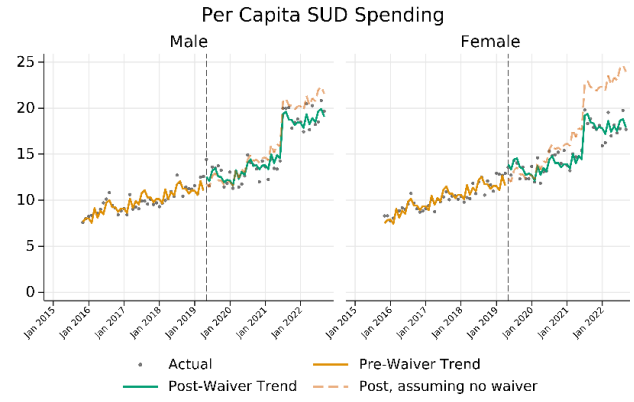
COVID-19 adjustment: Mar. 2020 to end of study period

4.13 Out-of-pocket costs to Medicaid Enrollees (All services)

Table 4.13

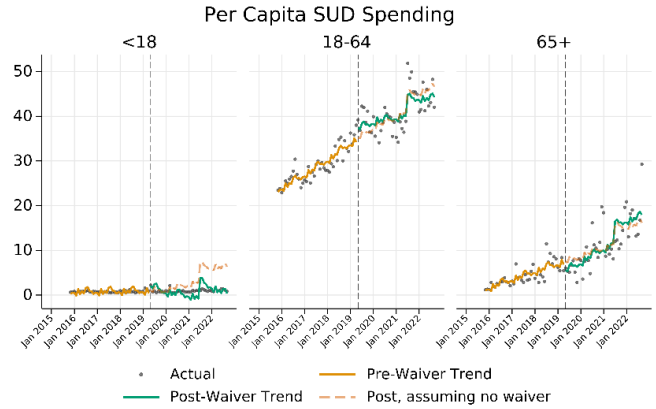
Comparison groups	Difference in the overall effect of the SUD waiver	Difference in the Trend by subpopulations	Avg. Outcome, Sept 2022 (Diff.)
Male vs. Female	-0.7783 (-1.4864, -0.0701)	0.1086 (0.0744, 0.1428)	3.5655 (2.2556, 4.8753)
<18 vs. 18-64	1.1899 (0.3874, 1.9924)	0.0606 (0.0228, 0.0983)	3.6122 (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



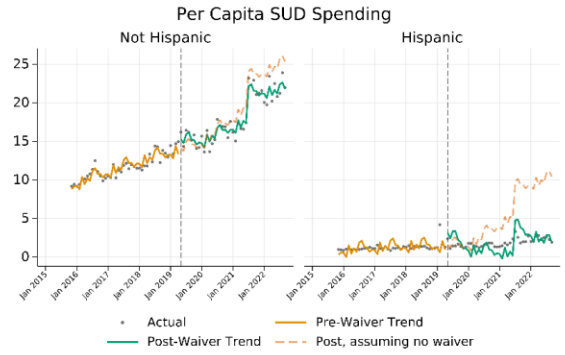
COVID-19 adjustment: Mar. 2020 to end of study period

Age

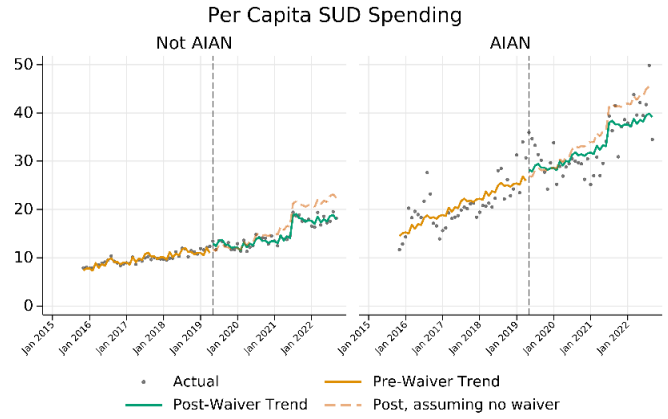


COVID-19 adjustment: Mar. 2020 to end of study period

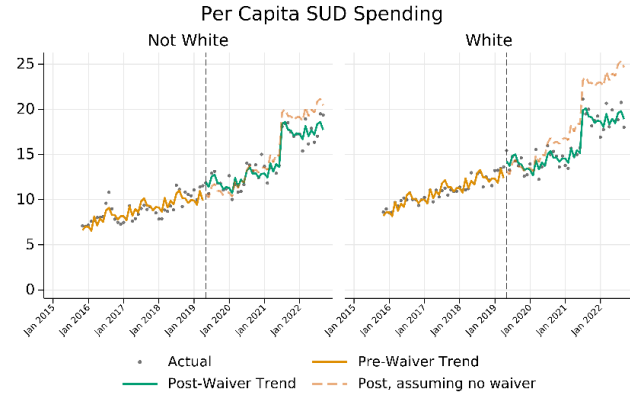
Race/Ethnicity



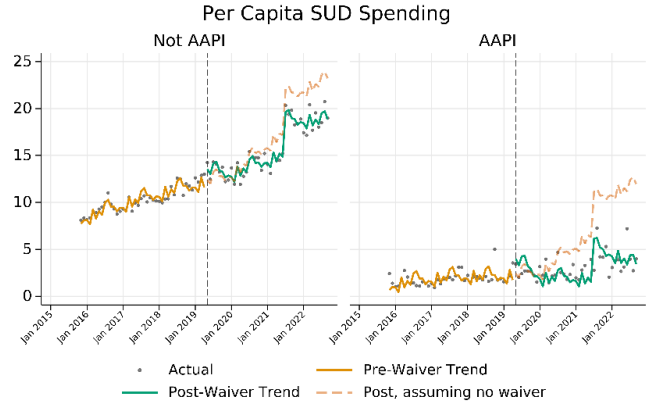
COVID-19 adjustment: Mar. 2020 to end of study period



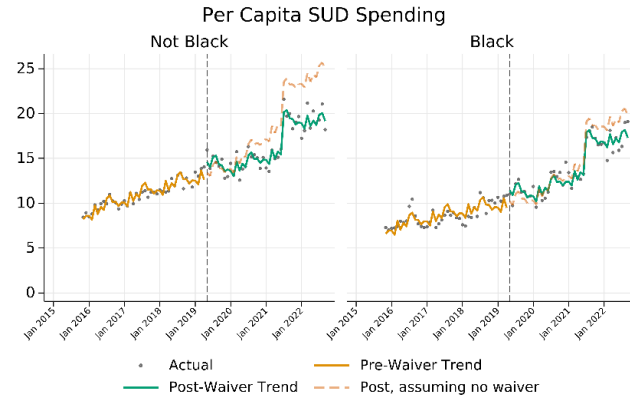
COVID-19 adjustment: Mar. 2020 to end of study period



COVID-19 adjustment: Mar. 2020 to end of study period

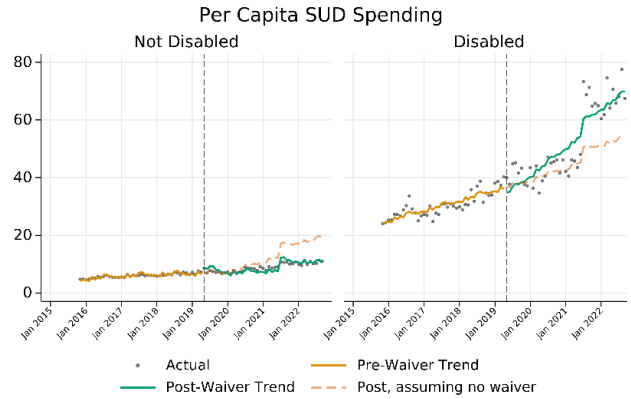


COVID-19 adjustment: Mar. 2020 to end of study period



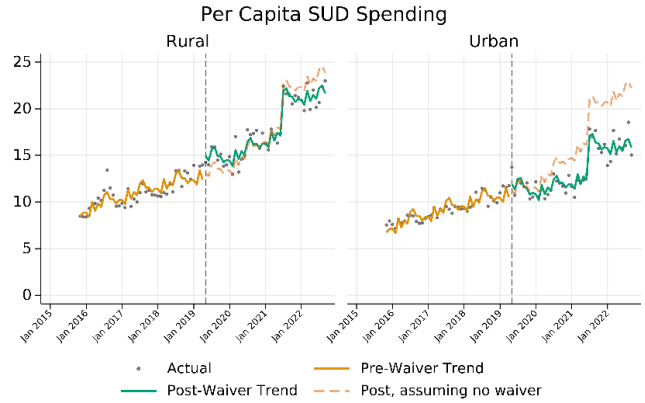
COVID-19 adjustment: Mar. 2020 to end of study period

Disability



COVID-19 adjustment: Mar. 2020 to end of study period

Urban/Rural



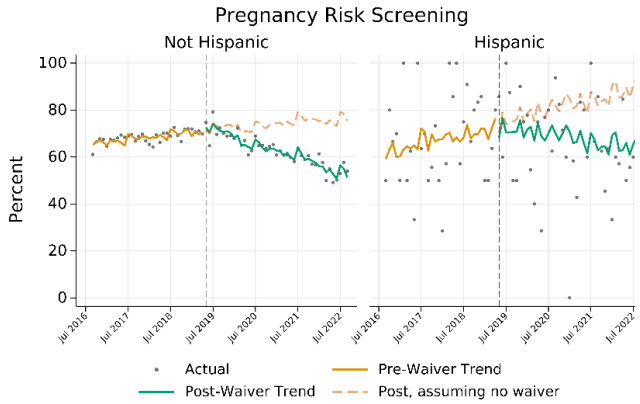
COVID-19 adjustment: Mar. 2020 to end of study period

4.14 Rate of Screening for Pregnancy Risk

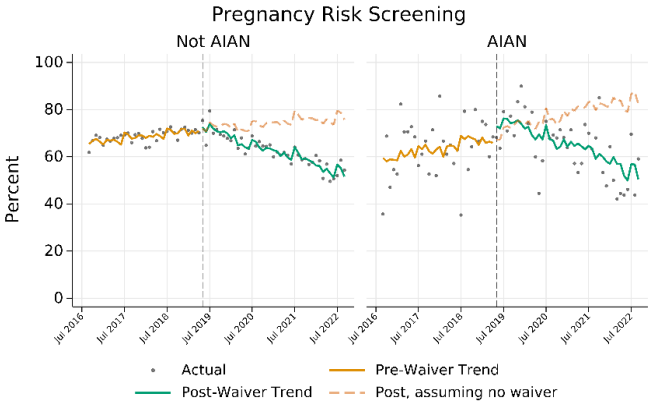
Table 4.14

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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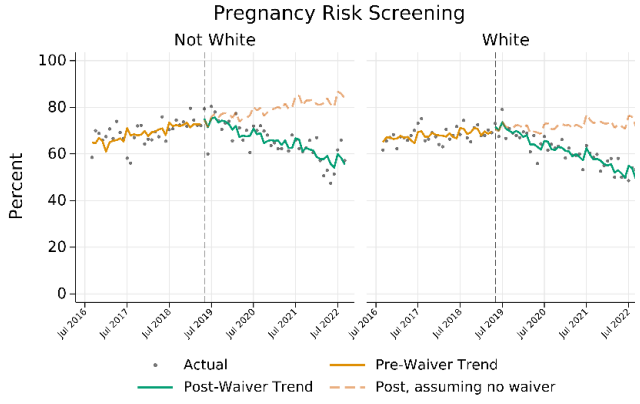

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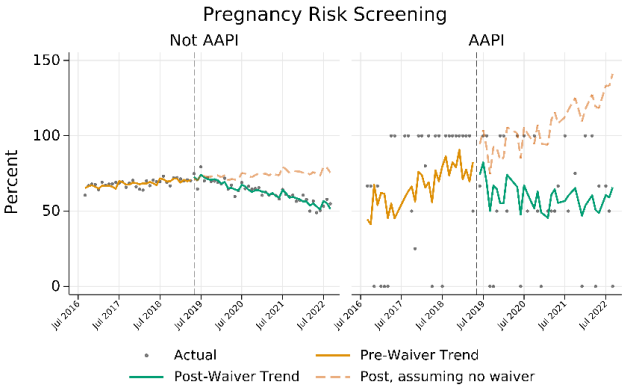

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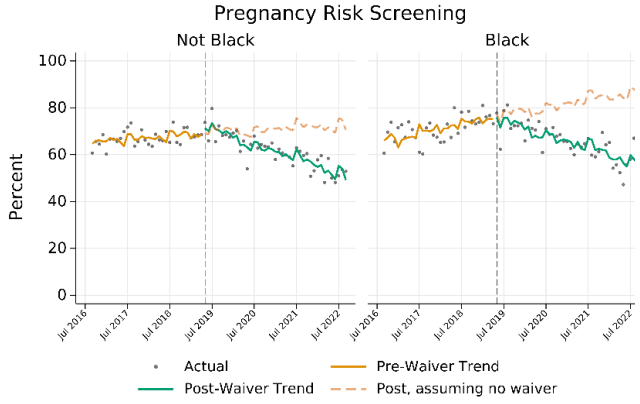
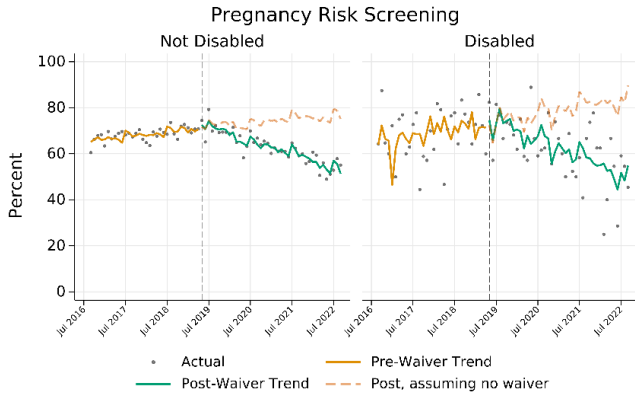
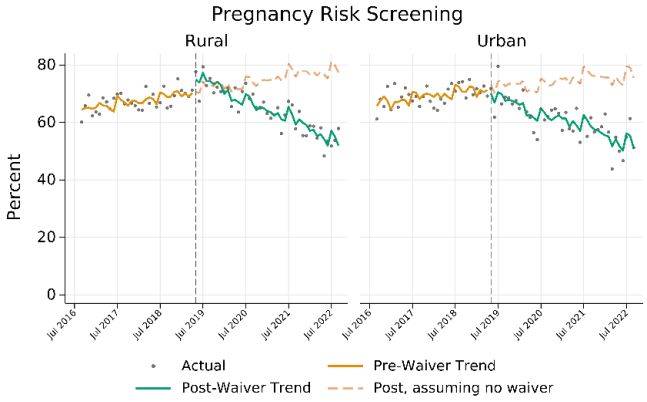


COVID-19 adjustment: Mar. 2020 to end of study period

Disability



Urban/Rural

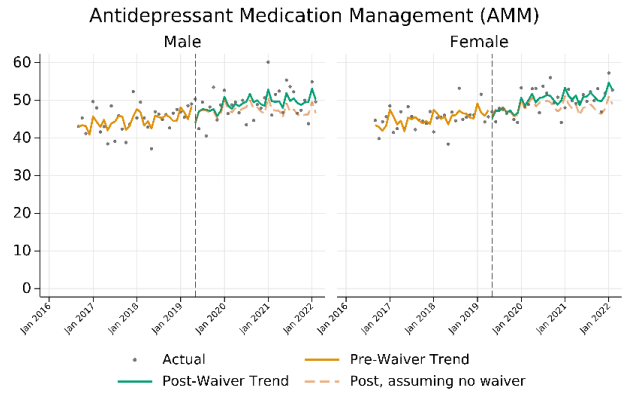


4.15 Antidepressant Medication Management – Acute Phase (AMM)

Table 4.15

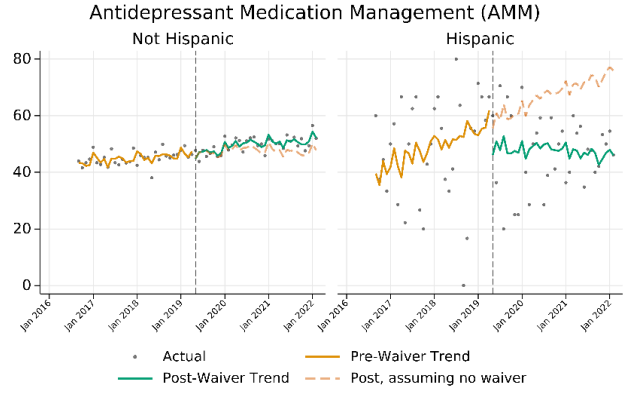
Comparison groups	Difference in the overall effect of the SUD waiver	Difference in the Trend by subpopulations	Avg. Outcome, Sept 2022 (Diff.)
Male vs. Female	0.3654 (-4.4044, 5.1352)	-0.0178 (-0.2710, 0.2355)	-0.2207 (-10.5142, 10.0729)
Hispanic vs. Not Hispanic	-9.2449 (-24.5321, 6.0424)	-0.7588 (-1.5635, 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

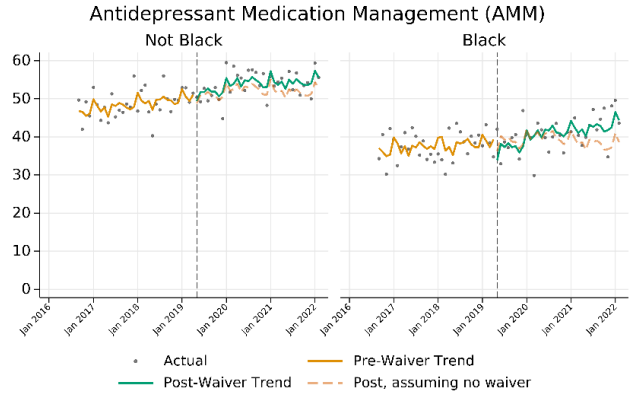


COVID-19 adjustment: Mar. 2020 to end of study period

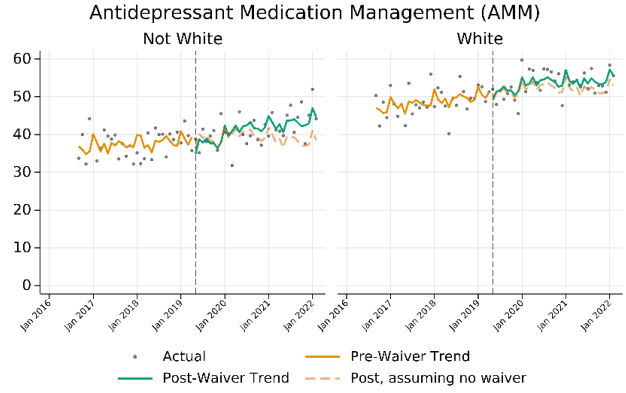
Race/Ethnicity



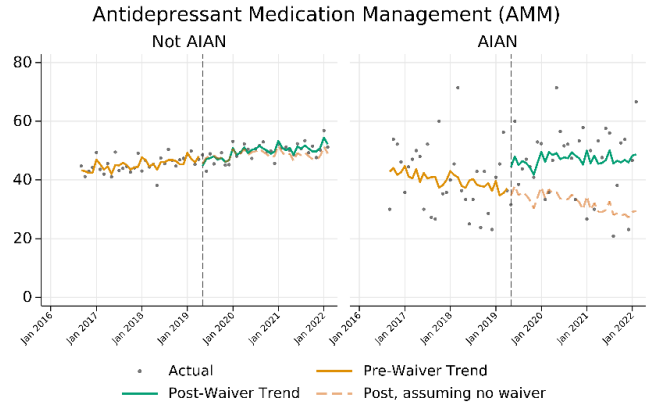
COVID-19 adjustment: Mar. 2020 to end of study period



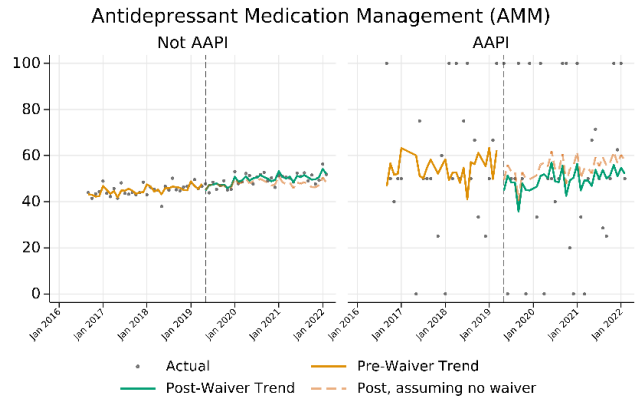
COVID-19 adjustment: Mar. 2020 to end of study period



COVID-19 adjustment: Mar. 2020 to end of study period

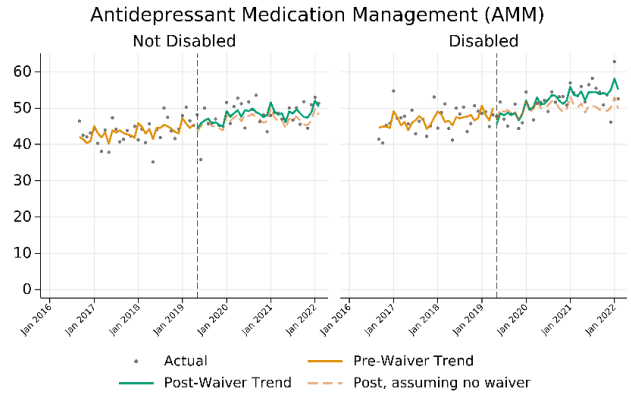


COVID-19 adjustment: Mar. 2020 to end of study period



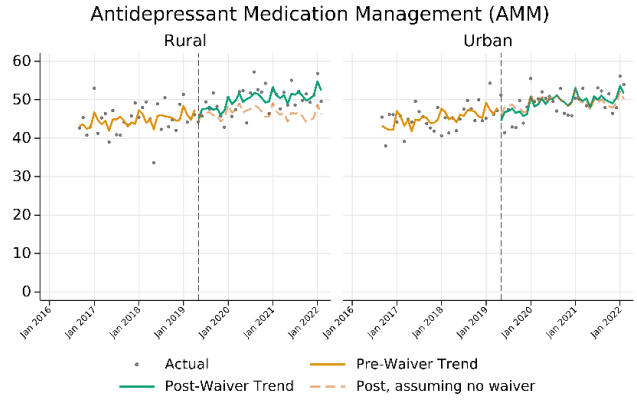
COVID-19 adjustment: Mar. 2020 to end of study period

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.

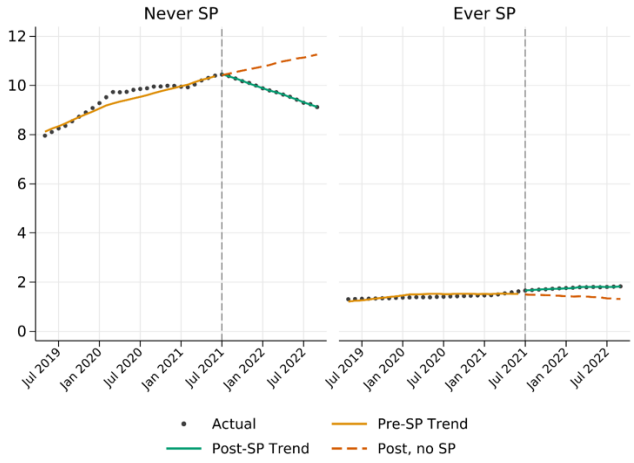


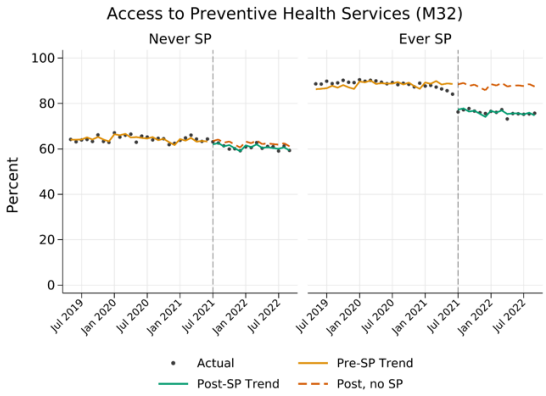
Table 5.1

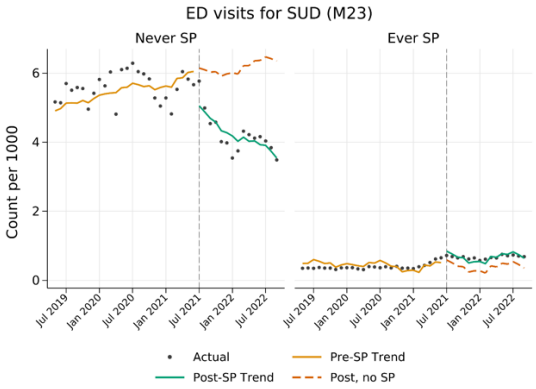
Ever SP vs. Never SP	Intercept Change (Diff.)	Slope Change (Diff.)	Avg. Outcome, Sept 2022 (Diff.)
Percent of beneficiaries with a SUD diagnosis (M3)	0.12* (0.05, 0.19)	0.18* (0.17, 0.19)	2.64* (2.54, 2.74)
Treatment rate (M6)	-13.97* (-14.58, -13.37)	0.0655* (0.0051, 0.1259)	-13.06* (-13.92, -12.19)
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)

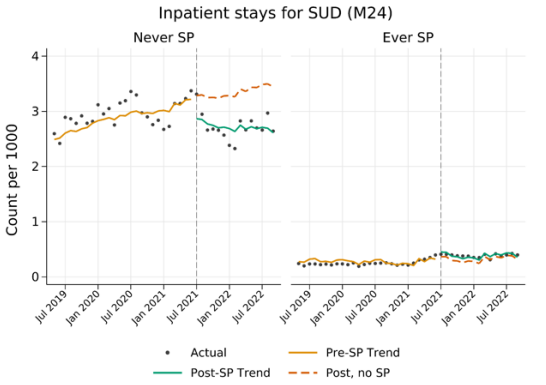
Out-of-pocket costs to Medicaid Enrollees with SUD (All services)	-28.96* (-30.93, -26.99)	-0.38* (-0.57, -0.18)	-34.23* (-36.78, -31.67)

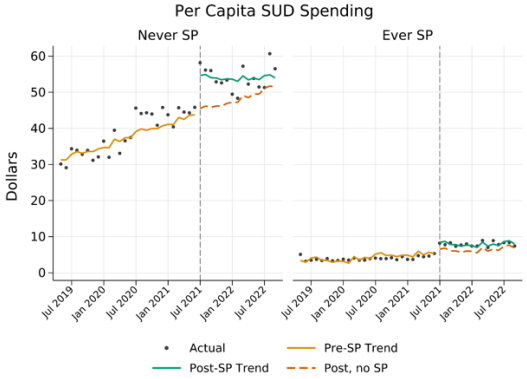
We similar examined several other outcomes to examine whether SP launch had differential effects between ever-SP beneficiaries and never-SP beneficiaries. Below is a summary of these findings and some of the figures are provided below the summary:

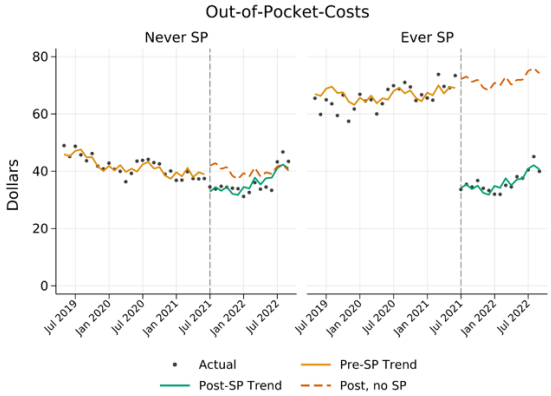
- All metrics examined had a statistically significant difference between the effect of SP launch on Ever-SP vs Never-SP populations.
- Most of the average effects of SP launch were negative, generally indicating the effect of SP implementation was larger and negative in the Ever-SP population than the 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.

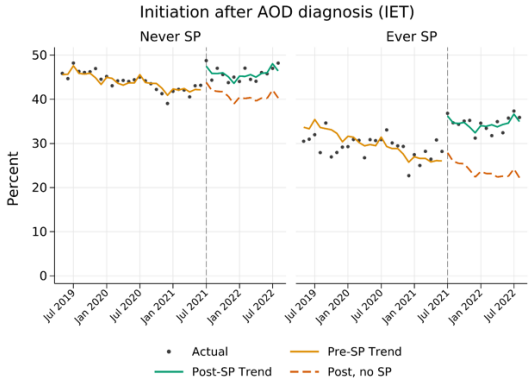

Access to Preventive Health Services (M32)
Never SP
Ever SP
Percent
0
20
40
60
80
100
Jul 2019
Jan 2020
Jul 2020
Jan 2021
Jul 2021
Jan 2022
Jul 2022
Actual
Pre-SP Trend
Post-SP Trend
Post, no SP


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.

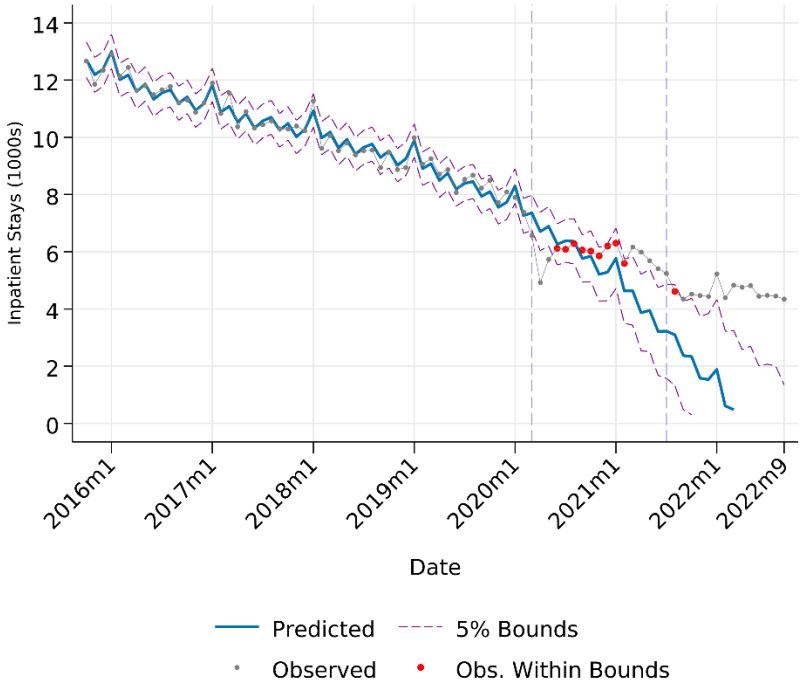
Results

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

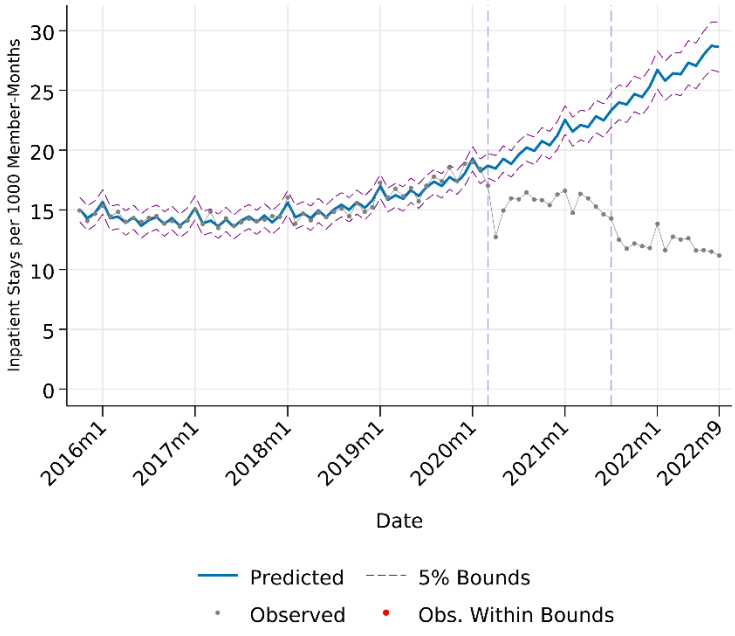
The following figures show utilization trends for each of the different service types and the forecasted utilization in the absence of COVID-19.

Appendix Figure 1. Count of Inpatient Visits.



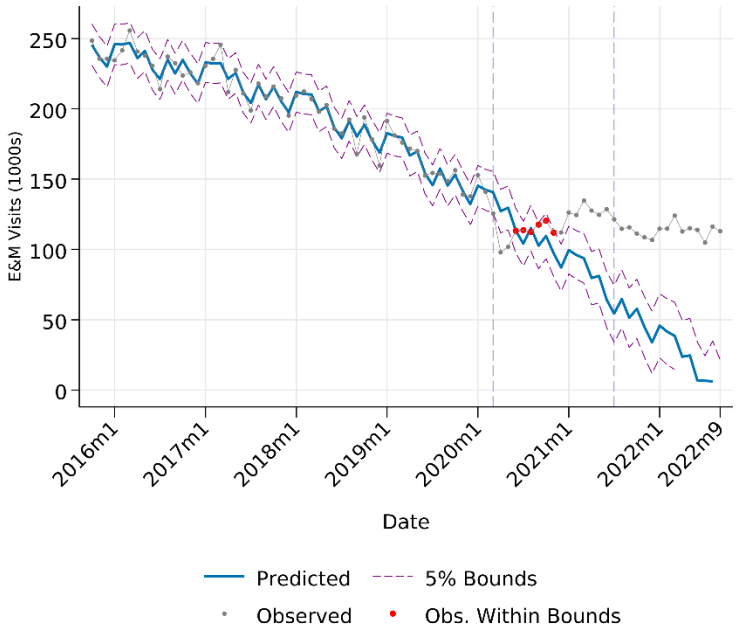
Population: fully-eligible beneficiaries without SUD who remained in Medicaid Direct.
The vertical dotted lines shown the onset of the COVID-19 pandemic in NC (March 2020) and the Standard Plan launch (July 2021), respectively.
Predictions less than 0 are omitted.

Appendix Figure 2. Rate of Inpatient Visits



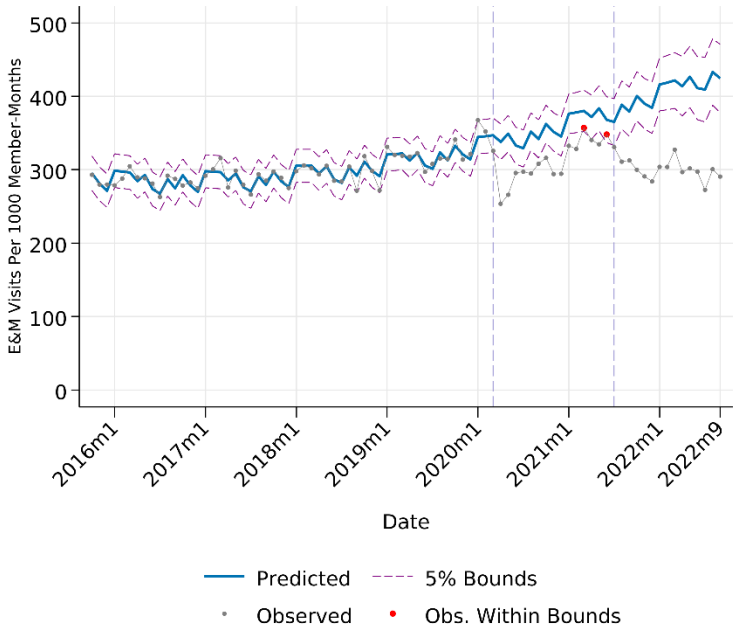
Population: fully-eligible beneficiaries without SUD who remained in Medicaid Direct.
The vertical dotted lines shown the onset of the COVID-19 pandemic in NC (March 2020) and the Standard Plan launch (July 2021), respectively.
Predictions less than 0 are omitted.

Appendix Figure 3. Count of Evaluation and Management Visits.



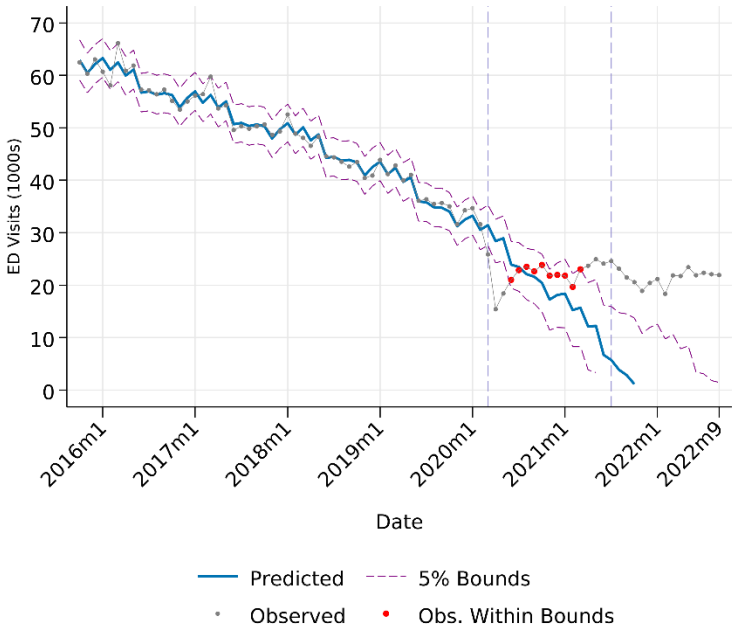
Population: fully-eligible beneficiaries without SUD who remained in Medicaid Direct.
The vertical dotted lines shown the onset of the COVID-19 pandemic in NC (March 2020) and the Standard Plan launch (July 2021), respectively.
Predictions less than 0 are omitted.

Appendix Figure 4. Rate of Evaluation and Management Visits



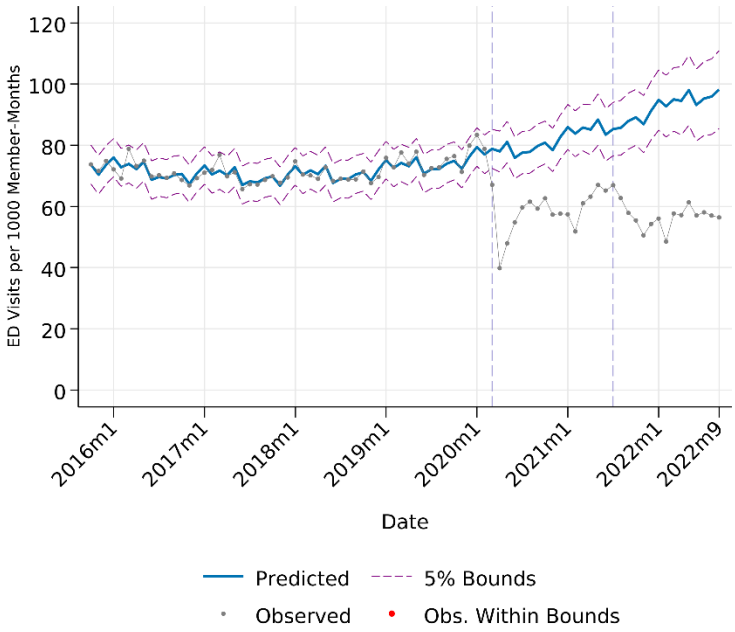
Population: fully-eligible beneficiaries without SUD who remained in Medicaid Direct.
The vertical dotted lines shown the onset of the COVID-19 pandemic in NC (March 2020) and the Standard Plan launch (July 2021), respectively.
Predictions less than 0 are omitted.

Appendix Figure 5. Count of ED Visits.



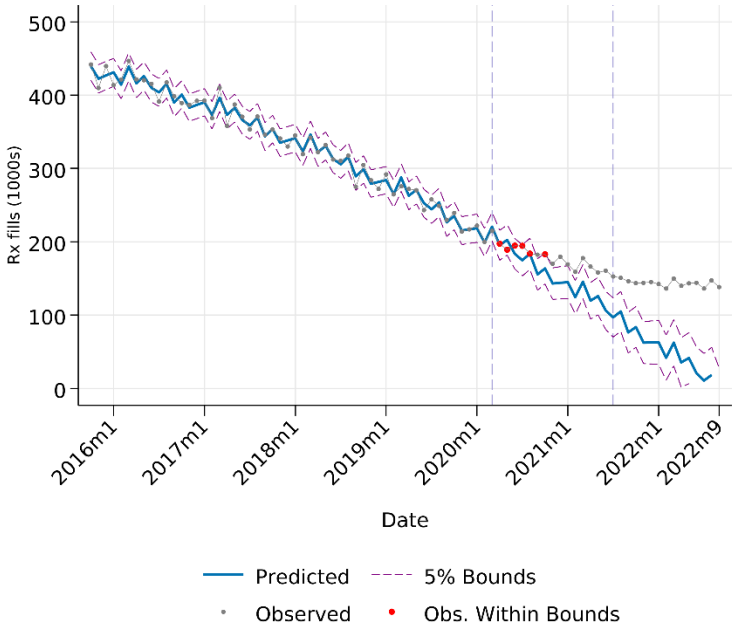
Population: fully-eligible beneficiaries without SUD who remained in Medicaid Direct.
The vertical dotted lines shown the onset of the COVID-19 pandemic in NC (March 2020) and the Standard Plan launch (July 2021), respectively.
Predictions less than 0 are omitted.

Appendix Figure 6. Rate of ED Visits.



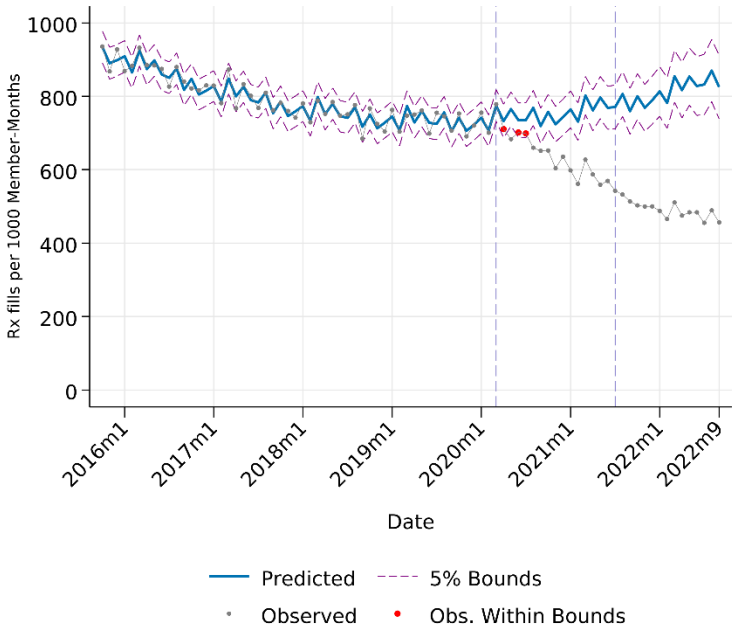
Population: fully-eligible beneficiaries without SUD who remained in Medicaid Direct.
The vertical dotted lines shown the onset of the COVID-19 pandemic in NC (March 2020) and the Standard Plan launch (July 2021), respectively.
Predictions less than 0 are omitted.

Appendix Figure 7. Count of Prescription Fills.



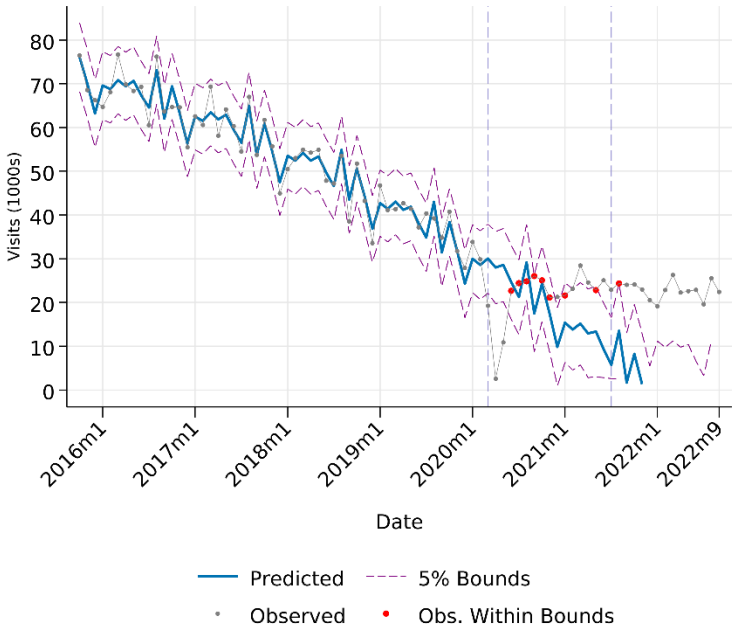
Population: fully-eligible beneficiaries without SUD who remained in Medicaid Direct.
The vertical dotted lines shown the onset of the COVID-19 pandemic in NC (March 2020) and the Standard Plan launch (July 2021), respectively.
Predictions less than 0 are omitted.

Appendix Figure 8. Rate of Prescription Fills.



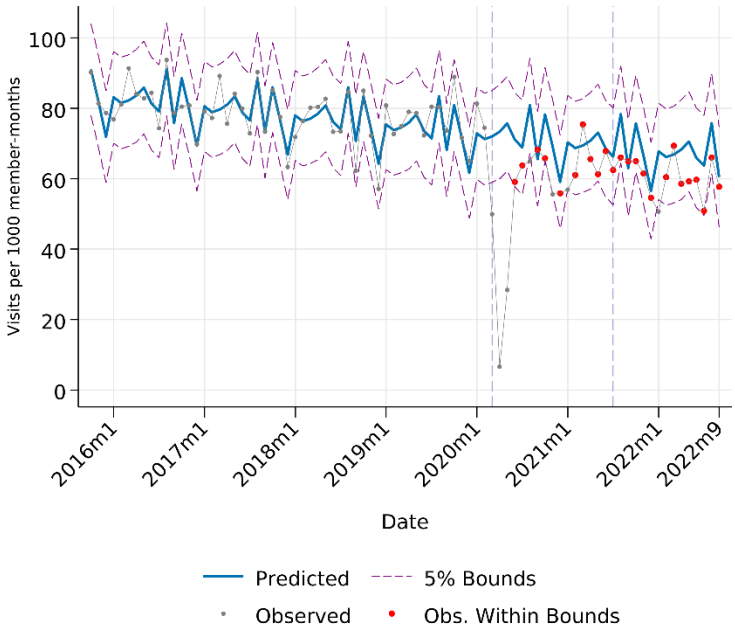
Population: fully-eligible beneficiaries without SUD who remained in Medicaid Direct.
The vertical dotted lines shown the onset of the COVID-19 pandemic in NC (March 2020) and the Standard Plan launch (July 2021), respectively.
Predictions less than 0 are omitted.

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.

Attachment C

Proposed Program Design

Policy Papers and Final Policy Guidance

DHHS Medicaid Managed Care policy papers and final policy guidance documents focus on NC Medicaid Managed Care program features.

NC Section 1115 Demonstration Waiver

On Oct. 24, 2018, the federal Centers for Medicare and Medicaid Services (CMS) approved North Carolina's 1115 Demonstration Waiver application submitted November 2017. The approval is effective Jan. 1, 2019, through Oct. 31, 2024. Additional information and links to the CMS 1115 website are available here.

NC Section 1115 Demonstration Waiver Amendment Requests

- Amendment Application - March 31, 2023
- Public Notice - March 31, 2023
- Abbreviated Public Notice for Section 1115 Waiver Amendment - March 31, 2023
- Supplement to NC 1115 Waiver Amendment Application - Dec. 17, 2021
- Amendment Application - Nov. 15, 2021
- Public Notice - Nov. 19, 2021
- Abbreviated Public Notice - Nov. 19, 2021

Public Hearings

North Carolina will host two public hearings to seek input regarding the request is to temporarily extend the North Carolina Section 1115 Demonstration Project for Residential and Inpatient Treatment for Individuals with a Substance Use Disorder (SUD).

Public hearing - Tuesday, April 11, 2023, 5 p.m.

Public hearing - Thursday, April 13, 2023, 2 p.m.

North Carolina Section 1115 Demonstration Project for Residential and Inpatient Treatment for Individuals with a Substance Use Disorder (SUD) Public Hearing presentation

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NORTH CAROLINA DEPARTMENT OF HEALTH AND HUMAN SERVICES

Public Notice for Section 1115 Waiver Amendment

This public notice provides information of public interest regarding a proposed amendment to North Carolina's Section 1115 Medicaid Demonstration Waiver.

North Carolina's current waiver approval authorizes significant transformations of North Carolina's Medicaid delivery system through a mandatory managed care program, the Healthy Opportunities Pilots and expenditure authority for substance use disorder (SUD) treatment in institutions for mental diseases (IMDs). The demonstration aims to advance integrated, high-value care, improve population health, engage and support providers and establish a more sustainable program with more predictable costs.

While the demonstration was scheduled to launch in November of 2019, core components – including Standard Plans and the Healthy Opportunities Pilots – were delayed until mid-2023 as a result of the COVID-19 pandemic and State budgetary challenges. Accordingly, NCDHHS' objectives in amending its 1115 demonstration reflect how the design and rollout of NC Medicaid transformation evolved over the past several years and allow for full implementation and evaluation of key elements of the demonstration, as originally envisioned under North Carolina's 2019 demonstration approval.

This amendment request is to temporarily extend the North Carolina Section 1115 Demonstration Project for Residential and Inpatient Treatment for Individuals with a Substance Use Disorder (SUD). There will be no changes other than those described in the original demonstration approval or as described above to the delivery system, eligibility requirements, benefit coverage and cost sharing as compared to the State's current program features.

Waiver and Expenditure Authorities

North Carolina is requesting the same waiver and expenditure authorities as those approved in the current demonstration for Residential and Inpatient Treatment for Individuals with a SUD, expenditures for otherwise covered services furnished to otherwise eligible individuals who are primarily receiving treatment and withdrawal management services for SUD who are short-term residents in facilities that meet the definition of an institution for mental diseases (IMD).

Hypotheses and Evaluation Approach

North Carolina's goal in the current waiver and requested extension is to reduce SUD and the State will test and evaluate the following hypotheses in pursuit of this goal:

- Expanding coverage of SUD services to include residential services furnished in institutions for mental disease (IMDs) as part of a comprehensive strategy will decrease the long-term use of opioids and increase the use of MAT and other opioid treatment services.
- Expanding coverage of SUD services to include residential services furnished to short- term residents in IMDs with a SUD diagnosis as part of a comprehensive strategy will result in improved care quality and outcomes for patients with SUD.

North Carolina's request to amend the demonstration period will allow all components of the demonstration a full opportunity to realize these goals and allow the State to test all associated hypotheses.

Opportunities for Public Input

Electronic copies of this public notice, the proposed amendment and public comments related to the amendment are available on the NC Medicaid website at medicaid.ncdhhs.gov/proposed-program-design.

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 CenterRaleigh
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.

To be assured consideration prior to submission of this amendment, comments must bereceived by 5 p.m. (Eastern Time) on May 1, 2023.

North Carolina will also host two public hearings to seek input regarding the amendment. Hearings will be held on Tuesday, April 11 at 5 p.m. Eastern via Microsoft Teams and Thursday, April 13 at 2 p.m. Eastern via Microsoft Teams. The public hearings will include presentations describing the proposed changes and opportunities for public testimony.

NORTH CAROLINA DEPARTMENT OF HEALTH AND HUMAN SERVICES

Abbreviated Public Notice for Section 1115 Waiver Amendment

March 31, 2023

PUBLIC NOTICE. ***This abbreviated public notice provides information of public interest regarding a proposed amendment to North Carolina's Section 1115 Medicaid Demonstration Waiver.***

North Carolina's current Section 1115 Medicaid demonstration waiver approval authorizes significant transformations of North Carolina's Medicaid delivery systems through a mandatory managed care program, Healthy Opportunities Pilots and expenditure authority for substance use disorder treatment in institutions for mental diseases. The demonstration aims to advance integrated high-value care, improve population health, engage and support providers and establish a more sustainable program with more predictable costs.

While the demonstration was scheduled to launch in November 2019, core components were delayed until mid-2023 as a result of the COVID-19 pandemic and state budgetary challenges. Accordingly, NCDHHS' objectives in amending its 1115 demonstration reflect how the design and rollout of NC Medicaid transformation evolved over the past several years and allow for full implementation and evaluation of key elements of the demonstration, as originally envisioned under North Carolina's 2019 demonstration approval.

This amendment request is to temporarily extend the North Carolina Section 1115 Demonstration Project for Residential and Inpatient Treatment for Individuals with a Substance Use Disorder (SUD). There are no other requested changes to the currently approved demonstration.

Electronic copies of this abbreviated and the full public notice and proposed waiver amendment are available on the North Carolina Department of Health and Human Services Medicaid website at medicaid.ncdhhs.gov/transformation/proposed-program-design.

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 CenterRaleigh
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.

To be assured consideration prior to submission of this amendment, comments must be received by 5 p.m. (ET) on May 21, 2023.

North Carolina will also host two public hearings to seek input regarding the amendment. Hearings will be held virtually on Tuesday, April 11, 2023, at 5 p.m. (ET) and Thursday, April 13, 2023, at 2 p.m. via Microsoft Teams. The public hearings will include presentations describing the proposed changes and opportunities for public testimony. Registration for the public hearings is available online at medicaid.ncdhhs.gov/transformation/proposed-program-design

For more information about NC Medicaid Managed Care transformation, visit medicaid.ncdhhs.gov/transformation.

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Legal Notices

NC Medicaid 1115 Demonstration Waiver Public Hearings

The North Carolina Department of Health and Human Services (NCDHHS) is offering two opportunities to attend a webinar-based public hearing about the NC Medicaid 1115 Demonstration Waiver proposed amendment. This amendment request is to temporarily extend the North Carolina Section 1115 Demonstration Project for Residential and Inpatient Treatment for Individuals with a Substance Use Disorder (SUD).

Join NCDHHS on one of the dates below for a review of the proposed changes to align the 1115 waiver with the current timeline and design. There will be an opportunity for questions and answers. The waiver amendment presentation is the same for all related public hearings.

Tuesday, April 11, 2023 – 5 p.m. Eastern
Registration required

Thursday, April 13, 2023 – 2 p.m. Eastern
Registration required

Registration for the public hearings is available online on the NC Medicaid website at medicaid.ncdhhs.gov/transformation/proposed-program-design

The NCDHHS 1115 demonstration waiver aims to advance integrated, high-value care, improve population health, engage and support providers and establish a more sustainable program with more predictable costs.

The waiver authorizes significant transformations of North Carolina's Medicaid delivery systems through a mandatory managed care program, the Healthy Opportunities Pilots and expenditure authority for substance use disorder treatment in institutions for mental diseases.

The Amendment Application and full public notice are posted on the NC Medicaid website medicaid.ncdhhs.gov/transformation/proposed-program-design. For more information or to submit comments on the 1115 waiver amendment, email Medicaid.NCEngagement@dhhs.nc.gov.

To be assured consideration prior to submission of this amendment, comments must be received by 5 p.m. (ET) on May 1, 2023.

Legal Notices

PRESS RELEASE • PUBLIC NOTICE
PUBLIC NOTICE
PROJECT FOR FEDERAL FUNDS

The Individuals with Disabilities Education Act (IDEA-Part B, Public Law 108.446) Project is presently being amended. The Project describes the special education programs that Rockingham County Schools proposes for Federal funding for the 2023-24 School Year. Interested persons are encouraged to review amendments to the Project and make comments concerning the implementation of special education under this Federal Program. All comments will be considered prior to submission of the amended Project to the North Carolina Department of Public Instruction in Raleigh, North Carolina. Our LEA will use the 2022-23 allotment data for an estimate due to current allotments not being available. The IDEA-Part B Project is open to the public for review and comments during the week of May 1, 2023 in the office of Pam Watkins. Interested persons are encouraged to review the plans or the assurances and make comments concerning the implementation of special education under these federal programs. Parents of students who are enrolled in home schools are encouraged to have input if their students have or may have disabilities. All comments will be considered prior to submission of the plans and the assurances to the North Carolina Department of Public Instruction in Raleigh. In addition, some of these funds will be used to support special education and related services to students with special needs in private schools or who are homeschooled. Homeschools and private schools are encouraged to contact Pam Watkins to discuss needs, concerns, and/or suggested use of funds.

For further information, questions or comments contact:

Pam Watkins
Director of Exceptional Children
Rockingham County Schools
511 Harrington Highway
Eden, North Carolina 27288
Phone 336-627-2669
Email: pwatkins@rock.k12.nc.us

Notice to Creditors

CREDITORS NOTICE

All persons, firms and corporations having claims against Joseph Darrell Lilly, Deceased, are notified to exhibit them to Richard Lou Lilly, Executor of the Decedent's Estate, on or before June 30, 2023, at 704 Englewood Street, Greensboro, North Carolina 27403, or be barred from their recovery. Debtors of the Decedent's Estate are asked to make immediate payment to the above named, Richard Lou Lilly, Executor.

Richard Lou Lilly
Executor of the Estate of
Joseph Darrell Lilly, Deceased

and

Ben F. Tucker
SETH M. WOODALL
& ASSOCIATES, PLLC
117 E. Murphy Street
Madison, N.C. 27025
(336) 548-2309
Attorney for the Estate of Joseph Darrell Lilly, Deceased

Publication Dates: March 27; April 3, 10, & 17, 2023

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Notice to Creditors

NOTICE TO CREDITORS
ESTATE OF KIMBERLY RENE KRONE, 23-E-1406
All persons, firms, and corporations having claims against Kimberly Rene Krone, deceased, of Guilford County, NC, are notified to exhibit the same to the undersigned on or before July 10, 2023 or this notice will be pleaded in bar of recovery. Debtors of the decedent are asked to make immediate payment. This the 10th day of April, 2023. David Scott Russ, the fiduciary, is fully authorized to receive and administer all assets belonging to the estate.
C/O Pierce Law Group PLLC,
3020 S Miami Blvd, Ste 201
Durham, NC 27703

Request for Bids

The Greensboro Housing Authority will receive bids for The Havens at Willow Oaks – Miscellaneous Repairs located at 2000 Everitt Street, Greensboro, NC 27401 until 2:00 pm on April 18, 2023. Sealed bids will be received and opened publicly at 450 North Church Street, Greensboro, NC 27401. A pre-bid meeting will be held at 2000 Everitt Street, Greensboro, NC 27401 on April 5, 2023 at 10:00am. Plans, specifications, and project manual are available for respondents online at http://www.gha-nc.org/vendors/current-bids-requests-for-proposals.aspx.

ROCKINGHAM LEGALS

Notice to Creditors

NORTH CAROLINA
ROCKINGHAM COUNTY

NOTICE TO CREDITORS

The undersigned, having qualified as Executrix of the Estate of RONALD KEITH SHREVE, late of Rockingham County, this is to notify all persons having claims against said estate to present them to the undersigned, c/o Farver, Skidmore & Hux, LLP, Attorneys at Law, Post Office Box 899, Reidsville, North Carolina 27323 on or before the 3rd day of July, 2023, or this Notice will be pleaded in bar of their recovery. All persons indebted to said Estate will please make immediate payment to the undersigned.

This 4th day of April, 2023.

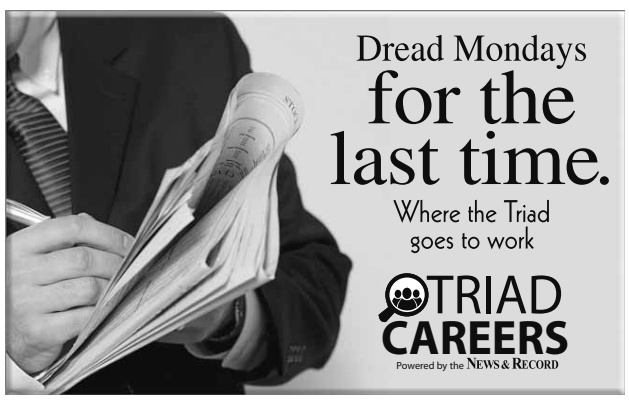
Jeanene Moore, Executrix
of the Estate of Ronald Keith Shreve

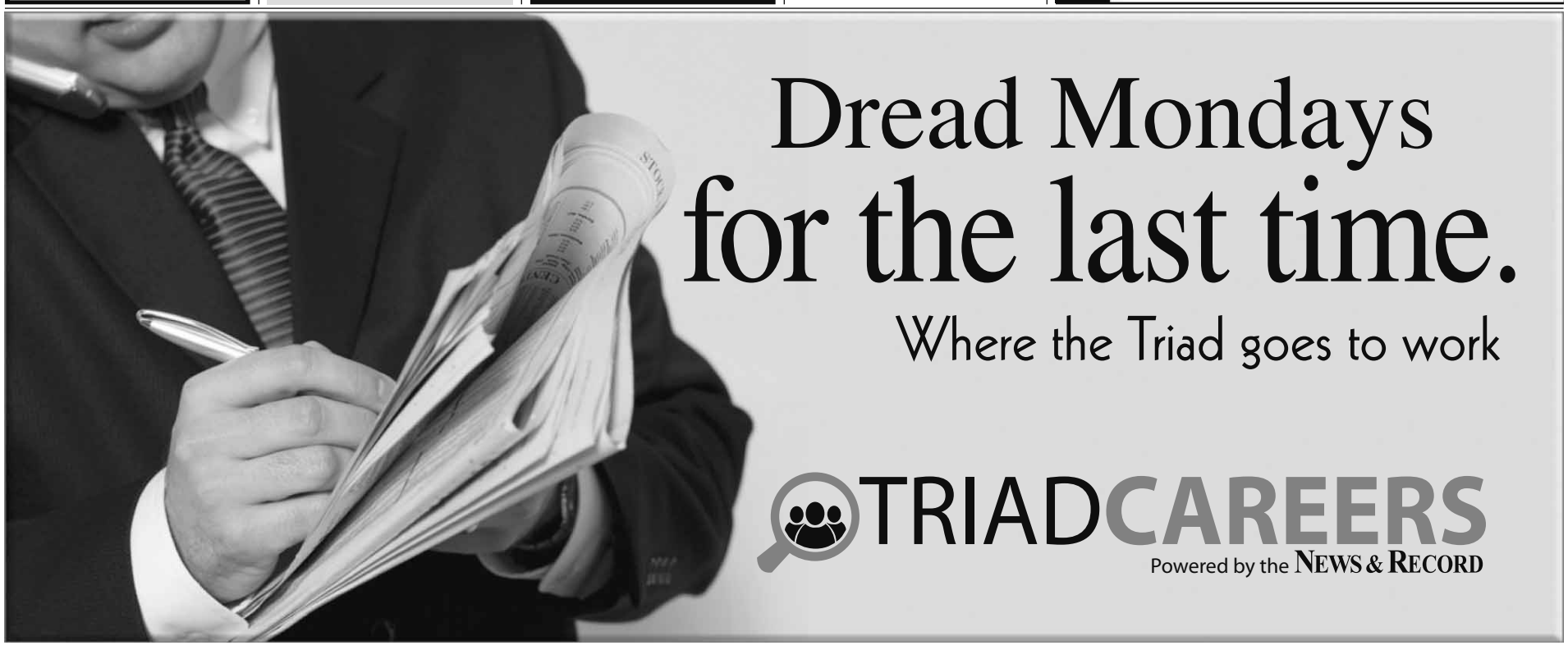
Notice to Creditors

H. Craig Farver, Esquire

FARVER, SKIDMORE & HUX, LLP
PO Box 899
108 S. Main St.
Reidsville, N. C. 27323
(336)349-4364

Dates of Publication: April 3, 10, 17, 24, 2023





Attachment D

April 28, 2023

North Carolina Department of Health and Human Services
NC Medicaid Section 1115 Waiver Team
1950 Mail Service Center
Raleigh NC 27699-1950

REF: NC Medicaid – Section 1115 Waiver Amendment

Dear NC Medicaid Section 1115 Waiver Team:

The North Carolina Healthcare Association (NCHA) represents over 130 hospitals and health systems in North Carolina who care for North Carolinians. Our mission is to improve the health of the communities where we live and work by advocating for sound public policy and collaborative partnerships. NCHA believes in a North Carolina where high-quality health care is accessible and equitable for all.

NCHA welcomes the opportunity to provide comments on the proposed amendment to North Carolina's Section 1115 Medicaid Demonstration Waiver. The amendment request is to temporarily extend the North Carolina Section 1115 Demonstration Project for Residential and Inpatient Treatment for Individuals with a Substance Use Disorder (SUD). Additionally, the request aims to broaden the scope of SUD services to encompass residential services provided in Institutions for Mental Disease (IMDs) and include residential services furnished to short- term residents in IMDs with a SUD diagnosis.

We commend the Department for implementing the SUD waiver since it is crucial to delivering whole-person care in light of the recent transition to Medicaid Managed Care. NCHA supports the proposed amendment to the Section 1115 waiver, however, we urge the Department to include the mental health IMD waiver. This is important because the waiver provides the opportunity to finance mental health treatment services in IMDs. Since 2018, we have been permitted to apply for this waiver. Medicaid covering the costs for IMDs expands the range of services available to Medicaid beneficiaries while freeing up state dollars for other initiatives, including individuals who are uninsured.

Thank you for your consideration of our comments. If you have any questions, please contact me (slawler@ncha.org, 919–677-4229) or Makeda Harris (mharris@ncha.org, 919-677-4222).

Sincerely,

Stephen J. Lawler
President and CEO
North Carolina Healthcare Association

From: Collan Rosier
To: Medicaid.NCEngagement
Subject: [External] Pyramid Healthcare - NC DHHS 1115 Substance Use Disorder Waiver Extension Application Comment Letter
Date: Monday, May 1, 2023 4:44:24 PM
Attachments: image001.png
2023-05-01 - NC - Pyramid NC DHHS Comments re NC Section 1115 Waiver (FINAL).pdf

Good afternoon,

Attached on behalf of the Pyramid Healthcare family of companies, please find a comment letter related to the North Carolina Department of Health & Human Services' Medicaid 1115 substance use disorder waiver extension application to CMS.

Thank you and best wishes,
Collan

Collan B. Rosier
Vice President of Government Relations

PYRAMID HEALTHCARE, INC.
O: 667-270-1582 | **M:** 202-285-6636 | **E:** crosier@pyramidhc.com

Pyramid Healthcare
AN INTEGRATED BEHAVIORAL HEALTHCARE SYSTEM

CORPORATE OFFICE
P.O. Box 967
Duncansville, PA 16635
P: 814-940-0407
F: 888-218-8253
pyramidhc.com

May 1, 2023

SUBMITTED VIA EMAIL to Medicaid.NCEngagement@dhhs.nc.gov

The Hon. Kody Kinsley, Secretary
North Carolina Department of Health & Human Services
NC Medicaid Section 1115 Waiver Team
1950 Mail Service Center
Raleigh, NC 27699-1950

RE: Pyramid Healthcare, Inc. Comments re NC Section 1115 Waiver

Dear Secretary Kinsley:

The Pyramid Healthcare, Inc. ("Pyramid Healthcare") family of companies is providing information and feedback below regarding the draft Section 1115 Waiver Amendment proposed by the North Carolina Department of Health & Human Services (hereinafter "NC DHHS" or "the Department").[1] We urge you to make appropriate amendments based on these comments to ensure that high-quality care is delivered to North Carolinians with substance use disorder diagnosis.

As background, Pyramid Healthcare was founded in 1999 and is an integrated behavioral healthcare system that employs over 3,000 professionals caring for 12,000 unique commercial and Medicaid patients per day throughout our residential and outpatient locations across eight states. We offer a treatment continuum providing comprehensive behavioral healthcare specialties, including: substance use disorder, mental health, autism, and eating disorder treatment across an integrated network of service lines and affiliated behavioral healthcare organizations.

In North Carolina, we operate eight residential and outpatient facilities for adult and adolescent clients with mental health, substance use, and co-occurring needs, including October Road, Tapestry, Real Recovery, Freedom Detox, High Focus Treatment Centers, and Silver Ridge across Asheville, Brevard, Charlotte, Fletcher, Gastonia, and Mills River. In particular, since 2006, October Road has been a key behavioral health and substance use community-based provider for Asheville and the greater western North Carolina region across a suite outpatient addiction treatment services. We serve a variety of local and state agencies and programs, including the Substance Abuse Intensive Outpatient Program ("SAIOP"), Substance Abuse Comprehensive Outpatient Treatment ("SACOT") program, Assertive Community Treatment Team ("ACTT") program, Cross Area Service Program ("CASP") services as well as Medication-Assisted Treatment ("MAT"), Medication Management, Peer Support Services and other wrap-around services. In addition, Pyramid Healthcare maintains accreditation across all of our facilities through The Commission on Accreditation of Rehabilitation Facilities ("CARF").

[1] https://medicaid.ncdhhs.gov/documents/medicaid/ncdhhs-sud-waiver-extension-application/download?attachment.

We appreciate the opportunity to provide comments and feedback to NC DHHS below regarding the following topics that will aid the state in complying with its goals and milestones outlined in the waiver extension application:

- ASAM Alignment
- Provider Medicaid Reimbursement for Residential and Outpatient Mental Health and Substance Use
- Extension of the IMD Exclusion Waiver

ASAM Alignment

One of the most important endeavors for North Carolina to pursue through its 1115 Waiver is to adopt alignment with the standards proposed by the American Society of Addiction Medicine ("ASAM") for adolescent and adult residential and outpatient substance use treatment services.[2] ASAM is a strengths-based multidimensional assessment which takes into account a patient's needs, obstacles, and liabilities. ASAM Alignment encourages and requires providers to follow clinical and medical best practices when providing levels of substance use disorder care and programming. This includes mapping and setting requirements around treatment setting, necessary support systems, adopting staffing qualifications and patterns, outlining programmatic structure and therapies, and establishing treatment documentation (such as assessment, treatment plan creation and reviews, and session notes). Aligning state regulations with ASAM criteria will also help North Carolina comply with Milestone 2 – Placement Criteria and Milestone 3 – Provider Qualifications of the waiver extension application.

In terms of the rationale for North Carolina adopting ASAM Alignment, it would give providers clinical best practices and a framework for substance use disorder providers and encourage uniformity in admissions criteria into the various levels of care from outpatient (1.0) to hospitalization (4.0). With uniformity in the structure of programs and requirements, however, comes the need for rate increases to ensure this conformance and compliance is completed by appropriate staff.

Other states while launching ASAM Alignment have rolled out other unrelated requirements under the banner of "ASAM alignment" such as specific staffing ratios, lengths of each session, and others which are outside of the [redacted] discourage North Carolina from creating duplicative and overlapping regulatory [redacted] opt as its regulatory framework the actual ASAM criteria and standards. All other [redacted] go through the appropriate approval process through state regulatory review [redacted] orm efforts. In particular, ASAM alignment will help right size funding and requirements related to North Carolina's .3400 level of licensure to bring it in alignment with ASAM's 3.5 level of care for residential substance use disorder treatment, which will rapidly expand provider treatment bed capacity for North Carolinians with substance use disorder issues. Currently, North Carolina's .3400 level of licensure does not fully align with the appropriate staffing and program requirements of ASAM's level 3.5. Aligning and expanding North Carolina's coverage of and funding for services will help the state better fulfill the terms of its waiver application.

Provider Medicaid Reimbursement for Residential and Outpatient Mental Health and Substance Use.

The State's second major goal of the 1115 substance use disorder waiver extension application is "[e]xpanding coverage of SUD services to include residential services furnished to short-term residents in IMDs with a SUD diagnosis as part of a comprehensive strategy [which] will result in improved care quality and outcomes for patients with SUD."[3] We wholeheartedly agree, but coverage of residential substance use services is insufficient

[2] https://www.asam.org/asam-criteria/about-the-asam-criteria.
[3] NC DHHS SUD Waiver Extension Application at 22.

without appropriate reimbursement to providers to be able to recruit, retain, and reward appropriate staffing levels necessary to assist clients occupying those residential treatment beds.

North Carolina's recent adoption of Medicaid expansion creates an opportunity to bring North Carolina in line with other states like Virginia[4] that have focused substance use efforts on ASAM alignment and the concurrent investment in sufficient and sustainable Medicaid reimbursement rates. Expanded reimbursement to better align with more competitive neighboring states will increase provider capacity and expand access in compliance with Milestones 1 – Access and 4 - Capacity, We encourage North Carolina to make substantial efforts to increase and maintain competitive Medicaid reimbursement rates for residential and outpatient substance use disorder and mental health treatment services in alignment with ASAM levels of care – especially residential substance use treatment services at the 3.7, 3.5, and 3.1 levels of care.

While ASAM Alignment is the right decision to ensure high quality outcomes for our clients, it does not come without additional – but necessary – administrative and staffing costs for providers. A decade has gone by without sustained enhanced rates and enhanced rates related to the COVID-19 pandemic expired in late 2022. Uncompetitive reimbursement rates do not allow providers to recruit, retain, and engage appropriate staffing to serve our patients. They force us to turn away patients in need of care. Continued high readmission rates to detox services, inpatient psychiatric hospitalizations, and high rates of emergency room utilization will occur without access to care. Furthermore, as a part of Medicaid transformation, providers have already been managing higher administrative burden and compliance costs as a result of the requirements of the various Local Management Entities/Managed Care Organizations (LMEs/MCOs).

There is a tremendous demand for high quality detox/rehabilitation services and not enough available bed capacity in the system. Securing adequate nursing staff has always been a challenge in the behavioral health field, particularly in programs that primarily serve Medicaid clients. However, this challenge has become nearly insurmountable due to the COVID-19 pandemic as well as increased inflation raising the cost of goods and services for mental health and substance use providers. The unprecedented changes in the labor market over the past several years have led healthcare professionals to go to the highest paid opportunities or even leave the healthcare field entirely for higher compensation or due to general burnout and fatigue. State Medicaid [redacted]e increased without these burdensome changes to allow providers to pay more [redacted]and to be able to provide the capacity the state so desperately needs.

[redacted]petitive to assure adequate, qualified staffing and to administer high-quality care and to provide access to treatment and recovery for some of the state's most vulnerable residents. North Carolina needs a robust provider network for mental health and substance use services; however, these services are not sustainable at the current reimbursement rates. This problem is getting worse as the cost to attract and retain staff, such as registered nurses, continues to rise without any commensurate increases in payment rates. These factors, combined with inflation, effectually result in annual rate decreases to providers.

Extension of the IMD Exclusion Waiver

Pyramid Healthcare has always prided itself on offering our clients the full continuum of care for treatment across our mental health and substance use programs. These efforts to provide a robust and integrated system of care are thwarted in states that retain outdated and unnecessary regulatory barriers that restrict access to care and prohibit a full and complete system of care in the community.

[4] https://www.magellanofvirginia.com/documents/2022/10/10-27-22-va-dmas-medicaid-rates.pdf/.

NC DHHS has outlined two major goals of its 1115 waiver extension application. One of them is "[e]xpanding coverage of SUD services to include residential services furnished in institutions for mental disease (IMDs) as part of a comprehensive strategy will decrease the long-term use of opioids and increase the use of medication-assisted treatment (MAT) and other opioid treatment services."[5]

North Carolina should continue to waive the state's institutions for mental diseases ("IMD") exclusion requirements beyond their current expiration on October 31, 2023. We are thankful to the State for requesting and receiving an initial waiver of the IMD exclusion and urge the state to continue to waive this outdated and burdensome requirement that prevents clients from receiving access to care and prevents providers from creating the appropriate mental health and substance use disorder treatment bed capacity in the State. These are highlighted as Milestones 1 and 4 of NC DHHS's 1115 substance use disorder waiver extension application. NC DHHS has highlighted lack of access as creating a high risk of noncompliance with the demonstration and should be a primary focus of efforts going forward. In 2018, the U.S. Centers for Medicare and Medicaid Services ("CMS"), issued a letter to state Medicaid Directors offering states the "authority to pay for short-term residential treatment services in an institution for mental disease (IMD)…[and that] CMS believes these opportunities offer states the flexibility to make significant improvements on access to quality behavioral health care."[6] This expansion of authority for providers to bill Medicaid for treatment centers with more than 16 beds has led to increases in access to care and reductions in Emergency Department utilization in states that have pursued this authority and will help the State comply with Milestone 1 of the waiver extension. We applaud North Carolina for pursuing this authority and urge the State to continue these flexibilities.

Please consider this feedback with regard to the Medicaid 1115 substance use disorder waiver extension application. Thank you for your support of mental health, behavioral health, and substance use providers in North Carolina and for considering my requests on behalf of Pyramid Healthcare. If we can provide any additional information or materials, please contact me at crosier@pyramidhc.com or 667-270-1582. In addition, we invite you to reach out and schedule a visit to one of our North Carolina facilities sometime soon to learn more about our services and programs.

Sincerely,

[redacted]

Collan B. Rosier
Vice President of Government Relations

[5] NC DHHS SUD Waiver Extension Application at 2.
[6] https://www.cms.gov/newsroom/press-releases/cms-announces-new-medicaid-demonstration-opportunity-expand-mental-health-treatment-services.

Attachment E

Proposed Program Design

Policy Papers and Final Policy Guidance

DHHS Medicaid Managed Care policy papers and final policy guidance documents focus on NC Medicaid Managed Care program features.

NC Section 1115 Demonstration Waiver

On Oct. 24, 2018, the federal Centers for Medicare and Medicaid Services (CMS) approved North Carolina's 1115 Demonstration Waiver application submitted November 2017. The approval is effective Jan. 1, 2019, through Oct. 31, 2024. See the NC Section 1115 Demonstration Waiver webpage here. Additional information and links to the CMS 1115 website are available here.

NC Section 1115 Demonstration Waiver Amendment Requests

- SUD Waiver Extension Application - July 28, 2023
- SUD Waiver Extension Public Notice - July 28, 2023
- SUD Waiver Extension Abbreviated Public Notice - July 28, 2023
- Amendment Application - March 31, 2023 (revised July 28, 2023)
- Public Notice - March 31, 2023 (revised July 28, 2023)
- Abbreviated Public Notice - March 31, 2023 (revised July 28, 2023)
- Supplement to Amendment Application - Dec. 17, 2021
- Amendment Application - Nov. 15, 2021
- Public Notice - Nov. 19, 2021
- Abbreviated Public Notice - Nov. 19, 2021

Public Comment

The SUD waiver extension application is now open for public comment until 5 p.m. on August 28, 2023. Comments may be emailed to Medicaid.NCEngagement@dhhs.nc.gov. Please indicate "NC Section

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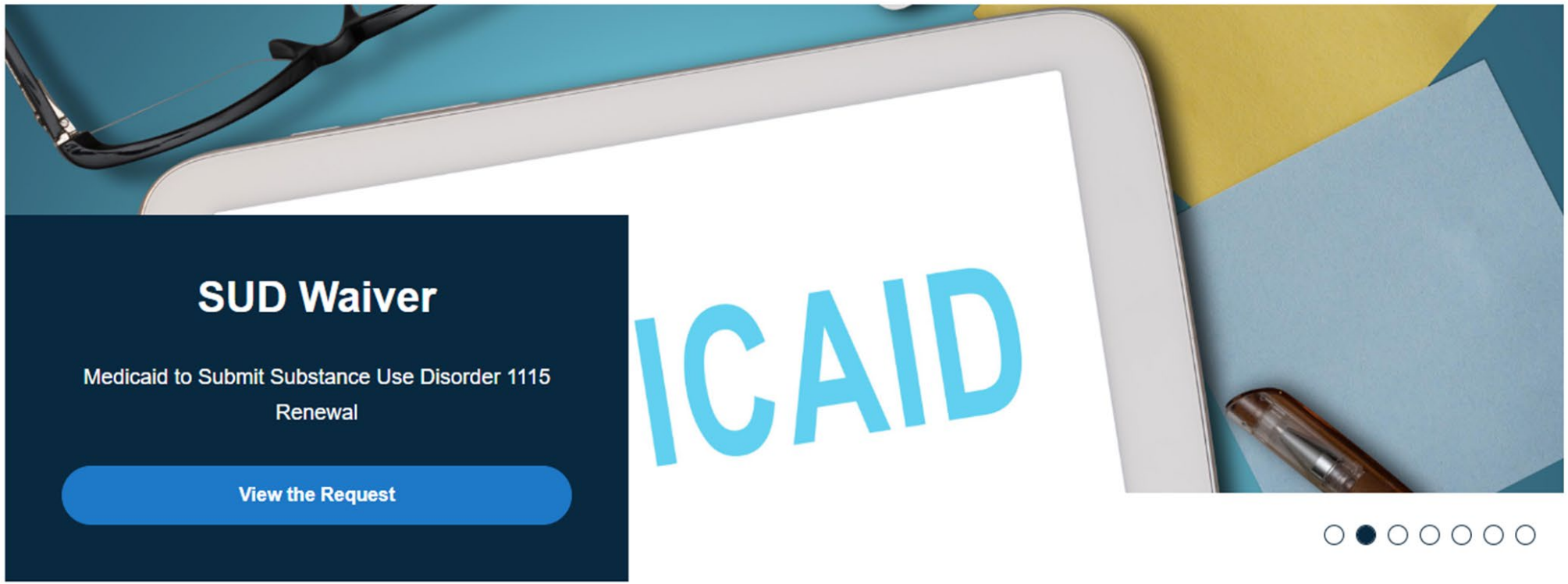

SUD Waiver

Medicaid to Submit Substance Use Disorder 1115 Renewal

View the Request

From: Goda, Deborah A <deborah.goda@dhhs.nc.gov>
Sent: Tuesday, August 8, 2023 1:19 PM
To: sarah.pfau@ncproviderscouncil.org; ncarfinfo <ncarfinfo@gmail.com>; Benita Purcell <benitapurcell@hotmail.com>; kmcleod <kmcleod@benchmarksnc.org>; sara.mcewen@governorsinstitute.org; Ann Rodriguez <ann@i2icenter.org>; ddihoff <ddihoff@naminc.org>; cathywomack <cathywomack@customassociation.com>; cathywomack <cathywomack@customassociation.com>; rhuffman <rhuffman@ncpsychiatry.org>; sally ncpsychology <sally@ncpsychology.org>; sally ncpsychology <sally@ncpsychology.org>; Kenny House <khouse@coastalhorizons.org>; Tara Larson <tlarson@ccr-email.com>; Sara Wilson <swilson@alliancehealthplan.org>; Anna North <anorth@eastpointe.net>; Emily Bridgers <EBridgers@partnersbhm.org>; Kimberly Huneycutt <kimberly.huneycutt@trilliumnc.org>; ComelliaS@sandhillscenter.org; marvin.sanders@vayahealth.com; Waiver Contract <DHHS@vayahealth.com>
Cc: Thompson, Suzanne <suzanne.thompson@dhhs.nc.gov>; Scott-Robbins, Starleen <starleen.scott-robbins@dhhs.nc.gov>; Freeman, June I <June.Freeman@dhhs.nc.gov>; Daniels, Gregory <Gregory.Daniels@dhhs.nc.gov>; Griffin, Tasha M <tasha.griffin@dhhs.nc.gov>; Hamlin, Monica B <Monica.Hamlin@dhhs.nc.gov>
Subject: Stakeholder notice of proposed SUD waiver extension & comment period

Good afternoon, Behavioral Health and Substance Use Disorder Community Partners:

North Carolina's Section 1115 Demonstration Waiver includes expenditure authority for services provided to individuals who obtain residential and inpatient substance use disorder (SUD) treatment in an institution for mental disease (IMD). This SUD provision will expire Oct. 31, 2023, and NCDHHS will request an extension of an additional five years. Public comments on the waiver extension application must be received by **August 28, 2023, at 5 p.m. (Eastern Time)** to be considered before final submission to the Centers for Medicare & Medicaid Services. NCDHHS encourages feedback on all its program and policies at any time.

Submit comments through:

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

To learn more about the SUD waiver extension, visit the NC Medicaid website's Proposed Program Design page:

- SUD Extension Application
- SUD Waiver Extension Public Notice (full and abbreviated)
- April 2023 SUD Public Hearings Presentation and Recording

Questions may be sent to Medicaid.NCEngagement@dhhs.nc.gov.

Thank you so much for your time and please share with anyone that may be interested.

Deb Goda
Associate Director, Behavioral Health and IDD
NC Medicaid
Division of Health Benefits
NC Department of Health and Human Services

Office: 919-527-7640
Fax: 919-715-9451
deborah.goda@dhhs.nc.gov
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NORTH CAROLINA DEPARTMENT OF HEALTH AND HUMAN SERVICES

Public Notice for Extension Request of the Substance Use Disorder (SUD) Component of North Carolina's Medicaid Reform Section 1115 Demonstration

July 28, 2023

This public notice provides information of public interest regarding a proposed extension of the SUD component of North Carolina's Medicaid Reform Section 1115 Demonstration.

Program Description and Goals

North Carolina's Medicaid Reform Section 1115 demonstration authorizes significant transformations of North Carolina's Medicaid delivery system through a mandatory managed care program, the Healthy Opportunities Pilots, and federal Medicaid matching for individuals obtaining SUD treatment in institutions for mental diseases (IMDs). The demonstration as a whole aims to advance integrated, high-value care; improve population health; engage and support providers; and establish a more sustainable program with more predictable costs.

The purpose of this request is to extend North Carolina's expenditure authority for services provided to individuals obtaining residential and inpatient SUD treatment in an IMD. Aligned with this authority, North Carolina is expanding its continuum of SUD services offered and undertaking a variety of initiatives to improve the quality of SUD care delivered in the state. As with the current demonstration, the goal of the proposed extension is to reduce SUD, including decreasing long-term use of opioids, and improve quality and outcomes for patients with SUD.

The SUD component of North Carolina's Medicaid Reform Section 1115 demonstration expires on October 31, 2023, whereas the other components of the demonstration currently have an end date of October 31, 2024. Through this extension request, North Carolina seeks to extend the SUD component of the demonstration for an additional five years. North Carolina is not requesting any changes to the delivery system, eligibility requirements, benefit coverage, or cost sharing, as compared to the State's current demonstration features.

Waiver and Expenditure Authorities

North Carolina is requesting the same expenditure authority as that approved in the current demonstration:

- **Residential and Inpatient Treatment for Individuals with a SUD**: Expenditures for otherwise covered services furnished to otherwise eligible individuals who are primarily receiving treatment and withdrawal management services for SUD who are short-term residents in facilities that meet the definition of an IMD.

Hypotheses and Evaluation Approach

North Carolina's goal in the current demonstration and requested extension is to reduce SUD. The State will test and evaluate the following hypotheses in pursuit of this goal:

- Expanding coverage of SUD services to include residential services furnished in IMDs as part of a comprehensive strategy will decrease the long-term use of opioids and increase the use of Medication Assisted Treatment (MAT) and other opioid treatment services.
- Expanding coverage of SUD services to include residential services furnished to short- term residents in IMDs with a SUD diagnosis as part of a comprehensive strategy will result in improved care quality and outcomes for patients with SUD.

Projected and Historical Enrollment and Expenditures

Table 1 below provides data on the historical and projected future enrollment for Medicaid enrollees obtaining SUD treatment in an IMD from Demonstration Year (DY) 1 (January 1, 2019 -October 31, 2019) to DY 10 (November 1, 2027 - October 31, 2028).

*Table 1. Historical and Projected Enrollment (in Person Counts)**

Eligibility Group**	DY1	DY2	DY3	DY4	DY5	DY6	DY7	DY8	DY9	DY10	10-Year Total
SUD IMD MEG 1 – MC Temporary Assistance for Needy Families (TANF) & Related Adults	0	0	17	64	64	1,980	2,032	2,085	2,140	2,196	10,578
SUD IMD MEG 2 – MC Aged, Blind, and Disabled	0	0	5	15	15	1,980	2,032	2,085	2,140	2,196	10,468
SUD IMD MEG 3 – MC Innovations / Traumatic Brain Injury (TBI)	0	0	0	0	0	729	748	768	788	808	3,841
SUD IMD Services MEG 4 – Fee-For-Service Adults	92	445	517	705	705	521	535	549	563	578	5,210
Total	**92**	**445**	**539**	**784**	**784**	**5,210**	**5,347**	**5,487**	**5,631**	**5,778**	**30,097**

*Estimates for DY1- DY5 reflect budget neutrality reporting through September 2022. Projections for DY6-10 assume implementation of the Behavioral Health and Intellectual/Developmental Disabilities (BH I/DD) Tailored Plans.
**MEG #1- #3 cover beneficiaries enrolled in a comprehensive managed care plan (i.e., Standard Plan, BH I/DD Tailored Plan). MEG #4 covers beneficiaries enrolled in NC Medicaid Direct who receive physical health services via Medicaid fee-for-service and behavioral health, I/DD, and traumatic brain injury (TBI) services via a prepaid inpatient health plan.

Table 2 below provides data on the historical and projected future expenditures from DY 1 (January 1, 2019 – October 31, 2019) to DY 10 (November 1, 2027 – October 31, 2028) for the SUD component of North Carolina's Medicaid Reform Section 1115 demonstration.

Table 2. Historical and Projected Future Expenditures

Eligibility Group*	DY1**	DY2**	DY3**	DY4**	DY5**	DY6***	DY7***	DY8***	DY9***	DY10***	10-Year Total
SUD IMD MEG 1 - MC TANF & Related Adults	$0	$0	$0	$9,218	$9,218	$7,701,345	$8,282,101	$8,906,651	$9,578,298	$10,300,594	$44,787,425
SUD IMD MEG 2 - MC Aged, Blind, and Disabled	$0	$0	$0	$8,732	$8,733	$10,502,163	$11,258,696	$12,069,727	$12,939,180	$13,871,266	$60,658,497
SUD IMD MEG 3 – MC Innovations/ TBI	$0	$0	$0	$0	$0	$7,952,834	$8,480,288	$9,042,724	$9,642,462	$10,281,977	$45,400,285
SUD IMD Services MEG 4 - Fee-For-Service Adults	$0	$20,044	$179,747	$146,177	$146,177	$11,740,034	$12,603,241	$13,529,917	$14,524,728	$15,592,685	$68,482,750
Total	**$0**	**$20,044**	**$179,747**	**$164,127**	**$164,128**	**$37,896,376**	**$40,624,326**	**$43,549,019**	**$46,684,668**	**$50,046,522**	**$219,328,957**

*MEG #1- #3 cover beneficiaries enrolled in a comprehensive managed care plan (i.e., Standard Plan, BH I/DD Tailored Plan). MEG #4 covers beneficiaries enrolled in NC Medicaid Direct who receive physical health services via Medicaid fee-for-service and behavioral health, I/DD, and traumatic brain injury (TBI) services via a prepaid inpatient health plan.
** DY1-5 reflect North Carolina DHHS Medicaid Transformation Budget Neutrality Workbook Reporting through September 30, 2022.
***These figures assume that BH I/DD Tailored Plans will launch in DY6 and will be in effect through DY10.

Opportunities for Public Input

Electronic copies of this public notice, the proposed extension request, and public comments related to the extension request are available on the North Carolina Department of Health and Human Services Medicaid website at medicaid.ncdhhs.gov/proposed-program-design.

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.

To be assured consideration prior to submission of this waiver extension request, comments must be received by 5 p.m. (Eastern Time) on August 28, 2023.

North Carolina hosted two public hearings to seek input regarding the waiver extension request. Hearings were held on Tuesday, April 11 at 5 p.m. Eastern and Thursday, April 13 at 2 p.m. Eastern via Microsoft Teams. The slide deck used during the public hearings can be found at the following link: https://medicaid.ncdhhs.gov/documents/medicaid/ncdhhs-sud-waiver-extension-public-hearing/download?attachment. The public hearings included presentations describing the proposed changes and opportunities for public testimony.

NORTH CAROLINA DEPARTMENT OF HEALTH AND HUMAN SERVICES

Abbreviated Public Notice for Extension Request for the Substance Use Disorder (SUD) Component of North Carolina's Medicaid Reform Section 1115 Demonstration

July 28, 2023

PUBLIC NOTICE. ***This abbreviated public notice provides information of public interest regarding a proposed extension request for the SUD component of North Carolina's Medicaid Reform Section 1115 Demonstration.***

North Carolina's Medicaid Reform Section 1115 demonstration authorizes significant transformations of North Carolina's Medicaid delivery system through a mandatory managed care program, the Healthy Opportunities Pilots and federal Medicaid matching funds for individuals obtaining substance use disorder (SUD) treatment in institutions for mental diseases (IMDs). The demonstration as a whole aims to advance integrated, high-value care; improve population health; engage and support providers; and establish a more sustainable program with more predictable costs.

This request is to extend North Carolina's expenditure authority for services provided to individuals obtaining residential and inpatient SUD treatment in an IMD. Aligned with this authority, North Carolina is expanding its continuum of SUD services offered and undertaking a variety of initiatives to improve the quality of SUD care delivered in the state. As with the current demonstration, the goal of the proposed extension is to reduce SUD, including decreasing long-term use of opioids, and improve quality and outcomes for patients with SUD.

The SUD component of North Carolina's Section 1115 Medicaid Demonstration expires on October 31, 2023, whereas the other components of the demonstration currently have an end date of October 31, 2024. Through this extension request, North Carolina seeks to extend the SUD component of the demonstration for an additional five years. North Carolina is not requesting any changes to the delivery system, eligibility requirements, benefit coverage, or cost sharing, as compared to the State's current demonstration features.

Electronic copies of this abbreviated public and the full public notice and proposed extension request are available on the North Carolina Department of Health and Human Services Medicaid website at medicaid.ncdhhs.gov/transformation/proposed-program-design.

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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following link: https://medicaid.ncdhhs.gov/documents/medicaid/ncdhhs-sud-waiver-extension-public-hearing/download?attachment. The public hearings included presentations describing the proposed changes and opportunities for public testimony.

For more information about NC Medicaid Managed Care transformation, visit medicaid.ncdhhs.gov/transformation.

The Fayetteville Observer

Govt Public Notices

Originally published at fayobserver.com on 07/30/2023

NORTH CAROLINA DEPARTMENT OF HEALTH AND HUMAN SERVICES
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July 28, 2023
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For more information about NC Medicaid Managed Care transformation, visit medicaid.ncdhhs.gov/transformation.
Publication Dates L00000000

Attachment F

From: benita purcell
To: Medicaid.NCEngagement
Subject: [External] NC Section 1115 waiver
Date: Tuesday, August 8, 2023 4:11:03 PM

I wholeheartedly agree with the request an extension of another 5 years. During Covid, we saw a huge increase in both mental health and substance use issues. I believe it is critical to provide services in whatever area is available. Institution for mental disease (IMD) should not be disallowed as a location to meet the needs of individuals seeking treatment.

Sincerely,

Benita Purcell

From: Waiver Contract (DHHS)
To: Medicaid.NCEngagement
Cc: Waiver Contract (DHHS); Daniels, Gregory
Subject: [External] FW: Stakeholder notice of proposed SUD waiver extension & comment period
Date: Friday, August 25, 2023 2:29:10 PM
Attachments: NCDHHS-SUD-Waiver-Application-Narrative-20230713_Vaya_Feedback_2023.08.25.pdf

Good afternoon,

Attach you will find Vaya's feedback on the NCDHHS SUD Waiver Application Narrative.

Please let me know if you have questions.

Thanks

Marvin E. Sanders, MS, HQSI, CI, CHC
Vice President of Regulatory Affairs
Vaya Health | 200 Ridgefield Court, Suite 218
Asheville, NC 28806 | O 828-225-2785 x 5182
| E marvin.sanders@vayahealth.com

I. Historical Narrative Summary of the Demonstration Project

The North Carolina Medicaid Reform demonstration was approved by the Centers for Medicare & Medicaid Services (CMS) on October 19, 2018, and includes a waiver of the institution for mental disease (IMD) exclusion for substance use disorder (SUD) treatment to expand access to the full continuum of SUD care. The current SUD waiver is effective January 1, 2019, through October 31, 2023. North Carolina requests to extend the SUD waiver for an additional five years.

The current demonstration benefit package for North Carolina Medicaid recipients includes Opioid Use Disorder (OUD)/SUD treatment services, including short-term residential services provided in residential and inpatient treatment settings that qualify as an IMD, which are not otherwise matchable expenditures under section 1903 of the Social Security Act. North Carolina is eligible to receive federal financial participation (FFP) for North Carolina Medicaid recipients who are short-term residents in IMDs under the terms of this demonstration for coverage of medical assistance, including OUD/SUD benefits that would otherwise be matchable if the beneficiary were not residing in an IMD. The State is required to aim for a statewide average length of stay of 30 days in residential treatment settings, which is monitored pursuant to the SUD Monitoring Protocol as outlined in STC 19(b), to ensure short-term residential treatment stays. Under the demonstration, beneficiaries have access to high-quality, evidence-based OUD and other SUD treatment services ranging from medically supervised withdrawal management to ongoing chronic care for these conditions in cost-effective settings while also improving care coordination and care for comorbid physical and mental health conditions. These services are available to beneficiaries enrolled in both the Medicaid managed care and fee-for-service/prepaid inpatient health plan (NC Medicaid Direct) delivery systems.

Commented [JJ1]: Is this inclusive of the new ASAM 3.1 Clinically Managed Residential Treatment low intensity, which is essentially a halfway house? I'm not sure that 30 days would be sufficient for this service.

North Carolina's goal in the current waiver and requested extension is to reduce SUD; the State is testing and evaluating the following hypotheses in pursuit of this goal:

- Expanding coverage of SUD services to include residential services furnished in IMDs as part of a comprehensive strategy will decrease the long-term use of opioids and increase the use of medication-assisted treatment (MAT) and other opioid treatment services.
- Expanding coverage of SUD services to include residential services furnished to short-term residents in IMDs with a SUD diagnosis as part of a comprehensive strategy will result in improved care quality and outcomes for patients with SUD.

As required by CMS, the components of the SUD waiver are organized around six milestones: (1) Access, (2) Placement Criteria, (3) Provider Qualifications, (4) Capacity, (5) Prescribing and Overdose, and (6) Care Coordination. North Carolina's Mid-Point Assessment determined that the State is at:

- High risk of not achieving demonstration Milestone 1
- Medium risk of not achieving demonstration Milestones 3 and 6
- Medium/low risk of not achieving Milestone 4
- Low risk of not achieving Milestones 2 and 5

Recommendations for progress are described in the Mid-Point Assessment (see Section V) and include the following:

- Provide greater web content for providers and beneficiaries on the SUD components of the waiver
- Determine barriers for metrics not meeting targets and identify incentives that could address these barriers
- Continue COVID-19 flexibilities
- Use monitoring metrics to mount an adaptive response to immediate needs
- Triangulate code lists and service definitions going forward
- Prioritize minimum MAT access requirements for residential treatment facilities
- Streamline the licensure process for facility-based treatment
- Support inpatient service capacity through direct financial support and/or improved allocation of beds

- Consider expanding Medicaid in North Carolina to cover those who do not have access to SUD services
- Identify and reward higher levels of beneficiary engagement in care.

II. Summary of Changes Requested

No changes requested.

III. Requested Waivers and Expenditure Authorities

North Carolina requests the same expenditure and waiver authorities as those approved for the SUD component of the current demonstration:

- **Residential and Inpatient Treatment for Individuals with a Substance Use Disorder (SUD)**. Expenditures for otherwise covered services furnished to otherwise eligible individuals who are primarily receiving treatment and withdrawal management services for substance use disorder (SUD) who are short-term residents in facilities that meet the definition of an institution for mental diseases (IMD).

IV. Quality Reports and Monitoring

As identified in the North Carolina 2020-2021 EQR Technical Report (Attachment A; also available here: https://medicaid.ncdhhs.gov/2020-2021-eqr-technical-report/download?attachment), Health Services Advisory Group, Inc. (HSAG) is the State's external quality review organization (EQRO). For state fiscal year (SFY) 2021 (July 1, 2020 through June 30, 2021), HSAG conducted preparatory activities with North Carolina for the mandatory EQR activities displayed in Table 1 and optional activities that include encounter data validation, consumer surveys, calculation of additional performance measures, focus studies on quality, quality rating of health plans, annual performance reports, annual care management performance evaluation, and collaborative quality improvement forums. In the SFY 2022 report, HSAG highlights substantive findings and actionable, state-specific recommendations to further advance the goals and objectives outlined in North Carolina's Medicaid Managed Care Quality Strategy.

Table 1. EQR Activities

Activity	Description	CMS EQR Protocol
Mandatory Activities*		
Validation of Performance Improvement Projects (PIPs)	This activity verifies whether a PIP conducted by a health plan used sound methodology in its design, implementation, analysis, and reporting.	**Protocol 1.** Validation of Performance Improvement Projects
Performance Measure Validation (PMV)	This activity assesses whether the performance measures (PMs) calculated by a health plan are accurate based on the measure specifications and State reporting requirements.	**Protocol 2.** Validation of Performance Measures
Compliance With Standards	This activity determines the extent to which a Medicaid and CHIP plan is in compliance with federal standards and associated State-specific requirements, when applicable.	**Protocol 3.** Review of Compliance with Medicaid and CHIP Managed Care Regulations

* Until the CMS network adequacy validation protocol is issued, health plans will only be subject to three mandatory EQR-related activities.

Table 2 from the North Carolina Medicaid Annual Quality Report (December 2020) (Attachment A; also available here: https://files.nc.gov/ncdma/Medicaid_QualityAnnualReport_3.30.2021.pdf) summarizes the State's performance against its Quality Strategy aims and goals in 2019.

Table 2. Summary of NC Medicaid Quality Performance 2019

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

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

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

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

Table 3 is the North Carolina Fiscal Year 2020 Annual Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) Form CMS-416 (Attachment A; available here: https://medicaid.ncdhhs.gov/cms-416-participation-reports-epsdt-ffy2020/download?attachment), which collects information on the State's Medicaid and CHIP programs to assess the effectiveness of EPSDT services.

Table 3. North Carolina Fiscal Year 2020 Annual EPSDT Form CMS-416

CMS Generated Reporting of State Form CMS-416 Data Using T-MSIS									
Description	**Cat**	**Total**	**< 1**	**1-2**	**3-5**	**6-9**	**10-14**	**15-18**	**19-20**
1a.Total Individuals Eligible for EPSDT	CN	1,284,952	70,132	145,946	215,359	252,876	310,120	212,485	78,034
	MN	2,014	46	82	129	291	492	489	485
	Total	1,286,966	70,178	146,028	215,488	253,167	310,612	212,974	78,519
1b.Total Individuals Eligible for EPSDT for 90 Continuous Days	CN	1,224,019	56,840	141,370	209,308	241,796	297,876	203,568	73,261
	MN	1,472	18	65	103	224	360	326	376
	Total	1,225,491	56,858	141,435	209,411	242,020	298,236	203,894	73,637

CMS Generated Reporting of State Form CMS-416 Data Using T-MSIS									
Description	**Cat**	**Total**	**< 1**	**1-2**	**3-5**	**6-9**	**10-14**	**15-18**	**19-20**
1c. Total Individuals Eligible Under a CHIP Medicaid Expansion	CN	173,159	187	18,024	36,239	39,915	45,201	30,799	2,794
	MN	0	0	0	0	0	0	0	0
	Total	173,159	187	18,024	36,239	39,915	45,201	30,799	2,794
2a. State Periodicity Schedule			5	4	3	4	5	4	2
2b. Number of Years in Age Group			1	2	3	4	5	4	2
2c. Annualized State Periodicity Schedule			5	2	1	1	1	1	1
3a. Total Months of Eligibility	CN	13,668,019	423,872	1,613,984	2,397,672	2,733,861	3,385,846	2,307,920	804,864
	MN	15,313	149	700	1,098	2,294	3,675	3,369	4,028
	Total	13,683,332	424,021	1,614,684	2,398,770	2,736,155	3,389,521	2,311,289	808,892
3b. Average Period of Eligibility	CN	0.93	0.62	0.95	0.95	0.94	0.95	0.94	0.92
	MN	0.87	0.69	0.90	0.89	0.85	0.85	0.86	0.89
	Total	0.93	0.62	0.95	0.95	0.94	0.95	0.94	0.92
4. Expected Number of Screenings per Eligible	CN		3.10	1.90	0.95	0.94	0.95	0.94	0.92
	MN		3.45	1.80	0.89	0.85	0.85	0.86	0.89
	Total		3.10	1.90	0.95	0.94	0.95	0.94	0.92
5. Expected Number of Screenings	CN	1,412,674	176,204	268,603	198,843	227,288	282,982	191,354	67,400
	MN	1,382	62	117	92	190	306	280	335
	Total	1,414,056	176,266	268,720	198,935	227,478	283,288	191,634	67,735
6. Total Screens Received	CN	1,026,251	261,515	291,251	143,919	105,079	133,031	78,417	13,039
	MN	542	29	83	41	78	138	103	70
	Total	1,026,793	261,544	291,334	143,960	105,157	133,169	78,520	13,109
7. SCREENING RATIO	CN	0.73	1.00	1.00	0.72	0.46	0.47	0.41	0.19
	MN	0.39	0.47	0.71	0.45	0.41	0.45	0.37	0.21
	Total	0.73	1.00	1.00	0.72	0.46	0.47	0.41	0.19
8.Total Eligibles Who Should Receive at Least One Initial or Periodic Screen	CN	1,166,077	56,840	141,370	198,843	227,288	282,982	191,354	67,400
	MN	1,286	18	65	92	190	306	280	335
	Total	1,167,363	56,858	141,435	198,935	227,478	283,288	191,634	67,735
9.Total Eligibles Receiving at Least One Initial or Periodic Screen	CN	DS	DS	DS	DS	DS	DS	DS	DS
	MN	DS	DS	DS	DS	DS	DS	DS	DS
	Total	617,594	54,718	117,816	131,076	100,674	127,194	73,901	12,215
10. PARTICIPANT RATIO	CN	DS	DS	DS	DS	DS	DS	DS	DS
	MN	DS	DS	DS	DS	DS	DS	DS	DS
	Total	0.53	0.96	0.83	0.66	0.44	0.45	0.39	0.18
11. Total Eligibles Referred for Corrective Treatment	CN	DS	DS	DS	DS	DS	DS	DS	DS
	MN	DS	DS	DS	DS	DS	DS	DS	DS
	Total	317,220	51,518	84,314	51,009	40,925	49,870	33,318	6,266
12a. Total Eligibles Receiving Any Dental Services	CN	DS	DS	DS	DS	DS	DS	DS	DS
	MN	DS	DS	DS	DS	DS	DS	DS	DS
	Total	566,868	685	28,613	102,565	141,795	169,330	101,903	21,977
12b. Total Eligibles Receiving Preventive	CN	DS	DS	DS	DS	DS	DS	DS	DS
	MN	DS	DS	DS	DS	DS	DS	DS	DS

CMS Generated Reporting of State Form CMS-416 Data Using T-MSIS									
Description	**Cat**	**Total**	**< 1**	**1-2**	**3-5**	**6-9**	**10-14**	**15-18**	**19-20**
Dental Services	Total	520,225	252	27,352	98,339	134,571	156,792	86,462	16,457
12c. Total Eligibles Receiving Dental Treatment Services	CN	DS	DS	DS	DS	DS	DS	DS	DS
	MN	DS	DS	DS	DS	DS	DS	DS	DS
	Total	243,189	286	1,941	29,237	63,846	77,622	57,441	12,816
12d. Total Eligibles Receiving a Sealant on a Permanent Molar Tooth	CN	57,279				30,417	26,862		
	MN	53				20	33		
	Total	57,332				30,437	26,895		
12e. Total Eligibles Receiving Dental Diagnostic Services	CN	DS	DS	DS	DS	DS	DS	DS	DS
	MN	DS	DS	DS	DS	DS	DS	DS	DS
	Total	544,130	664	28,496	101,178	137,682	162,252	93,729	20,129
12f. Total Eligibles Receiving Oral Health Services Provided by a Non-Dentist Provider	CN	DS	DS	DS	DS	DS	DS	DS	DS
	MN	DS	DS	DS	DS	DS	DS	DS	DS
	Total	88,055	5,238	67,525	15,195	49	33	DS	DS
12g. Total Eligibles Receiving Any Preventive Dental or Oral Health Service	CN	DS	DS	DS	DS	DS	DS	DS	DS
	MN	DS	DS	DS	DS	DS	DS	DS	DS
	Total	588,861	5,418	81,680	107,450	134,588	156,801	86,465	16,459
13.Total Eligibles Enrolled in Managed Care	CN	1,201,631	52,304	139,711	207,046	239,201	294,553	200,347	68,469
	MN	1,353	15	64	99	214	336	298	327
	Total	1,202,984	52,319	139,775	207,145	239,415	294,889	200,645	68,796
14a.Total Number of Screening Blood Lead Tests	CN	DS	DS	DS	DS				
	MN	DS	DS	DS	DS				
	Total	97,329	225	84,688	12,416				
14b. Methodology Used to Calculate the Total Number of Screening Blood Lead Tests			Enter X for Method I		Enter X for Method II		Enter X for Method III		
		CPT Code 83655 within certain diagnoses codes (Method I)	X	HEDIS (Method II)		Combin-ation Method-ology (Method III)			

CN = Categorically Needy

MN = Medically Needy

DS = Data suppressed because data cannot be displayed per the Centers for Medicare & Medicaid Services' cell-size suppression policy, which prohibits the direct reporting of data for beneficiary and record counts of 1 to 10 and values from which users can derive values of 1 to 10.

* States are not required to provide the EPSDT benefits to children enrolled in Medicaid through the medically needy benefit. CMS recommends that FFY 2020 data are not trended with data from other fiscal years due to both the significant change in delivery of services because of the COVID-19 public health emergency (PHE) and the initial use of T-MSIS as a data source in 19 states.

n/a = Not Applicable

V. Financial Data

North Carolina reviewed the current 1115 demonstration and emerging waiver reports and experience as part of the evaluation of the necessary financial projections for this requested waiver extension. North Carolina is working to

implement this waiver, and, as described in the mid-point and interim evaluation reports (please see Section VI), various factors that include the COVID-19 PHE and Behavioral Health and Intellectual/Developmental Disabilities (BH I/DD) Tailored Plan launch delays have contributed to limited enrollment and expenditures reported in the first four years of the demonstration as compared to projected values for the renewal. Tables 4 and 5, respectively, describe the historical and projected future enrollment (Table 4) and expenditures (Table 5) as well as the cumulative spend over the lifetime of the demonstration (Table 5).

The budget neutrality projections for the initial waiver approved in 2018 relied on modeling in the SUD toolkit for the implementation of the broader American Society of Addiction Medicine (ASAM) service array. In addition, the Medicaid Eligibility Group (MEG) estimates utilized data from the broader 1115 budget neutrality estimates, also approved in 2018, reflecting differential costs for individuals with more significant behavioral health needs who will be served through the BH I/DD Tailored Plans.[1] As BH I/DD Tailored Plans have not yet been implemented, the prior estimates remain the most relevant data for this projection.

As the budget neutrality projections developed for the initial waiver approved in 2018 are consistent with what is expected in the upcoming Demonstration Years 6 through 10, North Carolina has projected the PMPM costs for the SUD MEGs based on the prior approved PMPMs and estimated enrollment. As illustrated in Table 6, the projection uses Demonstration Year 5 enrollment and PMPM figures from the current waiver, along with the trend factors approved in 2018, to project forward the enrollment (in person counts and member months) and PMPM costs for this waiver extension request. The use of these trends is consistent with prior discussions with CMS; moreover, based on other work within the North Carolina Department of Health and Human Services (DHHS), these trends have been deemed appropriate for estimating recent spending growth. North Carolina proposes to maintain a per capita cap approach for establishing spending limits and monitoring costs for this 1115 waiver renewal.

[1] BH I/DD Tailored Plans are specialized managed care plans that will serve Medicaid enrollees with significant behavioral health conditions, I/DD, and traumatic brain injuries.

*Table 4. Historical and Projected Enrollment (in Person Counts)**

Eligibility Group**	DY1	DY2	DY3	DY4	DY5	DY6	DY7	DY8	DY9	DY10	10-Year Total
SUD IMD MEG 1 - MC Temporary Assistance for Needy Families (TANF) & Related Adults	0	0	17	64	64	1,980	2,032	2,085	2,140	2,196	10,578
SUD IMD MEG 2 - MC Aged, Blind, and Disabled	0	0	5	15	15	1,980	2,032	2,085	2,140	2,196	10,468
SUD IMD MEG 3 – MC Innovations/ Traumatic Brain Injury (TBI)	0	0	0	0	0	729	748	768	788	808	3,841
SUD IMD Services MEG 4 - Fee-For-Service Adults	92	445	517	705	705	521	535	549	563	578	5,210
Total	**92**	**445**	**539**	**784**	**784**	**5,210**	**5,347**	**5,487**	**5,631**	**5,778**	**30,097**

*Estimates for DY1- DY5 reflect budget neutrality reporting through September 2022. Projections for DY6-10 assume implementation of the Behavioral Health and Intellectual/Developmental Disabilities (BH I/DD) Tailored Plans.

**MEG #1- #3 cover beneficiaries enrolled in a comprehensive managed care plan (i.e., Standard Plan, BH I/DD Tailored Plan). MEG #4 covers beneficiaries enrolled in NC Medicaid Direct who receive physical health services via Medicaid fee-for-service and behavioral health, I/DD, and traumatic brain injury (TBI) services via a prepaid inpatient health plan.

*Table 5. Historical and Projected Future Expenditures**

Eligibility Group**	DY1	DY2	DY3	DY4	DY5	DY6	DY7	DY8	DY9	DY10	10-Year Total
SUD IMD MEG 1 - MC Temporary Assistance for Needy Families (TANF) & Related Adults	$0	$0	$0	$9,218	$9,218	$7,701,345	$8,282,101	$8,906,651	$9,578,298	$10,300,594	$44,787,425
SUD IMD MEG 2 - MC Aged, Blind, and Disabled	$0	$0	$0	$8,732	$8,733	$10,502,163	$11,258,696	$12,069,727	$12,939,180	$13,871,266	$60,658,497
SUD IMD MEG 3 – MC Innovations/ Traumatic Brain Injury (TBI)	$0	$0	$0	$0	$0	$7,952,834	$8,480,288	$9,042,724	$9,642,462	$10,281,977	$45,400,285
SUD IMD Services MEG 4 - Fee-For-Service Adults	$0	$20,044	$179,747	$146,177	$146,177	$11,740,034	$12,603,241	$13,529,917	$14,524,728	$15,592,685	$68,482,750
Total	**$0**	**$20,044**	**$179,747**	**$164,127**	**$164,128**	**$37,896,376**	**$40,624,326**	**$43,549,019**	**$46,684,668**	**$50,046,522**	**$219,328,957**

* Estimates for DY1- DY5 reflect budget neutrality reporting through September 2022. Projections for DY6-10 assume implementation of the BH I/DD Tailored Plans.

**MEG #1- #3 cover beneficiaries enrolled in a comprehensive managed care plan (i.e., Standard Plan, BH I/DD Tailored Plan). MEG #4 covers beneficiaries enrolled in NC Medicaid Direct who receive physical health services via Medicaid fee-for-service and behavioral health, I/DD, and traumatic brain injury (TBI) services via a prepaid inpatient health plan.

Table 6. Budget Neutrality Projections

Eligibility Group*	Metric	Value from DY5 of Approved Waiver**	Trend Rate from Approved Waiver	DY6	DY7	DY8	DY9	DY10	Total Waiver (DY6-DY10)
SUD IMD MEG 1 - MC TANF & Related Adults	Eligible Member Months	2,509	2.6%	2,575	2,642	2,711	2,782	2,855	13,565
	PMPM Cost	$2,854.25	4.8%	$2,991.26	$3,134.84	$3,285.31	$3,443.01	$3,608.27	$16,462.69
	Estimated Claims	N/A	N/A	$7,701,345	$8,282,101	$8,906,651	$9,578,298	$10,300,594	$44,768,989
SUD IMD MEG 2 - MC Aged, Blind, and Disabled	Eligible Member Months	2,509	2.6%	2,575	2,642	2,711	2,782	2,855	13,565
	PMPM Cost	$3,904.53	4.5%	$4,079.11	$4,261.50	$4,452.04	$4,651.11	$4,859.07	$22,302.83
	Estimated Claims	N/A	N/A	$10,502,163	$11,258,696	$12,069,727	$12,939,180	$13,871,266	$60,641,032
SUD IMD MEG 3 - Innovations/ TBI	Eligible Member Months	924	2.6%	948	973	998	1,024	1,051	4,994
	PMPM Cost	$8,071.63	3.9%	$8,388.07	$8,716.91	$9,058.65	$9,413.78	$9,782.83	$45,360.24
	Estimated Claims	N/A	N/A	$7,952,834	$8,480,288	$9,042,724	$9,642,462	$10,281,977	$45,400,285
SUD IMD Services MEG 4 - Fee-For-Service Adults	Eligible Member Months	660	2.6%	677	695	713	732	752	3,569
	PMPM Cost	$16,569.62	4.6%	$17,331.83	$18,129.10	$18,963.05	$19,835.36	$20,747.79	$95,007.13
	Estimated Claims	N/A	N/A	$11,740,034	$12,603,241	$13,529,917	$14,524,728	$15,592,685	$67,990,605

*MEG #1- #3 cover beneficiaries enrolled in a comprehensive managed care plan (i.e., Standard Plan, BH I/DD Tailored Plan). MEG #4 covers beneficiaries enrolled in NC Medicaid Direct who receive physical health services via Medicaid fee-for-service and behavioral health, I/DD, and traumatic brain injury (TBI) services via a prepaid inpatient health plan.

**Eligible member months in DY5 represent values projected in the original approved demonstration for the current demonstration period. They do not represent actual enrollment during DY5, since data for all estimates within tables 4 and 5 are as of 9/22 (prior to the start of DY5). For the programmatic reasons noted in the narrative, the state believes the original enrollment projections are most accurate.

VI. Evaluation Report

North Carolina submitted a Mid-Point Assessment report to CMS on April 29, 2022 (Attachment B).

Table 7, excerpted from the Mid-Point Assessment, summarizes the percentage of action items complete and the proportion of monitoring targets met for each milestone. In summary, North Carolina is at low risk of not meeting two of the six milestones: Placement Criteria (Milestone 2) and Prescribing and Overdose (Milestone 5). North Carolina is at low/medium risk of not meeting Milestone 4 (Capacity). The assessment depends on the relative importance of changes in the metrics (number of providers providing SUD and Medication for Opioid Use Disorders (MOUD) services to Medicaid beneficiaries from claims data) to completion of the process activities specified in the Implementation Plan and STCs. These documents require network adequacy assessments and provider outreach, which have not yet been completed. The Milestone 4 metrics are advancing in the intended direction (implying low risk of not meeting the milestone), while the process activities have not been completed (implying medium risk).

North Carolina is at medium risk for not completing Milestone 3 on the use of nationally recognized standards to set provider qualifications based solely on implementation activities and Milestone 6 on Coordination of Care. Finally, North Carolina is at high risk for not completing Milestone 1 on Access to Critical Levels of Care for SUD based on its limited progress in achieving targets for a number of metrics reflecting service use.

Table 7. Assessed Risk of Not Achieving Milestones

Milestone	Proportion of monitoring metric goals met (# metrics / total)	Percentage of fully completed action items (# completed / total)	Key themes from stakeholder feedback	Risk level
1. Access	**43% (3/7)**	2% (1/61)	♦ Milestone 1 has been a main focus of DHHS agencies. ♦ Several factors contributed to delays, including COVID-19, Standard Plan launch, exit of one local management entity/managed care organization (LME/MCO) and preparing for BH I/DD Tailored Plans. ♦ Providers and LME/MCOs report waiting for finalized policies for new services before beginning to establish networks and care standards. ♦ Multiple stakeholders express concerns about preparedness for BH I/DD Tailored Plans.	High

Milestone	Proportion of monitoring metric goals met (# metrics / total)	Percentage of fully completed action items (# completed / total)	Key themes from stakeholder feedback	Risk level
			♦ Beneficiaries report good access to SUD care overall and improved access to care as a result of COVID-19 flexibilities.	
2. Placement Criteria	**50% (1/2)**	60% (6/10)	DHHS agencies have made significant efforts around training providers in ASAM criteria, with over 600 trained. Turnout has not been as high as hoped, which may be partially attributable to the small fee for training.	Low
3. Qualifications	--	0% (0/4)	The State's presentations have clarified licensure requirements. LME/MCOs have concerns about the licensure process for residential facilities, which is long and costly. Some programs in NC still do not offer medication to treat opioid or alcohol use disorder.	Medium
4. Capacity	**100% (2/2)**	0% (0/4)	Staffing inpatient facilities and ensuring sufficient outpatient provider supply is a persistent concern for both State agencies and LME/MCOs. Providers perceive shortages of inpatient beds, outpatient care and office-based opioid treatment (OBOT). LME/MCOs report that developing capacity for facility-based treatment is overall more challenging, especially with lack of startup funds. Funding services is an issue,	Low/ Medium

Milestone	Proportion of monitoring metric goals met (# metrics / total)	Percentage of fully completed action items (# completed / total)	Key themes from stakeholder feedback	Risk level
			given that most people with SUD in NC are uninsured. State funds are critical for this, and the ongoing lack of Medicaid expansion threatens funding streams for new services.	
5. Prescribing and Overdose	**50% (2/4)**	100% (1/1)	There is a broad consensus that improvements to the PDMP have been very successful.	Low
6. Coordination	**71% (5/7)**	66% (2/3)	Both providers and State agencies report co-locating services has improved care coordination. Several providers report needing to make hard decisions about care management going forward, especially with the future launch of BH I/DD Tailored Plans.	Medium

North Carolina submitted an Interim Evaluation Report to CMS on June 8, 2023 (Attachment B). The report finds a number of positive improvements were observed in the state after the implementation of the SUD component of North Carolina's 1115 demonstration. For example, the number of providers offering SUD services to Medicaid beneficiaries has grown since the start of the demonstration and the number of individuals using evidence-based treatments for OUD increased during the evaluation period. At the same time, the report acknowledges the significant challenges and implementation barriers, such as the COVID-19 PHE and BH I/DD Tailored Plan launch delays, that contributed to less favorable results on other metrics during the evaluation period.

Commented [JJ2]: Not sure where this fits but there is a shortage of LCAS, which has made it difficult for provider organizations to offer SU treatment, particularly SAIOP. That needs to be taken into account as contributing to the results in the metrics.

VII. Public Notice Process Compliance Documentation

Public Notice and Comment Process

North Carolina first released this waiver extension request for public comment starting on March 31, 2023, and allowed the public to submit comments through May 1, 2023. Subsequently, North Carolina released an updated version of this waiver extension request for public comment on July 28, 2023, and allowed the public to submit comments through August 28, 2023. The State posted the public notice materials (including the full public notice and abbreviated public notice, both of which included details on how to submit comments) and the full waiver extension request on the North Carolina Department of Health and Human Services website (Attachment C; also available here: https://medicaid.ncdhhs.gov/proposed-program-design).

North Carolina disseminated notices and information about the public hearings both by making announcements during monthly meetings with consumer, provider, and family advisory stakeholders as well as by disseminating the notice by email. Emails were sent via "stakeholder" listservs that include over 700 email addresses for consumers, advocacy groups, providers, and community partners.

North Carolina also published the abbreviated public notice in the newspapers of widest circulation in each city in North Carolina with a population of at least 100,000. A list of newspapers by city appears in Table 8 and a newspaper clipping appears in Attachment C.

Table 8. Notice Distribution by Newspaper

Cities	Population as of July 2022[2]	Primary Newspaper by Circulation	Run Dates	Geographic Areas
1. Charlotte	897,720	Charlotte Observer	April 6, 9 & 10	Charlotte; Mecklenburg, Iredell, Cabarrus, Union, Lancaster, York, Gaston, Catawba and Lincoln counties
2. Raleigh	476,587	News & Observer	April 6, 9 & 10	Raleigh; Triangle area; Wake County
3. Greensboro	301,115	Greensboro News & Record	April 7, 9 & 10	Greensboro; High Point; Guilford, Rockingham and Randolph counties
4. Durham	332,680	Durham Herald Sun	April 6, 9 & 10	Durham; Durham, Orange and Chatham counties
5. Winston-Salem	251,350	Winston-Salem Journal	April 7, 9 & 10	Winston-Salem; Forsyth County
6. Fayetteville	208,873	The Fayetteville Observer	April 6, 9 & 10	Fayetteville; Fort Bragg; Cumberland County
7. Cary	180,388	News & Observer	April 6, 9 & 10	Raleigh; Triangle area; Wake County
8. Wilmington	120,324	Wilmington Star-News	April 4, 9 & 10	Wilmington; New Hanover, Brunswick and Pender counties

North Carolina hosted two virtual public hearings to seek input regarding the extension request. Emma Sandoe, Associate Director, Strategy and Planning at the Division of Health Benefits, led both hearings, which were held on Tuesday, April 11, 2023, and on Thursday, April 13, 2023, via Microsoft Teams. The total number of attendees for the hearings was approximately 90 individuals. During the public hearings, DHHS gave a presentation describing the proposed waiver extension request and provided opportunities

[2] U.S. Census. Population Estimates (July 2022)

for public testimony. The slide deck presented can be found here: https://medicaid.ncdhhs.gov/documents/medicaid/ncdhhs-sud-waiver-extension-public-hearing/download?attachment

In addition to the two public hearings dedicated to the SUD waiver, North Carolina discussed the SUD waiver during its most recent post-award public forum held on January 30, 2023. During the webinar, North Carolina presented on progress in the implementation of the 1115 waiver and provided an overview of upcoming work and the timeline for implementation of future key aspects of the waiver. In addition to the SUD waiver, the presentation covered the transition to NC Medicaid managed care and the Healthy Opportunities Pilots.

Comments and questions were received on the following topics, with most questions focusing on BH I/DD 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
    - 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
    - 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

Response to Public Comments Received between March 31- May 1, 2023

North Carolina received two written letters of public comment from organizations representing hospitals and health care systems in the state, including an integrated behavioral health care system (Attachment D). North Carolina also received one request for clarification during a public hearing.

Key themes from the comments are described below. Comments were supportive of the proposed waiver extension request. North Carolina is not proposing any changes to the waiver extension request in response to comments received through the public notice process.

Comment: **North Carolina received comments supporting the waiver extension request. In addition to extending the waiver of the IMD exclusion for SUD treatment that is approved under the current**

demonstration, a commenter advocated for requesting a waiver of the IMD exclusion for short-term mental health treatment.

North Carolina 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. As the State pursues a variety of reforms to its behavioral health delivery system, including the upcoming launch of BH I/DD Tailored Plans, it continues to explore requesting a waiver of the IMD exclusion for short-term mental health treatment.

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

North Carolina 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 by January 2024.

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

North Carolina Response: North Carolina appreciates the commenter's feedback and is exploring options with the legislature on the feasibility of increasing rates.

Comment: **North Carolina received a request to clarify if this waiver extension request would change any of the services offered under the approved demonstration.**

North Carolina Response: North Carolina is not seeking to change any of the services offered under the approved demonstration through this waiver extension request.

Response to Public Comments Received between XXX

[Placeholder]

Tribal Consultation Process

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 SUD waiver extension request via email on September 13, 2022, and offered to schedule a conference call to discuss the proposed extension. The email correspondence was sent to Casey Cooper, CEO of the Cherokee Indian Hospital Authority, and Vickie Bradley, Secretary of EBCI Public Health and Human Services. EBCI provided comments on the SUD waiver extension request on September 23, 2022. The notice and comments appear in Attachment E. EBCI was supportive of the proposed waiver extension request and advocated for expediting implementation of the demonstration components. In addition, EBCI requested that the application clarify that SUD services, including those delivered to individuals in IMDs, are available through both the state's managed care and fee-for-service delivery systems. North Carolina is not proposing any changes to the waiver extension request in response to comments received from EBCI.

In anticipation of submitting the request to CMS, North Carolina shared an updated version of the SUD waiver extension request with EBCI on April 27, 2023. No comments were received in response to the latest communication.

North Carolina also notified the United Tribes of North Carolina of the proposed SUD waiver extension request via email on April 27, 2023, and offered to schedule a conference call to discuss the proposed extension. The email correspondence was sent to Joni Lyon and Cherie Rose at Indian Health Services. North Carolina followed up with United Tribes of North Carolina on May 18, 2023, and included Robert

Sanders at Indian Health Services. No comments were received in response to this communication. The notification appears in Attachment E.

From: Iulia Vann
To: Medicaid.NCEngagement
Cc: Victor Isler
Subject: [External] NC Section 1115 Waiver
Date: Monday, August 28, 2023 11:40:07 AM
Attachments: image455532.png
image294247.png
image427684.png
image434302.png
image423601.png
DHHS Letter - Section 1115 Waiver Advocacy.docx

Dear Deputy Secretary Ludlam,

On behalf of Guilford County, I am writing to express our strong support for the continuation of the North Carolina Section 1115 Demonstration Waiver that expands access to the full continuum of Substance Use Disorder (SUD) and to highlight the invaluable benefits it brings to our state's healthcare system and, most importantly, to the lives of our citizens.

The North Carolina Section 1115 Waiver program has played a pivotal role in enhancing the accessibility, affordability, and quality of healthcare services for our most vulnerable populations. The demonstration succeeded in advancing integrated, high-value care, improving population health, engaging and supporting providers, and establishing a more sustainable program with predictable costs. Its continued existence is vital for several reasons:

1. **Innovation and Improved Quality**: The waiver has allowed North Carolina to implement innovative healthcare models and programs, such as Medicaid Managed Care and Healthy Opportunities Pilots. These innovations have improved the coordination of care, reduced costs, and enhanced the overall quality of healthcare services for our Medicaid beneficiaries. It allowed for smarter spending by paying for value instead of volume.

2. **Economic Benefits:** The waiver has stimulated economic growth in the healthcare sector, leading to job creation and increased revenue for the state. This not only benefits our healthcare providers but also contributes to the economic stability of our communities.

3. **Addressing the Opioid Crisis**: The waiver has been instrumental in funding critical initiatives aimed at addressing the opioid epidemic in our state. The benefit package for North Carolina Medicaid recipients includes SUD treatment services, including short-term residential services provided in residential and inpatient treatment settings that qualify as an institution for mental disease (IMD). These are not otherwise matchable expenditures under section 1903 of the Social Security Act. Expanding coverage of SUD services to include residential services furnished in IMDs as part of a comprehensive strategy decreases the long-term use of opioids. It increases medication-assisted treatment (MAT) and other opioid treatment services. Expanding the coverage to include residential services furnished to short-term residents in IMDs with a SUD diagnosis as part of a comprehensive strategy improves care quality and outcomes for patients with SUD. These efforts are saving lives and helping individuals and families affected by substance use disorders to recover and rebuild their lives.

4. **Support for Rural Communities**: Rural areas in North Carolina have often faced unique healthcare challenges, including provider shortages. The waiver program has helped address these issues by increasing funding for rural healthcare providers and expanding telehealth services, ensuring that all North Carolinians have access to the care they need, regardless of where they live.

Guilford County urges the Federal government to approve the request to extend the SUD waiver for an additional five years in light of the proven successes and tangible benefits the North Carolina Section 1115 Waiver has brought to our state. It has been a beacon of hope for countless North Carolinians who would have otherwise struggled to access essential healthcare services.

I appreciate the Department's dedication to improving healthcare in our state, and continuing the waiver program is a crucial step in this ongoing journey. Please consider the voices of countless North Carolinians who rely on this program and extend its benefits to even more individuals and families in need.

Thank you for your attention to this matter and your commitment to the health and well-being of our state's residents. I am confident that continuing the North Carolina Section 1115 Demonstration Waiver will contribute to a healthier, more prosperous North Carolina.

Sincerely,

Victor Isler
Assistant County Manager for Successful People

Iulia Vann, MD, MPH
Public Health Director

Iulia Vann, MD, MPH | She, Her
Guilford County Public Health Director
Public Health

Guilford County Government
1203 Maple Street, Greensboro, NC 27405
336-641-6026 | m: 336-451-0614 | f: 336-641-6971
ivann@guilfordcountync.gov | www.guilfordcountync.gov

Attachment G

[redacted]

Subject: RE: [External] RE: Official Tribal Notification - SUD 1115 Extension
Attachments: NC SUD Extension Application_Original 02222023.docx; Tribal Response Attachment for Tribal or Indian Health Services - NC 1115 Waiver - 4.27.2023.docx

From: Williams, Cecilia <cecilia.williams@dhhs.nc.gov>
Sent: Thursday, April 27, 2023 2:45 PM
To: Tara Larson <tlarson@ccr-email.com>
Cc: Sandoe, Emma <Emma.Sandoe@dhhs.nc.gov>; Benjamin Millsap <bmillsap@ccr-email.com>; Staton, Betty J <Betty.J.Staton@dhhs.nc.gov>
Subject: RE: [External] RE: Official Tribal Notification - SUD 1115 Extension

Good afternoon, Tara!

Please see the attachments and message from the NC Team below.

Thank you for the response the team provided last September. The NC DHB team wanted to provide the latest 1115 SUD waiver version and respond to the questions:

1. We appreciate this comment and plan to include this feedback in our final submission.
2. We appreciate this comment and plan to include this feedback in our final submission.
3. We are working expeditiously to implement the 1115 waiver.

The NC DHB team plans to submit the final version of the 1115 SUD waiver in May. If there are any further comments that should be included in the package, please feel free to share.

Thanks!

Cecilia Williams
State Plan and Amendments Coordinator
NC Medicaid
Division of Health Benefits
NC Department of Health and Human Services

Find a vaccine location, get questions answered and more at YourSpotYourShot.nc.gov.

Mobile: (919) 270-2530
Office: (919) 527-7105

Cecilia.Williams@dhhs.nc.gov

820 S. Boylan Ave., McBryde Building
1950 Mail Service Center
Raleigh, NC 27699-1950

Twitter | Facebook | YouTube | LinkedIn

From: Tara Larson <tlarson@ccr-email.com>
Sent: Friday, September 23, 2022 8:01 AM
To: Staton, Betty J <Betty.J.Staton@dhhs.nc.gov>; c.cooper@cherokeehospital.org; Brad, Vick <vickbrad@ebci-nsn.gov>
Cc: Williams, Cecilia <cecilia.williams@dhhs.nc.gov>; Sandoe, Emma <Emma.Sandoe@dhhs.nc.gov>; Benjamin Millsap <bmillsap@ccr-email.com>
Subject: [External] RE: Official Tribal Notification - SUD 1115 Extension

Good morning,
Here is the SUD waiver consultation. As always, let me know if you have any questions.

Tara

From: Staton, Betty J <Betty.J.Staton@dhhs.nc.gov>
Sent: Tuesday, September 13, 2022 9:16 AM
To: c.cooper@cherokeehospital.org; Brad, Vick <vickbrad@ebci-nsn.gov>
Cc: Tara Larson <tlarson@ccr-email.com>; Williams, Cecilia <cecilia.williams@dhhs.nc.gov>; Sandoe, Emma <Emma.Sandoe@dhhs.nc.gov>
Subject: Official Tribal Notification - SUD 1115 Extension

Good morning Casey and Vickie,

I am officially notifying you of the Department of Health and Human Services, Division of Health Benefits intent to amend the following state plan services.

SUD 1115 Extension

The 2018 approval of the Medicaid 1115 SUD waiver expires in October 2023 and states are required to submit any extensions to 1115 waivers one year in advance of the 1115 expiration. As such the NC Medicaid program is requesting an extension of the 1115 SUD waiver in order to further the implementation of these policies and allow these changes to continue past the 2023 end date.

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 (Benefits and Services)

Mobile: 919-538-3215

Office: 919-527-7093

Find a vaccine location, get questions answered and more at YourSpotYourShot.nc.gov.

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: October 2023(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:
The 2018 approval of the Medicaid 1115 SUD waiver expires in October 2023 and states are required to submit any extensions to 1115 waivers one year in advance of the 1115 expiration. As such the NC Medicaid program is requesting an extension of the 1115 SUD waiver in order to further the implementation of these policies and allow these changes to continue past the 2023 end date.

The North Carolina Medicaid Reform demonstration was approved by CMS on October 19th, 2018 and includes a waiver of the institution for mental disease (IMD) exclusion for substance use disorder (SUD) treatment to expand access to the full continuum of SUD care. The current waiver is effective January 1, 2019 through October 31, 2023. The State requests to extend the SUD waiver for an additional five years and no changes are requested to the currently approved SUD demonstration.

The current demonstration benefit package for North Carolina Medicaid recipients includes OUD/SUD treatment services, including short- term residential services provided in residential and inpatient treatment settings that qualify as an Institution for Mental Diseases (IMD), which are not otherwise matchable expenditures under section 1903 of the Act. The state is eligible to receive FFP for North Carolina Medicaid recipients who are short-term residents in IMDs under the terms of this demonstration for coverage of medical assistance, including OUD/SUD benefits that would otherwise be matchable if the beneficiary were not residing in an IMD. The state is required to aim for a statewide average length of stay of 30 days in residential treatment settings, to be monitored pursuant to the SUD Monitoring Protocol as outlined in STC 19(b), to ensure short-term residential treatment stays. Under the demonstration, beneficiaries have access to high quality, evidence-based OUD and other SUD treatment services ranging from medically supervised withdrawal management to on-going chronic care for these conditions in cost-effective settings while also improving care coordination and care for comorbid physical and mental health conditions.

Indian Health Services Input on the State Plan/Waiver listed above:
EBCI and Cherokee Indian Hospital received request for consultation on 9/13/22.

Tribal Members have higher rates of misuse of substances along with suicide rates than other ethnicity groups and the population at large. We strongly support the waiver to address the IMD issue for providers offering Substance Use Services as the Tribe continues to complete full implementation of their substance use disorder continuum that includes ranges of residential supports and other periodic services. We offer the following comments:

1. Providers who offer residential care, often offer other services to support the individual post discharge and even to divert to lower levels of care if appropriate. As such, there is an assumption with the waiving of the IMD for the residential support, all other services offered by the same provider also are not impacted by IMD regulation.
2. The letter in the consultation email references LMEs which is understandable for the state as a whole since most of the recipients and providers for NC are subject to the LME relationship. That is not totally true for the federally recognized Tribal member or Indian Health Service eligible as they may opt into managed care but not mandated. Also, with the PCCM model of the EBCI Tribal Option, providers serving the individuals must be able to bill Medicaid Direct or regular FFS and not thru the LME/MCOs. For example, CIHA offers this service and is not part of the LME network, they are carved out of managed care. The operations of the IMD exclusion must be applied within the NCTracks system as well.
3. We encourage the Dept to expedite the target dates for the roll out of the SUD Waiver various services projected which are instrumental addressing the SU increase noted during COVID, the ongoing Opioid epidemic and settlement planning that is occurring.

Respectfully submitted 9/23/22 on behalf of Casey Cooper, CEO of the Cherokee Indian Hospital Authority (CIHA) and Vickie Bradley, 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:_____

[redacted]

Subject: Subject: RE: Official Notification
Attachments: NC SUD Extension Application_Original 02222023.docx; Tribal Response Attachment for Tribal or Indian Health Services - NC 1115 Waiver - Unity.docx

From: Williams, Cecilia <cecilia.williams@dhhs.nc.gov>
Sent: Thursday, May 18, 2023 7:46 AM
To: Robert.Sanders@ihs.gov
Cc: Staton, Betty J <Betty.J.Staton@dhhs.nc.gov>; Sandoe, Emma <Emma.Sandoe@dhhs.nc.gov>; Lyon, Joni (IHS/NAS/UHC) <Joni.Lyon@ihs.gov>; Rose, Cherie (IHS/NAS/UHC) <Cherie.Rose@ihs.gov>
Subject: RE: Official Notification

Good morning, Robert!

Following up on the notification sent on 04/27/2023. Please feel free to contact the department if there are questions or concerns. Documents have been reattached for quick reference.

Thanks!

From: Williams, Cecilia
Sent: Thursday, April 27, 2023 2:50 PM
To: Lyon, Joni (IHS/NAS/UHC) <Joni.Lyon@ihs.gov>; Rose, Cherie (IHS/NAS/UHC) <Cherie.Rose@ihs.gov>
Cc: Staton, Betty J <Betty.J.Staton@dhhs.nc.gov>; Sandoe, Emma <Emma.Sandoe@dhhs.nc.gov>; Benjamin Millsap <bmillsap@ccr-email.com>
Subject: Official Notification

Good afternoon, Joni and Cherie!

I am officially notifying you of the Department of Health and Human Services, Division of Health Benefits intent to amend the following state plan services.

SUD 1115 Extension

The 2018 approval of the Medicaid 1115 SUD waiver expires in October 2023 and states are required to submit any extensions to 1115 waivers one year in advance of the 1115 expiration. As such the NC Medicaid program is requesting an extension of the 1115 SUD waiver to further the implementation of these policies and allow these changes to continue past the 2023 end date. The North Carolina Medicaid Reform demonstration was approved by CMS on October 19th, 2018, and includes a waiver of the institution for mental disease (IMD) exclusion for substance use disorder (SUD) treatment to expand access to the full continuum of SUD care. The current waiver is effective January 1, 2019, through October 31, 2023. The State requests to extend the SUD waiver for an additional five years and no changes are requested to the currently approved SUD demonstration. Please find the attached for review and feedback.

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.

Thanks!

Cecilia Williams
State Plan and Amendments Coordinator
NC Medicaid (Benefits and Services)

Mobile: (919) 270-2530
Office: (919) 527-7105

Find a vaccine location, get questions answered and more at YourSpotYourShot.nc.gov.
