DEPARTMENT OF HEALTH & HUMAN SERVICES
Centers for Medicare & Medicaid Services
7500 Security Boulevard, Mail Stop S2-25-26
Baltimore, Maryland 21244-1850

State Demonstrations Group

May 8, 2025

Henry Lipman
State Medicaid Director
Office of Medicaid Business and Policy
New Hampshire Department of Health and Human Services
129 Pleasant Street
Concord, NH 03301-6521

Dear Director Lipman:

The Centers for Medicare & Medicaid Services (CMS) completed its review of the Summative Evaluation Report, which is required by the Special Terms and Conditions (STCs), specifically STC #47 "Summative Evaluation Report" of New Hampshire's section 1115 demonstration, "Substance Use Disorder, Serious Mental Illness, and Serious Emotional Disturbance, Treatment Recovery and Access" section 1115 demonstration (Project Number 11-W-00321/1). The demonstration was approved on July 10, 2018 and effective through June 30, 2023, and was temporarily extended through July 31, 2024. This Summative Evaluation Report covers the period from July 2018 through June 2023. CMS determined that the Evaluation Report, submitted on December 6, 2024, is in alignment with the CMS-approved Evaluation Design and the requirements set forth in the STCs, and therefore, approves the state's Summative Evaluation Report.

The Summative Evaluation Report covers three policy components which were implemented in different timeframes. The Substance Use Disorder (SUD) component of the demonstration, the first to be implemented, was evaluated over the full period from July 2018 through June 2023. During this time, Institutions for Mental Disease (IMD) service utilization increased, while the rate of emergency department (ED) visits for SUD declined, as did the rate of ED visits for the adult IMD population. Furthermore, the percentage of beneficiaries utilizing an SUD treatment following IMD discharge increased. Qualitatively, providers felt that beneficiaries had satisfactory access to almost all levels of care, with the exception of medically managed intensive inpatient services. The Serious Mental Illness (SMI) component of the demonstration was implemented in July 2022, and was evaluated between then and June 2023. Though preliminary, trends indicate that the demonstration is making progress on key metrics, evidenced by declines in the rates of ED visits post-discharge compared prior to IMD admission, as well as in the rate of readmission to IMDs. In April of 2023, the state also implemented a denture benefit for beneficiaries in nursing homes; CMS looks forward to future evaluation findings on this

piece, as well as further findings relating to the demonstration's progress on the SUD and SMI components.

In accordance with STC #50, the approved Evaluation Report may now be posted to the state's Medicaid website within 30 days. CMS will also post the Summative Evaluation Report on Medicaid.gov.

We look forward to our continued partnership on the New Hampshire Substance Use Disorder, Serious Mental Illness, and Serious Emotional Disturbance, Treatment Recovery and Access section 1115 demonstration. If you have any questions, please contact your CMS demonstration team.

Sincerely,

DANIELLE DALY -S

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Date: 2025.05.08 10:57:14 -04'00'

Danielle Daly
Director
Division of Demonstration Monitoring and Evaluation

cc: Joyce Butterworth, State Monitoring Lead, CMS Medicaid and CHIP Operations Group

PHPG

THE PACIFIC HEALTH POLICY GROUP

State of New Hampshire
Substance Use Disorder, Serious Mental Illness and Serious Emotional Disturbance Treatment and Recovery Access Section 1115 Medicaid Demonstration 11-W-00321/1

Draft Summative Evaluation Report
(July 1, 2018 – June 30, 2023)

Submitted to CMS December 2024

Table of Contents

List of Common Abbreviations & Acronyms

ANOVA	Analysis of Variance
AOD	Alcohol and Other Drug
ASAM	American Society of Addiction Medicine
BN	Budget Neutrality
CMHC	Community Mental Health Center
CMS	Centers for Medicare and Medicaid Services
CY	Calendar Year
DBH	Division of Behavioral Health
DHHS	New Hampshire Department of Health and Human Services
DO	Dental Organization
DSRIP	Delivery System Reform Incentive Program
DY	Demonstration Year
ED	Emergency Department
FFS	Fee-for-Service
HCPCS	Healthcare Common Procedure Coding System
HEDIS	Healthcare Effectiveness Data and Information Set
IDN	Integrated Delivery Network
IET	Initiation and Engagement in Treatment
IMD	Institution for Mental Diseases
IP	Inpatient
LTC	Long Term Care
MAT	Medication Assisted Treatment
MCO	Managed Care Organization
MMIS	Medicaid Management Information System
NCQA	National Committee for Quality Assurance
NF	Nursing Facility
NPI	National Provider Identifier
OUD	Opioid Use Disorder
PAP	Premium Assistance Program
PHE	Public Health Emergency
PHPG	Pacific Health Policy Group
PMPM	Per Member Per Month
SAMHSA	Substance Abuse and Mental Health Services Administration
SED	Serious Emotional Disturbance
SFY	State Fiscal Year
SMI	Serious Mental Illness
STC	Special Terms and Conditions
SUD	Substance Use Disorder

1. EXECUTIVE SUMMARY

CMS approved the New Hampshire Substance Abuse Treatment and Recovery Access Section 1115 Demonstration on July 10, 2018, for a five-year term ending June 30, 2023. The Demonstration authorized New Hampshire to provide high-quality, clinically appropriate SUD treatment services for short-term stays in residential and inpatient treatment settings that qualify as Institutions for Mental Disease (IMDs). On June 16, 2021, CMS approved an amendment to update the Demonstration's budget neutrality terms and conditions.

On June 2, 2022, CMS approved an amendment to authorize Medicaid payments for psychiatric treatment in residential programs designated as IMDs for adults with a serious mental illness (SMI) and children with a serious emotional disturbance (SED) who receive services in Qualified Residential Treatment Programs (QRTPs).

On March 17, 2023, CMS approved a third amendment to authorize Medicaid payments for removable prosthodontic (dentures) coverage for adults who reside in nursing facilities. This coverage was effective April 1, 2023 and for the remainder of the Demonstration period ending June 30, 2023. Clarifying, non-substantive revisions were approved on April 14, 2023.

Effective July 1, 2023, the Demonstration was extended for one year while the State and CMS negotiated the terms of a five-year renewal agreement. This summative evaluation report presents findings for the SUD, SMI and nursing facility Dentures benefit for the following Demonstration periods:

Demonstration Population	Evaluation Period
SUD IMD Demonstration	7/1/2018 – 6/30/2023
SMI/SED IMD Amendment	7/1/2022 – 6/30/2023
Nursing Facility Dentures Benefit	4/1/2023 – 3/30/2024*

*The effective date of the dentures was three months prior to the end of the evaluation period. State elected to include one year of data (through 3/30/2024) to collect preliminary findings.

A summary of findings for each population is provided below.

SUD IMD Findings

The SUD Demonstration was developed to encourage growth in SUD residential treatment capacity (IMD and non-IMD), to build on existing efforts to improve models of care that focus on supporting enrollees in their homes and communities, and to strengthen the New Hampshire continuum of SUD services.

The New Hampshire Department of Health and Human Services (DHHS) identified three overarching goals for the SUD Demonstration:

1. Improve access to OUD and other SUD services.
2. Improve the quality of the SUD treatment delivery system to provide high-quality coordinated and comprehensive OUD/SUD treatment for Medicaid enrollees.
3. Maintain budget neutrality.

Evaluation questions, hypotheses and performance measures are associated with each of the overarching goals of Demonstration. The evaluation design examines service utilization (Emergency Department [ED] and IMD) and engagement in treatment for Medicaid members with an SUD.

In addition, adults receiving treatment in an IMD were identified to provide a focus on the utilization trends and outcomes for those members receiving IMD services specifically authorized under the Demonstration. The Evaluation Design approved May 22, 2019 for Demonstration years one through five (July 1, 2018 – June 30, 2023), with an established baseline period of July 1, 2017 - June 30, 2018.

Many of the New Hampshire residential SUD IMD treatment facilities were existing statewide providers at the outset of the Demonstration. Most residential SUD treatment facilities had been delivering care to Medicaid enrollees prior to the implementation of the SUD Demonstration. Therefore, these findings are longitudinal and should not be interpreted as causal evidence for the impacts of the Demonstration.

Overall, the New Hampshire SUD Treatment and Recovery Access Demonstration is associated with improved access to care for those beneficiaries with intensive SUD treatment needs. In all years, ED use declined in the 90 days following IMD discharge as compared to the 90-day period prior to admissions. IMD services may contribute to stability and continuity of care post discharge. This is further evidenced by the year over year increase in the percentage of members who have a claim for SUD treatment in the 45, 90, 135 and 180 days following IMD discharge.

Results of the Demonstration indicate that SUD treatment utilization has increased, and overall use of ED has declined. However, readmission rates to IMD facilities increased over the baseline in each year, apart from Demonstration Year (DY) 3.

With the onset of the Public Health Emergency (PHE) in the second year of the Demonstration, and its disruption to patterns of care, it is difficult to draw strong conclusions regarding the Demonstration. The table starting on the next page presents an overall summary of the SUD-related evaluation findings.

Hypotheses	Measures	Findings
Evaluation Question 1: What are the impacts of the Demonstration on access to SUD residential treatment services for Demonstration enrollees?		
A. Adult enrollees will have better access to residential SUD treatment services	1. Percent of enrollees Ages 12-64 with an SUD claim for treatment in an IMD with a discharge date during the year	Statistically significant increases in access to IMD services were seen in each year of the Demonstration
	2. The total number of licensed beds for Medicaid-enrolled SUD residential treatment providers each year	Licensed bed capacity for Medicaid enrolled residential treatment facilities increased from 554 beds at baseline to 583 beds in DY5
	3. Network availability (appointments, wait times, acceptance of Medicaid)	Most wait times were between 0-24 hours. Access to all levels of care was perceived as good, with providers suggesting access to withdrawal management services could be improved
Evaluation Question 2: What are the impacts of the Demonstration on quality of care for Medicaid enrollees with an SUD diagnosis?		
A. Enrollees will have fewer ED visits for SUD	1. The total number of ED visits for SUD per 1,000 Demonstration enrollees	ED use declined versus baseline for all age groups and for total ED visits and SUD-related ED visits
B. Enrollees will have fewer total ED visits	1. The total number of ED visits for any reason per 1,000 Demonstration enrollees	
C. Enrollees will have fewer ED visits post-discharge from an SUD IMD	1. ED use 90 days prior to IMD admission and 90 days post discharge	Declines in ED visits in the 90 days following IMD discharge as compared to the 90 days prior to admission were evident in each year and statistically significant in DY2-5
D. Enrollees will have improved rates of initiation and engagement in treatment	1. Percentage of enrollees who initiated treatment within 14 days of diagnosis	There was a statistically significant increase in DY1 and DY3, before a statistically significant decline in DY5
	2. Percentage of enrollees who engage in treatment within 34 days of initiation	There was a statistically significant increase in DY3-5
E. Enrollees will have lower IMD readmission rates	1. The percentage of IMD stays followed by a readmission within 30 days	Readmission rates increased over baseline in most years

Hypotheses	Measures	Findings
F. Enrollees will have improved rates of treatment retention	1. The percentage of enrollees who had SUD treatment visits 45, 90, 135, and 180 days following IMD discharge	There were statistically significant increases over baseline in each year of the Demonstration
G. Medicaid IMD Providers will report consistency in DHHS program design and discharge planning policies	1. Provider perception of administrative burden and discharge planning policies	Providers reported alignment of rules and requirements across State agencies and agreed (or were neutral) regarding discharge planning related rule changes. Providers did not report strong disagreement with or opposition to the enhanced rules
Evaluation Question 3: Will the Demonstration maintain or reduce spending in comparison to what would have been spent absent the demonstration?		
A. The Demonstration will be cost neutral	1. PMPM trends and per capita costs by Medicaid Eligibility Groups identified in the STCs	At the end of DY5, the Demonstration showed a cumulative surplus

SMI IMD Findings

The SMI-IMD authority was sought as part of a larger system integration and behavioral health transformation project envisioned in the State's 10-Year Mental Health Plan. Broad stakeholder input and ongoing monitoring of the 10-Year Mental Health Plan created a pre-existing framework for supporting the SMI-IMD Demonstration. This includes ensuring access to the full continuum of psychiatric care, enhanced community mental health center (CMHC) capacity, attention to early intervention and centralizing and coordination of crisis stabilization services statewide.

The Demonstration was created to improve access to care, reduce psychiatric boarding in the ED and support integration of mental and physical health care. The evaluation examined eight research questions related to members receiving IMD services for an SMI, including utilization of the ED, IMD readmissions and access to ambulatory and preventive care. The evaluation design was approved in June of 2023 to provide preliminary information about the first year of the SMI-IMD amendment.

Both of New Hampshire's psychiatric treatment facilities were existing statewide providers at the outset of the Demonstration and were delivering care to Medicaid enrollees prior to the implementation of the SMI amendment. The SMI-IMD authority was authorized for the final year of the Demonstration. Therefore, these findings are preliminary and should not be interpreted as causal evidence for the impacts of the Demonstration.

Preliminary results are promising and suggest that embedding the Demonstration in the larger context of community mental health planning is associated with fewer ED visits post IMD-discharge, low IMD readmission rates, and access to primary care and other community services. Psychiatric boarding in the ED increased over the baseline period; however, the documented increase coincided with improvements and standardization of data collection in the first year of the SMI-IMD amendment.

Evaluation of the Demonstration for the renewal period (beginning July 2024) will offer an opportunity to determine if the preliminary successes are maintained and results improve under the renewed Demonstration.

A summary of findings by research question and hypothesis is presented starting on the following page.

Hypotheses	Measures	Findings
Evaluation Question 1: Does the SMI amendment reduce ED utilization for enrollees who receive psychiatric treatment in a NH IMD?		
The SMI amendment will contain ED utilization for mental health for enrollees who receive psychiatric treatment in a NH IMD	Rate of ED utilization for mental health diagnoses per 1,000 member months pre/post psychiatric IMD treatment for members Ages 21-64	There was a statistically significant decline in ED use in the 90 days post IMD discharge in both baseline and year one of the SMI amendment
Evaluation Question 2: Does the SMI amendment reduce length of stay in the ED while awaiting mental health treatment?		
The SMI amendment will contain the length of stay in the ED for enrollees who are awaiting treatment services in a NH IMD	Average number of days in the ED for members Ages 21-64 who are admitted to an IMD from the ED	ED wait times increased in the first year of the amendment. However, this coincided with the implementation of a more standardized electronic tracking system. In 2023, the State implemented an initiative, Mission Zero, to address psychiatric boarding in the ED
Evaluation Question 3. Does the SMI amendment reduce preventable readmissions to NH IMDs?		
The SMI amendment will contain preventable readmission to NH IMDs	Percent of members Ages 21-64 with 30-day readmissions to an inpatient psychiatric hospital following IMD discharge	Readmissions declined from over ten percent at baseline to just over four percent in year two
	Percent of members Ages 21-64 with IMD readmissions within 30 days who did not receive follow-up care in the community post discharge	Fewer than one percent of readmissions lacked mental health follow-up prior to readmission
Evaluation Question 4: Does the SMI amendment improve the availability of crisis stabilization services across the State?		
The SMI amendment will maintain the availability of crisis stabilization services statewide	Rapid Response Call Center call volume and referrals for mobile dispatch	Call center volume increased in the first year of the Demonstration. The number of calls referred to mobile crisis dispatch also increased. Most calls referred were for adults
	Percent of regions with mobile crisis response teams	Teams were established in all regions by the end of year one
	Percent of regions with transitional bed capacity	At the end of year one there were 42 transitional beds supporting individuals with mental health challenges; 15 beds were dedicated to ED/Hospital diversion and steps downs

Hypotheses	Measures	Findings
Evaluation Question 5: Does the SMI amendment improve access to community-based care, including the integration of primary and behavioral health care?		
The SMI amendment will maintain access to community-based care, for members who received NH psychiatric IMD treatment services	Percent of members Ages 21-64 with a preventive or ambulatory health service post IMD discharge	The percentage of members with a preventive or ambulatory care visit in the first six months post discharge increased from 72 percent at baseline to nearly 78 percent in year one
The SMI amendment will maintain access to mental health services	Percent of adult survey respondents who report they were able meet with a PCP to discuss physical well-being	Eighty-six percent of respondents reported they were able to meet with their PCP in the first year of the amendment
	Percent of adult survey respondents who report staff were able to see them as often as necessary	Eighty percent of respondents reported they could see staff as often as they felt necessary in the first year of the amendment
	Percent of adult survey respondents who report staff return calls within 24 hours	In the first year of the amendment, 71 percent of respondents reported staff returned calls within 24-hours
	Percent of adult survey respondents who report services were available at times that were convenient	In the first year of the amendment, 81 percent of respondents reported services were available at convenient times
	Percent of adult survey respondents who report they were able to get all the services they needed	In the first year of the amendment, 75 percent of respondents reported that were able to get all services they felt were needed
	Percent of adult survey respondents who report they were able to see a psychiatrist when they wanted	In the first year of the amendment, 53 percent of respondents reported that they were able to see a psychiatrist when they wanted

Hypotheses	Measures	Findings
Evaluation Question 6: Does the SMI amendment improve care coordination following discharge from the IMD setting?		
The SMI amendment will maintain care coordination following discharge from a NH IMD	Percent of members Ages 21-64 who had follow-up within 7 days after hospitalization for MH	In the first year of the amendment just over 29 percent of discharges were followed up within 7 days of discharge compared to 28 percent at baseline; and nearly 39 percent had follow-up within 30 days, compared to 36 percent at baseline Discharges with follow-up in each of the six months post discharge was 17 percent in both years
	Percent of members Ages 21-64 who had follow-up within 30 days after hospitalization for MH	
	Percent of members Ages 21-64 who received mental health services each month in the six months following IMD discharge	
Evaluation Question 7: How does the cost of care change over time?		
Exploratory Expenditure Analysis	Total Per member per month (PMPM) expenditures for enrollees who received IMD services, including MH-related PMPM with MH-IMD and breakouts	There was a statistically significant increase in the total PMPM and the MH-related portion of total expenditures. Medicaid IMD claiming under the Demonstration was largely responsible for the increase
Evaluation Question 8: What are the cost drivers?		
Exploratory Expenditure Analysis	PMPM expenditures for outpatient care (non-ED), pharmacy, ED, Inpatient, and Long-Term Care	There was no statistically significant change over baseline in expenditures in any category of service examined

Removable Prosthodontics (Dentures) Findings

During the first twelve months of coverage for nursing facility residents, 34 members received new (full or partial), or denture repairs. There were no statistically significant differences between baseline and the first year of coverage for nursing facility residents in measures of dental infections, dental-related ED visits (non-traumatic), and hospitalization for aspiration pneumonia. Results are summarized in the table below.

	Results			
	Baseline		2023-24	
Measure	Count	Rate	Count	Rate
The percentage of Medicaid members Ages 21 and older who reside in nursing facilities and receive dentures	-	-	34	0.64%
The rate of dental infections per 1,000 member months for nursing facility residents	270	5.73	307	6.59
The rate of dental-related ED visits (non-traumatic) per 1,000 member months for nursing facility residents	10	0.21	11	0.24
The rate of inpatient admissions for aspiration pneumonia per 1,000 member months for nursing facility residents	357	7.58	253	5.43

The dentures benefit was approved on April 1, 2023 and operational policies still were under development at the time of the evaluation. As more outreach and education with members and providers is conducted by the managed care Dental Organization (DO), the rate of member engagement in prosthodontic services may increase.

2. GENERAL BACKGROUND INFORMATION

The New Hampshire Substance Abuse Treatment and Recovery Access Section 1115 Demonstration was approved by The Centers for Medicare & Medicaid Services (CMS) on July 10, 2018, for a five-year term ending June 30, 2023. CMS concurrently approved the State's Substance Use Disorder (SUD) Implementation and Health IT Plans. Clarifying, non-substantive revisions were approved on August 3, 2018. On June 16, 2021, CMS approved an amendment to update the Demonstration's budget neutrality terms and conditions. CMS agreed to prospectively adjust the State's hypothetical budget neutrality limits to reflect actual expenditures more accurately. Additionally, CMS updated Sections III, XI, and XII of the Special Terms and Conditions (STCs) to align with recent CMS requirements for 1115(a) Demonstration approvals.

On June 2, 2022, CMS approved an amendment to authorize Medicaid payments for psychiatric treatment in residential programs designated as Institutions for Mental Disease (IMDs) for adults with a serious mental illness (SMI) and children with a serious emotional disturbance (SED) who receive services in Qualified Residential Treatment Programs (QRTP). The amendment also concurrently approved the State's SMI/SED Implementation and Health IT plans. As part of the final amendment the Demonstration was renamed The New Hampshire Substance Abuse, Serious Mental Illness and Serious Emotional Disturbance Treatment and Recovery Access Section 1115 Demonstration.

On March 17, 2023, CMS approved a third amendment to authorize Medicaid payments for removable prosthodontic (dentures) coverage for adults who reside in nursing facilities. This coverage was effective for the remainder of the Demonstration period April 1, 2023 - June 30, 2023. Clarifying, non-substantive revisions were approved on April 14, 2023.

Subsequent to the dentures amendment, CMS extended the current Demonstration for up to one year (with an expiration date of June 30, 2024), while the State and CMS continued discussions related to a five-year Demonstration renewal.

This summative evaluation report presents findings for the SUD, SMI and nursing facility Dentures benefit for the following periods:

Demonstration Population	Evaluation Period
SUD IMD Demonstration (Five Years)	7/1/2018 – 6/30/2023
SMI/SED IMD Amendment (One Year)	7/1/2022 – 6/30/2023
Nursing Facility Dentures Benefit (One Year)	4/1/2023 – 3/30/2024*

*The effective date of the dentures was three months prior to the end of the evaluation period. The State elected to include one year of data (through 3/30/2024) to collect preliminary findings

Evaluation design addendums were approved by CMS addressing the unique considerations for each population. The remainder of this report is organized in the following manner:

Evaluation Components and Findings	Sections	Page Numbers
SUD Demonstration	Chapters 3 – 7, Attachments 1-2	15 -79
SMI/SED Amendment	Chapters 8 – 12, Attachments 3	80 - 132
Nursing Facility Dentures Benefit	Chapters 13 – 17, Attachments 4-5	133 - 141

3. SUD IMD DEMONSTRATION BACKGROUND

At the time of the State's application to the Centers for Medicare and Medicaid Services (CMS) for its SUD Demonstration, New Hampshire was experiencing one of the most significant public health crises in its history. New Hampshire had the third highest overdose death rate in the country (39 per 100,000 residents).

The number of overdose deaths had increased dramatically, from 192 in 2013 to 488 in 2017. Between 2013 and 2017, the number of times that emergency medical personnel administered Narcan more than doubled, from 1,039 to 2,774, and emergency department visits rose by 9.8 percent from 2016 to 2017. The escalation of opiate use and opioid misuse impacted individuals, families, and communities throughout the State.

The scope of the State's crisis extended beyond individuals with SUD to include family members. New Hampshire saw a significant rise in neonatal abstinence syndrome, with the rate reaching 24.4 per 1,000 live births in 2015. Babies born with neonatal abstinence syndrome require more complex medical care, with average hospital stays of twelve days.

The incidence of neonatal abstinence syndrome was higher among Medicaid enrollees than other groups. In 2013, Medicaid covered 78 percent of neonatal abstinence syndrome births. In 2015, the DHHS Division for Children, Youth, and Families reported that it received 504 reports of children born drug-exposed, representing an increase of 37 percent from 2014.

In addition to the high rate of opioid use among the adult population, the State ranked among the top five for binge drinking among persons ages 12 to 20 years. According to the 2015-2016 National Survey on Drug Use and Health, illicit drug use among individuals ages 12 to 17 in New Hampshire was higher than in the broader New England region and the United States. In 2015-2016, 8.98 percent (95 percent confidence interval: 7.32-10.96) of New Hampshire's adolescents (ages 12 to 17) reported illicit drug use in the past month.

In response to the opioid crisis, New Hampshire invested more than $30 million in the years prior to its SUD Demonstration application to build service capacity and support a full continuum of care to treat individuals with SUD. These investments included those that maintain existing prevention, treatment, and recovery capacity, while also expanding access to Medication Assisted Treatment (MAT), peer recovery support services, direct prevention services, and coordination of care through a statewide crisis hotline.

The State also established nine regional treatment "Hubs" to serve as 24/7 access points to addiction treatment. The Hubs provide screening, evaluation, care management, social service referral and addiction treatment services across the State.

These investments were made in support of a robust, resiliency- and recovery-oriented system of care for individuals with SUD. Although capacity for services increased, the limited availability of treatment in all settings, particularly residential treatment, was challenging.

The State implemented the New Hampshire Substance Use Disorder Treatment and Recovery Access Demonstration (SUD Demonstration) to address critical unmet needs for residential SUD treatment; improve quality of SUD treatment; and maintain or reduce cost of care for Medicaid enrollees with an SUD.

SUD DEMONSTRATION APPROVAL

CMS approved the New Hampshire Substance Abuse Treatment and Recovery Access Section 1115 Demonstration on July 10, 2018, for a five-year term ending June 30, 2023. Clarifying, non-substantive revisions were approved on August 3, 2018. On June 16, 2021, CMS approved an amendment to update the Demonstration's budget neutrality terms and conditions. The Demonstration's Evaluation Design was approved by CMS on May 22, 2019.

SUD DEMONSTRATION DESCRIPTION AND GOALS

New Hampshire's Demonstration is designed to maintain critical access to opioid use disorder (OUD) and other (SUD) treatment services and continue delivery system improvements to support coordinated and comprehensive OUD/SUD treatment for Medicaid enrollees. The Demonstration authorizes New Hampshire to provide high-quality, clinically appropriate SUD treatment services for short-term stays in residential and inpatient treatment settings that qualify as Institutions for Mental Disease (IMDs).

The Demonstration also was designed to encourage growth in SUD residential treatment capacity (IMD and non-IMD) and build on existing efforts to improve models of care focused on supporting enrollees in their homes and communities and strengthen the New Hampshire continuum of SUD services.

New Hampshire's statutes and rules require that treatment decisions and delivery system innovations be based on the use of the American Society of Addiction Medicine (ASAM) criteria and other nationally recognized assessment and placement tools that reflect evidence-based clinical treatment guidelines making the CMS SUD IMD Demonstration requirements a good fit for the State. DHHS identified three overarching goals of the Demonstration:

1. To improve access to OUD and other SUD services.
2. To improve the quality of the SUD treatment delivery system to provide high-quality coordinated and comprehensive OUD/SUD treatment for Medicaid enrollees.
3. To maintain budget neutrality.

The CMS-defined goals for all Section 1115 SUD Demonstrations include:

- Increased rates of identification, initiation, and engagement in treatment.
- Increased adherence to, and retention in, treatment.
- Reduced overdose deaths, particularly those due to opioids.
- Reduced utilization of emergency department and inpatient hospital settings for treatment where the utilization is preventable or medically inappropriate, through improved access to other continuum of care services.
- Reduced readmissions to the same or higher level of care, where the readmission is preventable or medically inappropriate.
- Improved access to care for physical health conditions among beneficiaries.

SUD DEMONSTRATION IMPLEMENTATION

The Demonstration was effective as of July 10, 2018. At its outset, New Hampshire's existing service array, program requirements, and delivery system were in alignment with many of the milestones identified by CMS for SUD IMD Section 1115 Demonstrations. DHHS also anticipated enhancements to the State oversight structure and in residential capacity for youth. An overview of implementation activities is provided below.

REGULATORY ENHANCEMENTS

In the first year of the Demonstration, the New Hampshire Medicaid program's SUD coverage rule and Bureau of Health Facilities' licensing rule for residential SUD treatment facilities were revised and updated to:

- Align the rules with each other and support ASAM, Substance Abuse and Mental Health Services Agency (SAMHSA) and other evidence-based practices, including explicit ASAM level of care staffing and service expectations.
- Update the New Hampshire Health Facilities Licensing Rule for SUD providers to include specific staffing, physical space, program design, and compliance requirements, including annual compliance audits.
- Explicitly require MAT access for enrollees served in residential SUD treatment facilities.
- Expand requirements regarding best practices in discharge planning to all SUD treatment providers.

ADOLESCENT RESIDENTIAL CAPACITY

Under the SUD Demonstration, the State planned capacity at the Sununu Youth Services Center for a 36-bed residential SUD treatment facility available for adolescents under 18 years old. Services included both low- and medium-intensity residential treatment for adolescents ages 12 to 18 years who qualify for such levels of care using the ASAM patient placement criteria.

In June of 2019 (the end of DY1), the Legislature adopted Senate Bill 14-FN, an act relating to child welfare. This legislation supported enhancements in the children's behavioral health system, which included: expanding Case Management Entity requirements to create a new system of transitional support and oversight; developing a single statewide behavioral health assessment tool; redesigning and contracting for the youth residential treatment array; expanding the eligible population for wraparound services; establishing children's mobile crisis services; developing a plan to address infant mental health; creating a parent information clearinghouse and online treatment and support locator; implementing the Prevention/First Episode Psychosis program; and providing Evidenced-Based Practice Technical Assistance and training support.

In addition, the federal Families First Prevention Services Act made residential treatment options - historically available to youth in State's custody or through school districts - increasingly accessible to all youth who require that level of care, without the necessity of entering into the child welfare system. This work involves a large-scale transformation of New Hampshire's residential treatment system with the goal of providing effective short-term treatment and stabilization, while diverting as many youths as possible from State custody, hospital emergency departments, and inpatient psychiatric hospitalizations.

In June of 2020, the adolescent SUD treatment program at the Sununu Youth Services Center closed when DHHS terminated its contract with the vendor. New levels of integrated behavioral health care have been developed to ensure in-state resources for children and youth with a wide range of stabilization and treatment needs. The expanded array outlines five levels of care, with level one being the least intensive, with more community-based and supportive living options and five being the most intensive (e.g., accredited Psychiatric Residential Treatment Facility).

DHHS has begun work to clearly articulate the desired future state of residential treatment. As discussed in more detail in Section 5, the closure of the Sununu adolescent treatment program resulted in an insufficient population size related to IMD services.

BUDGET NEUTRALITY

During implementation, DHHS identified utilization trends and other factors that were adversely impacting the original Budget Neutrality (BN) calculation. In addition, provider rate increases occurring each year following approval and other payment changes impacted BN.

DHHS provided CMS with an impact analysis completed by the State's actuary. Impacts were analyzed for: actual enrollment experience; retroactive coverage; provider rate changes; and changes in the Sununu Youth Center timelines.

On August 21, 2020, DHHS submitted an amendment request to CMS as part of its Corrective Action Plan to adjust the BN limits. The request identified adjustments not originally anticipated during Demonstration development and was approved by CMS as previously noted.

SUD DEMONSTRATION POPULATION

Medicaid beneficiaries with an SUD requiring residential treatment, based on ASAM placement criteria, are eligible for the Demonstration.

4. SUD-SPECIFIC EVALUATION QUESTIONS AND HYPOTHESES

Section 4 describes how the State's Demonstration goals are translated into quantifiable targets for improvement, including the CMS-approved driver diagrams that depict the rationale behind Demonstration activities and intended outcomes. This section also includes descriptions of the State's evaluation questions and hypotheses, as well as the alignment of evaluation questions and hypotheses with the goals of the Demonstration. A discussion of how the Demonstration promotes the objectives of Title XIX also is provided.

QUANTIFIABLE TARGETS AND SUD DRIVER DIAGRAMS

The New Hampshire SUD Demonstration is specifically designed to maintain and enhance access to treatment for enrollees with an SUD, support high quality care, and to maintain budget neutrality. The evaluation is designed to examine the Demonstration's impact in each of these areas.

It is hypothesized that access to residential care will improve for both adults and adolescents under the Demonstration. The SUD Demonstration is expected to maintain and encourage growth in adult capacity.

It also is hypothesized that the quality of care will improve under the Demonstration as evidenced by:

- fewer Emergency Department admissions, both in total use and for SUD related visits;
- improved rates of initiation and engagement in alcohol and other drug dependence treatment; lower hospital and IMD readmission rates; and
- improved rates of treatment retention.

New Hampshire's residential SUD treatment system is a critical component of the overall ASAM level of care framework in the State. Maintaining and enhancing capacity under the Demonstration is expected to support treatment success resulting in improved health outcomes.

Residential providers also are expected to assess the comprehensive needs of participants and use the results in the development of high-quality discharge plans for enrollees. As such, residential SUD treatment providers are responsible for supporting enrollee referral and engagement with community-based SUD treatment providers, including:

- Medication Assisted Treatment;
- PCP engagement;
- Recovery supports (e.g., Alcoholics/Narcotics Anonymous and peer recovery support specialist); and
- relapse prevention plans.

It is expected that maintaining and enhancing access to residential SUD treatment under this Demonstration will support high quality care and improve health outcomes for enrollees.

To further enhance the quality of residential treatment, the Demonstration's SUD Implementation Plan (STC Attachment D) contained revisions to New Hampshire rules to clarify SUD provider program expectations and licensing requirements, including additional specificity in the use of ASAM criteria and best practices in discharge planning across all levels of SUD treatment. Rule changes included:

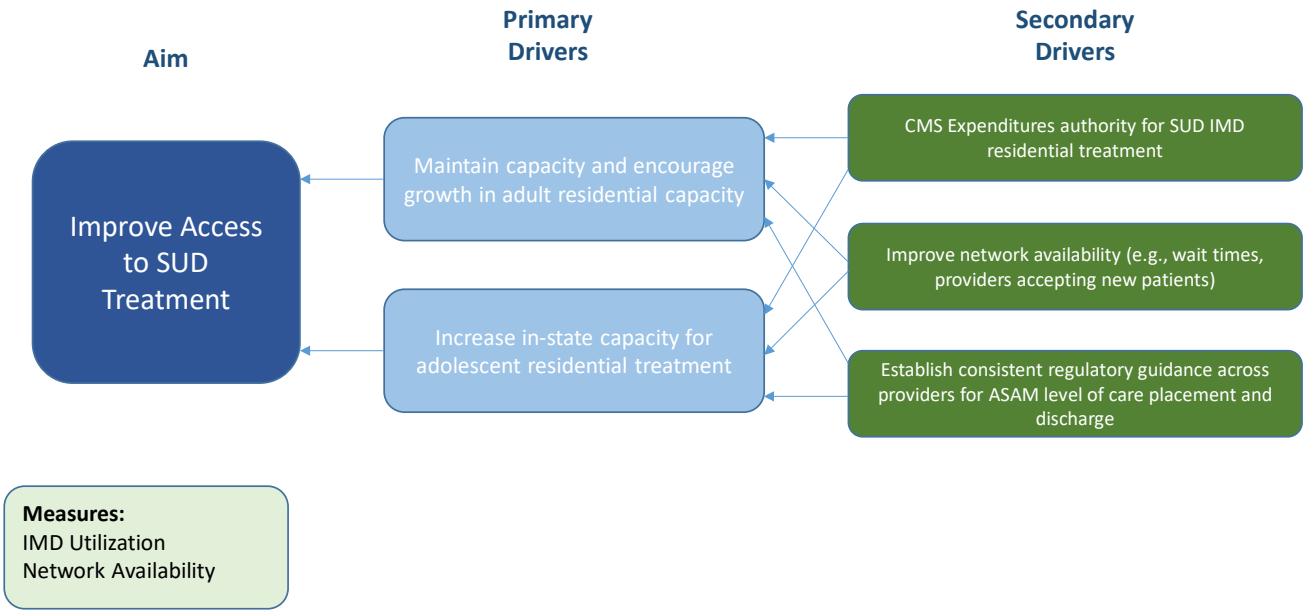
- Medicaid Substance Use Disorder Treatment and Recovery Support Services rule (He-W 513), effective November 15, 2018.
- Bureau of Health Facility SUD Residential Provider licensing rule, effective November 1, 2018.
- BDAS SUD Treatment Provider rule (to be completed by the close of the Demonstration).

The impact of rule changes was examined through structured provider interviews and surveys in the final year of the Demonstration.

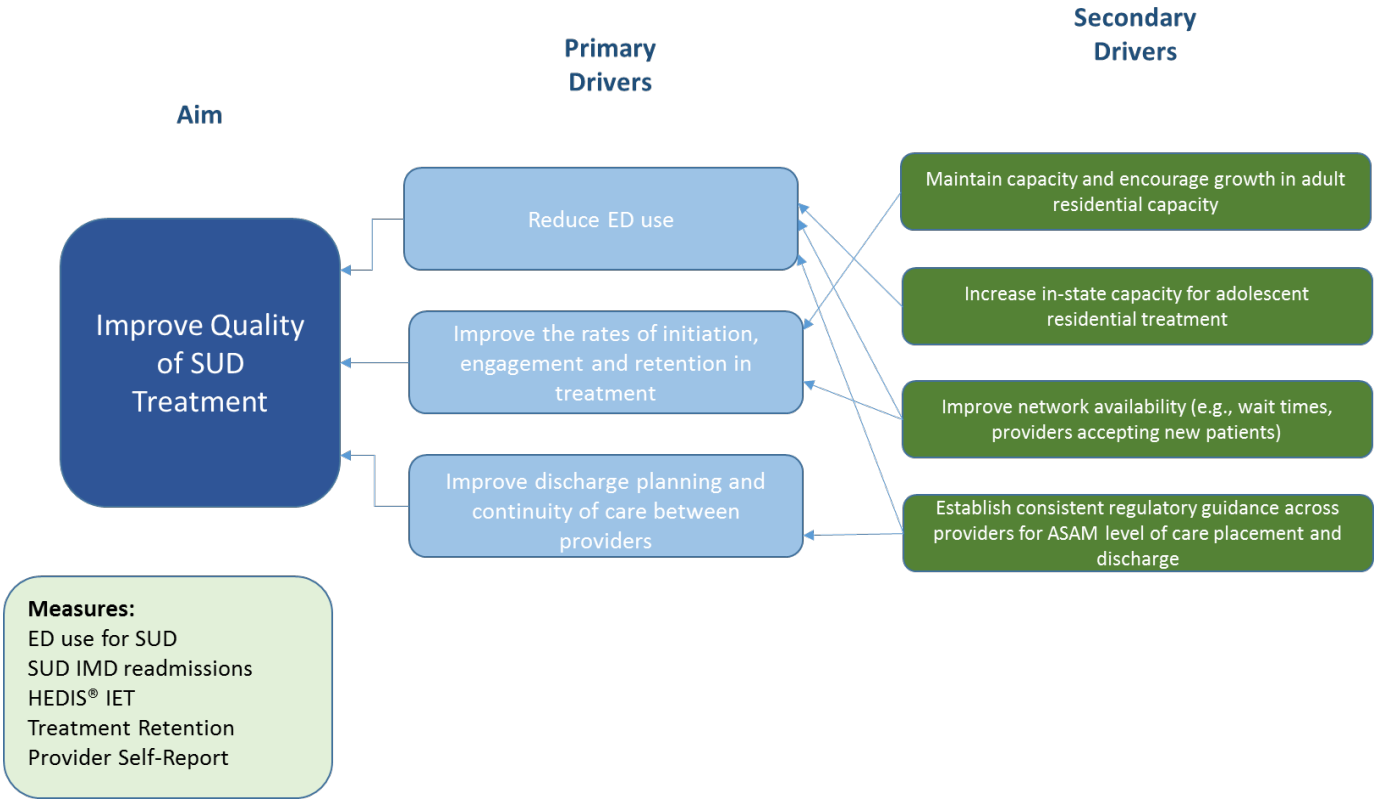
Related to the cost of care, the State is expected to maintain or reduce spending in comparison to what would have been spent absent the Demonstration.

Driver Diagrams on the following pages provide a visual depiction, from the approved Evaluation Design, of the relationship between the Demonstration's purpose, the primary drivers that contribute to realizing that purpose and the secondary drivers that are necessary to achieve the primary drivers.

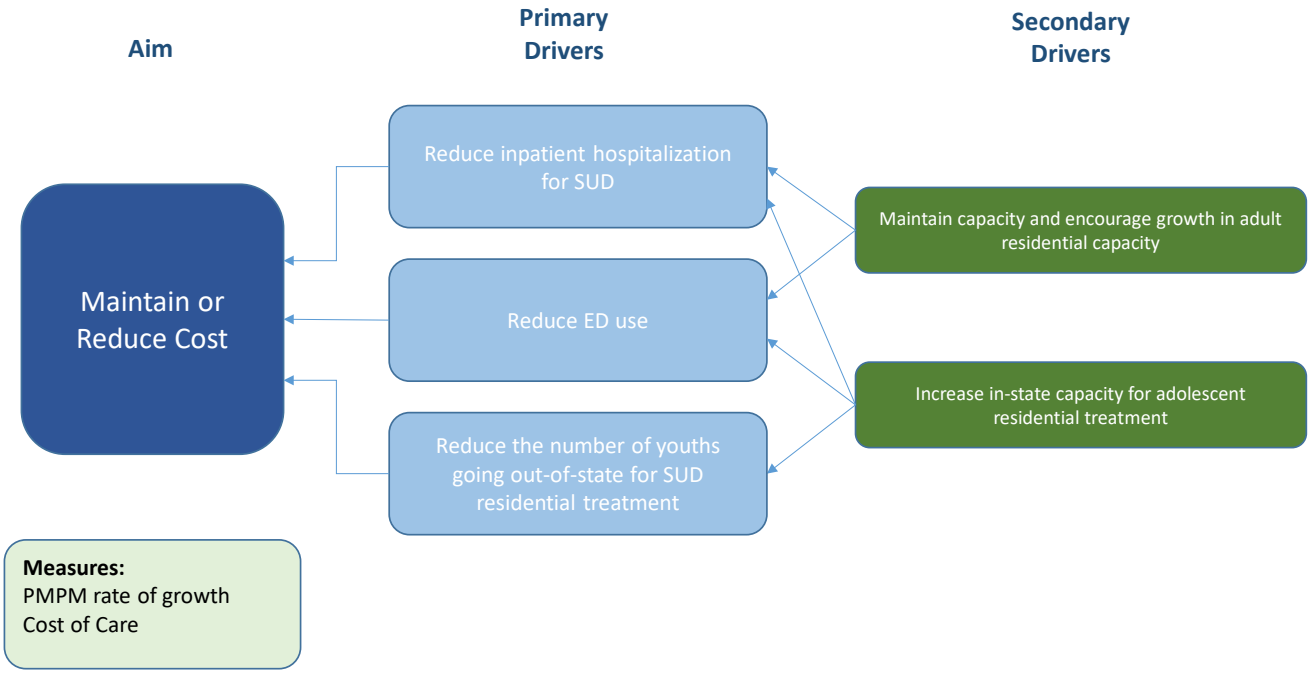
Access - Driver Diagram



Quality - Driver Diagram



Cost - Driver Diagram



SUD EVALUATION QUESTIONS AND HYPOTHESES

The evaluation is designed to study the impact of the Demonstration on participation in SUD treatment and specifically IMD treatment services. The table below offers an overview of evaluation questions, hypotheses, and study groups. As noted elsewhere in the report, hypotheses related to the adolescent IMD study group were not included in the interim or summative analysis.

Evaluation Question	Hypothesis	Study Group
Demonstration Goal 1. To improve access to OUD and other SUD services		
1. What are the impacts of the Demonstration on access to SUD residential treatment services for Demonstration enrollees?	A. Adult enrollees will have better access to residential SUD treatment services	Enrollees with an SUD
	B. Adolescent enrollees will have better access to in-state residential SUD treatment services	Suspended*
Demonstration Goal 2. To improve the quality of the SUD treatment delivery system to provide high-quality coordinated and comprehensive OUD/SUD treatment for Medicaid enrollees		
2. What are the impacts of the Demonstration on quality of care for Medicaid enrollees with an SUD diagnosis?	A. Enrollees with SUD will have fewer ED visits for SUD	Enrollees with an SUD; adult IMD service recipients
	B. Enrollees with SUD will have fewer total ED visits	
	C. Enrollees with SUD will have fewer ED visits post discharge from an SUD IMD	Adult IMD service recipients
	D. Enrollees with SUD will have improved rates of initiation and engagement in alcohol and other drug treatment	Enrollees with an SUD
	E. Enrollees with SUD will have lower IMD readmission rates	Adult IMD service recipients
	F. Enrollees with SUD will have improved rates of treatment retention	Adult IMD service recipients
	G. Medicaid IMD Providers will report consistency in DHHS program design and discharge planning policies	IMD providers
Demonstration Goal 3. To maintain budget neutrality		
3. Will the Demonstration maintain or reduce spending in comparison to what would have been spent absent the demonstration?	A. The Demonstration will be cost neutral	IMD Service Recipients
	B. The cost of adolescent residential SUD treatment services will be reduced	Suspended*
Exploratory Analysis		
Expenditure Trends	A. What are the PMPM trends related to Medicaid payments for SUD IMD enrollees, including breakouts for SUD-related and non-SUD-related services and age groups?	Adult IMD service recipients

** These hypotheses and measures were suspended prior to the development of the Interim Report*

ALIGNMENT WITH TITLE XIX OBJECTIVES

The SUD Demonstration supports the federal Medicaid program in its core mission: to meet the health and wellness needs of our nation's vulnerable and low-income individuals and families. Demonstration goals align with the Title XIX objectives: to improve access to high-quality, person-centered services that produce positive health outcomes for individuals.

5. SUD EVALUATION METHODOLOGY

The approved Evaluation Design includes both quantitative and qualitative design techniques. As a result of not having a viable comparison group (discussed below), the evaluation utilizes a quasi-experimental pre-test/post-test design with annual observation points. The pre/post design was selected to characterize differences over time for participants. The length of the pre-intervention period was twelve months. Due to the unique nature of the target group, the New Hampshire delivery system and construction of evaluation measures, there are no applicable national benchmarks.

SUD TARGET AND COMPARISON POPULATIONS

Enrollees with an SUD were identified using the criteria for SUD Monitoring Protocol Metric #4 (Medicaid members with an SUD annually) found in the Mathematica Policy Research Manual developed specifically for CMS (1115 Substance Use Disorder Demonstrations: Technical Specifications for Monitoring Metrics Version 4, August 2021). This includes members who were enrolled in Medicaid for at least one month (30 consecutive days) during the measurement period and who had a claim for service with an SUD diagnosis and an SUD-related treatment service during the measurement period and/or in the 12 months preceding the period. Diagnosis from any of the following HEDIS 2020 Value Sets were included: alcohol abuse and dependence; opioid abuse and dependence; and other drug abuse and dependence.

The approved Evaluation Design does not include comparison groups. Prior to conducting the planned analysis, the independent evaluator reviewed the evaluation methodology with the State and confirmed that a viable comparison group was not available.

SUD Demonstration enrollees were further stratified into subgroups as outlined below.

Group	Definition	Population Size					
		Baseline	DY1	DY2	DY3	DY4	DY5
Adults w/SUD	Adults ages 18 - 64 years at any time in the year	25,478	27,363	27,520	27,331	27,807	28,338
Adolescents w/SUD	Youth ages 12 - 17 years on the first and last day of year	357	383	399	384	326	495
SUD IMD Recipients	Adults ages 18 to 64 with at least one IMD discharge during the year	1,674	2,350	2,372	2,152	2,385	2,630
	Youth ages 12 - 17 with at least one IMD discharge during the year	0	*	*	*	0	0

**Fewer than ten occurrences*

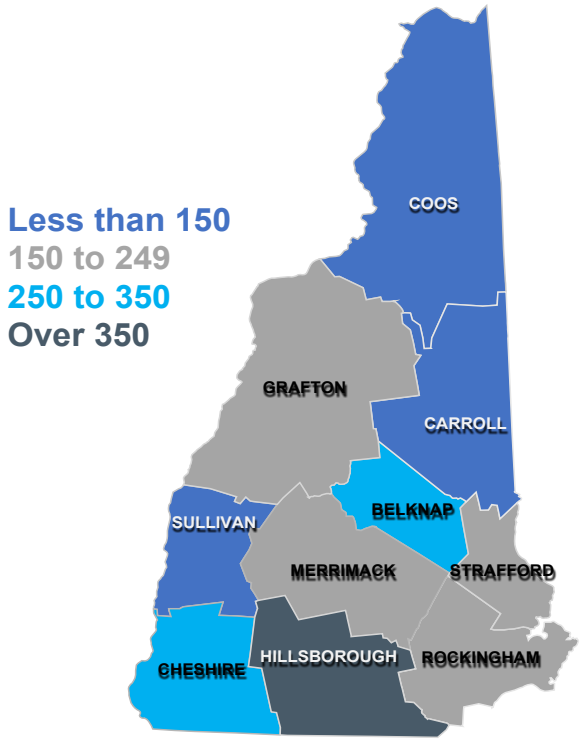
All Demonstration enrollees who met measurement criteria were included in the analyses. The evaluation did not employ random sample, representative sample, or other sampling methods.

As noted in the approved Design, population size was a concern for certain measures and analyses. The identification of the adolescent IMD group yielded a population size of fewer than ten participants annually.

The evaluator explored the feasibility of revising the adolescent IMD sub-group definition by looking at individuals served in an IMD for SUD who were ages 21 and under (in alignment with Early Periodic Screening Diagnosis and Treatment age criteria). However, the population sizes for that group remained low, ranging from 37 to 62 enrollees annually. Given the changes in program implementation discussed earlier and a recipient universe of fewer than ten, the adolescent IMD subgroup measures and analyses were not included in the interim or summative report analysis.

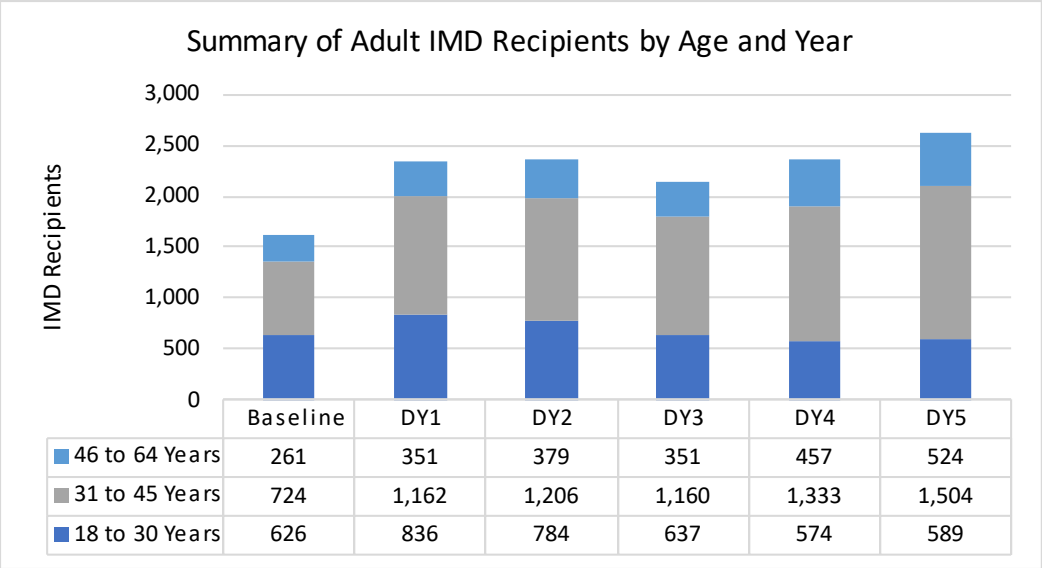
Several measures examine service utilization and engagement in treatment for Medicaid members with an SUD. In addition, adults receiving IMD services were identified to provide a focus on the trends and outcomes for those members receiving IMD services specifically authorized under the Demonstration.

In Demonstration Year 5 (SFY23), 1,227 individuals who received IMD treatment services resided in Hillsborough County, representing 42 percent of IMD service recipients statewide. Belknap County had the second highest number of IMD service recipients with 293 individuals, followed by Cheshire County with 267. Between 150-249 individuals in Merrimack, Rockingham, Strafford County and Grafton received IMD treatment services. Fewer than 150 IMD participants resided in Carroll, Coos, and Sullivan Counties.



Adults using IMD services were 93 percent white, three percent Black or African American, less than one percent American Indian or Alaskan Native, and three percent “other” or more than two races.

In each year of the Demonstration most of the members using IMD services were between the ages of 31 to 45 years, with just over 1,500 recipients by DY5. The second largest age group was members’ 18 to 30 years old. A summary of IMD recipients by age and Demonstration Year is provided on the following page.



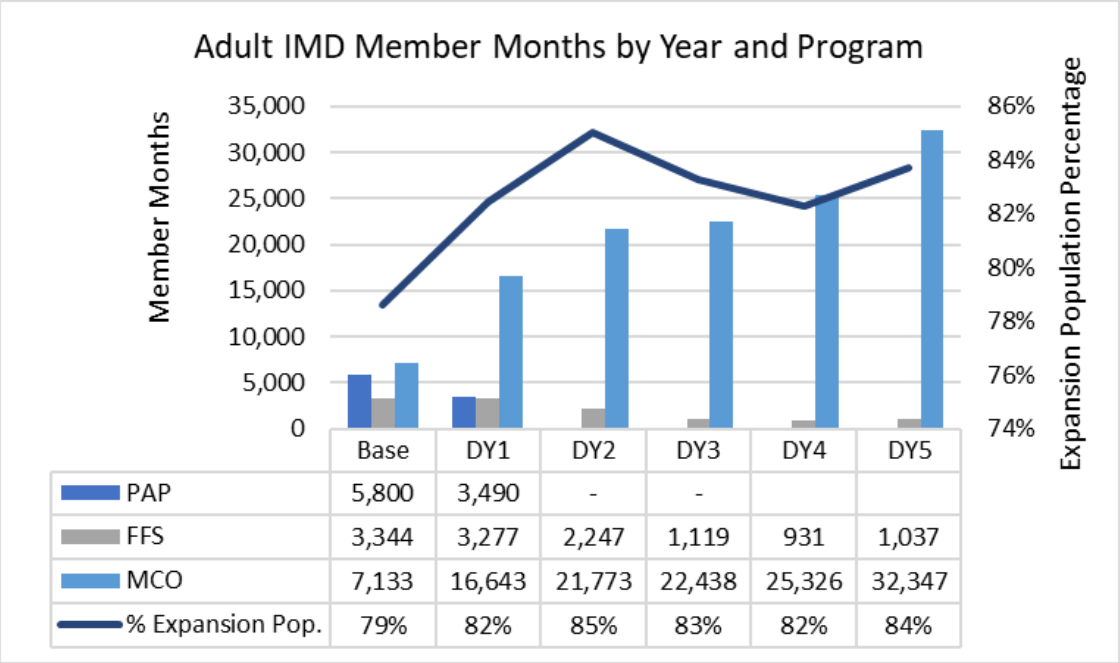
	Baseline	DY1	DY2	DY3	DY4	DY5
46 to 64 Years	261	351	379	351	457	524
31 to 45 Years	724	1,162	1,206	1,160	1,333	1,504
18 to 30 Years	626	836	784	637	574	589

Adults using IMD services included more males than females in each year of the Demonstration and within each age cohort. In aggregate, across the five years, males represented 65 percent of all participants, including: 61 percent of participants ages 18 to 30 years old, 64 percent of members ages 31 to 45 and 72 percent of members ages 46 to 64 years old.

On December 31, 2018, DHHS terminated the State's Premium Assistance Program (PAP) for the Medicaid Expansion population. Subsidies for Medicaid Expansion enrollees to purchase a Qualified Health Plan on the marketplace were eliminated and enrollees were transitioned into the Medicaid MCO delivery system. The SUD Demonstration was developed, in part, to address the service recipients in the Medicaid expansion population.

MCO member months increased from 7,133 at baseline to 16,643 in the first year of the Demonstration and rose again to 21,773 in DY2 after the transition of the premium assistance program (PAP) into the MCO framework. Enrollment continued to rise to 22,438 member months in DY3, 25,326 member months in DY4 and 32,347 member months in DY5.

As the PAP program terminated halfway through DY1, (December 31, 2018) the member months for beneficiaries in the Adult Expansion population increased from 79 percent of the total at baseline to 84 percent in DY5. A summary of participation by program is provided on the following page.



	Base	DY1	DY2	DY3	DY4	DY5
PAP	5,800	3,490	-	-		
FFS	3,344	3,277	2,247	1,119	931	1,037
MCO	7,133	16,643	21,773	22,438	25,326	32,347
% Expansion Pop.	79%	82%	85%	83%	82%	84%

CONTINUED ELIGIBILITY UNDER THE PUBLIC HEALTH EMERGENCY

As described in the Methodological Limitations subsection below, the novel coronavirus public health emergency began approximately 18 months after the start of the Demonstration and continued into the final year of Demonstration. Between March 2020 and March 2023, Medicaid eligibility determinations were suspended and enrollees were protected from losing coverage.

At the end of the PHE, the DHHS tracked beneficiary redeterminations. As of October 2023, approximately 104,000 redeterminations were completed with approximately 60,000 resulting in case closures (58 percent).

DHHS tracked the reasons for case closures, which included failure to respond, failure to provide additional information, and no longer meeting eligibility guidelines. In some cases, individuals whose cases were closed due to a lack of response or procedural issues were subsequently granted eligibility upon submission of completed applications.

Closure due to ineligibility at the time of review was included as a covariate in the analysis. However, there is no way of knowing at what point during the PHE they became ineligible for coverage. The number of members identified in the SUD analysis whose eligibility was terminated is provided by Demonstration Year in the table on the following page.

DY	Closed for Any Reason	Closed Due to Confirmed Ineligibility
Baseline	237	110
DY1	393	187
DY2	492	244
DY3	454	223
DY4	455	238
DY5	290	146

SUD EVALUATION PERIOD

The summative evaluation for SUD-related authorities spans the Demonstration approval period (July 10, 2018 - June 30, 2023,) with a baseline period beginning one year prior to the Demonstration (July 1, 2017 - June 30, 2018).

SUD EVALUATION MEASURES

The measure specifications for Initiation and Engagement are derived from the Mathematica Policy Research Manual developed specifically for CMS 1115 Substance Use Disorder Demonstrations (Technical Specifications for Monitoring Metrics, Version 4, August 2021).

The original design anticipated that the measures would be calculated on a Calendar Year basis. After discussion with the evaluator, all measures were calculated using the Demonstration Year as the measurement period. This revision allows for findings to draw upon the same populations, measurement periods, data sets and service delivery context.

One measure, retention in treatment, was originally developed by DHHS as an extension to the initiation and engagement measurement framework. Prior to the development of the interim evaluation report, DHHS was asked by NCQA not to use the framework of the HEDIS metrics to design new performance metrics. The evaluator worked with DHHS to develop a state-specific measure of retention that focuses on continuity of treatment following an IMD discharge. This measure is described in detail as part of the findings.

The evaluation design includes a qualitative analysis of access and a survey of SUD residential provider perceptions relative to: access to care; Medicaid enhancements under the Demonstration; and revisions made by DHHS to Medicaid coverage and Health Facility Licensing rules for SUD residential treatment. Qualitative activities originally were conceptualized as a Secret Shopper survey coupled with separate provider interviews. However, due to the ongoing

PHE, the DHHS opted to capture all information from providers in the form of an electronic survey.

In addition to hypothesis testing, the evaluation included an exploratory analysis of expenditures. Cost of care measures not associated with a hypothesis are examined for year-over-year change and relative to cost drivers, such as ED utilization, inpatient hospitalization, and pharmacy services.

As noted earlier, the adolescent IMD subgroup measures and analyses were not included due to insufficient population size and changes in the SUD program implementation for the adolescent IMD group.

A listing of measures from the approved evaluation design by goal area and hypothesis is provided in Attachment 1. The attachment also includes a description of changes, if any due to the PHE, data availability or integrity.

DATA SOURCES, CLEANING AND VALIDATION

The quantitative evaluation measures rely on New Hampshire Medicaid claims and managed care encounter data stored in the Medicaid Management Information System (MMIS). Fee-for-service data for members previously enrolled in the New Hampshire Health Protection Program/Premium Assistance Program (PAP) were extracted from the State's premium assistance program encounter database for dates of service between July 1, 2016, and December 31, 2018. After the first six months of the Demonstration, PAP members were transitioned to the MCO program. Information on member characteristics (e.g., category of eligibility, eligibility start and end dates, race/ethnicity, county of residence) was obtained through the State eligibility and enrollment system maintained by DHHS.

DHHS provided the evaluator with Medicaid data extracts for each year. Extracts contained member eligibility data, fee-for-service claims data and encounter data for Medicaid members for the period July 1, 2016, through December 31, 2023. PHPG removed claims with dates of service outside of the evaluation period. Enrollees who did not receive full Medicaid benefits also were removed from the data set.

DHHS provided the evaluator with the methodology to identify residential and IMD services. The methodology includes identifying residential providers and their IMD status using a list of National Provider Identifiers (NPI) for New Hampshire residential SUD treatment facilities.

The evaluator identified claims with a primary diagnosis of SUD from each IMD provider. A secondary check was completed using DHHS specific billing, revenue, and modifier codes as illustrated in the table on the following page.

New Hampshire Billing Code	Billing Code Type	Informational IMD Code	Informational Code Type
H0010 - Alcohol and/or drug services; sub-acute detoxification (residential addiction program inpatient)	HCPCS	V1	Procedure Modifier
H0018 - Behavioral health; short-term residential (non-hospital residential treatment program), without room and board, per diem			
H2034 - Alcohol and/or drug abuse halfway house services, per diem			
T1006 - Specialty Residential Services for Pregnant & Parenting Women			
0116 - Detox	Revenue	A3	Condition
0126 - Detox			
0136 - Detox			
0146 - Detox			
0156 - Detox			
1002 - Residential treatment – chemical dependency			

Preliminary member counts and utilization results were validated against data reports produced independent of the evaluation (e.g., SUD Monitoring Protocol, DHHS quality monitoring reports and HEDIS audited results).

Bed counts for Medicaid-enrolled SUD residential treatment providers were obtained through a combination of MMIS provider enrollment files and the DHHS Bureau of Health Facilities licensing reporting system. The total number of beds were recorded for Medicaid-enrolled facilities as of July 1 of each year.

PHPG validated residential SUD treatment provider NPIs against claims detail (type of services billed each SFY). In addition, a licensing report was obtained that included provider name, date of the provider's initial license, and bed counts for each residential SUD treatment provider regardless of Medicaid enrollment status. The list was cross walked to the MMIS list and served as another source of validation.

ANALYTIC METHODS

The data analysis included exploratory and descriptive strategies and incorporated causal inference methods for the observational data. Descriptive statistics were used to describe the basic features of the data and what they depict, and to provide simple summaries about the sample and the measures. The original design contemplated the use of the Mann Whitney to address the possibility that the data was not normally distributed. Upon examination of the data the evaluators concluded the central limit theorem is applicable. The causal inference methods included univariate and multivariate linear and logistic regressions with t-tests.

Outcomes were calculated annually for the baseline period and for Demonstration Years 1-5. Regression models accounting for members in more than one year (clustering) were used to assess the rate of change over time in evaluation outcomes. To assess change over time, the evaluation used ANOVA for the utilization measures and logistic regression for the quality measures. Age and gender were controlled for in the models examining cost and ED utilization measures. Statistically significant results are reported based on p ≤ 0.05. A Bonferroni correction was applied, as applicable, and noted in the detailed findings.

The evaluators estimated a binary (Bernoulli) response variable Y here (i.e., whether the patient received the care, follow up, or visit of interest), which is denoted as $p = P(Y = 1)$. Assuming a linear relationship between the predictor variable (year) and the log-odds of the event Y= 1, the relationship is denoted as:

$$l = \log_b \frac{p}{1-p} = \beta_0 + \beta_1(year)$$

which when solved algebraically for p comes out to:

$$p = \frac{1}{1 + b^{-(\beta_0 + \beta_1(year))}}$$

Where $l =$ log odds, $b =$ base of the logarithm (we default to natural log), and $\beta_i's$ are the parameters for the predictors.

The evaluators estimated a linear response between a response, Y, and multiple explanatory variables (age, gender, year). For explanatory variables that take on a finite number of discrete levels, the evaluators one-hot encoded the responses. For example, for “gender,” the evaluators have two factors: “gender male” and “gender female” which can take on only values of 0 and 1. Each patient can only be one gender and the gender reported will take on the value “1” and the other one will take on the value “0.” The relationship is denoted as for all years as follows:

$$Y = \beta_0 + \beta_1(age) + \beta_2(gender\_F) + \beta_3(year19) + \beta_4(year20) + \beta_5(year21)$$

Doorway services, available to all New Hampshire residents struggling with opioid abuse and dependence, began in DY2 (see Doorway description below). When controlling for Doorway services for Demonstration enrollees in DY2-5 the relationship is denoted as:

$$Y = \beta_0 + \beta_1(age) + \beta_2(gender\_F) + \beta_3(year21) + \beta_4(Doorway\_Y)$$

Where age represents age in years, and gender F, year19, year20, year21, etc., and Doorway Y are all binary variables that take on value 1 when true and value 0 when not true.

Note that gender M and year_18 are left out from the first linear estimation equation (just as year_20, gender M and Doorway N are left out of the second one) because they are perfectly correlated and collinear with the other variables. Given that one of the assumptions of Ordinary Least Squares is no multicollinearity, these variables are dropped to avoid multicollinearity and because they cannot otherwise be estimated.

Isolation from Other Initiatives

Three initiatives ran concurrently with the SUD demonstration. These included: the State Opioid Response Grant; the transition of the Medicaid expansion group from premium assistance to MCOs; and the final years of the DHHS Delivery System Reform Incentive Program Demonstration, entitled Building Capacity for Transformation. Methods for isolating the impact of each initiative, where possible, are described below.

The Doorway (State Opioid Response Plan): The State of New Hampshire implemented a State Opioid Response Program, the Doorway, funded through SAMHSA, on January 1, 2019. Nine Doorways began offering the following core services in each region of the State:

- SUD screening and evaluation.
- SUD treatment services, including MAT.
- Prevention and harm reduction services (e.g., naloxone distribution).
- Recovery services and supports.
- Peer recovery services.

The evaluator controlled for the State Opioid Response Plan by identifying Medicaid members with a claim from one of the nine Doorway providers. Results were calculated with and without Doorway recipients to assess the potential program impact on the Demonstration. (Note, however, that members may receive Doorway services that are not Medicaid reimbursable, or providers may choose not to claim for State Plan services, limiting the extent to which the impact of these programs can be isolated from the SUD Demonstration results.)

Where feasible, a linear regression was performed to control for members who received Medicaid reimbursable Doorway services. The evaluators one-hot encoded the Doorway

(binary) variable and estimated the coefficient of receiving Doorway services (i.e., Doorway-yes) versus not receiving Doorway services to control for the impact of a member being in the Doorway program for SUD Demonstration Years 2-5.

Expansion Group Transition: On December 31, 2018, DHHS terminated the State's Premium Assistance Program (PAP) for the Medicaid Expansion population. Subsidies for Medicaid Expansion enrollees to purchase a Qualified Health Plan on the marketplace were eliminated and enrollees were transitioned into the Medicaid MCO delivery system.

The SUD Demonstration was developed with the understanding that many of the service recipients would be in the Medicaid expansion population. Thus, the Demonstration Evaluation Design did not contemplate isolating expansion groups. Adult IMD enrollees in the expansion population represent over 80 percent of member months in each year of the Demonstration.

Delivery System Reform Incentive Program (DSRIP): The DSRIP Demonstration was authorized January 5, 2016, through December 31, 2020. The project period ran concurrent with SUD Demonstration for two and one-half years, July 1, 2018 – December 31, 2020. DSRIP project activities spanned the health care delivery system and were not exclusive to SUD programs. However, the program included a focus on the integration of physical and behavioral health and building capacity for SUD treatment across the State.

The DSRIP project supported the formation of community partnerships known as Integrated Delivery Networks (IDN), IT infrastructure and direct services to address local service gaps and population health needs. The IDN host agencies were not expected to identify or track services received by individual Medicaid members, nor did the DSRIP evaluation design include provisions to isolate the impact of services rendered by IDN members.

While it is likely SUD Demonstration enrollees benefited from local IDN activities, it is not possible to isolate the impact between the two Demonstrations.

QUALITATIVE METHODS

During the last year of the Demonstration (July 1, 2022 – June 30, 2023), PHPG collaborated with Medicaid and BDAS staff to develop survey questions responsive to the evaluation design and policy interests of the State. In the fall of 2022, BDAS and Medicaid staff distributed a notice to residential SUD providers who were Medicaid-enrolled as of July 1, 2022. The notice described the upcoming survey, identified members of the design and survey team for any questions or clarifications, and requested provider participation.

The survey included open-ended and Likert-scaled questions. A thematic analysis was employed for the open-ended questions (See Attachment 2).

Fifteen facilities were identified as Medicaid-enrolled as of July 1, 2022. One facility closed during the survey period; a second facility was located out-of-state. The out-of-state facility had no Medicaid claims or MCO encounters for services to New Hampshire members during the evaluation period. These two facilities were dropped from the study.

In the two weeks following its release, the independent evaluator contacted each provider to answer any questions. The evaluator also offered providers the option to complete the survey telephonically. Providers who did not return the survey were contacted by email and phone at the end of October and again at the end of November. The survey had a 77 percent response rate; three of the thirteen facilities did not participate.

Licensing for residential SUD treatment is based on tiers that correspond to the type and level of care provided. Tier 1 facilities offer full medical withdrawal management, Tier 2 facilities offer limited medical withdrawal management, and Tier 3 facilities offer SUD residential treatment. The table below provides an overview of number of respondents by New Hampshire license type.

	Type of New Hampshire License				Total Respondents
	Tier 2	Tier 3	Tier 2 and 3	Tier 1, 2 and 3	
Number of Facilities Responding	1	5	2	2	10

METHODOLOGICAL LIMITATIONS

The SUD Demonstration evaluation is limited by several factors, including:

Lack of true experimental comparison groups: IMD facilities in New Hampshire serve residents from across the State. Thus, regional comparison groups are not available. In addition, residential placement decisions are made based on nationally recognized ASAM level of care guidelines; thus, individuals admitted to a residential SUD program have a clinically different profile and level of care need than those who are not admitted. These clinical differences eliminate the possibility of a matched sample of enrollees who received services versus those who did not. Lastly, all Medicaid enrollees who meet SUD criteria are eligible for the Demonstration.

The approved Evaluation Design recognizes this limitation and utilizes a pre/post design with annual observation points. Where the outcome variable is not binary, the evaluators also used multivariate linear regression that includes demographic factors (e.g., age and gender) to account for additional variances attributable to those factors and not the Demonstration.

Continuity of Services: New Hampshire residential SUD IMD treatment facilities are existing statewide providers who had been delivering care to Medicaid enrollees prior to the implementation of the SUD demonstration. The approved Evaluation Design recognizes this

limitation and utilizes a logistic regression model to analyze the significance of change for each year against the baseline period. Therefore, these findings are longitudinal and should not be interpreted as causal evidence for the impact of the Demonstration.

Reliance on Administrative Data: The evaluation may be limited by its reliance on claims and diagnostic codes to identify the beneficiary population with SUD. These codes may not capture all participants, especially if the impact or severity of the SUD is not evident on initial assessment. For example, an ED visit for a broken arm due to inebriation may not be coded as SUD related if the member does not present as inebriated, the ED provider has not ascertained causation, or the member fails to disclose the cause.

This type of limitation is inherent in claims-based analysis. However, the potential for missing data is random. There is no reason to believe that any given Demonstration group is more or less likely to have missing data.

Population Size: The evaluation may be limited by the small size of the SUD Demonstration population and IMD capacity. This limitation is especially apparent as it relates to adolescents and IMD recipients. Due to the small population size and the changes in Demonstration implementation related to adolescent programs, the evaluator eliminated the adolescent IMD study group from the interim and summative analyses.

Public Health Emergency (PHE). In additional to recognizing the limitations above in the design stage, the evaluation findings are likely impacted by the novel coronavirus pandemic and the State's PHE response. The PHE was declared in 2020 (18 months after the start of the Demonstration) and continued into the final year of Demonstration.

During the unwinding of the PHE, the DHHS tracked beneficiary redeterminations. The DHHS unwinding dashboard included information on members whose eligibility was terminated due to failure to respond as well as those who were closed due to ineligibility at the time of redetermined. In examining the results, the evaluators controlled for the suspension of disenrollments during the PHE by using closure status as a covariate in a linear regression model.

6. SUD DEMONSTRATION RESULTS

This section presents the findings for the New Hampshire SUD Treatment and Recovery Access Demonstration by evaluation question and hypothesis. Many of the New Hampshire residential SUD IMD treatment facilities were existing statewide providers at the outset of the Demonstration. Most residential SUD treatment facilities had been delivering care to Medicaid enrollees prior to the implementation of the SUD Demonstration. Therefore, these findings are longitudinal and should not be interpreted as causal evidence for the impacts of the Demonstration.

The remainder of this section provides detailed findings, including the statistical analyses used for each evaluation measure.

SUD EVALUATION QUESTION ONE

Evaluation Question One asks, ***"What are the impacts of the Demonstration on access to SUD residential treatment services for Demonstration enrollees?"*** The table below provides an overview of the hypothesis and measures associated with Evaluation Question One.

Hypothesis	Measures
A. Adult enrollees will have better access to residential SUD treatment services	1. Percent of enrollees Ages 12-64 with an SUD claim for treatment in an IMD with a discharge date during the year
	2. The total number of licensed beds for Medicaid enrolled SUD residential treatment providers each year
	3. Network availability (appointments, wait times, acceptance of Medicaid)

Measure 1.A.1. Percent of enrollees Ages 12-64 with an SUD claim for treatment in an IMD with a discharge date during the year.

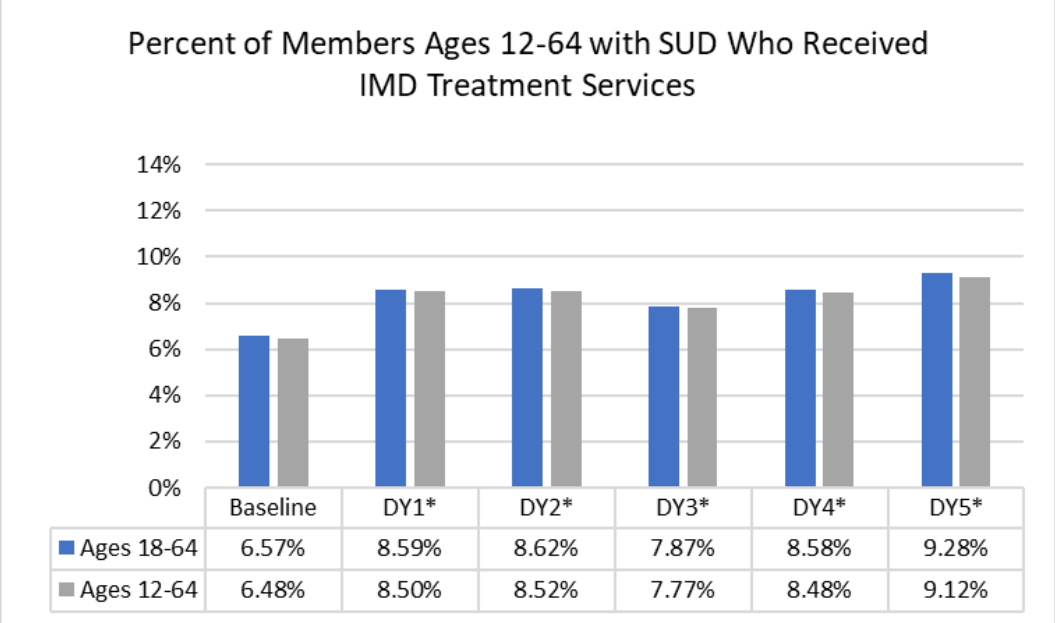
Measure Description: This measure uses the diagnostic value sets from the SUD Monitoring Protocol methodology for Metric #4 (Medicaid Beneficiaries with SUD diagnosis annually). The measurement period for the denominator was adjusted to the Demonstration Year with no look back period. The numerator was created by counting enrollees with an IMD discharge date during the measurement period using the DHHS list of SUD residential providers designated as IMDs.

Data Source and Time Period: PAP and MMIS paid claims, and MCO encounters SFY2017-23.

Analytical Approach: Logistic Regression.

Findings: Data was examined for two age groups: members ages 12-64 years old and adults ages 18-64 years old. During the baseline period, 6.48 percent of all members ages 12 to 64 and 6.57 percent of adult members (ages 18 to 64) received IMD treatment services.

Members ages 12 to 64 with an SUD receiving IMD services rose above baseline to 8.50 percent in DY1, 8.52 percent in DY2, 7.77 percent in DY3, 8.48 in DY4 and 9.12 in DY5. The adult age group showed a similar increase above baseline to 8.59 percent in DY1, 8.62 percent in DY2, 7.87 percent in DY3, 8.58 in DY4 and 9.28 percent in DY5. The increase over baseline was statistically significant in each year of the Demonstration.



	Baseline	DY1*	DY2*	DY3*	DY4*	DY5*
Ages 18-64	6.57%	8.59%	8.62%	7.87%	8.58%	9.28%
Ages 12-64	6.48%	8.50%	8.52%	7.77%	8.48%	9.12%

**Statistically significant change from baseline period*

Measure 1.A.2 The total number of licensed SUD treatment beds for Medicaid Enrolled SUD residential treatment providers each year.

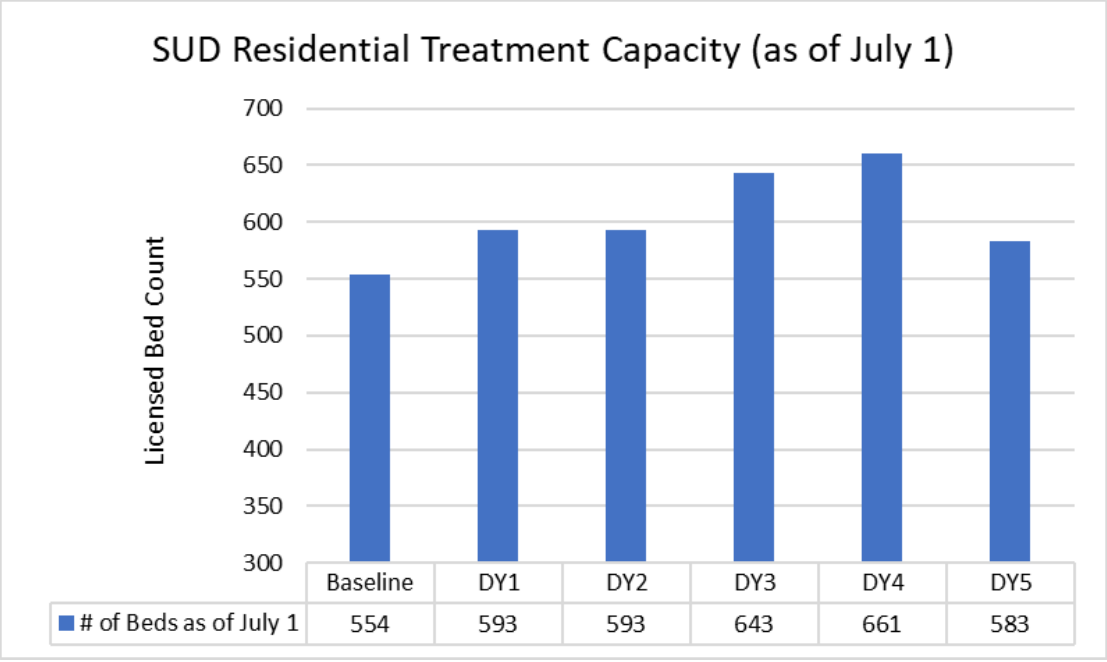
Measure Description: This measure was calculated using a licensed bed count and MMIS provider enrollment detail for all Medicaid enrolled residential SUD treatment programs as of July 1 of each year. Total beds were summed annually and the percentage change year over year calculated.

Data Source and Time Period: MMIS provider enrollment files; Bureau of Health Care Licensing SUD Facility Reports as of July 1 of each year.

Analytical Approach: Descriptive.

Findings: A point-in-time examination of treatment capacity showed increases over baseline in the number of residential treatment beds. Prior to the Demonstration there were 554 licensed beds as of July 1, 2017. In DY1 and DY2 there were 593 Medicaid enrolled beds; in DY3, at the onset of the PHE, there were 643 beds; in DY4 661 beds were available on July 1, (although several facilities had planned closures later in the year); and in DY5 583 beds were available on July 1.

The final year of the Demonstration, following the end of the PHE, showed a five percent gain in the number of beds over the baseline count.



Measure 1.A.3 Network Availability, Wait Times, and Acceptance of Medicaid

Network availability, wait times and acceptance of Medicaid were evaluated using a provider survey in DY5. SUD residential treatment providers were asked to provide information related to current wait times for program admission and the average length of stay in the program.

The majority of respondents indicated that the wait time was 24 hours or less, with three facilities reporting a two-to ten-day wait for admission. Only one specialized residential treatment facility (ASAM level 3.5) reported a wait time of longer than 30 days. Note: Response counts by level of care exceed total facility responses because some respondents offer multiple levels of care within their facilities.

Question	Level of Residential Care			Percent of Total
Wait time for admission to a treatment bed	Residential Treatment (ASAM 3.5)	Medically Monitored Inpatient (ASAM 3.7)	Medically Managed Inpatient (ASAM 4.0)	
0-24 hours	6	3	1	71.43%
2-10 days	2	1	0	21.43%
11-29 days	0	0	0	0.00%
30-90 days	1	0	0	7.14%

The majority of respondents reported that the average length of stay in treatment was 30 days or less. Most facilities providing medically monitored (ASAM 3.7) and medically managed (ASAM 4.0) inpatient care reported length of stays averaging fewer than 7 days. Two facilities, both offering specialized programs for pregnant women, noted stays greater than 90 days.

Question	Level of Residential Care			Percent of Total
14b-16b What is the average length of stay in your treatment program?	Residential Treatment (ASAM 3.5)	Medically Monitored Inpatient (ASAM 3.7)	Medically Managed Inpatient (ASAM 4.0)	
1-7 days	0	3	0	21.43%
7-21 days	1	1	1	21.43%
22-30 days	3	0	0	21.43%
31-90 days	3	0	0	21.43%
>90 days	2	0	0	14.28%

All providers accepted Medicaid, there were no restrictions on the number of beds available to serve individuals with Medicaid coverage.

In addition to questions regarding wait times and length of stay. Providers were asked whether they agreed or disagreed with the following statement: “When needed, Medicaid members can access: {service type}.” The following service types were assessed:

a. Screening, brief intervention, and referral to treatment (SBIRT)
b. Outpatient treatment services (ASAM 1.0)
c. Intensive outpatient treatment services – IOP (ASAM 2.1)
d. Partial hospitalization services (ASAM 2.5)
e. Residential low-intensity SUD treatment services (ASAM 3.1)
f. Residential SUD treatment services (ASAM 3.5)
g. Medically monitored intensive inpatient services (ASAM 3.7)
h. Medically managed intensive inpatient hospital services (ASAM 4.0)
i. Co-occurring mental health and SUD treatment services (Any Level)
j. Recovery support services (e.g., peer support services, community support groups)
k. Medication Assisted Treatment (MAT) for opioid and other substance use disorders

All survey respondents agreed that IOP treatment was accessible; 90 percent of respondents agreed that outpatient treatment, recovery supports, and MAT for OUD were accessible; and 70 percent of respondents agreed that residential SUD treatment ASAM level 3.5 was accessible when needed. Respondent agreement with adequate access to services was 60 percent for SBIRT, Partial Hospitalization (ASAM Level 2.5), and medically monitored intensive inpatient (ASAM Level 3.7). Fifty percent of respondents agreed that co-occurring mental health and SUD treatment services (any level) and residential low-intensity SUD treatment (ASAM Level 3.1) were available when needed. Only 20 percent of respondents agreed that medically managed intensive inpatient hospital services (ASAM level 4) were available when needed.

Question	Responses		
When needed, Medicaid members can access:	Agree	Disagree	Neutral
Screening, brief intervention, and referral to treatment (SBIRT)	60%	10%	30%
Outpatient treatment services (ASAM 1.0)	90%	10%	0%
Intensive outpatient treatment services (ASAM 2.1)	100%	0%	0%
Partial hospitalization services (ASAM 2.5)	60%	20%	20%
Residential low-intensity SUD treatment services (ASAM 3.1)	50%	40%	10%
Residential SUD treatment services (ASAM 3.5)	70%	20%	10%
Medically monitored intensive inpatient services (ASAM 3.7)	60%	20%	20%
Medically managed intensive inpatient hospital services (ASAM 4.0)	20%	30%	50%
Co-occurring mental health and SUD treatment services (Any Level)	50%	30%	20%
Recovery support services (e.g., peer support services, community support groups)	90%	0%	10%
Medication Assisted Treatment for opioid and other substance use disorders	90%	0%	10%

SUD EVALUATION QUESTION TWO

Evaluation Question Two asks, ***"What are the impacts of the Demonstration on quality of care for Medicaid enrollees with an SUD diagnosis?"*** The table below provides an overview of seven hypotheses and eight measures associated with Evaluation Question Two.

Hypotheses	Measures
A. Enrollees with SUD will have fewer ED visits for SUD	1. The total number of ED visits for SUD per 1,000 SUD Demonstration enrollees
B. Enrollees with SUD will have fewer total ED visits	1. The total number of ED visits for any reason per 1,000 SUD Demonstration enrollees
C. Enrollees with SUD will have fewer ED visits post discharge from an SUD IMD	1. The frequency and rate of ED use, for enrollees receiving SUD IMD services, 90 days prior to their IMD admission and 90 days post their IMD discharge
D. Enrollees with SUD will have improved rates of initiation and engagement in alcohol and other drug treatment	1. Percentage of enrollees who initiated treatment within 14 days of diagnosis
	2. Percentage of enrollees who initiated treatment and who had two or more additional AOD services or MAT within 34 days of the initiation visit
E. Enrollees with SUD will have lower IMD readmission rates	1. The percent of SUD IMD stays during the measurement period followed by an SUD IMD readmission for SUD within 30 days
F. Enrollees with SUD will have improved rates of treatment retention	1. The percentage of enrollees who had SUD treatment visits 45, 90, 135 and 180 days following IMD discharge
G. Medicaid IMD Providers will report consistency in DHHS program design and discharge planning policies	1. Provider perception of administrative burden and discharge planning policies

Measure 2.A.1. The total number of ED visits for SUD per 1,000 SUD Demonstration enrollees.

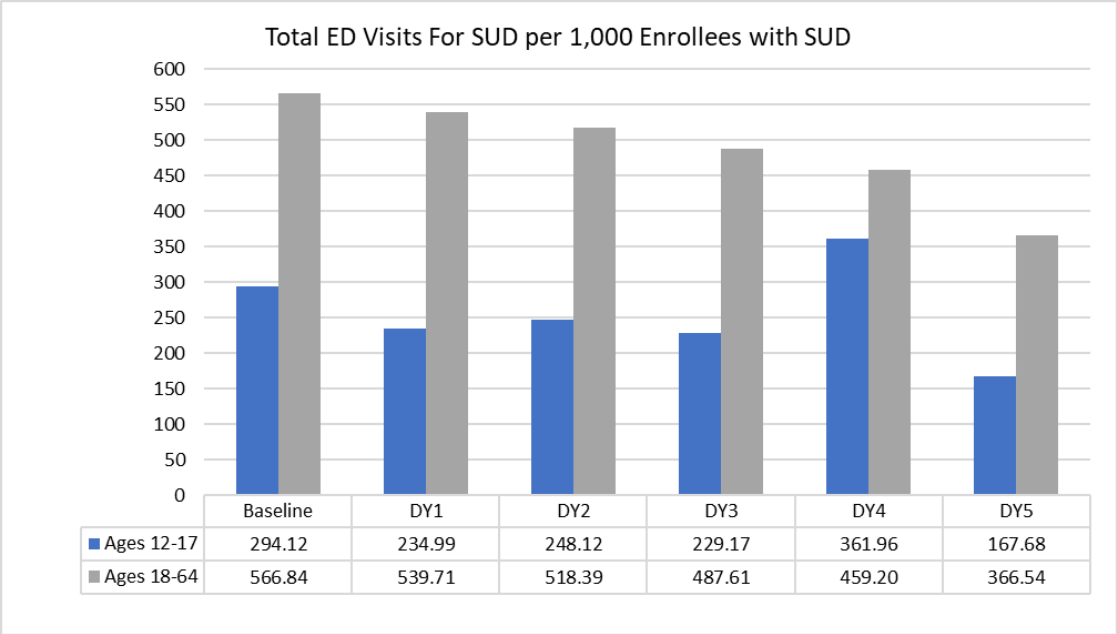
Measure Description: This measure follows the SUD Monitoring Protocol methodology for Metric #23 (ED visits for SUD per 1,000 enrollees). The measure was stratified for the adult and adolescent SUD sub-groups and the adult IMD study group.

Data Source and Time Period: PAP and MMIS paid claims, and MCO encounters SFY2017-23.

Analytical Approach: Linear Regression for the IMD Study Group.

Findings: ED visits for SUD have been declining since the baseline level of 566.84 visits per 1,000 adult enrollees. In DY1, visits declined to 539.71. In DY2, during the onset of the PHE, visits per 1,000 were 518.39, followed by 487.61 in DY3, 459.20 in DY4 and 366.54 in DY5.

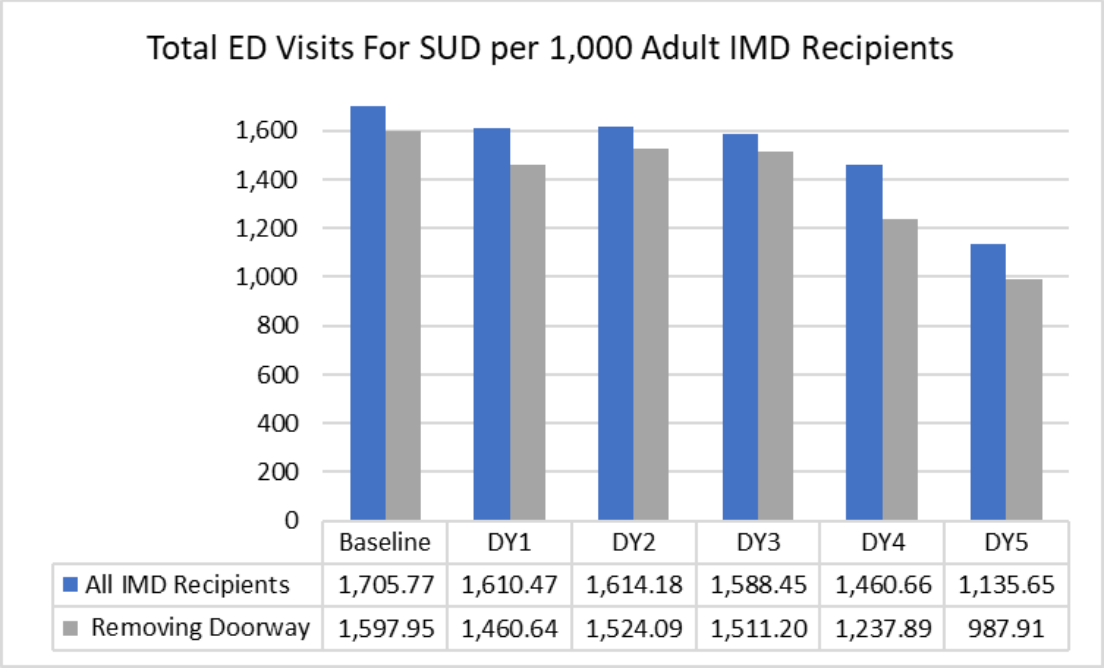
ED visits for SUD among adolescents dropped from 294.12 visits per 1,000 at baseline to 234.99 in DY1, 248.12 in DY2, and 229.17 in DY3. Visits increased in DY4 to 361.96 before declining again in DY5 to 167.68.



	Baseline	DY1	DY2	DY3	DY4	DY5
Ages 12-17	294.12	234.99	248.12	229.17	361.96	167.68
Ages 18-64	566.84	539.71	518.39	487.61	459.20	366.54

ED visits for the adult IMD study group also were examined. This group represents individuals requiring the most intensive level of SUD treatment, including medically managed and medically monitored detoxification services, intensive residential treatment, and inpatient care.

ED visits for SUD among adult IMD service recipients declined from a baseline of 1,705.77 per 1,000 IMD enrollees to 1,610.47 visits in DY1, 1,614.88 in DY2, 1,588.45 in DY3, 1,460.66 in DY4 and 1,135.65 in DY5. When Doorway program recipients were removed from the IMD study group, the trend was maintained in DY2 – 5.



A linear regression controlling for age, gender, participation in the Doorway program and continued eligibility under the PHE for the IMD study group also was performed. Statistical significance suggests the likelihood of the variable having an impact, while the coefficient estimate measures the size and direction of the potential effect. The intercept represents the baseline (mean values) before accounting for differences due to member demographics or measurement year.

Age accounted for some of the variation seen across years, with ED use increasing with age. Members who were deemed ineligible for Medicaid following the end of the PHE did not impact utilization.

Doorway participation accounted for some of the variation seen, as ED use increased with participation in the Doorway program. Demonstration Year did not have statistically significant explanatory power for the variation in the data in DY2 or 3 but did so in other years. Regression coefficients are summarized in the table below.

Variable	Coefficient Estimate	Standard Error	t-value	Pr(>|t|)	Statistical Significance
(Intercept)	1.70E-03	2.91E-04	5.843	5.67e-09 ***	Yes
Year (DY1)	-6.47E-04	2.61E-04	-2.482	0.0131 *	Yes
Year (DY2)	-3.03E-04	2.55E-04	-1.188	0.2347	No
Year (DY3)	-3.69E-04	2.56E-04	-1.442	0.1493	No

Variable	Coefficient Estimate	Standard Error	t-value	Pr(>|t|)	Statistical Significance
Year (DY4)	-1.91E-03	2.32E-04	-8.25	2.34e-16 ***	Yes
Year (DY5)	-2.16E-03	2.34E-04	-9.215	< 2e-16 ***	Yes
Eligibility (PHE)	-9.91E-05	1.32E-04	-0.754	0.4512	No
Age	3.84E-05	5.74E-06	6.68	2.84e-11 ***	Yes
Gender	4.62E-05	1.19E-04	0.39	0.6963	No
Doorway	5.44E-04	1.34E-04	4.049	5.28e-05 ***	Yes

*Significance codes: "***" = 0.001; "**" =.01; "*" = 0.05; "†" = 0.1*

2.B.1. The total number of ED visits for any reason per 1,000 SUD Demonstration enrollees.

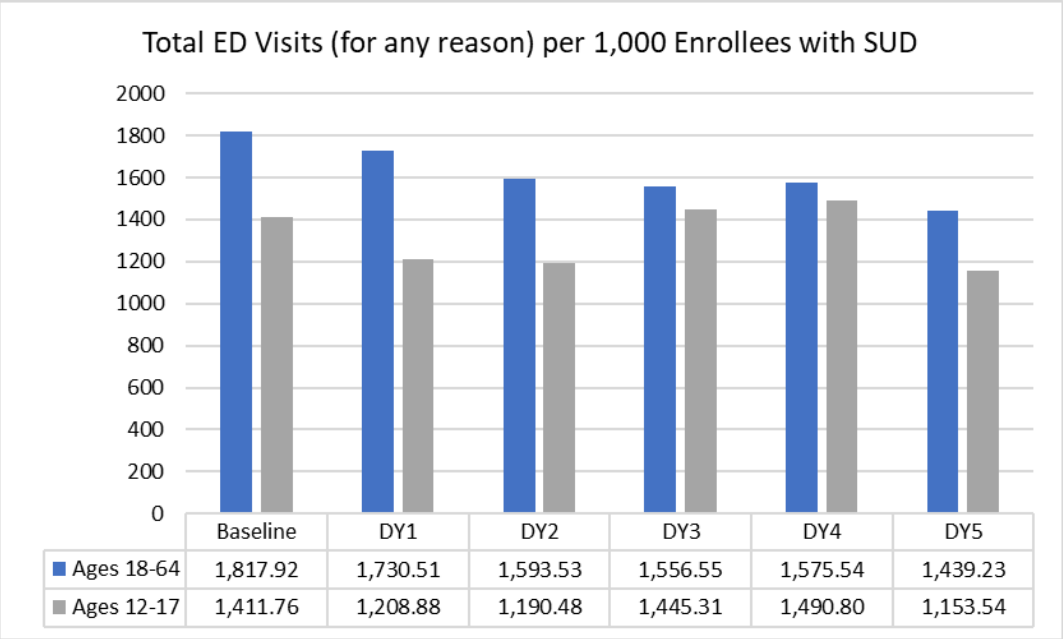
Measure Description: This measure is an adaptation of the CMS measure, Ambulatory Care: Emergency Department (ED) Visits from the Medicaid Health Home Core Set. The metric was modified to include only those enrollees identified with an SUD under the Demonstration. The measure was stratified for the adult and adolescent SUD sub-groups and the adult IMD study group.

Data Source and Time Period: PAP and MMIS paid claims, and MCO encounters SFY2017-23.

Analytical Approach: Linear Regression for the IMD Study Group.

Findings: ED visits for any reason have been declining since the baseline level of 1,817.92 visits per 1,000 adult enrollees with an SUD. ED visits per 1,000 adult enrollees in DY1 declined to 1,730.51. In DY2, during the onset of the PHE, the adult rate of ED visits declined further to 1,593.53, followed by 1,556.55 in DY3, 1575.54 in DY4 and 1439.23 in DY5.

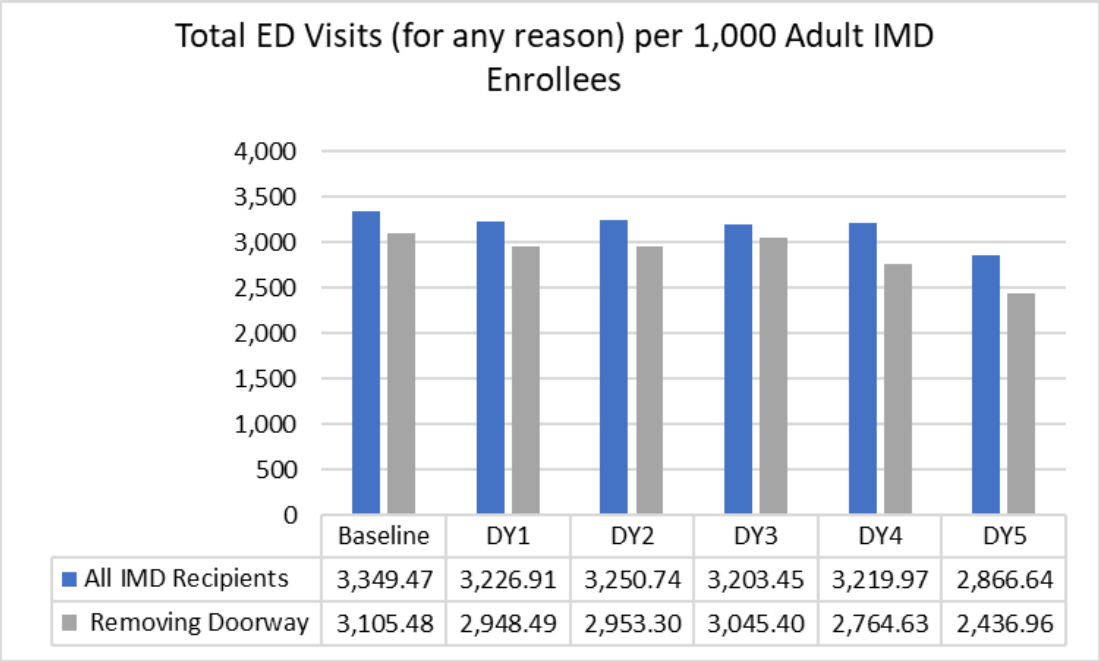
ED visits for any reason among adolescents dropped from 1,411.76 visits per 1,000 at baseline to 1,208.88 in DY1. In DY2, during the onset of the PHE, adolescent ED visits declined to 1,190.48. Adolescent visits increased in DY3 to 1,445.31 and 1,490.80 in DY4, before declining to 1,153.54 in DY5.



	Baseline	DY1	DY2	DY3	DY4	DY5
Ages 18-64	1,817.92	1,730.51	1,593.53	1,556.55	1,575.54	1,439.23
Ages 12-17	1,411.76	1,208.88	1,190.48	1,445.31	1,490.80	1,153.54

ED visits for the adult IMD study group also were examined. This group represents individuals requiring the most intensive level of SUD treatment including medically managed and medically monitored detoxification services, intensive residential treatment, and inpatient care.

ED visits for any reason among adult IMD service recipients declined from a baseline of 3,349.97 per 1,000 IMD enrollees to 3,226.91 ED visits per 1,000 IMD enrollees during DY1. In DY2, during the onset of the PHE, the IMD enrollee rate of ED visits was 3,250.74, followed by 3,203.45 in DY3, 3,219.97 in DY4, and 2,866.64 in DY5. When Doorway program recipients were removed from the IMD study group, the change over baseline was maintained for DY2-DY5.



	Baseline	DY1	DY2	DY3	DY4	DY5
All IMD Recipients	3,349.47	3,226.91	3,250.74	3,203.45	3,219.97	2,866.64
Removing Doorway	3,105.48	2,948.49	2,953.30	3,045.40	2,764.63	2,436.96

A linear regression controlling for age, gender, Doorway participation, and continued eligibility under the PHE for the IMD study group also was performed. Statistical significance suggests the likelihood of the variable having an impact, while the coefficient estimate measures the size and direction of the potential effect. The intercept represents the baseline (mean values) before accounting for differences due to member demographics or measurement year.

Age accounted for some of the variation seen across years, with ED use increasing in older enrollees. Results show Doorway recipients accounted for some of the variation seen, as ED use increased with participation in Doorway program services. Apart from DY2, each year showed statistically significant explanatory power for the variation in the data. Gender and continued eligibility under the PHE did not have significant explanatory power to account for the variation seen across years. Regression coefficients are summarized below.

Variable	Coefficient Estimate	Standard Error	t-value	Pr(>|t|)	Statistical Significance
(Intercept)	2.98E-03	3.675e-04	8.106	7.07e-16 ***	Yes
Year (DY1)	-9.64E-04	3.140e-04	-3.072	0.00214 **	Yes
Year (DY2)	-5.87E-04	3.052e-04	-1.924	0.05446 †	No

Variable	Coefficient Estimate	Standard Error	t-value	Pr(>|t|)	Statistical Significance
Year (DY3)	-8.07E-04	3.089e-04	-2.611	0.00906 **	Yes
Year (DY4)	-1.97E-03	2.935e-04	-6.697	2.45e-11 ***	Yes
Year (DY5)	-2.17E-03	2.980e-04	-7.265	4.52e-13 ***	Yes
Eligibility (PHE)	-2.50E-04	1.707e-04	-1.466	0.14267	No
Age	4.19E-05	7.640e-06	5.478	4.58e-08 ***	Yes
Gender	2.78E-05	1.536e-04	0.181	0.85665	No
Doorway	1.19E-03	1.787e-04	6.682	2.71e-11 ***	Yes

*Significance codes: "***" = 0.001; "**" =.01; "*" = 0.05; "†" = 0.1*

2.C.1. The frequency and rate of ED use, for enrollees receiving SUD IMD services, 90 days prior to their IMD admission and 90 days post their IMD discharge.

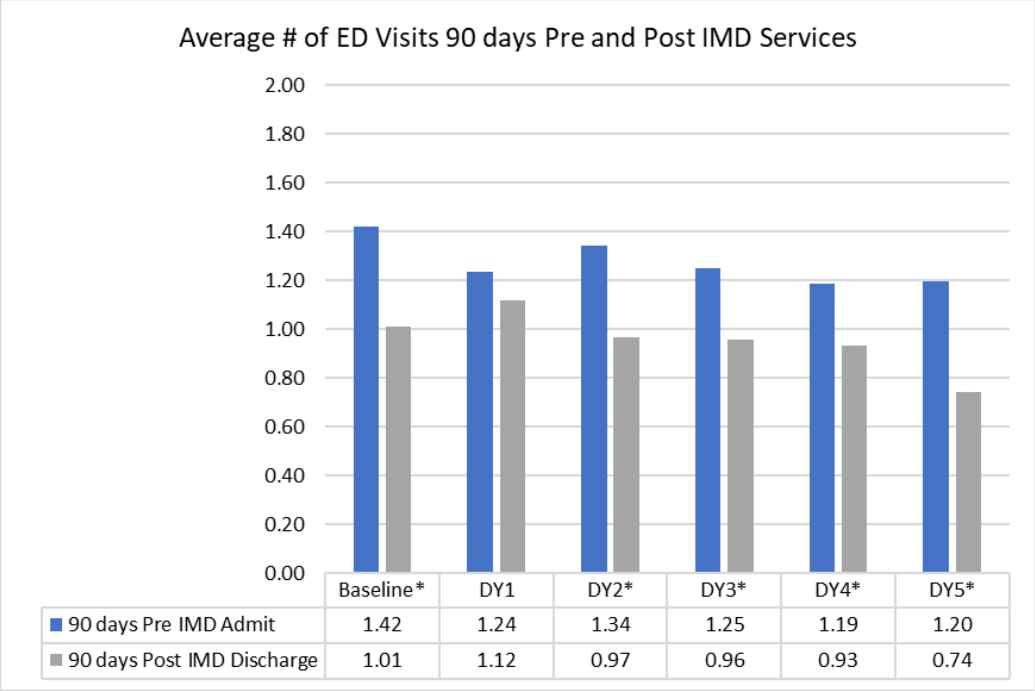
Measure Description: IMD service recipients were identified using the DHHS methodology previously described. The frequency and rate of ED use 90 days prior to their IMD admission and 90 days post IMD discharge was calculated. ED visits were defined and counted using the ED visit specifications from Measure 2.B.1, above.

Data Source and Time Period: PAP and MMIS paid claims, and MCO encounters SFY2017-23.

Analytical Approach: Welch two sample t-test (unequal variance), individual year and pooled years.

Findings: The average number of ED visits in the 90 days prior to an IMD admission was 1.42 during the baseline period, 1.24 in DY1, 1.34 in DY2, 1.25 in DY3, 1.19 in DY4 and 1.20 in DY5. For each year of the evaluation period, IMD enrollees showed fewer visits in the 90 days following discharge.

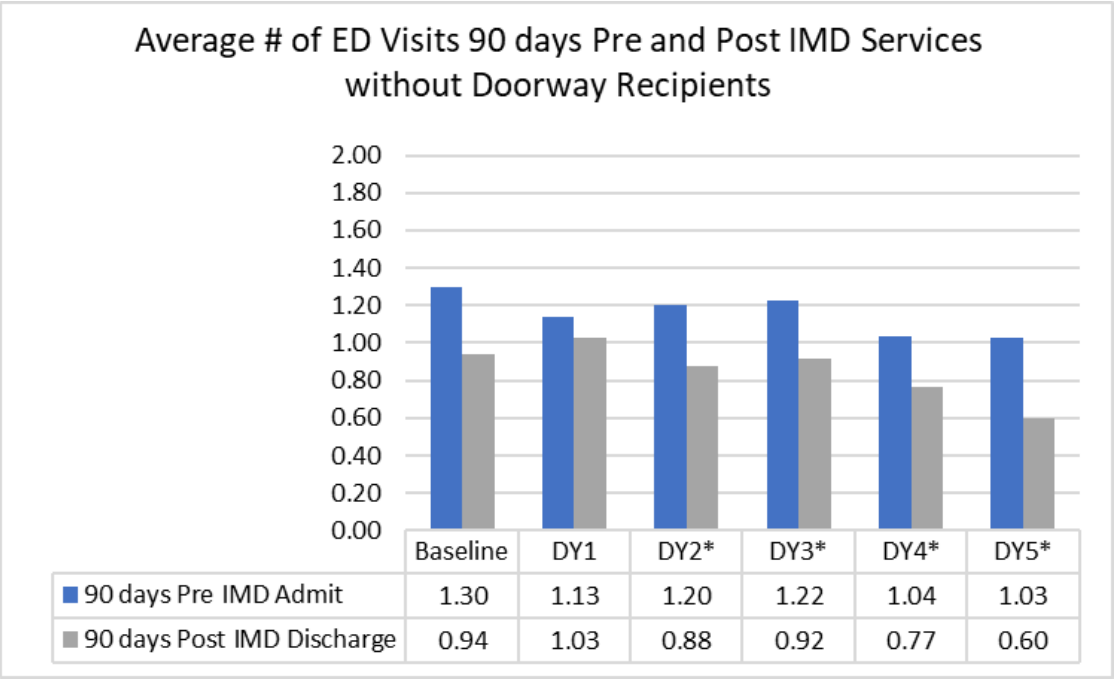
During the baseline period, the average number of visits in the 90 days following discharge was 1.01; in DY1 the average was 1.12. In DY2, during the onset of the PHE, the average was 0.97, followed by 0.96 in DY3, 0.93 in DY4 and 0.74 in DY5. A pooled t-test for all years yielded a statistically significant difference in the rate of ED visits pre/post IMD services, with a reduction seen post IMD services. In assessing each year individually, the reduction in the average number of ED visits post IMD stay were statistically significant for each year, apart from DY1.



	Baseline*	DY1	DY2*	DY3*	DY4*	DY5*
90 days Pre IMD Admit	1.42	1.24	1.34	1.25	1.19	1.20
90 days Post IMD Discharge	1.01	1.12	0.97	0.96	0.93	0.74

**Statistically significant change in the ED visit rate post IMD services*

When Doorway program recipients were removed from the IMD study group, the reduction in ED visits post IMD discharge was maintained. A pooled t-test for all years yielded a statistically significant difference in the rate of ED visits pre/post IMD services, with an overall reduction in ED use seen post IMD services in each year. In assessing each year individually, the reduction in the average number of ED visits post IMD stay remained statistically significant for each year, apart from DY1.



	Baseline	DY1	DY2*	DY3*	DY4*	DY5*
90 days Pre IMD Admit	1.30	1.13	1.20	1.22	1.04	1.03
90 days Post IMD Discharge	0.94	1.03	0.88	0.92	0.77	0.60

**Statistically significant change in the ED visit rate post IMD services*

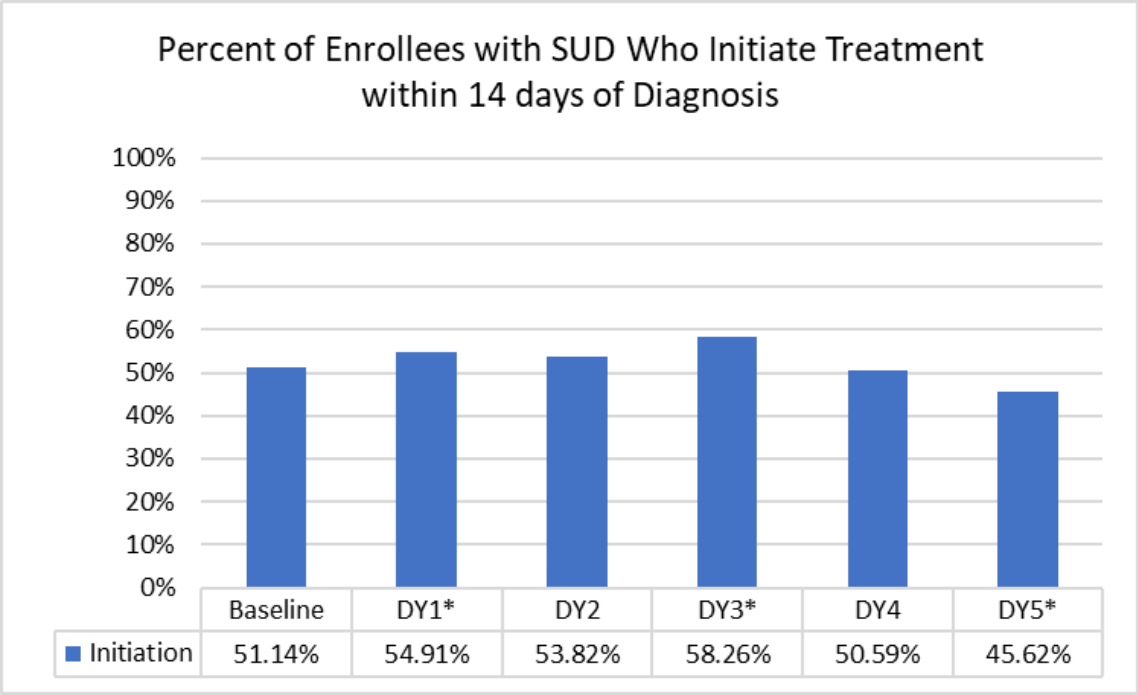
2.D.1. The percentage of enrollees who initiated treatment within 14 days of diagnosis.

Measure Description: This measure follows the HEDIS methodology for Initiation and Engagement in Treatment. The results represent members with an SUD who initiated treatment within fourteen days of their diagnosis.

Data Source and Time Period: PAP and MMIS paid claims, and MCO encounters SFY2017-23.

Analytical Approach: Logistic Regression.

Findings: The percentage of enrollees with an SUD who initiated treatment increased over the baseline of 51.14 percent in the first three years of the Demonstration. In DY1, 54.91 percent initiated treatment; in DY2, 53.82 percent initiated treatment, and in DY3 58.26 percent initiated treatment. In DY4 results declined below the baseline to 50.59 percent and in DY5 to 45.62 percent. Differences compared to baseline were statistically significant in DY1, 3 and 5.



**Statistically significant change from baseline period*

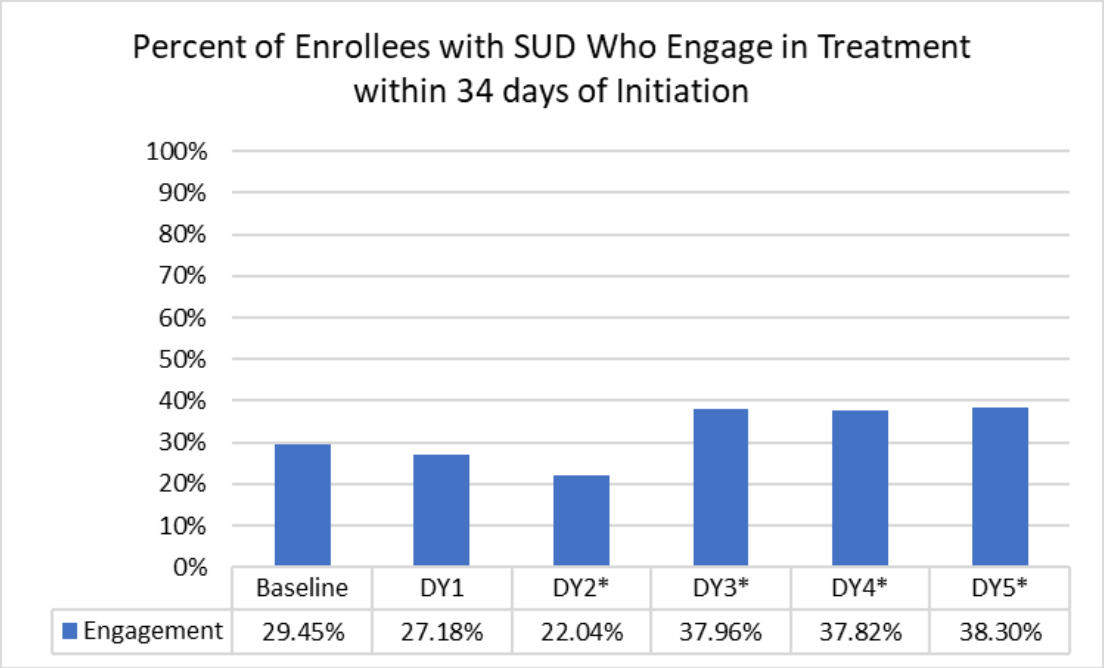
2.D.2. The percentage of enrollees who initiated treatment and who had two or more additional AOD services or MAT within 34 days of the initiation visit.

Measure Description: This measure follows the HEDIS methodology Initiation and Engagement in Treatment. The results represent the percentage of enrollees who engage in treatment within 34 days of their initiation visit (identified in Measure 2.D.1, above).

Data Source and Time Period: PAP and MMIS paid claims, and MCO encounters SFY2017-23.

Analytical Approach: Logistic Regression.

Findings: The percentage of enrollees who engaged in treatment following the initiation visit declined from 29.45 percent at baseline to 27.18 percent in DY1 and 22.04 percent in DY2 before increasing above baseline levels to 37.96 percent in DY3, 37.82 percent in DY4 and 38.30% in DY5. Results in the most recent evaluation period (DY5) represent a 30 percent increase over baseline. Differences compared to baseline were statistically significant in DY2-5.



	Baseline	DY1	DY2*	DY3*	DY4*	DY5*
Engagement	29.45%	27.18%	22.04%	37.96%	37.82%	38.30%

**Statistically significant change from baseline period*

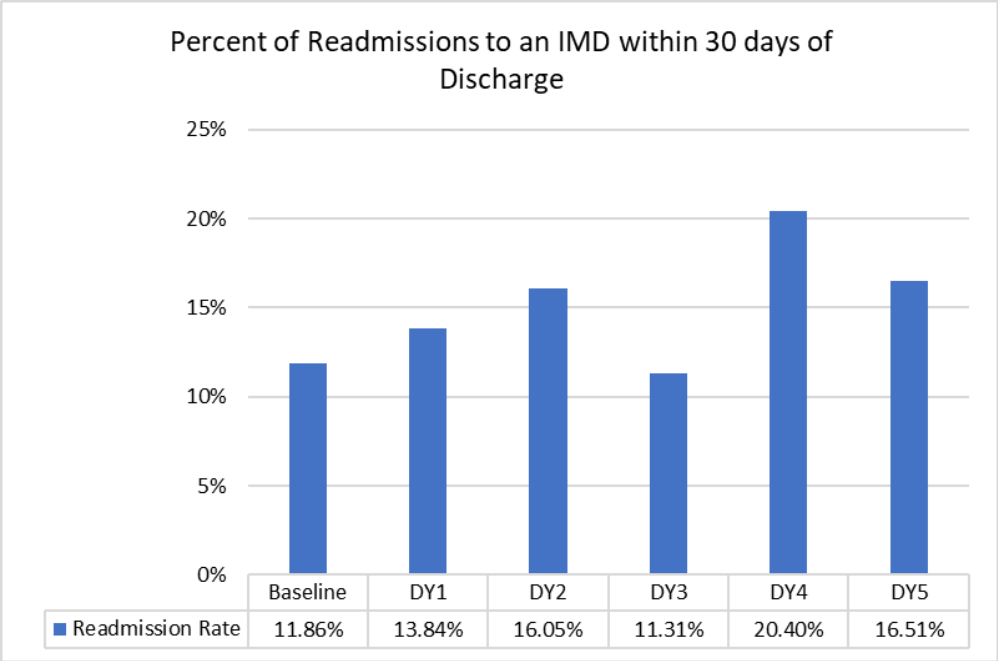
2.E.1. The percentage of SUD IMD stays during the measurement period followed by an SUD IMD readmission for SUD within 30 days.

Measure Description: The denominator represents the total number of IMD discharges during the measurement period. The numerator represents the number of readmissions to an IMD that occurred within 30 days of the discharge date.

Data Source and Time Period: PAP and MMIS paid claims, and MCO encounters SFY2017-23.

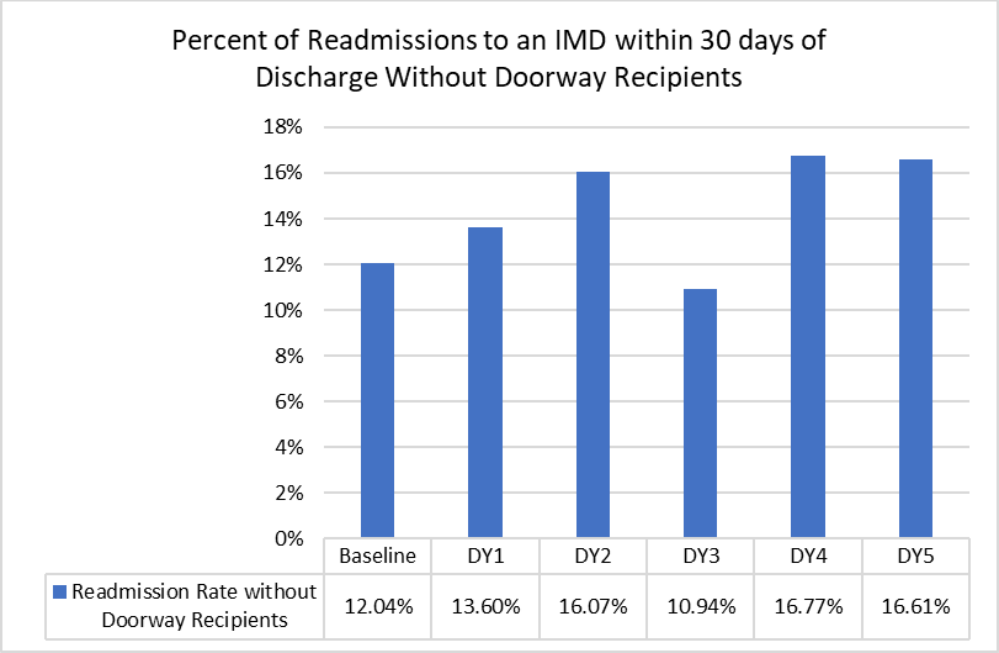
Analytical Approach: Linear Regression.

Findings: The percentage of IMD readmissions rose from a baseline of 11.83 percent to 13.84 percent in DY1 and 16.05 percent in DY2, then declined to 11.31 percent in DY3. In DY4 readmissions increased to 20.40 percent and declined again in DY5 to 16.51 percent.



When Doorway program recipients were removed from the IMD study group, the group showed an initial increase over baseline in DY2, the first full year of Doorway operations, followed by a decrease in DY3 to 10.94 percent and a return to 16.77 percent in DY4 and 16.61 percent in DY5.

A linear regression controlling for age, gender, Doorway participation, and continued eligibility under the PHE for the IMD study group also was performed. Statistical significance suggests the likelihood of the variable having an impact, while the coefficient estimate measures the size and direction of the potential effect. The intercept represents the baseline (mean values) before accounting for differences due to member demographics or measurement year.



Age was associated with fewer readmissions as was DY4-5. However, the coefficients were small. No other variables had significant explanatory power to account for the variation seen across years. Regression coefficients for are summarized in the table below.

Variable	Coefficient Estimate	Standard Error	t-value	Pr(>|t|)	Statistical Significance
Intercept	0.0832118	0.0129857	6.408	1.63e-10***	Yes
Year (DY1)	0.0072649	0.0107929	0.673	0.50091	No
Year (DY2)	0.0168654	0.0104049	1.621	0.10511	No
Year (DY3)	-0.0015825	0.0105208	-0.150	0.88044	No
Year (DY4)	0.0263385	0.0105271	2.502	0.01239 *	Yes
Year (DY5)	0.0212872	0.0107231	1.985	0.04719 *	Yes
Eligibility (PHE)	-0.0009493	0.0060809	-0.156	0.87595	No
Age	-0.0008166	0.0002794	-2.923	0.00348 **	Yes
Gender	0.0023351	0.0055449	0.421	0.67368	No
Doorway	0.0044051	0.0066443	0.663	0.50737	No

*Significance codes: "***" = 0.001; "**" =.01; "*" = 0.05; "†" = 0.1*

2.F.1. The percentage of enrollees who had SUD treatment visits at 45, 90, 135 and 180 days following IMD discharge.

Measure Description: The denominator represents the total number of enrollees discharged from an IMD during the measurement period. The numerator represents enrollees who had SUD treatment visits in the periods 45, 90, 135 and 180 days following the IMD discharge. All claims and encounters with a primary diagnosis of SUD were included in the numerator regardless of treatment setting (i.e., Intensive Outpatient, IMD, or hospital services). Results are cumulative (i.e., the 90-day period includes the 45-day period).

Data Source and Time Period: PAP and MMIS paid claims, and MCO encounters SFY2017-23.

Analytical Approach: Logistic Regression.

Findings: During the baseline period, the percent of recipients receiving a treatment service within 45 days was 43.70 percent, continued treatment within 90 days was 45.81, continuation within 135 days was 46.43 percent and continuation within 180 days was 46.43.

During DY1, the percentage rose to 47.04 within 45 days, 49.51 within 90 days, 50.11 within 135 days and 50.23 within 180 days.

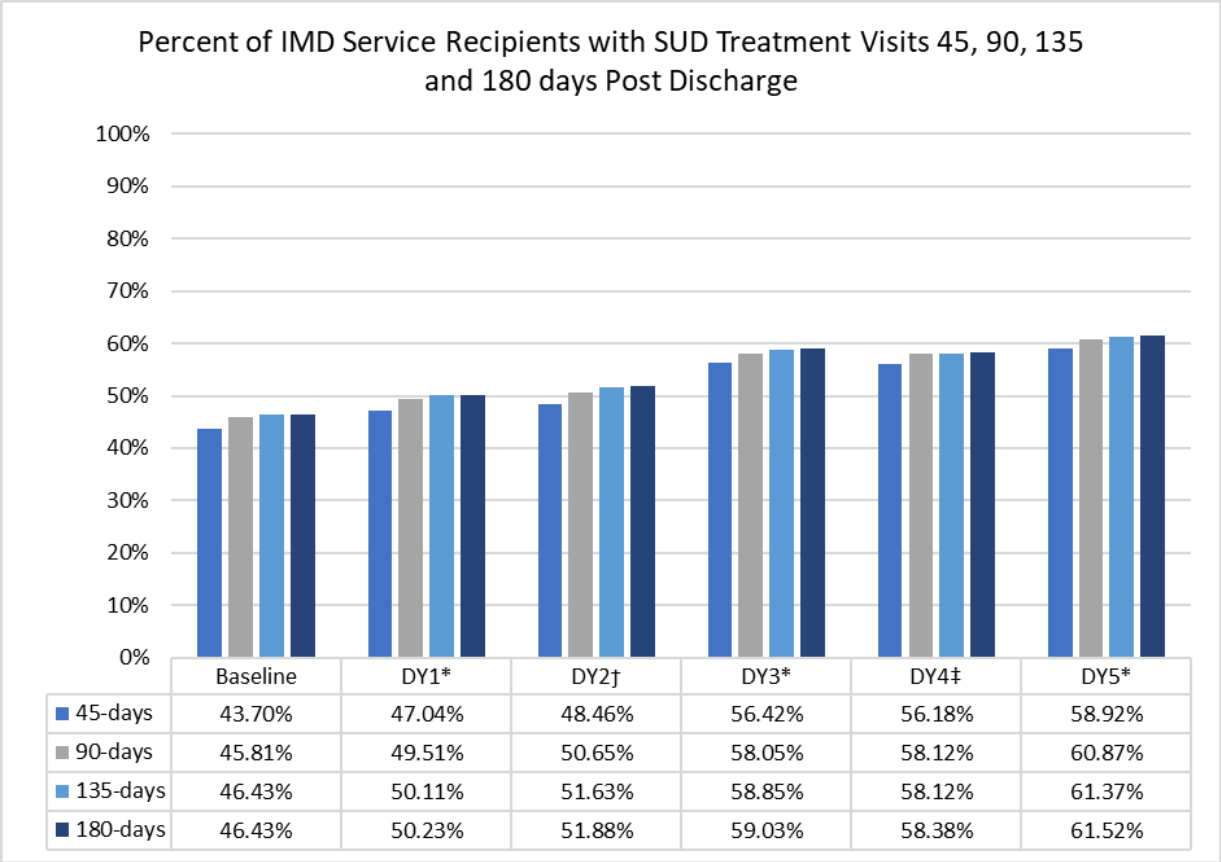
In DY2, the percentage increased to 48.46 within 45 days, 50.65 within 90 days, 51.63 within 135 days and 51.88 within 180 days.

In DY3, the percentages continued to increase over baseline, with 56.42 percent of enrollees receiving SUD treatment services within 45 days, 58.05 within 90 days, 58.85 within 135 days and 59.03 within 180 days.

In DY4 results were stable with 56.18 percent retention at 45 days, 58.12 at 90 days, 58.12 percent at 135 days and 58.38 at 180 days.

In DY5 retention in treatment rose to 58.92 within 45 days, 60.87 percent within 90 days, 61.37 percent within 135 days and 61.52 within 180 days.

Change over baseline was statistically significant in DY 1, 3 and 5 at each interval examined, and at 135 and 180 days in DY2 and 45, 135 and 180 days in DY4.



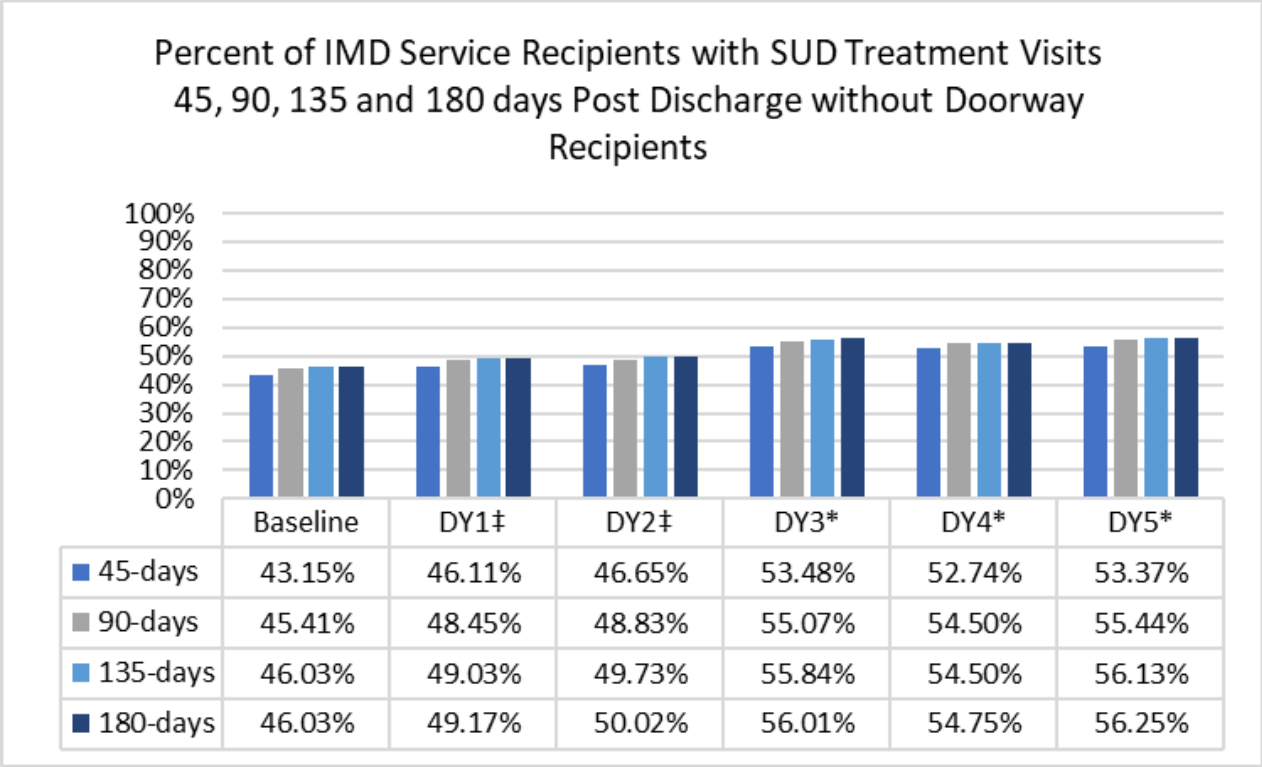
	Baseline	DY1*	DY2†	DY3*	DY4‡	DY5*
45-days	43.70%	47.04%	48.46%	56.42%	56.18%	58.92%
90-days	45.81%	49.51%	50.65%	58.05%	58.12%	60.87%
135-days	46.43%	50.11%	51.63%	58.85%	58.12%	61.37%
180-days	46.43%	50.23%	51.88%	59.03%	58.38%	61.52%

**Statistically significant change from baseline period at each interval*

† Statistically significant change from baseline period at 135 and 180 days

‡Statistically significant change from baseline period at 45, 135 and 180 days

When Doorway program recipients were removed from the IMD study group, the group showed the same trend in improvements in the percentage of IMD recipients who received treatment services at 45-, 90-, 135- and 180-days post discharge. Change over baseline was significant in each year that the Doorway operated (i.e., DY3-5).



	Baseline	DY1‡	DY2‡	DY3*	DY4*	DY5*
45-days	43.15%	46.11%	46.65%	53.48%	52.74%	53.37%
90-days	45.41%	48.45%	48.83%	55.07%	54.50%	55.44%
135-days	46.03%	49.03%	49.73%	55.84%	54.50%	56.13%
180-days	46.03%	49.17%	50.02%	56.01%	54.75%	56.25%

‡ Doorway program was not fully operating
**Statistically significant change from baseline period*

2.G.1 Provider Perception of Administrative Burden and Discharge Planning Policies

Medicaid enrolled SUD-IMD treatment providers were asked about their perceptions on the alignment of rules and requirements across State departments and their experience of administrative burden associated with those requirements.

Overall respondents agreed that most rules and requirements were aligned. Ninety percent of respondents agreed that Medicaid rules were aligned with BDAS requirements and 70 percent agreed that they aligned with Health Facility Licensing rules. Fifty percent of respondents agreed that there was alignment between BDAS and Health Facility Licensing rules. In addition, 60 percent of respondents agreed that the rules were clear and easy to understand. Only 20 percent agreed that the enhancement reduced administrative burden, 30 percent disagreed, and 50 percent were neutral.

Regarding discharge planning and coordination with providers outside of the facility, 50 percent agreed the rule changes supported discharge planning and 50 percent were neutral; 60 percent agreed the rules supported coordination with providers outside the facility and 40 percent were neutral.

Topic Statement	Responses		
	Agree	Disagree	Neutral
The Medicaid SUD residential treatment and Health Facility Licensing rules are aligned	70%	10%	20%
The Medicaid SUD residential treatment rules are aligned with BDAS provider contract requirements	90%	0%	10%
The Health Facility Licensing rules are aligned with BDAS provider contract requirements	50%	30%	20%
The Medicaid SUD residential treatment rules are clear and easy to understand	60%	30%	10%
The Health Facility Licensing rules are clear and easy to understand	60%	30%	10%
The 2018 and 2019 Medicaid and Health Facility Licensing rule alignment reduced administrative burden	20%	30%	50%
The Medicaid and Health Facility Licensing rules support our approach to discharge planning	50%	0%	50%
The Medicaid and Health Facility Licensing rules support coordination with providers outside the facility	60%	0%	40%

SUD EVALUATION QUESTION THREE

Evaluation Question Three asks: ***"Will the Demonstration maintain or reduce spending in comparison to what would have been spent absent the Demonstration?"*** The table below provides an overview of the hypothesis and measure associated with Evaluation Question Three.

Hypothesis	Measures
A. The Demonstration will be cost neutral	The PMPM trend rates and per capita cost estimates for each eligibility group defined in STC 60 for each year of the demonstration

3.A.1. The PMPM trend rates and per capita cost estimates for each eligibility group defined in STC 60 for each year of the Demonstration.

Measure Description: This measure examines the actual PMPM rates against the CMS approved PMPM limits for each of the approved Medicaid Eligibility Groups under the Demonstration. CMS considers these PMPM limits as part of a hypothetical spending cap, representing what may have been spent absent the Demonstration. In alignment with the DHHS budget neutrality reporting methodology, the adolescent group for this measure includes Demonstration participants who are ages 18-21.

Data Source and Time Period: DHHS budget neutrality workbooks as submitted to CMS at the close of DY5.

Analytical Approach: Descriptive.

Findings: New Hampshire's Budget Neutrality cap was adjusted at the end of DY2 as the result of the Demonstration amendment. The hypothetical PMPM limits (i.e., the estimate of what may have been spent absent the Demonstration) were readjusted by CMS and are no longer considered for DY1 and DY2 as part of the hypothetical spending cap.

At the end of DY5, DHHS was meeting the budget neutrality requirements. Actual expenditures through Demonstration in DY5 were $5,919,843 below the hypothetical cap set by CMS. The cumulative surplus at the end of DY5 for the SUD portion of the Demonstration was $12,783,070.

MEG	Demonstration Year (DY)				
	DY1	DY2	DY3	DY4	DY5
Without Waiver Limit (SUD)					
Medicaid Adults (SUD)	$636,182	$624,488	$1,009,590	$1,399,940	$1,514,033
Expansion Adults (SUD)	$2,230,144	$2,763,420	$6,078,271	$6,932,366	$8,284,311
Adolescents (SUD)	$42,402	$34,510	$27,638	$27,383	$24,803
Total (SUD)	**$2,908,728**	**$3,422,418**	**$7,115,499**	**$8,359,689**	**$9,823,147**
Actual Expenditures (SUD)					
Medicaid Adults (SUD)	$965,951	$1,311,693	$1,279,590	$1,343,433	$1,400,056
Expansion Adults (SUD)	$6,235,083	$4,014,881	$3,152,003	$2,787,294	$2,487,742
Adolescents (SUD)	$55,853	$105,016	$19,951	$29,690	$15,506
Total (SUD)	**$7,256,887**	**$5,431,590**	**$4,451,544**	**$ 4,160,417**	**$3,903,304**
Annual SUD Surplus (Deficit)	*$(4,348,159)*	*$(2,009,172)*	*$2,663,955*	*$4,199,272*	*$5,919,843*
Cumulative SUD Surplus Deficit)	*NA*	*NA*	*$2,663,955*	*$6,863,227*	*$12,783,070*

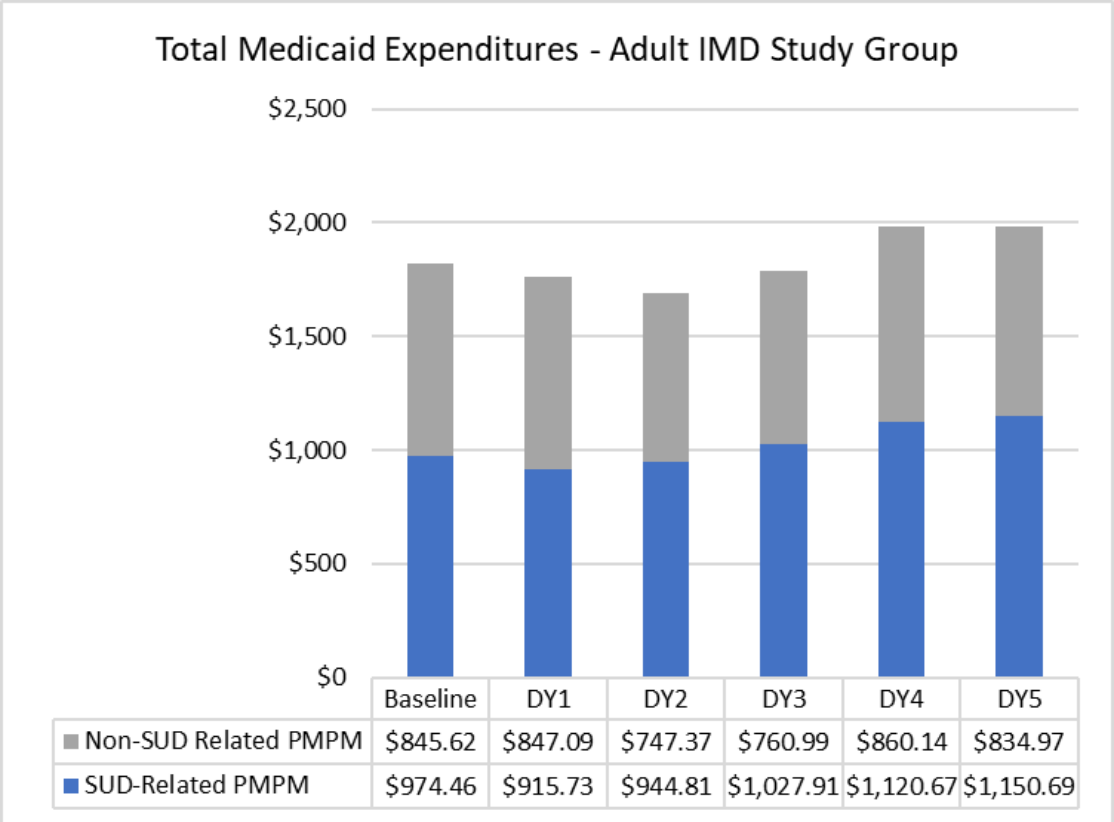
SUD EXPLORATORY EXPENDITURE ANALYSIS

An exploratory analysis of expenditures for the adult IMD study group was performed; these measures capture all costs for the measurement year and are not associated with a hypothesis or with budget neutrality reporting.

TOTAL COST OF CARE

The total cost of care was calculated for all adult enrollees who received IMD services during the measurement period. Expenditures were stratified into SUD-related and non-SUD health care services. SUD-related services were defined as claims with a primary diagnosis of SUD. Total costs are expressed as per member per month, with breakouts for cost drivers such as SUD-IMD, SUD-non IMD residential, ED, inpatient, pharmacy, and long-term care (LTC) services.

Total Medicaid expenditures showed a decline from baseline in DY2 and DY3 before increasing slightly in DY4 and DY5. The baseline SUD-related expenditures were $974.46 and declined to $915.73 in DY1 and to $944.81 in DY2. SUD-related PMPM expenditures increased to $1,027.91 in DY3, $1,120.67 in DY4 and $1,150.69 in DY5.



	Baseline	DY1	DY2	DY3	DY4	DY5
Non-SUD Related PMPM	$845.62	$847.09	$747.37	$760.99	$860.14	$834.97
SUD-Related PMPM	$974.46	$915.73	$944.81	$1,027.91	$1,120.67	$1,150.69

A linear regression of costs also was performed. Statistical significance suggests the likelihood

of the variable having an impact, while the coefficient estimate measures the size and direction of the potential effect. The intercept represents the baseline (mean values) before accounting for differences due to member demographics or measurement year.

Doorway participation accounted for some of the variation seen with SUD-related PMPM costs increasing. There was no statistically significant variation for age, gender, DY or continued eligibility under the PHE. Regression coefficients are summarized in the table below.

SUD-Related PMPM Expenditures					
Variable	**Coefficient Estimate**	**Standard Error**	**t-value**	**Pr(>|t|)**	**Statistical Significance**
Intercept	958.333	64.442	14.871	< 2e-16 ***	Yes
Year (DY1)	-34.013	53.628	-0.634	0.526	No
Year (DY2)	-54.35	51.68	-1.052	0.293	No
Year (DY3)	78.541	52.234	1.504	0.133	No
Year (DY4)	21.369	52.264	0.409	0.683	No
Year (DY5)	-69.844	53.197	-1.313	0.189	No
Eligibility (PHE)	6.276	30.209	0.208	0.835	No
Age	1.159	1.386	0.836	0.403	No
Gender (Female)	-21.881	27.521	-0.795	0.427	No
Doorway	233.454	32.951	7.085	1.61e-12 ***	Yes

*Significance codes: "***" = 0.001; "**" =.01; "*" = 0.05; "†" = 0.1*

In examining non-SUD related expenditures, age, gender, and Doorway participation accounted for the some of the variation in the total non-SUD related PMPM. Costs increased with age, gender (women were costlier) and Doorway participation. DY2-5, which aligned with the PHE period, showed some statistical power in explanatory lower costs. Continued eligibility under the PHE did not show significance in accounting for variation. Regression coefficients are summarized in the table below.

Non-SUD Related Expenditures					
Variable	**Coefficient Estimate**	**Standard Error**	**t-value**	**Pr(>|t|)**	**Statistical Significance**
Intercept	543.554	72.609	7.486	8.54e-14 ***	Yes
Year (DY1)	-83.78	60.417	-1.387	0.165603	No
Year (DY2)	-185.034	58.166	-3.181	0.001477 **	Yes
Year (DY3)	-144.431	58.894	-2.452	0.014229 *	Yes

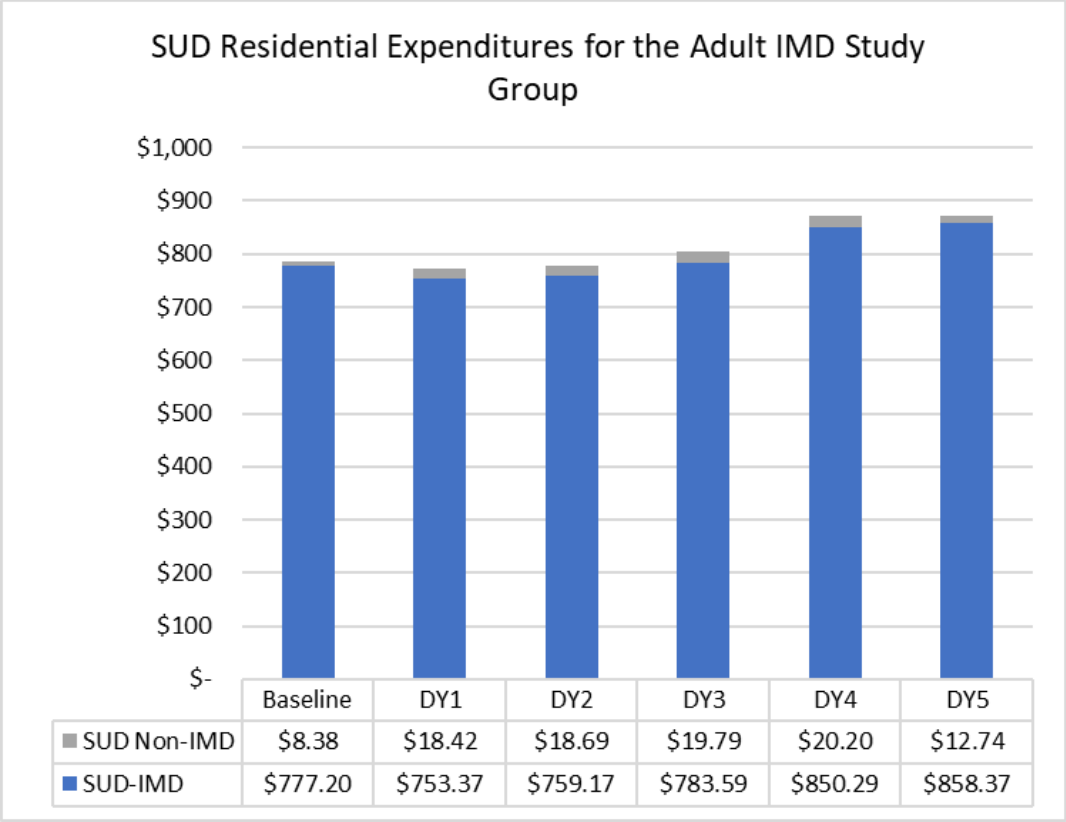
Non-SUD Related Expenditures					
Variable	Coefficient Estimate	Standard Error	t-value	Pr(>|t|)	Statistical Significance
Year (DY4)	-138.604	58.71	-2.361	0.018278 *	Yes
Year (DY5)	-215.485	59.751	-3.606	0.000314 ***	Yes
Eligibility (PHE)	1.067	33.909	0.031	0.974892	No
Age	6.111	1.553	3.934	8.47e-05 ***	Yes
Gender (Female)	69.673	30.827	2.26	0.023861 *	Yes
Doorway	276.703	36.809	7.517	6.75e-14 ***	Yes

*Significance codes: "***" = 0.001; "**" =.01; "*" = 0.05; "†" = 0.1*

SUD RESIDENTIAL TREATMENT SERVICES

Expenditures were examined as they related to SUD-residential services (IMD and non-IMD). Increases were seen in spending for non-IMD residential services; however, they remain a small portion of the residential treatment spending. SUD-IMD service spending declined from baseline, despite an uptick in service utilization in each year of the Demonstration and Medicaid rate increases.

During the baseline year, the SUD-IMD PMPM was $777.20. The PMPM declined slightly from baseline to $753.37 in DY1 and to $759.17 in DY2. The SUD IMD PMPM increased slightly in DY3 to $783.59, $850.29 in DY4 and $858.37 in DY5. For members who received IMD services, non-IMD residential spending was $8.38 at baseline, $18.42 in DY1, $18.69 in DY2, $19.79 in DY3, $20.20 in DY4 and $12.74 in DY5.



	Baseline	DY1	DY2	DY3	DY4	DY5
SUD Non-IMD	$8.38	$18.42	$18.69	$19.79	$20.20	$12.74
SUD-IMD	$777.20	$753.37	$759.17	$783.59	$850.29	$858.37

In a linear regression examining SUD IMD residential costs, neither age, gender nor continued eligibility under the PHE provided statistically significant power in explaining the variation in the SUD-IMD residential treatment PMPM. Participation in Doorway services was significant in accounting for some increase in expenditures.

Apart from DY5, which accounted for some decrease in expenditures, DY was not significant in explaining variation in expenditures. Regression coefficients are summarized in the table on the following page.

SUD-IMD Residential Expenditures					
Variable	Coefficient Estimate	Standard Error	t-value	Pr(>|t|)	Statistical Significance
Intercept	854.5925	56.1538	15.219	< 2e-16 ***	Yes
Year (DY1)	-21.2492	46.7866	-0.454	0.64973	No
Year (DY2)	-37.1422	45.08	-0.824	0.41003	No
Year (DY3)	1.3027	45.5548	0.029	0.97719	No
Year (DY4)	-23.3892	45.5649	-0.513	0.60776	No
Year (DY5)	-108.3835	46.3758	-2.337	0.01948 *	Yes
Eligibility (PHE)	11.0824	26.3385	0.421	0.67394	No
Age	-0.3985	1.2065	-0.33	0.74122	No
Gender (Female)	-38.6438	23.9817	-1.611	0.10717	No
Doorway	81.7547	28.7078	2.848	0.00442 **	Yes

*Significance codes: "***" = 0.001; "**" =.01; "*" = 0.05; "ŧ" = 0.1*

In examining the non-IMD residential PMPM, DY4 and 5 were associated with lower non-IMD residential costs. No other variable had statistically significant explanatory power for the variation. Regression coefficients are summarized in the table below.

Non-SUD-IMD Residential Expenditures					
Variable	Coefficient Estimate	Standard Error	t-value	Pr(>|t|)	Statistical Significance
Intercept	445.6079	59.8907	7.44	1.57e-13 ***	Yes
Year (DY1)	89.3977	69.6055	1.284	0.199	No
Year (DY2)	59.1254	66.8036	0.885	0.376	No
Year (DY3)	35.8886	63.9416	0.561	0.575	No
Year (DY4)	-405.8823	58.5431	-6.933	5.79e-12 ***	Yes
Year (DY5)	-419.3242	58.5964	-7.156	1.22e-12 ***	Yes
Eligibility (PHE)	-4.0795	10.3993	-0.392	0.695	No
Age	-0.311	0.4496	-0.692	0.489	No
Gender (Female)	-5.1267	9.2458	-0.554	0.579	No
Doorway	1.684	9.5906	0.176	0.861	No

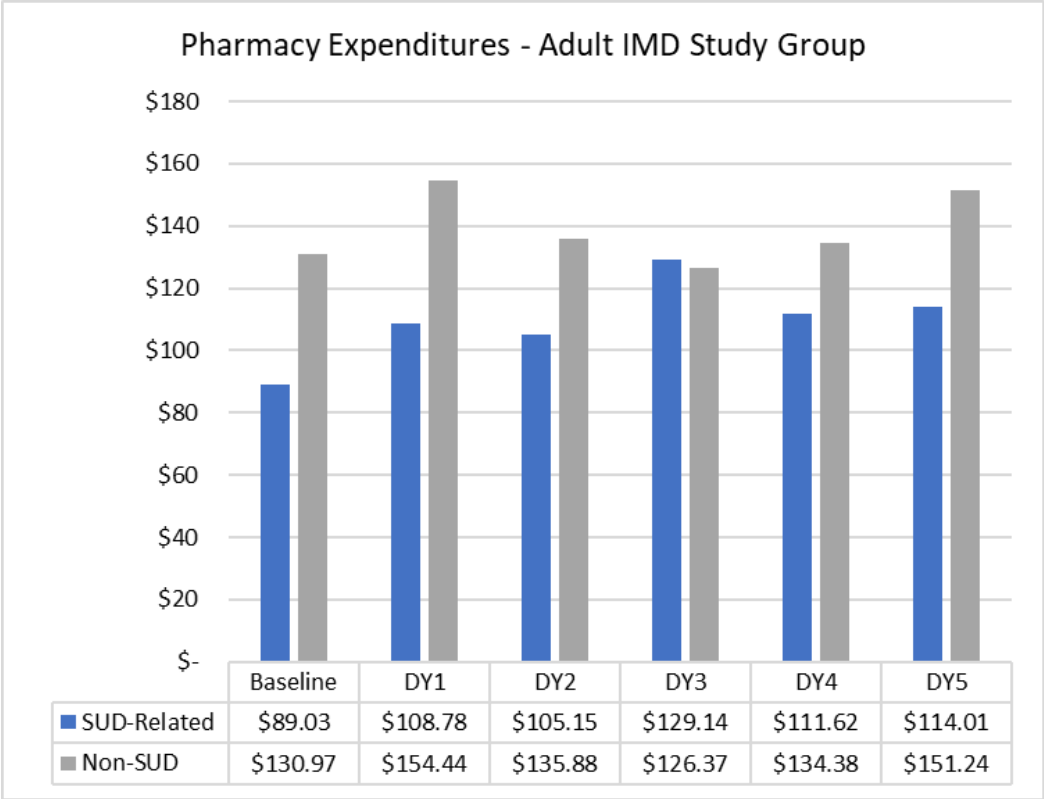
*Significance codes: "***" = 0.001; "**" =.01; "*" = 0.05; "ŧ" = 0.1*

PHARMACY

SUD-related pharmacy costs were classified using the HEDIS (measurement year 2020) AOD Medication Treatment Value Set, Alcohol Use Disorder Treatment Medication Lists, and Opioid Use Disorder Treatment Medication Lists, in alignment with the methodology identified in the CMS SUD Monitoring Protocol Metric 28 (Medicaid SUD Spending).

Total pharmacy expenditures increased over the Demonstration period. SUD-related costs were $80.03 at baseline and increased to $108.78 in DY1, $105.15 in DY2, $129.14 in DY3, $111.62 in DY4 and $114.01 in DY5.

Non-SUD expenditures were higher than SUD-related pharmacy in each year of the Demonstration, except in DY3. Non-SUD-related pharmacy was $130.97 at baseline and rose to $154.44 in DY1, $135.88 in DY2, $126.37 in DY3, $134.38 in DY4 and $151.24 in DY5.



	Baseline	DY1	DY2	DY3	DY4	DY5
SUD-Related	$89.03	$108.78	$105.15	$129.14	$111.62	$114.01
Non-SUD	$130.97	$154.44	$135.88	$126.37	$134.38	$151.24

In a linear regression examining non-SUD-related pharmacy costs, participation in Doorway services was the only variable with statistically significant explanatory power. Doorway participants were associated with more non-SUD pharmacy costs. Regression coefficients are summarized in the table on the following page.

Non-SUD Related Pharmacy Expenditures					
Variable	**Coefficient Estimate**	**Standard Error**	**t-value**	**Pr(>|t|)**	**Statistical Significance**
Intercept	95.5303	39.2281	2.435	0.0149 *	Yes
Year (DY1)	34.8317	33.1364	1.051	0.2932	No
Year (DY2)	2.4038	31.8003	0.076	0.9397	No
Year (DY3)	-6.8763	32.2031	-0.214	0.8309	No
Year (DY4)	-23.9827	31.7011	-0.757	0.4494	No
Year (DY5)	-17.8158	32.2247	-0.553	0.5804	No
Eligibility (PHE)	6.7595	18.088	0.374	0.7086	No
Age	0.3565	0.8253	0.432	0.6658	No
Gender (Female)	24.6834	16.4371	1.502	0.1333	No
Doorway	40.963	19.4173	2.11	0.0350 *	Yes

*Significance codes: "***" = 0.001; "**" =.01; "*" = 0.05; "†" = 0.1*

In a linear regression examining SUD-related pharmacy costs, age, gender and DY3-5 showed statistically significant explanatory power. A lower cost was associated with age and with gender (costs were lower for women). DY3 was associated with more SUD-related pharmacy costs, while DY4-5 were associated with lower costs. Regression coefficients are summarized in the table below.

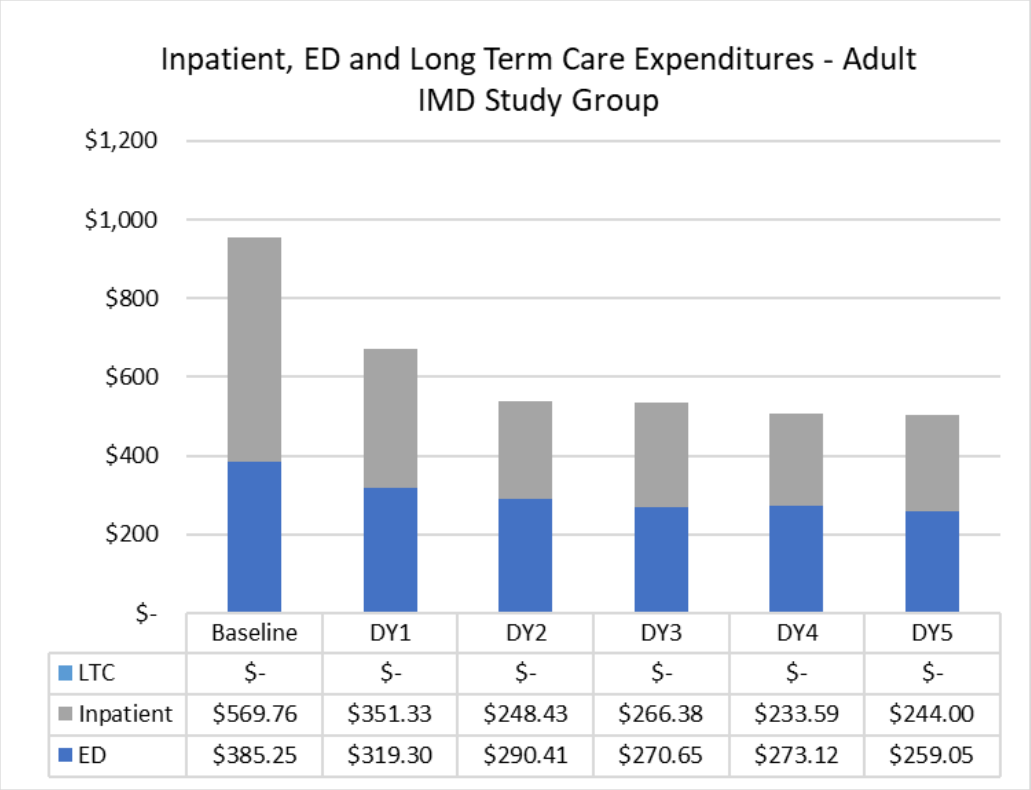
SUD Related Pharmacy Expenditures					
Variable	**Coefficient Estimate**	**Standard Error**	**t-value**	**Pr(>|t|)**	**Statistical Significance**
Intercept	204.0699	22.2814	9.159	< 2e-16 ***	Yes
Year (DY1)	-6.4425	19.3563	-0.333	0.73928	No
Year (DY2)	-10.5187	18.5028	-0.568	0.56974	No
Year (DY3)	49.5137	18.8242	2.63	0.00857 **	Yes
Year (DY4)	-43.1735	17.7756	-2.429	0.01520 *	Yes
Year (DY5)	-58.7786	18.0258	-3.261	0.00112 **	Yes
Eligibility (PHE)	2.5533	9.764	0.261	0.79372	No
Age	-1.0286	0.4689	-2.194	0.02833 *	Yes
Gender (Female)	-22.2354	8.8913	-2.501	0.01244 *	Yes
Doorway	15.9706	10.3101	1.549	0.12147	No

*Significance codes: "***" = 0.001; "**" =.01; "*" = 0.05; "†" = 0.1*

ED, INPATIENT, AND LONG-TERM CARE

PMPM trends for ED and inpatient use also declined from the baseline year for the adult IMD study group. At baseline, the PMPM for inpatient treatment was $569.76. The inpatient PMPM declined to $351.33 in DY1, $248.43 in DY2, $266.38 in DY3, $233.59 in DY4 and $244.00 in DY5.

The PMPM for ED showed a similar trend, decreasing from a baseline of $385.25 PMPM to $319.30 in DY1, $290.41 in DY2, $270.65 in DY3, $273.12 in DY4 and $259.05 in DY5. There was no Long-Term Care spending in any year of the Demonstration.



	Baseline	DY1	DY2	DY3	DY4	DY5
LTC	$-	$-	$-	$-	$-	$-
Inpatient	$569.76	$351.33	$248.43	$266.38	$233.59	$244.00
ED	$385.25	$319.30	$290.41	$270.65	$273.12	$259.05

In a linear regression of ED expenditures, age was associated with increased ED cost. Each year of the Demonstration also was associated with statistically significant explanatory power for lower ED cost. Participation in Doorway services was associated with increased expenditures. Continued eligibility under the PHE and gender did not account for statistically significant variation. Regression coefficients are summarized in the table below.

ED Expenditures					
Variable	**Coefficient Estimate**	**Standard Error**	**t-value**	**Pr(>|t|)**	**Statistical Significance**
Intercept	256.402	45.365	5.652	1.71e-08 ***	Yes
Year (DY1)	-126.714	38.838	-3.263	0.001114 **	Yes

ED Expenditures					
Variable	Coefficient Estimate	Standard Error	t-value	Pr(>|t|)	Statistical Significance
Year (DY2)	-154.579	37.762	-4.094	4.34e-05 ***	Yes
Year (DY3)	-163.705	38.156	-4.29	1.83e-05 ***	Yes
Year (DY4)	-256.818	36.173	-7.1	1.50e-12 ***	Yes
Year (DY5)	-268.647	36.726	-7.315	3.15e-13 ***	Yes
Eligibility (PHE)	-22.394	20.988	-1.067	0.286045	No
Age	5.74	0.939	6.114	1.08e-09 ***	Yes
Gender (Female)	7.473	18.871	0.396	0.692121	No
Doorway	75.592	21.844	3.461	0.000545 ***	Yes

*Significance codes: "***" = 0.001; "**" =.01; "*" = 0.05; "†" = 0.1*

In a linear regression of the inpatient expenditures, age and Doorway participation were associated with increased cost. Each year of the Demonstration, apart from DY1, was associated statistically significant explanatory power for lower inpatient cost. Continued eligibility under the PHE was not associated with statistically significant power. Regression coefficients are summarized in the table below.

Inpatient Expenditures					
Variable	Coefficient Estimate	Standard Error	t-value	Pr(>|t|)	Statistical Significance
Intercept	833.329	65.5	12.723	< 2e-16 ***	Yes
Year (DY1)	-92.477	62.101	-1.489	0.136568	No
Year (DY2)	-251.877	63.145	-3.989	6.82e-05 ***	Yes
Year (DY3)	-223.816	60.357	-3.708	0.000213 ***	Yes
Year (DY4)	-753.939	50.853	-14.826	< 2e-16 ***	Yes
Year (DY5)	-756.104	51.557	-14.665	< 2e-16 ***	Yes
Eligibility (PHE)	-53.817	30.963	-1.738	0.082309†	No
Age	3.314	1.365	2.427	0.015286 *	Yes
Gender (Female)	-38.404	27.772	-1.383	0.166822	No
Doorway	71.124	31.305	2.272	0.023167 *	Yes

*Significance codes: "***" = 0.001; "**" =.01; "*" = 0.05; "†" = 0.1*

The long-term care PMPM included fewer than ten observations. Due to the small number, a linear regression was not performed.

7. SUD DEMONSTRATION CONCLUSION

The evaluation examined three research questions and nine hypotheses. In general, the Demonstration is achieving its intended goals. A discussion of each evaluation question and findings is presented below.

Evaluation Question One. What are the impacts of the Demonstration on access to SUD residential treatment services for Demonstration enrollees?

It is hypothesized that access to residential SUD services will increase under the Demonstration. The percentage of enrollees with an SUD diagnosis who received IMD services increased in each year of the Demonstration. Enrollees ages 12-64 years old who received IMD services rose from a baseline of 6.5 percent to 10.5 percent in DY5. Differences over baseline were statistically significant in each year of the Demonstration.

The SUD Demonstration also is expected to maintain and encourage growth in adult capacity. In examining the number of Medicaid enrolled SUD residential providers, the evaluation tracked the number of licensed SUD residential treatment beds as of July 1 of each year, at all levels of care.

The number of residential treatment facilities enrolled in Medicaid increased from fourteen at baseline to fifteen by the start of DY5. Several facilities expanded bed capacity prior to the PHE; however, bed capacity declined following the onset of the PHE. Several programs reflected in the July 1st baseline licensed bed count already had announced plans to close or downsize bed capacity by the end of the calendar year.

Overall, there was five percent increase in capacity over baseline by the beginning of DY5. The licensed bed count for the Medicaid enrolled residential SUD treatment facilities was 554 in the year before the Demonstration; by DY5 that number rose to 583.

The provider survey results suggested that Medicaid members have satisfactory access to each level of care, apart from medically managed intensive inpatient services (withdrawal management - ASAM level 4.0), where only twenty percent of providers agreed that the service was available when needed. Except for specialized residential programs for pregnant women, wait times for admission was reported to be 24 hours or less and the average length of stay was reported by providers as thirty days or less. None of the residential programs limit the number of beds available for Medicaid members.

The table on the following page provides an overall summary of the evaluation findings for Evaluation Question One.

Evaluation Question 1: What are the impacts of the Demonstration on access to SUD residential treatment services for Demonstration enrollees?		
Hypotheses	Measures	Findings
A. Adult enrollees will have better access to residential SUD treatment services	1. Percent of enrollees Ages 12-64 with an SUD claim for treatment in an IMD with a discharge date during the year	Statistically significant increases in access to IMD services were seen in each year of the Demonstration
	2. The total number of licensed beds for Medicaid enrolled SUD residential treatment providers each year	Licensed bed capacity for Medicaid enrolled residential treatment facilities increased from 554 beds at baseline to 583 beds in DY5
	3. Network availability, (appointments, wait times, acceptance of Medicaid)	The majority of providers reported wait times of 0-24 hours. Survey respondents reported good access to all levels of care, with most suggesting that access to withdrawal management services could be improved

These findings support the conclusion that the Demonstration is associated with better access to residential SUD treatment services.

Evaluation Question Two. What are the impacts of the Demonstration on quality of care for Medicaid enrollees with an SUD diagnosis?

The evaluation examined the impact of the Demonstration on ED utilization, IMD readmissions and initiation, engagement, and retention in treatment. It was hypothesized:

A. Enrollees with SUD will have fewer ED visits for SUD.
B. Enrollees with SUD will have fewer total ED visits.
C. Enrollees with SUD will have fewer ED visits post discharge from an SUD IMD
D. Enrollees with SUD will have improved rates of initiation and engagement in alcohol and other drug treatment.
E. Enrollees with SUD will have lower IMD readmission rates.
F. Enrollees with SUD will have improved rates of treatment retention.
G. Medicaid IMD Providers will report consistency in DHHS program design and discharge planning policies.

Conclusions related to each hypothesis are summarized below.

A. Enrollees with SUD will have fewer ED visits for SUD:

The results showed that number of ED visits for SUD declined from baseline in each year of Demonstration. For enrollees ages 18-64 years old there was a decline in utilization of the ED for SUD from baseline in each year of the Demonstration. DY5 showed a 35.5 percent decline in utilization from baseline. This trend was maintained for the adolescent population (enrollees ages 12-17 years old). Adolescent use of the ED for SUD declined by 43.0 percent in DY5.

The adult IMD study group also showed a decline in ED use for SUD of 34.4 percent from baseline to DY5. A linear regression showed that age was associated with more ED visits, as was having a Doorway service. DY1,3 and 5 also showed a significant association with decreased utilization.

B. Enrollees with SUD will have fewer total ED visits.

ED visits for any reason also declined from baseline in each year of the Demonstration. For enrollees 18-64 years old, ED visits dropped 21 percent from baseline to DY5. For adolescents 12-17 years old, ED visits declined 18 percent from baseline to DY5.

For the adult IMD study group the decline in ED use from baseline to DY 5 was 15 percent. A linear regression showed that age was associated with more ED visits as was having a Doorway service. Apart from DY2, each DY was associated with lower ED use. Continued eligibility under the PHE was not associated with significant explanatory power.

In all the regressions, the coefficient estimates were small. Statistical significance suggests the likelihood of the variable having an impact, while the coefficient estimate measures the size of the potential effect. A small coefficient estimate indicates small effect size, meaning that while the variables studied (i.e., age, gender, continued eligibility under the PHE, and each 12-month Demonstration period) may be statistically significant (as indicated by p-values) they only play a small part in explaining the results. Where a covariate shows a statistically significant yet small regression coefficient, we cannot attribute the changes year over year to those activities.

Results show that ED use had declined from baseline in the first year of the Demonstration (pre-pandemic). However, with the onset of the PHE part way through DY2, it is possible that the reductions seen in subsequent years were influenced by the State's PHE response and enrollee concerns with potential exposure to the novel coronavirus in an ED setting.

Having a Doorway service was associated with higher ED use. While available to anyone with an SUD, the Doorway program is particularly focused on individuals with an opiate addiction, a population with historically high risk of overdose and other health incidents requiring ED services. In some cases, Doorway providers also offer MAT induction in the ED, as they serve as a gateway to other community-based OUD and SUD treatment and recovery services. In addition, hospital-based providers host Doorway programs; in some cases, services are housed on the hospital campus and/or ED.

C. Enrollees with SUD will have fewer ED visits post discharge from an SUD IMD.

During the baseline and in each year of the Demonstration, enrollees had fewer ED visits in the 90 days following an IMD discharge as compared to the 90 days prior to admission. In DY1 ED use was more than nine percent lower following an IMD stay. In DY2-4 ED use was 28.07, 23.36, and 25.41 percent lower post discharge. In DY5, ED use was 40.33 percent lower following IMD discharge.

The pre/post differences were statistically significant in each year, apart from DY1. Results were maintained when Doorway participants were removed from the calculations.

D. Enrollees with SUD will have improved rates of initiation and engagement in alcohol and other drug treatment.

The percentage of enrollees who initiated treatment within 14 days of their diagnosis increased in the first three years of the Demonstration. In DY4 there was a marked decline in enrollees initiating treatment. Initiation was eight percent lower than baseline in DY4 and 15 percent lower in DY5.

The percentage of enrollees who engaged in additional treatment visits within 34 days of their initiation visit increased over baseline in DY4 by 28 percent and by 30 percent in DY5. The difference from baseline was statistically significant for initiation in DY1, 3 and 5; and for engagement in DYDY2-5. The sustained uptick in engagement in DY3-5 coincided with improved access to telehealth and the reinstatement of in-person program operations for those members who did seek out and engage in SUD treatment services.

E. Enrollees with SUD will have lower IMD readmission rates.

Readmissions to IMD facilities rose above baseline levels in the first three years of the Demonstration before declining during DY3. DY4 readmission rates rose over baseline by over 70 percent before declining again in DY5.

Older IMD service recipients were associated with fewer readmissions, as was DY4-5. However, in all comparisons the coefficient estimates were small. The coefficient estimates in a regression can be thought of as effect sizes. A small coefficient estimate indicates that, while the variable had a statistically significant impact, it played a small part in explaining the differences in results year over year.

F. Enrollees with SUD will have improved rates of treatment retention.

The percentage of enrollees who had SUD treatment visits in the six months following IMD discharge was examined at 45-, 90-, 135- and 180-days post discharge. The percentage of enrollees with an SUD treatment visit, of any type, in the six months following IMD discharge consistently increased year over year.

In the first year of the Demonstration, enrollees who had services increased an average of 7.96 percent across the four intervals, in DY2 the increase averaged 11.10 percent, in DY3 the increase averaged 27.43 percent, in DY4 the increase averaged 26.58 percent, and in DY5 the increase in retention average 33.10 percent. When Doorway participants were removed from the calculations, the trends were maintained.

The uptick in members who were retained in treatment services post discharge coincided with improvements in discharge planning across all service providers, improved access to telehealth, and the reinstatement of in-person program operations.

G. Medicaid IMD Providers will report consistency in DHHS program design and discharge planning policies.

Overall, representatives who responded to the SUD-IMD provider survey reported alignment of rules and requirements across State departments. However, only 20 percent of respondents agreed that the enhancement reduced administrative burden, while 30 percent disagreed, and 50 percent were neutral.

Regarding discharge planning and coordination with providers outside of the facility, 50 percent agreed the rule changes supported discharge planning and 50 percent were neutral; 60 percent agreed the rules supported coordination with providers outside the facility and 40 percent were neutral. Providers did not report strong opposition to the enhanced rules.

An overall summary of the evaluation findings for Evaluation Question Two is provided below.

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Evaluation Question 2: What are the impacts of the Demonstration on quality of care for Medicaid enrollees with an SUD diagnosis?		
Hypotheses	Measures	Findings
A. Enrollees will have fewer ED visits for SUD	1. The total number of ED visits for SUD per 1,000 Demonstration enrollees	ED use declined over baseline for all age groups and for total ED visits and SUD-related ED visits.
B. Enrollees will have fewer total ED visits	1. The total number of ED visits for any reason per 1,000 Demonstration enrollees	
C. Enrollees will have fewer ED visits post discharge from an SUD IMD	1. ED use 90 days prior to IMD admission and 90 days post discharge	Declines in ED visits in the 90 days following IMD discharge as compared to the 90 days prior to admission were evident in each year and statistically significant in DY2-5
D. Enrollees will have improved rates of initiation and	1. Percentage of enrollees who initiated treatment within 14 days of diagnosis	There was a statistically significant increase in DY1 and DY3, before a statistically significant decline in DY5

Evaluation Question 2: What are the impacts of the Demonstration on quality of care for Medicaid enrollees with an SUD diagnosis?		
Hypotheses	Measures	Findings
engagement in treatment	1. Percentage of enrollees who engage in treatment within 34 days of initiation	There was a statistically significant increase in DY3-5
E. Enrollees will have lower IMD readmission rates	1. The percentage of IMD stays followed by a readmission within 30 days	Readmission rates increased over baseline in most years
F. Enrollees will have improved rates of treatment retention	1. The percentage of enrollees who had SUD treatment visits 45, 90, 135, and 180 days following IMD discharge	There were statistically significant increases over baseline in each year of the Demonstration
G. Medicaid IMD Providers will report consistency in DHHS program design and discharge planning policies	1. Provider perception of administrative burden and discharge planning policies	Providers reported alignment of rules and requirements across State agencies and agreed or were neutral regarding discharge planning related rule changes. Providers did not report strong disagreement with or opposition to the enhanced rules

Evaluation Question Three. Will the Demonstration maintain or reduce spending in comparison to what would have been spent absent the Demonstration?

It was hypothesized that the Demonstration would be cost neutral. To track performance, CMS and the State agree to a hypothetical cap (i.e., a PMPM limit) on spending. Performance at the end of DY3 showed that the Demonstration expenditures were $2,931,666 below the hypothetical spending cap. At the end of DY5, the Demonstration showed a cumulative savings of $12,783,070 and actual expenditures $5,919,834 below the hypothetical cap for SUD-related activities.

PMPM trends for total cost of care in the adult IMD study group began declining with the onset of the PHE. In the last two years of the Demonstration, expenditures increased to just above baseline levels. Increases were seen in pharmacy (both SUD-related and non-SUD related), while inpatient and ED expenditures declined. Increased access to MAT and the integration of physical and behavioral health coincided with the increase in pharmacy related expenditures.

Linear regressions were performed, controlling for members who were found ineligible for Medicaid services following a period of continued eligibility under the PHE. There were no significant findings. Continued eligibility under the PHE did not yield any significance in explaining the variation seen in the results.

Overall, the SUD Demonstration is associated with meeting its goals, including to:

1. Improve access to OUD and other SUD services;

2. Improve the quality of the SUD treatment delivery system to provide high-quality coordinated and comprehensive OUD/SUD treatment for Medicaid enrollees; and
3. Maintain budget neutrality.

Below is an overall summary of the evaluation findings for Evaluation Question Three.

Evaluation Question 3: Will the Demonstration maintain or reduce spending in comparison to what would have been spent absent the demonstration?		
A. The Demonstration will be cost neutral	1. PMPM trends and per capita costs by Medicaid Eligibility Groups identified in the STCs	At the end of DY5 the Demonstration showed a cumulative surplus

CONCLUSION

Overall, the New Hampshire SUD Treatment and Recovery Access Demonstration is associated with improved access to care for those beneficiaries with intensive SUD treatment needs. In all years, ED use declined in the 90 days following IMD discharge as compared to the 90 days period prior to admissions.

IMD services for those meeting criteria may contribute to stabilization and continuity of care post discharge. This is further evidenced by the percentage of members who have a claim for SUD treatment in the 45, 90, 135 and 180 days following IMD discharge. Results indicate that SUD treatment utilization increased, and overall use of ED has declined.

An exploratory analysis of expenditures for adults who received IMD services shows lower PMPM costs during the PHE, with a slight increase in total cost of care over baseline by the end of the Demonstration period. This increase may be related to increased access to pharmacy services for both SUD-related and non-SUD-related conditions.

INTERPRETATIONS, POLICY IMPLICATIONS AND INTERACTIONS WITH OTHER STATE INITIATIVES

Prior to the beginning of the Demonstration, New Hampshire began developing a full continuum of care for individuals with SUD. This included maintaining existing prevention, treatment, and recovery capacity, while also expanding access to Medication Assisted Treatment (MAT), peer recovery support services, harm reduction initiatives, and the coordination of care through a statewide crisis hotline.

The SUD system of care also included the development of nine regional treatment Hubs (the Doorways) to serve as 24/7 access points to addiction treatment. Implementation of Doorway services began six months after the start of the Demonstration.

In linear regression models of ED utilization, SUD Demonstration participants who also had claims from Doorway providers accounted for some of the variation seen in utilization. However, it is difficult to draw strong conclusions regarding the Doorway's impact on the Demonstration for the following reasons:

- Regression coefficients were small, which indicates that the magnitude of impact was also small.
- Individuals may have received a Doorway service that was not reimbursed by Medicaid, making a claims-based method imprecise.
- A priority population for Doorway programs are individuals with OUD. Members with an OUD are more likely to suffer from overdoses and other complications from their addiction that require emergency care.
- Doorway providers offer MAT induction in the ED.
- Intakes for Doorway services are offered in the ED.
- DY2-5 aligned with the novel coronavirus PHE, making it difficult to draw strong conclusions regarding service utilization.

Continued eligibility under the PHE did not show statistical significance in accounting for the variation in results.

LESSONS LEARNED AND RECOMMENDATIONS

The New Hampshire Substance Use Disorder Treatment and Recovery Access Demonstration was necessary to address critical unmet needs for residential SUD treatment. Prior to the start of the Demonstration, New Hampshire's statutes and rules required that treatment decisions and delivery system innovations be based on the use of the American Society of Addiction Medicine criteria and other nationally recognized assessment and placement tools that reflect

evidence-based clinical treatment guidelines, making the CMS SUD IMD Demonstration requirements a good fit for the State.

Best practice in SUD treatment for children and adolescents supports the delivery of highly integrated mental health and SUD treatment services and family support. After further evaluation of the child and adolescent service system, the State of New Hampshire concluded that creating a separate SUD treatment facility was not warranted. Instead, the State is transforming its residential care and treatment system for children and adolescents to support a full continuum of integrated, co-occurring mental and physical health and SUD treatment in non-IMD settings.

8. SMI DEMONSTRATION AMENDMENT BACKGROUND

The State of New Hampshire supports a comprehensive continuum of community mental health services. Guided by a 10-year mental health plan reissued in 2019, the Department of Health and Human Services addresses the needs of individuals and families across the continuum of care.

DHHS and its stakeholders are engaged in strengthening and enhancing the community mental health service system, with a comprehensive approach to mental health across the life span. The State's 10-Year Mental Health Plan calls for strengthening the system of care with evidence-based treatment options and promoting a highly coordinated and integrated system of care to improve physical and behavioral health outcomes and prevent readmissions.

In the period immediately prior to the Demonstration amendment request, DHHS observed an increase in individuals utilizing Emergency Departments for mental health and psychiatric crisis. The State's inpatient psychiatric bed capacity could not meet the increased demand. This in turn resulted in long wait times for treatment. Psychiatric boarding in the ED, previously reduced to near zero, had increased dramatically.

In May of 2021, a State Supreme Court decision required the State to hold probable cause hearings for mental health patients within three days of completion of an Involuntary Emergency Admission (IEA) certificate, regardless of any wait list or ED boarding status. In response, Governor Sununu signed Executive Order 2021-0915 on May 13, 2021, requiring DHHS to enact emergency rules and expand the number of available beds and other resources available to state residents in crisis.

These actions, coupled with the State's commitment to strengthening community based mental health treatment, caused DHHS to seek a Demonstration amendment in support of a full continuum of psychiatric care options for individuals with a SMI or SED. The full continuum of care includes evidenced-based psychiatric treatment services in residential and inpatient settings, including those classified as IMDs.

The SMI Demonstration amendment was implemented to ensure that Medicaid enrollees have access to a full continuum of evidenced-based treatment services for SMI and SED, including inpatient and residential treatment provided by facilities that are classified as IMDs.

SMI AMENDMENT APPROVAL

On June 2, 2022, CMS approved an amendment to authorize Medicaid payments for psychiatric treatment in residential programs designated as IMDs for adults with a serious mental illness and children with a serious emotional disturbance who receive services in Qualified Residential Treatment Programs (QRTPs). The amendment also concurrently approved the State's SMI/SED Implementation and Health IT plans. As part of the final amendment the Demonstration was

renamed The New Hampshire Substance Abuse, Serious Mental Illness and Serious Emotional Disturbance Treatment and Recovery Access Section 1115 Demonstration.

SMI AMENDMENT DESCRIPTION AND GOALS

The SMI amendment authorizes Medicaid reimbursement for medically necessary inpatient treatment for SMI and SED in qualified IMDs. While not currently planned in New Hampshire, the SMI amendment also includes authority for Medicaid coverage of QRTPs that meet the definition of an IMD for beneficiaries under the age of 21. In accordance with Demonstration requirements, the State must achieve a statewide average length of stay of no more than 30 days in residential and inpatient treatment in IMD settings covered under the Demonstration.

The overarching goals of the Demonstration amendment are for the State to:

- Maintain critical access to Serious Mental Illness (SMI) and Serious Emotional Disturbance (SED) treatment and recovery services; and
- Improve models of care focused on supporting individuals in the community and home (outside of institutions) and strengthen the continuum of SMI/SED treatment and recovery services.

As such, the State's goals align with the following CMS-defined goals for all Section 1115 SMI/SED Demonstrations:

1. Reduce utilization and lengths of stay in hospital emergency departments (ED) among Medicaid beneficiaries with SMI/SED while awaiting mental health treatment in specialized settings.
2. Reduce preventable readmissions to acute care hospitals and residential settings.
3. Improve availability of crisis stabilization services including services made available through call centers and mobile crisis units, intensive outpatient services, as well as services provided during acute short-term stays in residential crisis stabilization programs and psychiatric hospitals and residential treatment settings throughout the state.
4. Improve access to community-based services to address the chronic mental health care needs of beneficiaries with SMI/SED including through increased integration of primary and behavioral health care.
5. Improve care coordination, especially continuity of care in the community following episodes of acute care in hospitals and residential treatment facilities.

SMI AMENDMENT IMPLEMENTATION

The New Hampshire Medicaid delivery system is based on an integrated managed care model for physical and behavioral health. It utilizes MCOs to deliver integrated physical and behavioral health services, including SMI and SED treatment services, with a small number of members continuing to receive benefits on a fee-for-service basis. The delivery system operates as approved under Section 1932(a) State Plan authority for managed care and concurrent 1915(b) and 1115 Demonstrations.

New Hampshire's SMI/SED Demonstration amendment was identified as a necessary step under its 10-Year Mental Health Plan. The Plan is aimed at increasing access to community-based mental health treatment and creating a cohesive system for crisis response and stabilization, including centralized intake and mobile response teams in each region of the State. The Plan also contemplates increasing bed capacity in community-based treatment programs for psychiatric care. These programs offer hospital diversion, step-down and transitional living options for persons experiencing a psychiatric crisis.

Medicaid members have access to the full continuum of high-quality, evidence-based SMI and SED treatment services. Treatment options range in intensity from short-term acute care for SMI and SED to ongoing chronic care for these conditions in cost-effective community-based settings.

Below is an overview of the range of benefits authorized through the State Plan and under the Demonstration's expenditure authorities.

Benefit	Type	State Plan Authority	Demonstration Authority
Outpatient services	SMI, SED	✓	
Intensive outpatient services	SMI, SED	✓	
Inpatient services	SMI, SED	✓ (non-IMD)	✓ (IMD)
Residential treatment services	SMI, SED	✓ (non-IMD)	✓ (IMD)
Partial Hospitalization	SMI, SED	✓	

The New Hampshire Division for Behavioral Health (DBH) within DHHS oversees community-based mental health services. These services are provided through a network of ten regional CMHCs and other licensed mental health practices across the State.

In SFY 2020, publicly funded mental health services were provided to 12,420 youth and 28,196 adults. Approximately 91% of the youth served met the New Hampshire criteria for SED, and 51% of the adults served met the New Hampshire criteria for SMI.

DHHS operates two psychiatric care facilities designated as IMDs. The New Hampshire Hospital maintains 187 inpatient beds serving adults. Hampstead Hospital, a private facility purchased by the State in 2022, maintains a minimum of forty beds for youth with psychiatric and behavioral health challenges and fifteen beds for young adults.

SMI AMENDMENT POPULATION

All enrollees eligible under the State Plan for full Medicaid coverage between the ages of 21-64 are eligible for services under the Demonstration. Although not currently planned for implementation by the State, Medicaid enrollees who are under age 21 may qualify for services under the SMI amendment when receiving treatment services in a QRTP.

9. SMI EVALUATION QUESTIONS AND HYPOTHESES

The following section offers an overview of the SMI Amendment Logic Model, alignment with the objectives of Title XIX and evaluation questions and hypotheses.

QUANTIFIABLE TARGETS AND SMI AMENDMENT LOGIC MODEL

Authority granted under the SMI amendment provides Medicaid reimbursement for short-term medically necessary psychiatric residential and inpatient treatment services in IMD settings. Consistent with the New Hampshire's 10-Year Mental Health Plan, the State initiated steps to increase the availability of crisis stabilization services, including call centers, mobile crisis outreach, residential, psychiatric hospitals (Goal #3).

The expansion of a statewide Rapid Response crisis intervention system includes a centralized call center and the development of ten regional response teams (i.e., mobile crisis outreach and stabilization teams) and non-hospital psychiatric beds throughout the Community Mental Health Center network. As part of its implementation plan, the State also is examining the feasibility of adding IMD bed capacity. The long-term impact of these efforts is expected to increase access to a continuum of treatment options that will in turn decrease the use of EDs for mental health diagnoses and lower the lengths of stay in the ED for members awaiting treatment in specialized settings (Goal #1).

Under the SMI amendment, the State also monitors the expansion of Critical Time Intervention (CTI) programs statewide. CTI offers a time-limited, evidence-based practice that mobilizes support during periods of transition and has been used to prevent recurrent homelessness and readmissions. CTI has been utilized nationally for people with SMI leaving shelters, transitioning from hospital-based care, and/or being released from incarceration.

New Hampshire's CTI efforts are expected to increase follow-up within seven and thirty days after discharge from an ED or hospitalization for mental illness. The long-term impact of these actions is expected to reduce preventable readmissions to acute care hospitals and residential settings (Goal #2).

In addition, the State updated administrative rules to explicitly require psychiatric IMD settings to screen for and facilitate access to care for co-morbid conditions and to engage in intensive pre-discharge planning that includes community-based providers in care transitions. These efforts support access to community-based services, including increased integration of primary and behavioral health care (Goal #4).

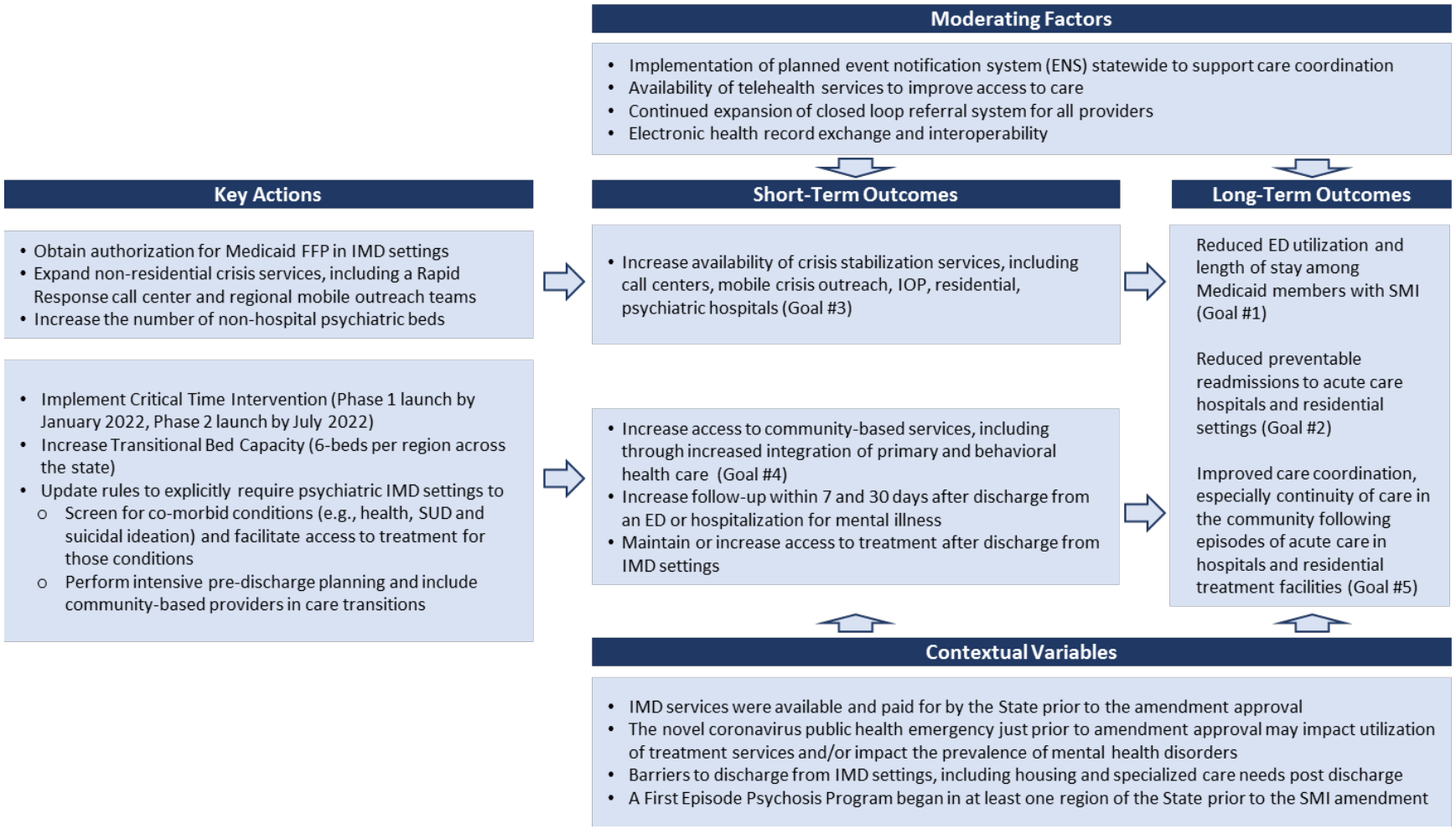
The State's rule changes are expected to improve care coordination, especially continuity of care in the community following episodes of acute care in hospitals and residential treatment facilities (Goal #5).

Moderating factors include activities such as:

- Implementation of planned event notification system (ENS) statewide in support care coordination and follow-up after ED and inpatient stays.
- Availability of telehealth services to support access to care for rural areas and hard to reach populations.
- Continued expansion of closed loop referral system for all providers.
- Electronic health record exchange and interoperability.

A visual depiction of these activities and goals is presented on the following page. Contextual variables related to the SMI evaluation design addendum will be discussed in Section 10 (Methodology).

SMI Amendment Logic Model



SMI AMENDMENT EVALUATION QUESTIONS AND HYPOTHESES

The Evaluation Design addendum for psychiatric treatment services provided in IMD settings considered six evaluation questions and seven hypotheses. The design addendum also included two evaluation questions related to expenditures that are exploratory in nature.

The evaluation studied the impact of the Demonstration amendment on service utilization, outcomes and costs for individuals receiving psychiatric IMD services as outlined in the table below.

Evaluation Question	Hypothesis
1. Does the SMI amendment reduce ED utilization for enrollees who receive psychiatric treatment in an IMD?	The SMI amendment will contain ED utilization for mental health for enrollees who receive psychiatric treatment in an NH IMD
2. Does the SMI amendment reduce length of stay in the ED while awaiting mental health treatment?	The SMI amendment will contain the length of stay in the ED for enrollees who are awaiting treatment in a NH IMD
3. Does the SMI amendment reduce preventable readmissions to NH IMDs?	The SMI amendment will contain preventable readmission to NH IMDs
4. Does the SMI amendment improve the availability of crisis stabilization services across the State?	The SMI amendment will maintain the availability of crisis stabilization services statewide
5. Does the SMI amendment improve access to community-based care, including the integration of primary and behavioral health care?	The SMI amendment will maintain access to community-based care for members who received NH psychiatric IMD treatment services
	The amendment will maintain access to mental health services
6. Does the SMI amendment improve care coordination following discharge from the IMD setting?	The SMI amendment will maintain care coordination following discharge from a NH IMD
7. How does the cost of care change over time?	N/A Exploratory
8. What are the cost drivers?	

ALIGNMENT WITH XIX OBJECTIVES

The SMI Demonstration amendment supports the federal Medicaid program in its core mission: to meet the health and wellness needs of our nation's vulnerable and low-income individuals and families. Demonstration amendment goals align with the Title XIX objective to improve access to high-quality, person-centered services that produce positive health outcomes for individuals.

10. SMI EVALUATION METHODOLOGY

Given the limited intervention period for evaluation under the current SMI amendment (i.e., one year), the Evaluation Design contemplated a pre/post evaluation design in the event that the Demonstration was not renewed. However, the Demonstration was renewed, thereby eliminating the post-intervention period. Data collected during the baseline and intervention period is presented in this summative report as preliminary observations and serves to inform the revised evaluation design expected as part of the five-year renewal.

SMI TARGET AND COMPARISON POPULATIONS

The Demonstration group and target group for the evaluation are full benefit Medicaid members ages 21 to 64 who received psychiatric treatment in a New Hampshire IMD. Members receiving New Hampshire IMD services are ages 21 to 64 at the time of admission and were identified using the State's Psychiatric IMD dataset (described later in this section). The SMI study group consisted of Medicaid members with stays of six months or less who had a psychiatric IMD discharge during the measurement year.

The State of New Hampshire currently has two psychiatric treatment programs characterized as IMDs (New Hampshire Hospital and Hampstead Hospital). These hospital-based programs serve all Medicaid members who require inpatient psychiatric care services. IMD placement decisions are based on nationally recognized level of care guidelines.

Enrollees identified in the SMI study group include 368 individuals at baseline (DY4) and 320 individuals in DY5. Over 55 percent of the participants in each year were male. During the two-year period, over 55 percent of participants were between ages 31 and 50, 30 percent were ages 21-30, and 20 percent were ages 51 to 65.

Demographic	DY4 (SMI Baseline)	Percent of Total	DY5	Percent of Total
Gender				
Female	160	43.5%	143	44.7%
Male	208	56.5%	177	55.3%
Total	*368*	*100.0%*	*320*	*100.0%*
Age				
21-30 Years	96	26.1%	107	33.4%
31-50 Years	203	55.2%	144	45.0%
51-65 Years	69	18.7%	69	21.6%
Total	*368*	*100.0%*	*320*	100.0%

In DY4, 79 percent of the participants identified as white, 15 percent were unknown and fewer than one percent of participants identified in each of the following categories Black, Asian, two or races or other. In DY5, 75 percent of participants identified as white, 20 percent were unknown and fewer than one percent identified as Black, Asian, two or more races or other.

The State is not aware of another Medicaid program with a substantially similar population, taking into account differences in program eligibility and coverage policies, demographic and geographic characteristics, behavioral health provider systems, breadth of networks, IMD availability and provider payment rates. In addition, New Hampshire does not have any data-use agreements with another State. These factors make the use of an out-of-state comparison group impractical at this time.

SMI EVALUATION PERIOD

Data was examined for the baseline period of July 1, 2021 – June 30, 2022 (DY4) and the first year of the SMI Demonstration July 1, 2022 – June 30, 2023 (DY5).

SMI EVALUATION MEASURES

Measures and analytic approaches from the approved evaluation design are provided in Attachment 3. The attachment also includes a description of modifications due to the PHE, data availability or integrity. Measures also are detailed in the Findings (Section 11).

DATA SOURCES, CLEANING AND VALIDATION

Managed care encounters, final adjudicated claims, eligibility data, and cost data from the State's Medicaid Management Information System (MMIS) were made available to evaluators to support the evaluation. A list of SMI evaluation datasets and brief description of their uses is provided below.

Data System	Brief Description of Evaluation Data	Target Group	Time Period
Medicaid Management Information System (MMIS)	Medicaid claims and MCO encounter data submitted to the State by providers used to support performance, utilization, and cost metrics	IMD Service Recipients	July 1, 2021 – June 30, 2023
State Medicaid Eligibility and Enrollment System (EES) files	Eligibility and enrollment detail for Medicaid beneficiaries are used to determine enrollee aid category, residence, race/ethnicity and stratify data into sub-groups, when applicable	IMD Service Recipients	July 1, 2021 – June 30, 2023
New Hampshire Psychiatric Hospital (IMD) Dataset	Admission and discharge data for Medicaid members who use New Hampshire Hospital and Hampstead Hospital services. This dataset	IMD Service Recipients	July 1, 2021 – June 30, 2023, for admit/discharge detail

Data System	Brief Description of Evaluation Data	Target Group	Time Period
	also includes information on ED length of stay prior to IMD admission		Jan 1, 2022 – June 30, 2023, for ED length of stay prior to IMD admission*
Division of Behavioral Health Administrative Data	The DBH receives routine reports from CMHCs relative to the regions' progress in establishing the rapid response system and call center data. Reporting also provides staffing information and the status of local transitional bed capacity	NH Residents	Jan 1, 2022 – June 30, 2023
MCO Behavioral Health Survey Data	A standardized DHHS methodology and survey tool used by MCOs. Survey results are due to DHHS on February 1 of each year	Medicaid MCO Enrollees	February 2021 – February 2024

**Data was standardized in the hospital's electronic records system as of Jan 1, 2022; when available, data from January 1, 2021 was included.*

Medicaid Management Information System and Medicaid Eligibility and Enrollment Systems: The evaluator received raw claims extracts quarterly and annually. The evaluator performed a data audit process to identify problems and inconsistencies with the data received. This included direct comparisons to previous raw claims extracts to evaluate trends and validate consistency.

New Hampshire Psychiatric Hospital (IMD) datasets: The evaluator furnished New Hampshire IMD providers with a standardized format for admission and discharge data. Extracts included Medicaid ID, admission and discharge date, primary diagnosis, and length of stay in the ED prior to admission. The evaluator performed a data review to identify problems and inconsistencies with the data received (e.g., duplicate files, admit/discharge on same day). Admissions for members with no corresponding Medicaid member months were removed from the study group.

Division for Behavioral Health (DBH) Administrative Data: As part of the transformation of the mental health system statewide, the DBH requires each CMHC to report on the implementation of mobile crisis teams and transitional beds in each region. In addition, the DBH receives call center reports regarding the volume of calls, resolution, and mobile team responsiveness. Call center data does not include health care coverage type. Thus, Medicaid recipients were not identifiable. The inclusion of call center data provides contextual information regarding the delivery system trends and gaps.

MCO Behavioral Health Survey Data: DHHS requires each MCO to conduct a Behavioral Health Satisfaction Survey. DHHS issued standardized survey tools, instructions, and sample size requirements. Results are reviewed by DHHS for adherence to required sampling and reporting requirements. The evaluator received MCO data summaries for each MCO and created a pooled file for use in this evaluation.

ANALYTIC METHODS

The analysis was performed to systematically apply statistical and/or logical techniques to describe, summarize, and compare data within the State and across time. Descriptive statistics were used to describe the basic features of the data and what they depict, and to provide simple summaries about the population and the measures. They also were used to provide summaries about the participants and their outcomes. Due to the unique nature of the study population, comparisons to national benchmarks were not appropriate.

The original design contemplated the use of quarterly measurement periods for DY4 (baseline) and DY5 (the first year of the amendment), depending on the size and validity of using a quarterly measurement approach for metrics that have been designed for annual measurement (e.g., HEDIS and CMS Core Set). Upon examination of the data, the evaluator concluded the study population was too small and the number of observations too infrequent to use quarterly observation points. Annual measures were assessed using t-tests.

The evaluator accounted for the impact of potential outliers by running the analyses with and without outliers (defined as +/- 2 standard deviations from the population mean - as captured in the data set). The findings in Section 11 note, where applicable, if removing outliers changed the significance of differences between baseline (DY4) and the first year of the amendment (DY5).

With only two annual measurements for each observation, time series methods are not possible. For example, it is not possible to do a partial autocorrelation function (ACF) plot to check for autocorrelation because autocorrelation is not defined for two data points. Analysis of variance (ANOVA) is not necessary for comparison between two groups. ANOVA is for comparing at least three groups and reducing the need for many pairwise t-tests. Welch two sample t-tests were used for annual comparisons.

The traditionally accepted significance level ($p \leq 0.05$) was used for all comparisons.

Member Survey: MCOs are required to conduct the survey annually between September 1 and November 30. The minimum survey sample size is 1,350 for adults. MCOs are expected to oversample as needed to ensure a minimum of 411 completed surveys each year. MCOs submit a sampling plan to DHHS prior to conducting the survey. Data is collected using a mixed methodological process (e.g., electronic, telephonic, etc.).

The evaluator pooled data collected by the MCOs to create a statewide total for specific questions related to evaluation hypotheses. All survey questions examined utilized a five-point Likert-scale response. Results were assessed using logistic regression for change against the baseline. Results are presented by the year the data was collected, not the reporting year (e.g., 2023 data was reported in 2024).

Isolation from Other Initiatives: The State of New Hampshire is engaged in transforming the behavioral health care system as outlined in its 10-Year Mental Health Plan. The plan includes access to a full continuum of care (prompting the State's request to CMS for Medicaid IMD authority), ongoing assessment of service gaps and identifying opportunities for quality improvement. Activities as they relate to the Medicaid program are outlined in the SMI Amendment's approved Implementation Plan and are accounted for in the SMI Logic Model presented earlier.

METHODOLOGICAL LIMITATIONS

Due to the quasi-experimental nature of the design and the limitations identified below, the evaluation results cannot be attributed to causal inference. The findings may suggest an association or correlation with various aspects of the Demonstration. However, language suggesting causation or analyses of counterfactuals may not be appropriate when describing results.

The SMI evaluation has been designed to yield accurate and actionable findings but does have methodological limitations, most of which are inherent to Section 1115 demonstrations. Data and design limitations are outlined below.

Lack of True Experimental Control Groups: IMD facilities serve residents from across the State. Thus, regional control or comparison groups for IMD service recipients are not available. The design will consider pre/post techniques to mitigate the impact of these limitations.

Medicaid Enrollment/Disenrollment: Medicaid enrollment changes on an annual basis related to eligibility. For example, someone may be attributed to a study cohort in year one, disenroll in year two and re-enroll in year three. The evaluation will examine trends over time to help mitigate this limitation.

Public Health Emergency (PHE): The baseline for the current evaluation period began July 1, 2021, after the PHE began to abate. Most providers resumed operations prior to the start date of the evaluation. However, in response to the novel coronavirus, the State suspended Medicaid terminations and experienced an increase in Medicaid enrollments. The majority of the members in the SMI study group are eligible for Medicaid based on their disability status or other mandatory eligible aid category. Reinstatement of procedural redeterminations is unlikely to the impact the evaluation findings.

SPECIAL METHODOLOGICAL CONSIDERATIONS

Psychiatric IMD treatment facilities are existing statewide providers that were delivering care to Medicaid enrollees prior to the implementation of the Demonstration. The SMI amendment occurred in the final year of the Demonstration and allows the State to continue services that have been in place, albeit with a new funding partner.

The SMI Implementation Plan was approved concurrently with the Demonstration amendment and notes that that the State already was meeting many of the CMS milestones defined for SMI-IMD Demonstrations. Thus, potential independent variables are based on delivery system enhancements and quality improvement strategies occurring over a longer five-year period and not new IMD expenditure authorities.

11. SMI EVALUATION RESULTS

This section presents the findings for the SMI amendment by evaluation question and hypothesis. The following eight evaluation questions were studied as part of the SMI amendment:

1. Does the SMI amendment reduce ED utilization for enrollees who receive psychiatric treatment in an IMD?
2. Does the SMI amendment reduce length of stay in the ED while awaiting mental health treatment?
3. Does the SMI amendment reduce preventable readmissions to New Hampshire IMDs?
4. Does the SMI amendment improve the availability of crisis stabilization services across the State?
5. Does the SMI amendment improve access to community-based care, including the integration of primary and behavioral health care?
6. Does the SMI amendment improve care coordination following discharge from the IMD setting?
7. How does the cost of care change over time?
8. What are the cost drivers?

Both of New Hampshire's psychiatric treatment facilities were existing statewide providers at the outset of the Demonstration and were delivering care to Medicaid enrollees prior to the implementation of the SMI amendment. The SMI-IMD authority was authorized for the final year of the Demonstration. Therefore, these findings are preliminary and should not be interpreted as causal evidence for the impacts of the Demonstration.

The remainder of this section provides detailed findings, including the statistical analyses used for each evaluation measure. Unless otherwise noted, the SMI study group consisted of Medicaid members with stays of six months or less and who had a psychiatric IMD discharge during the measurement year. Data was derived from MMIS claims and encounters.

SMI EVALUATION QUESTION ONE

Evaluation Question One asks: ***"Does the SMI amendment reduce ED utilization for enrollees who receive psychiatric treatment in a New Hampshire IMD?"*** The table below provides an overview of the hypothesis and measures associated with Evaluation Question One.

Hypothesis	Measures
1. The SMI amendment will contain ED utilization for mental health for enrollees who receive psychiatric treatment in an NH IMD	1.1.1 Rate of ED utilization for mental health diagnoses per 1,000 member months pre/post psychiatric IMD treatment for members Ages 21-64

Measure 1.1.1 Rate of ED utilization for mental health diagnoses per 1,000 member months pre/post psychiatric IMD treatment for members Ages 21-64

Measure Description: This measure examines the total number of ED visits for mental health diagnoses in the 90 days prior to admission and 90-days following discharge for members ages 21-64. The results are expressed as the rate per 1,000 member months.

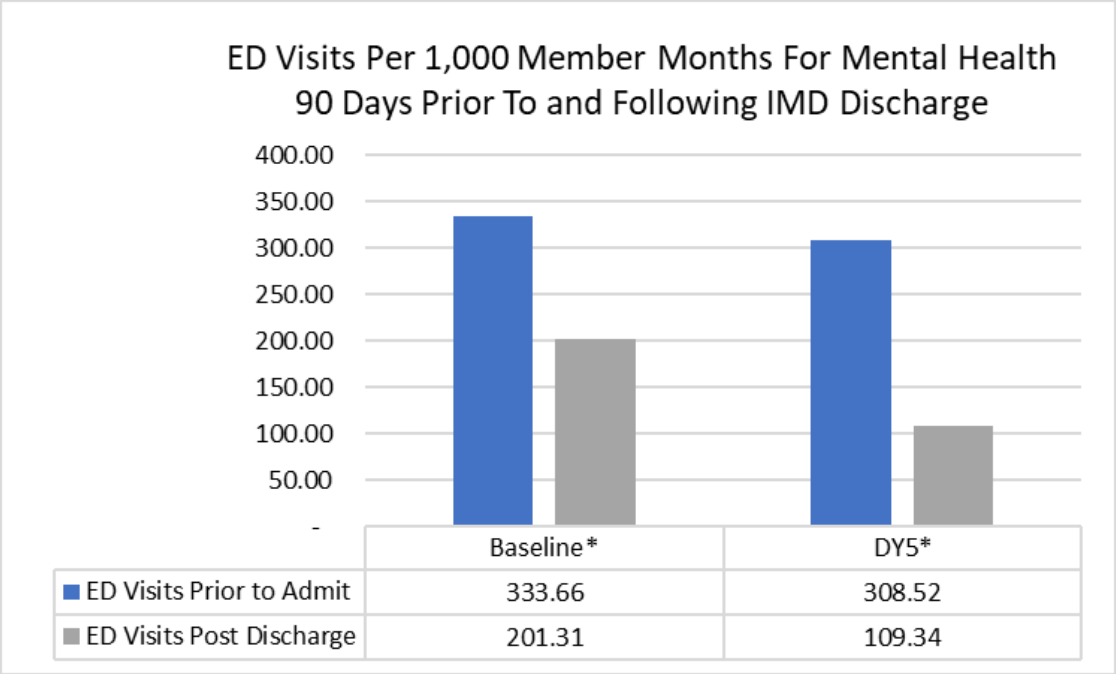
Data Source and Time Period: MMIS paid claims, and MCO encounters SFY2022-23. New Hampshire IMD admission and discharge data.

Analytical Approach: Welch two sample t-test with and without outliers.

Findings: During both years examined, members had fewer visits to the ED per 1,000 members months in the 90 days following discharge from an IMD than in the 90 days prior to admission. During the baseline period, ED visits declined from 333.66 per 1,000 member months prior to admission to 201.31 in the 90 days following discharge. The same trend was observed in DY5, with 308.52 ED visits per 1,000 member months prior to admission and 109.34 in the 90 days following discharge.

The post-discharge ED utilization rate was 40 percent lower than the pre-admission ED utilization rate in the Baseline period, compared to a decline of nearly 65 percent in the first year of the SMI Demonstration.

The same results were evident when outliers were removed from the analysis. Differences in ED visit totals before admission and after discharge were statistically significant in both years.



**Statistically significant difference after IMD discharge*

SMI EVALUATION QUESTION TWO

Evaluation Question Two asks, ***"Does the SMI amendment reduce length of stay in the ED while awaiting mental health treatment?"*** The table below provides an overview of the hypothesis and measure associated with Evaluation Question Two.

Hypothesis	Measure
1. The SMI amendment will contain the length of stay in the ED for enrollees who are awaiting treatment services in a NH IMD	2.1.1 Average number of days in the ED for members Ages 21-64 who are admitted to an IMD from the ED

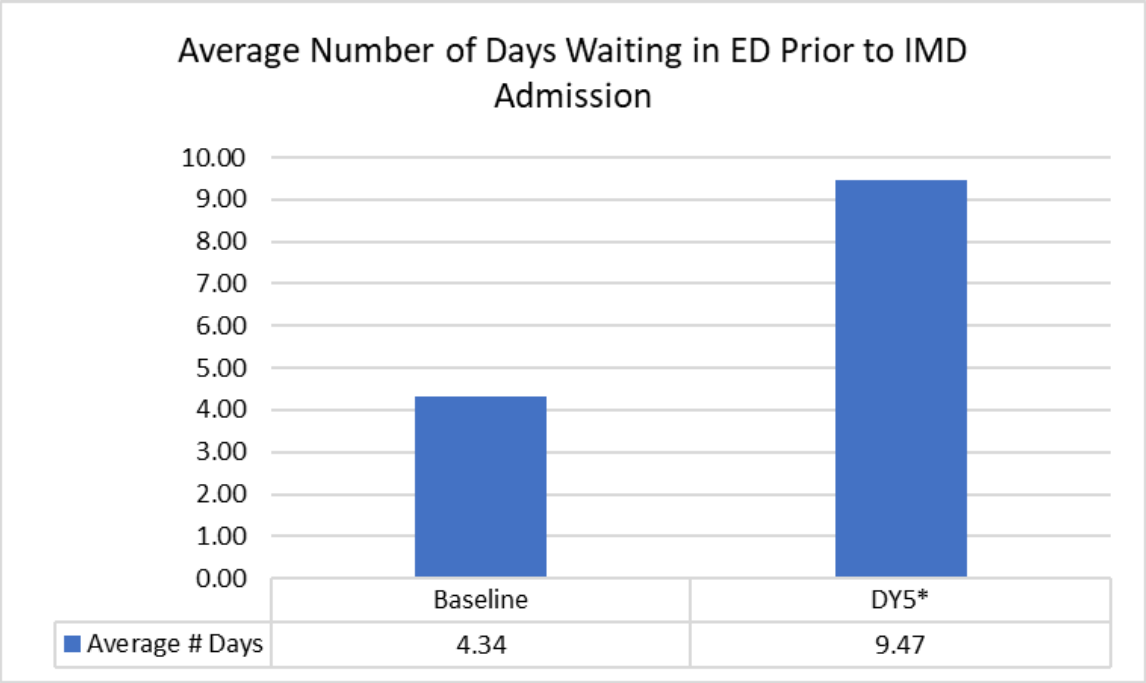
Measure 2.1.1 Average number of days in the ED for members Ages 21-64 who are admitted to an IMD from the ED

Measure Description: The number of days awaiting placement in the ED prior to hospital admission is tracked for persons waiting for psychiatric treatment in a New Hampshire IMD.

Data Source and Time Period: New Hampshire Hospital Admission and Discharged data July 1, 2021 – June 30, 2023.

Analytical Approach: Welch two sample t-test with and without outliers.

Findings: The number of days waiting in the ED prior to admission to specialized placement in a New Hampshire IMD rose from a baseline of 4.34 days to 9.47 days in DY5. The change over baseline was significantly different and remained so when outliers were removed from the calculation.



**Statistically significant change over baseline*

SMI EVALUATION QUESTION THREE

Evaluation Question Three asks, ***"Does the SMI amendment reduce preventable readmissions to New Hampshire IMDs?"*** The table below provides an overview of the hypothesis and measures associated with Evaluation Question Three.

Hypothesis	Measures
1. The SMI amendment will contain preventable readmission to NH IMDs	3.1.1 Percent of members Ages 21-64 with readmissions to an inpatient psychiatric hospital within 30 days following IMD discharge
	3.1.2 Percent of members Ages 21-64 with IMD readmissions who did not receive follow-up care in the community post discharge within 30 days

Measure 3.1.1 Percent of members Ages 21-64 with 30-day readmissions to an inpatient psychiatric hospital following IMD discharge.

Measure 3.1.2 Percent of members Ages 21-64 with an IMD readmission within 30 days who did not receive follow-up care in the community post discharge.

Measure Description: The number of IMD discharges (i.e., the denominator) excludes members on temporary leave. Number of psychiatric IMD readmissions within 30 days of discharge served as the numerator for measure 3.1.1. For members who had a readmission, data was examined to determine if they received a mental health service following discharge and prior to the readmission (measure 3.1.2).

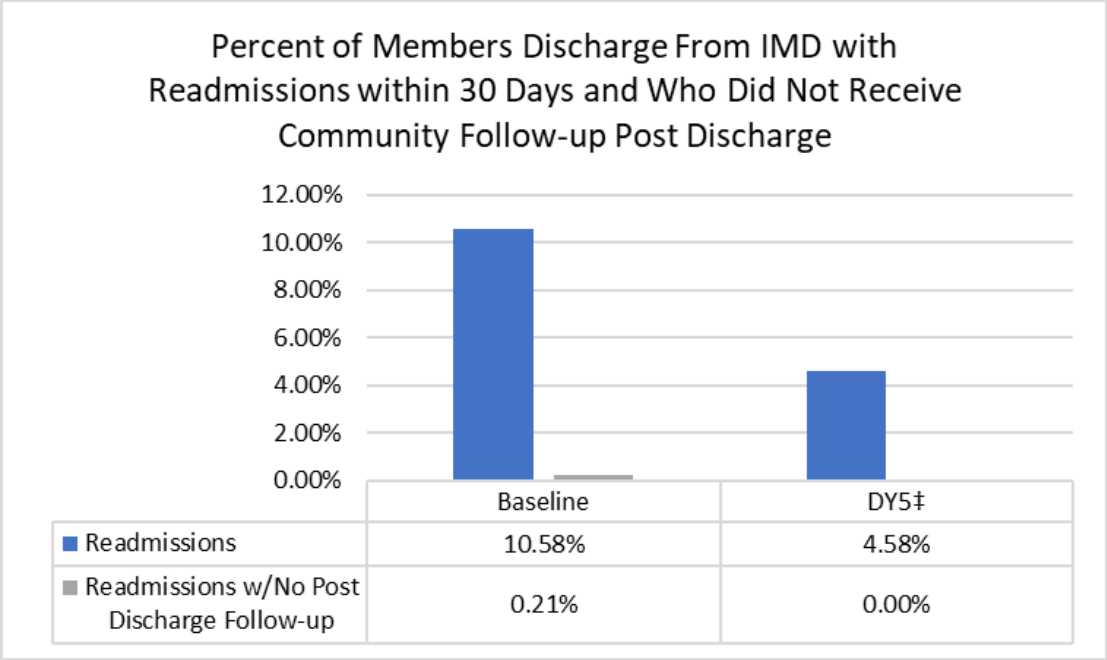
Data Source and Time Period: MMIS paid claims, and MCO encounters SFY2022-23. New Hampshire IMD admission and discharge data.

Analytical Approach: Welch two sample t-test with and without outliers.

Findings: At baseline, 10.58 percent of IMD discharges resulted in a readmission within 30 days. The percentage dropped to 4.58 percent in DY5.

At baseline, fewer than one percent of the readmissions were for members who had no follow-up care. During DY5 none of the readmissions represented members who did not receive follow-up care.

The change over baseline was significant for both metrics. However, when outliers were removed, results were not significantly different than the baseline year.



	Baseline	DY5‡
Readmissions	10.58%	4.58%
Readmissions w/No Post Discharge Follow-up	0.21%	0.00%

‡After removing outliers there was no significant difference in readmission rates for both measures studied

SMI EVALUATION QUESTION FOUR

Evaluation Question Four asks, ***"Does the SMI amendment improve the availability of crisis stabilization services across the State?"*** The table below provides an overview of the hypothesis and measures associated with Evaluation Question Four.

Hypothesis	Measures
1. The SMI amendment will maintain the availability of crisis stabilization services statewide	4.1.1. Percent of crisis center calls (payer agnostic) that were immediately resolved* Substitution – Number of calls received
	4.1.2. Percent of crisis center calls (payer agnostic) that were responded to by a mobile team within an hour of request* Substitution – Number and percent of calls referred for mobile response
	4.1.3. Percent of regions with mobile crisis response teams
	4.1.4. Percent of regions with transitional bed capacity

**Due to changes in vendor and data collection methods, the measures contemplated could not be assessed. Substitutions are noted.*

Measure 4.1.1 Number of calls (payer agnostic) received by the Rapid Response Center

Measure 4.1.2 Number and percentage of calls (payer agnostic) that were referred for a mobile response.

Measure Description: The Rapid Response call center vendor collects call volume information, including, where feasible, age of caller and whether the call was referred for a mobile dispatch. Mobile dispatch connects the caller to the mobile response team for further assessment and onsite assistance if needed.

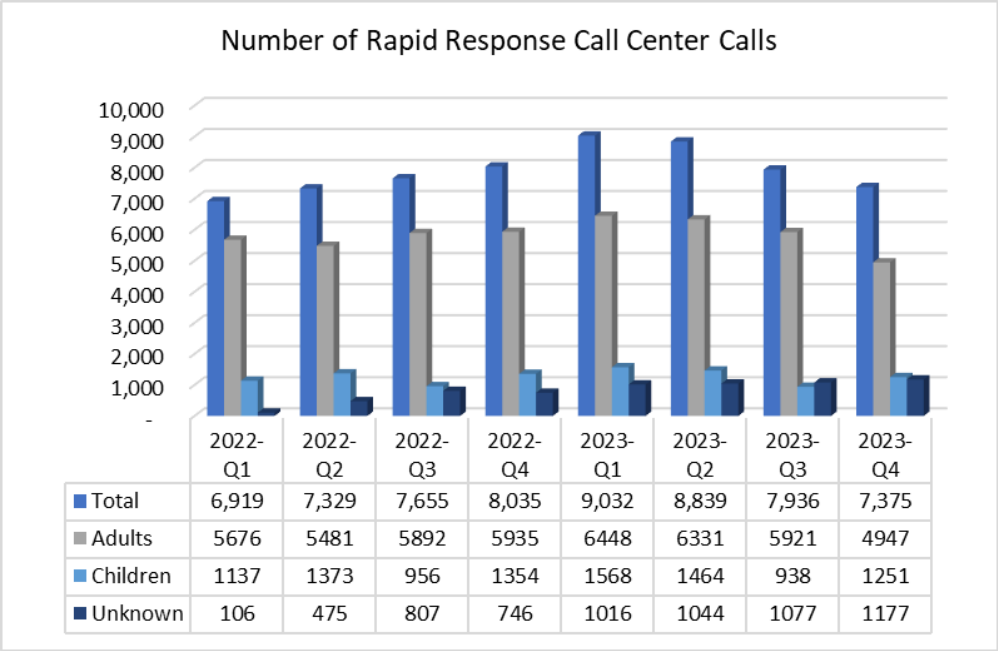
Data Source: New Hampshire Rapid Response Access Point Quarterly Data, Jan 2022 - Jan 2024, Report run from Connects data system on February 16, 2024.

Findings: The Rapid Response Center received 29,938 calls in calendar year 2022 and 33,182 in CY2023. Calls gradually increased in 2022 from 6,919 in the first quarter to 8,035 in the fourth quarter. Calls continued to increase in the first quarter of 2023 to 9,032, before decreasing to 8,839 in quarter two, 7,936 in quarter three and 7,375 in quarter four.

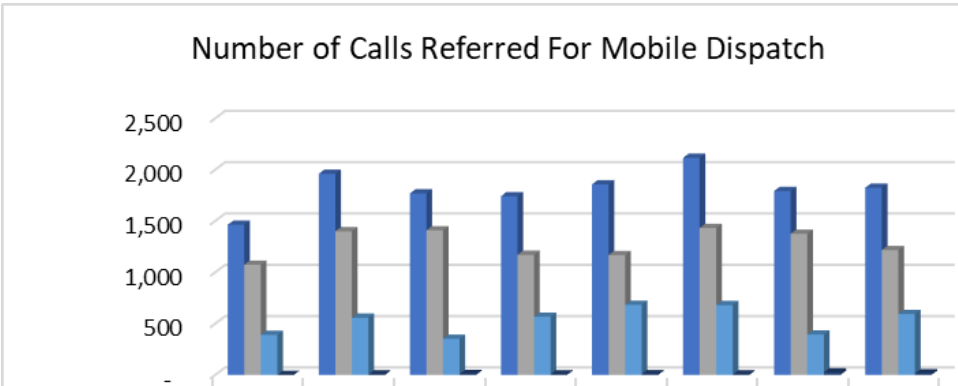
The number of calls referred for a mobile crisis dispatch also increased from 6,932 in 2022 to 7,588 in 2023. Calls gradually increased in 2022 from 1,463 in the first quarter to 1,960 in quarter two, 1,768 in quarter three, and 1,741 in quarter four. Calls continued at higher levels in 2023, with 1,857 in quarter one and 2,115 in quarter two, before declining to 1,792 in quarter three and 1,824 in quarter four.

The largest percentage of calls referred for mobile dispatch were for adults. Mobile dispatch referrals for adults were 73 percent in the first quarter of 2022, 71 percent in quarter two, 80 percent in quarter three and 67 percent in quarter four.

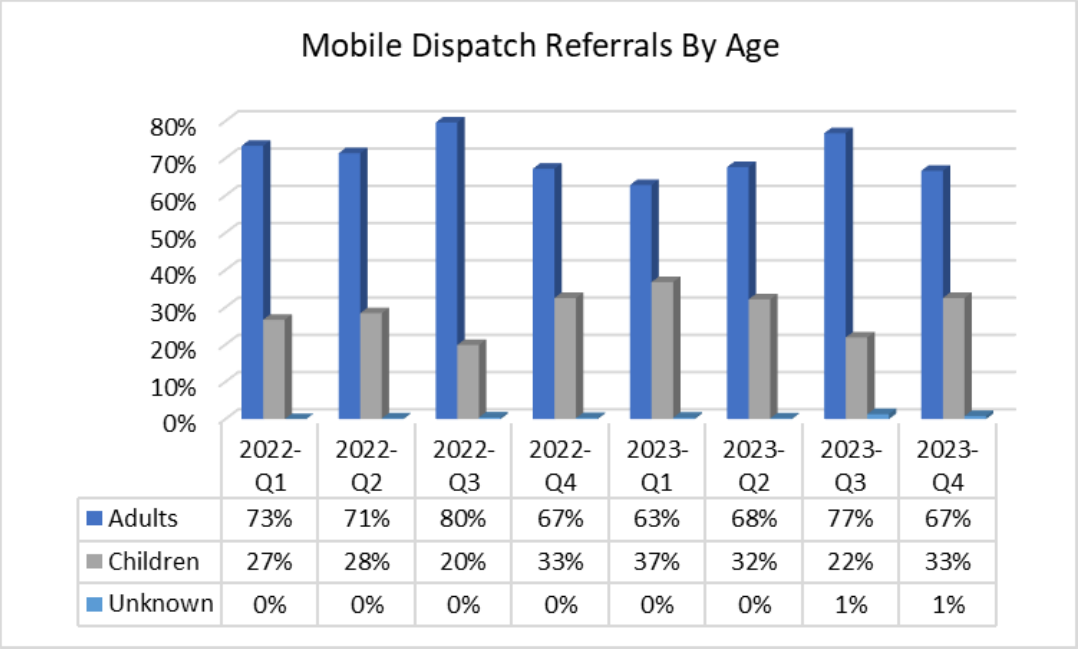
During the first year of the SMI amendment, adults represented 63 percent of the referrals in quarter one, 68 percent in quarter two, 77 percent in quarter three and 77 percent in quarter four.



	2022-Q1	2022-Q2	2022-Q3	2022-Q4	2023-Q1	2023-Q2	2023-Q3	2023-Q4
Total	6,919	7,329	7,655	8,035	9,032	8,839	7,936	7,375
Adults	5676	5481	5892	5935	6448	6331	5921	4947
Children	1137	1373	956	1354	1568	1464	938	1251
Unknown	106	475	807	746	1016	1044	1077	1177



	2022-Q1	2022-Q2	2022-Q3	2022-Q4	2023-Q1	2023-Q2	2023-Q3	2023-Q4
Total	1,463	1,960	1,768	1,741	1,857	2,115	1,792	1,824
Adults	1073	1399	1408	1170	1167	1431	1375	1216
Children	390	557	352	566	683	680	393	593
Unknown	0	4	8	5	7	4	24	15



	2022-Q1	2022-Q2	2022-Q3	2022-Q4	2023-Q1	2023-Q2	2023-Q3	2023-Q4
Adults	73%	71%	80%	67%	63%	68%	77%	67%
Children	27%	28%	20%	33%	37%	32%	22%	33%
Unknown	0%	0%	0%	0%	0%	0%	1%	1%

Measure 4.1.3 Percent of regions with mobile crisis response teams

Measure 4.1.4 Percent of New Hampshire CMHC regions with transitional bed capacity

The New Hampshire Division for Behavioral Health within DHHS oversees community-based mental health services. These services are provided through a network of ten regional CMHCs and other licensed mental health practices across the State.

New Hampshire's SMI/SED Demonstration amendment was identified as a necessary step under its 10-Year Mental Health Plan. The Plan is aimed at increasing access to community-based mental health treatment and creating a cohesive system for crisis response and stabilization, including centralized intake and mobile response teams in each region of the State.

The Plan also contemplates increasing bed capacity in community-based treatment programs for psychiatric care. These programs offer hospital diversion, step-down and transitional living options for persons experiencing a psychiatric crisis.

At the end of the first year of the SMI amendment, mobile crisis teams were staffed in each of the ten CMHC catchment areas, and 15 community crisis beds were available to support ED and hospital diversion. These community crisis beds also provide step down placements for members following IMD discharge. A total of 42 community beds were available statewide to support individuals with mental health challenges during periods of transitions and crisis.

SMI EVALUATION QUESTION FIVE

Evaluation Question Five asks, ***"Does the SMI amendment improve access to community-based care, including the integration of primary and behavioral health care?"*** The table below provides an overview of the hypotheses and measures associated with Evaluation Question Five.

Hypotheses	Measures
1. The SMI amendment will maintain access to community-based care, for members who received NH psychiatric IMD treatment services	5.1.1 Percent of members Ages 21-64 with a preventive or ambulatory health service post IMD discharge
	5.1.2 Percent of adult survey respondents who report they were able meet with a PCP to discuss physical well-being
2. The SMI amendment will maintain access to mental health services	5.2.3 Percent of adult survey respondents who report staff were able to see them as often as necessary
	5.2.4 Percent of adult survey respondents who report staff return calls within 24 hours
	5.2.5 Percent of adult survey respondents who report services were available at times that were convenient
	5.2.6 Percent of adult survey respondents who report they were able to get all the services they needed
	5.2.7 Percent of adult survey respondents who report they were able to see a psychiatrist when they wanted

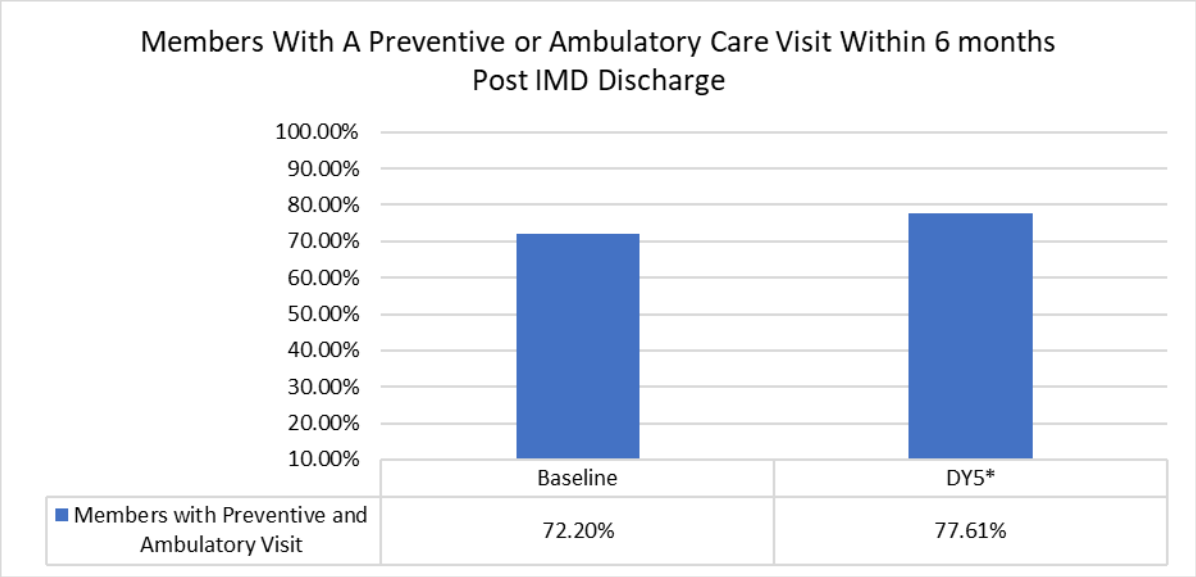
Measure 5.1.1 Percent of members Ages 21-64 with a preventive or ambulatory health service post IMD discharge

Measure Description: Number of members discharged from an IMD during the measurement period, who had a preventive or ambulatory care visit within six months of discharge. Preventive and ambulatory care visits included visits with behavioral health providers and PCPs.

Data Source and Time Period: MMIS paid claims, and MCO encounters SFY2022-23. New Hampshire IMD admission and discharge data.

Analytical Approach: Welch two sample t-tests with and without outliers.

Findings: Members who had a preventive or ambulatory care visit in the six months following discharge increased from 72.20 percent at baseline to 77.61 percent in DY5. The change over baseline was statistically significant when examined with and without outliers.



**Statistically significant change over baseline*

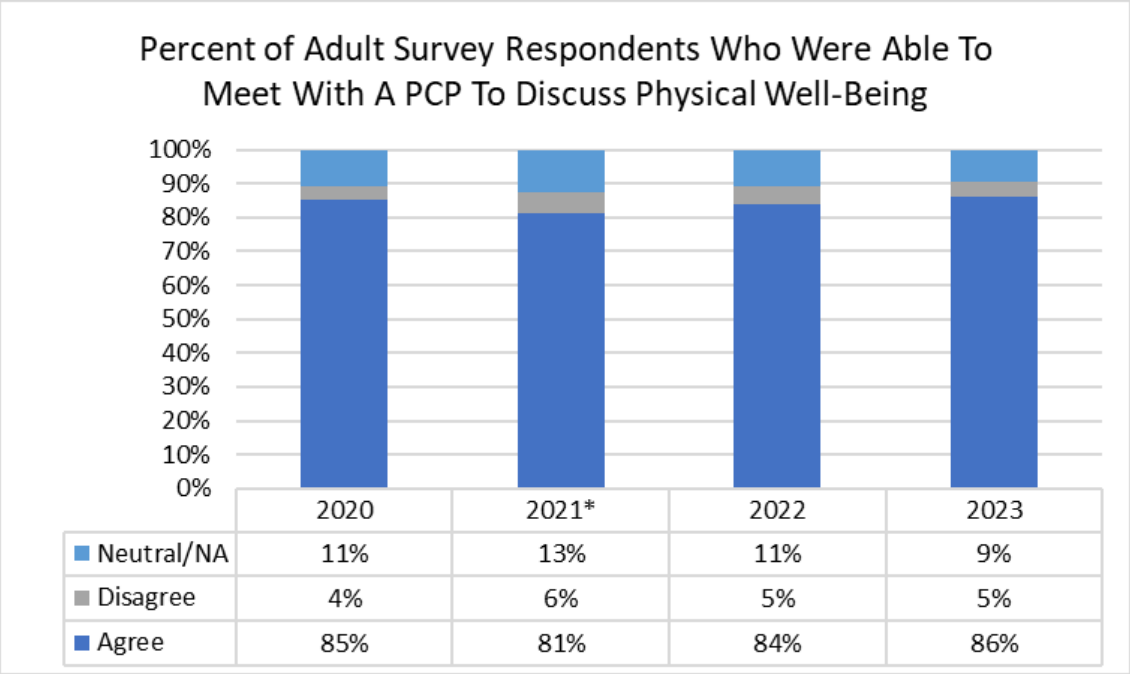
Measure 5.1.2 Percent of adult survey respondents who report they were able meet with a PCP to discuss physical well-being.

Measure Description: The percentage was calculated using the number of respondents who agree or strongly agree that they were able to meet with a PCP based on total responses received for the MCO Adult Behavioral Health Survey Section D, Question 1.

Data Source and Time Period: MCO Adult Behavioral Health Survey aggregate responses, reported for years 2020 – 2023 (i.e., report years 2021-2024).

Analytical Approach: Logistic Regression.

Findings: Over 80 percent of survey respondents reported they were able to meet with a PCP to discuss well-being in each year measured. The percentage of respondents who agreed or strongly agreed was 85 percent in 2020, 81 percent in 2021, 84 percent in 2022 and 86 percent in 2023. Change from baseline was statistically significant in 2021.



	2020	2021*	2022	2023
Neutral/NA	11%	13%	11%	9%
Disagree	4%	6%	5%	5%
Agree	85%	81%	84%	86%

**Statistically significant change over baseline*

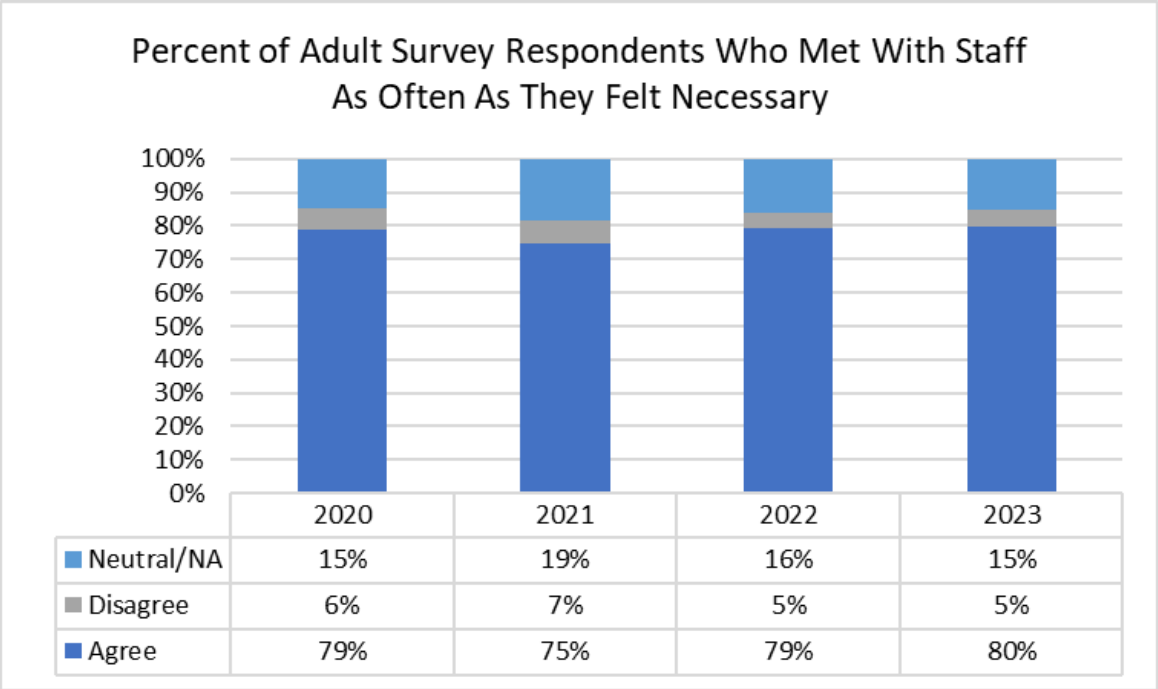
Measure 5.2.1 Percent of adult survey respondents who report staff were able to see them as often as necessary.

Measure Description: The percentage was calculated using the number of respondents who agree or strongly agree that staff were able to see them as often as necessary based on the total responses received for the MCO Adult BH survey Section A, Question 2.

Data Source and Time Period: MCO Adult Behavioral Health Survey aggregate responses, reported for years 2020 – 2023 (i.e., report years 2021-2024).

Analytical Approach: Logistic Regression.

Findings: The percentage of respondents who agreed or strongly agreed that they met with staff as often as they felt necessary was 79 percent in 2020, 75 percent in 2021, 79 percent in 2022 and 80 percent in 2023. Change from baseline was not statistically significant in any year.



	2020	2021	2022	2023
Neutral/NA	15%	19%	16%	15%
Disagree	6%	7%	5%	5%
Agree	79%	75%	79%	80%

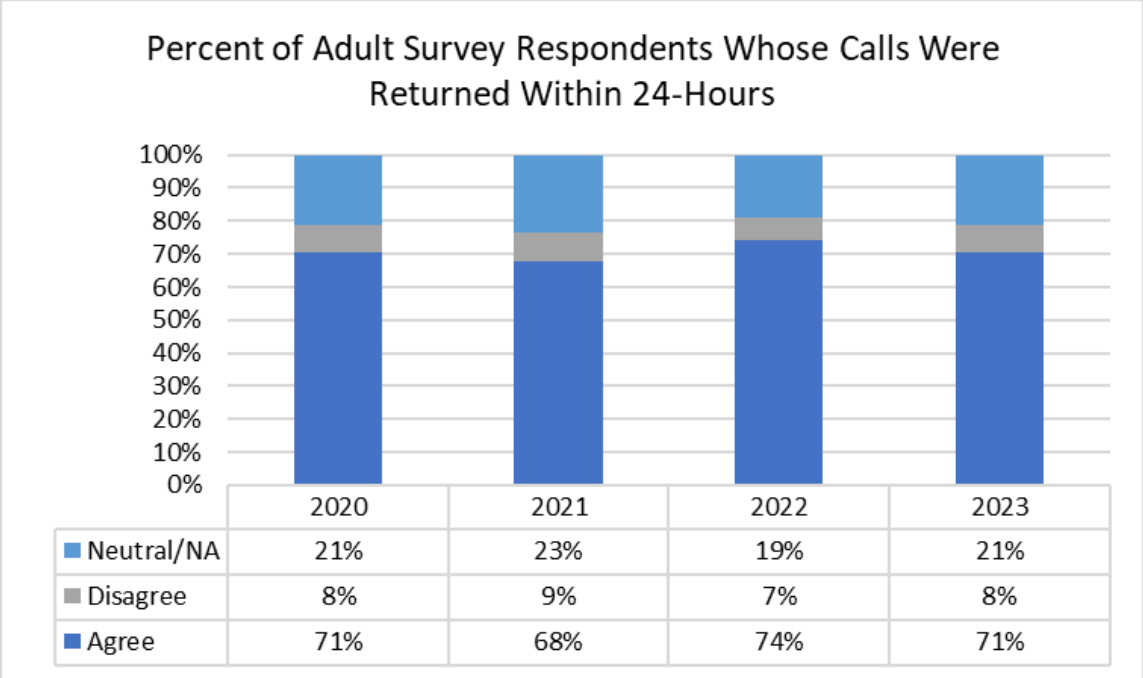
Measure 5.2.2 Percent of adult survey respondents who report staff return calls within 24 hours.

Measure Description: The percentage was calculated using the number of respondents who agree or strongly agree that staff returned calls within 24 hours based on the responses received to MCO Adult BH Survey Section A, Question 3.

Data Source and Time Period: MCO Adult Behavioral Health Survey aggregate responses, reported for years 2020 – 2023 (i.e., report years 2021-2024).

Analytical Approach: Logistic Regression.

Findings: The percentage of respondents who agreed or strongly agreed that staff return calls within 24 hours was 71 percent in 2020, 68 percent in 2021, 74 percent in 2022 and 71 percent in 2023. Change from baseline was not statistically significant in any year.



	2020	2021	2022	2023
Neutral/NA	21%	23%	19%	21%
Disagree	8%	9%	7%	8%
Agree	71%	68%	74%	71%

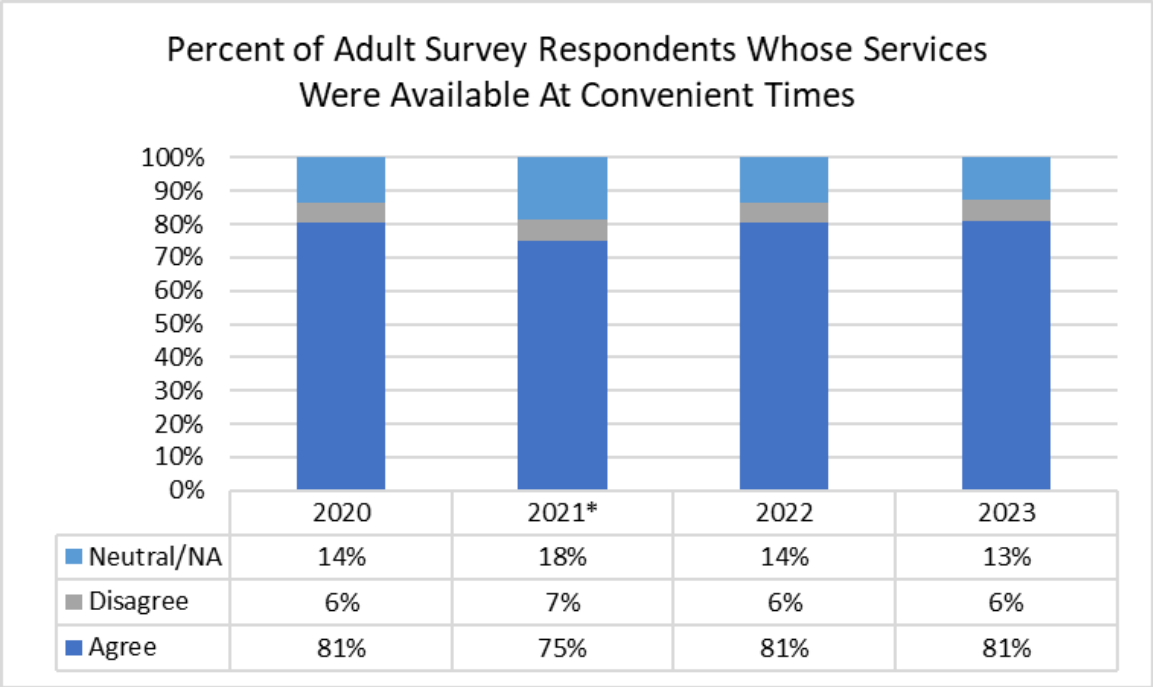
Measure 5.2.3 Percent of adult survey respondents who report services were available at times that were convenient.

Measure Description: The percentage was calculated using the number of respondents who agree or strongly agree that services were available at convenient times based on the number of respondents to MCO Adult BH Survey Section A, Question 4.

Data Source and Time Period: MCO Adult Behavioral Health Survey aggregate responses, reported for years 2020 – 2023 (i.e., report years 2021-2024).

Analytical Approach: Logistic Regression.

Findings: The percentage of respondents who agreed or strongly agreed that services were available at times that were convenient was 81 percent in 2020, 75 percent in 2021, 81 percent in 2022 and 81 percent in 2023. Change from baseline was statistically significant in 2021.



	2020	2021*	2022	2023
Neutral/NA	14%	18%	14%	13%
Disagree	6%	7%	6%	6%
Agree	81%	75%	81%	81%

**Statistically significant change over baseline*

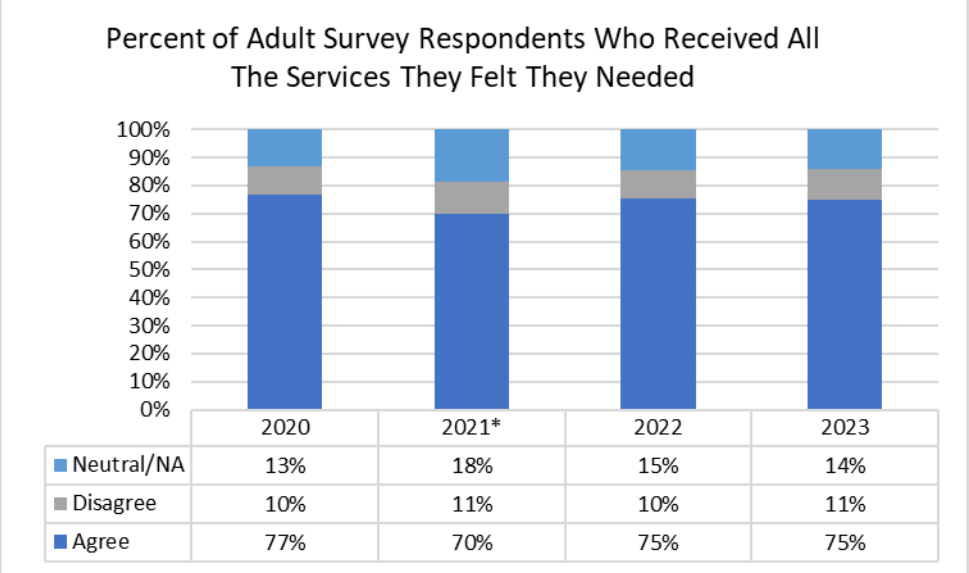
Measure 5.2.4 Percent of adult survey respondents who report they were able to get all the services they needed.

Measure Description: The percentage was calculated using the number of respondents who agree or strongly agree that they were able to get all the services they needed based on the number of respondents to Adult BH MCO Survey Section A, Question 5.

Data Source and Time Period: MCO Adult Behavioral Health Survey aggregate responses, reported for years 2020 – 2023 (i.e., report years 2021-2024).

Analytical Approach: Logistic Regression.

Findings: The percentage of respondents who agreed or strongly agreed that they received all the services they felt they needed was 77 percent in 2020, 70 percent in 2021, 75 percent in 2022 and 75 percent in 2023. Change from baseline was statistically significant in 2021.



	2020	2021*	2022	2023
Neutral/NA	13%	18%	15%	14%
Disagree	10%	11%	10%	11%
Agree	77%	70%	75%	75%

**Statistically significant change over baseline*

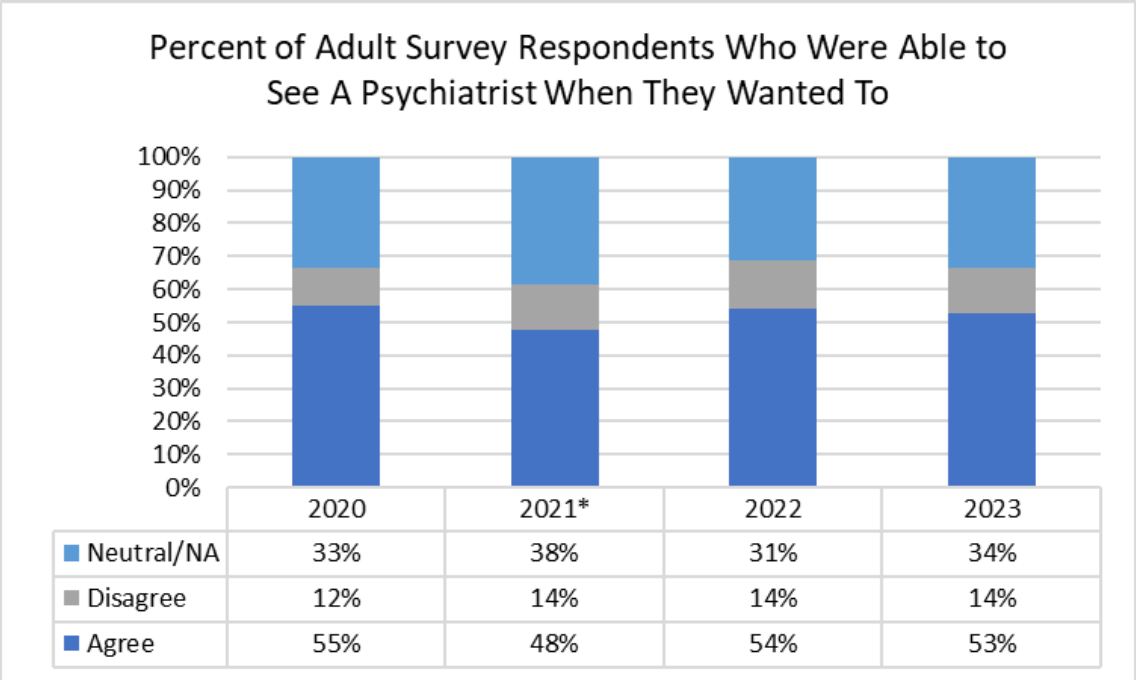
Measure 5.2.5 Percent of adult survey respondents who report they were able to see a psychiatrist when they wanted.

Measure Description: The percentage was calculated using the number of respondents who agree or strongly agree that they were able to see a psychiatrist when needed based on the number of respondents to MCO Adult BH Survey Section A, Question 6

Data Source and Time Period: MCO Adult Behavioral Health Survey aggregate responses, reported for years 2020 – 2023 (i.e., report years 2021-2024).

Analytical Approach: Logistic Regression.

Findings: The percentage of respondents who agreed or strongly agreed that they could see a psychiatrist when needed was 55 percent in 2020, 48 percent in 2021, 54 percent in 2022 and 53 percent in 2023. Change from baseline was statistically significant in 2021.



	2020	2021*	2022	2023
Neutral/NA	33%	38%	31%	34%
Disagree	12%	14%	14%	14%
Agree	55%	48%	54%	53%

**Statistically significant change over baseline*

SMI EVALUATION QUESTION SIX

Evaluation Question Six asks, ***"Does the SMI amendment improve care coordination following discharge from New Hampshire IMD settings?"*** The table below provides an overview of the hypothesis and measures associated with Evaluation Question Six.

Hypothesis	Measures
1. The SMI amendment will maintain care coordination following discharge from a NH IMD	6.1.1. Percent of members Ages 21-64 who had follow-up within 7 days after hospitalization for MH
	6.1.2. Percent of members Ages 21-64 who had follow-up within 30 days after hospitalization for MH
	6.1.3. Percent of members Ages 21-64 who received mental health services each month in the six months following IMD discharge

Measure 6.1.1 Percent of members Ages 21-64 who had follow-up within 7 days after hospitalization for MH.

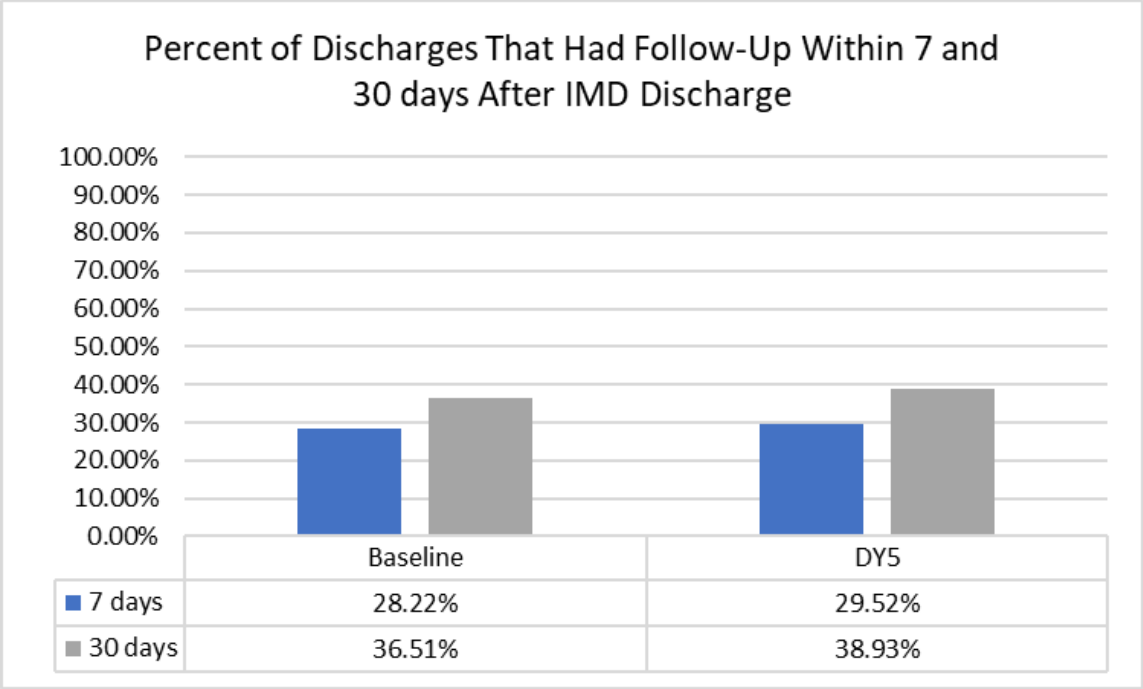
Measure 6.1.2 Percent of members Ages 21-64 who had follow-up within 30 days after hospitalization for MH.

Measure Description: The percentage is calculated using the number of discharges from an IMD that had a follow-up visit with a mental health practitioner within 7 and 30 days of discharge.

Data Source and Time Period: MMIS paid claims, and MCO encounters SFY2022-23. New Hampshire IMD admission and discharge data.

Analytical Approach: Welch two sample t-test with and without outliers.

Findings: The percentage of members who received post-discharge follow-up within 7 days increased from 28.22 percent at baseline to 29.52 percent in DY5. The percentage who received follow-up within 30 days increased from 36.51 percent at baseline to 38.93 percent in DY5. The change over baseline was not statistically significant. There were no outliers.



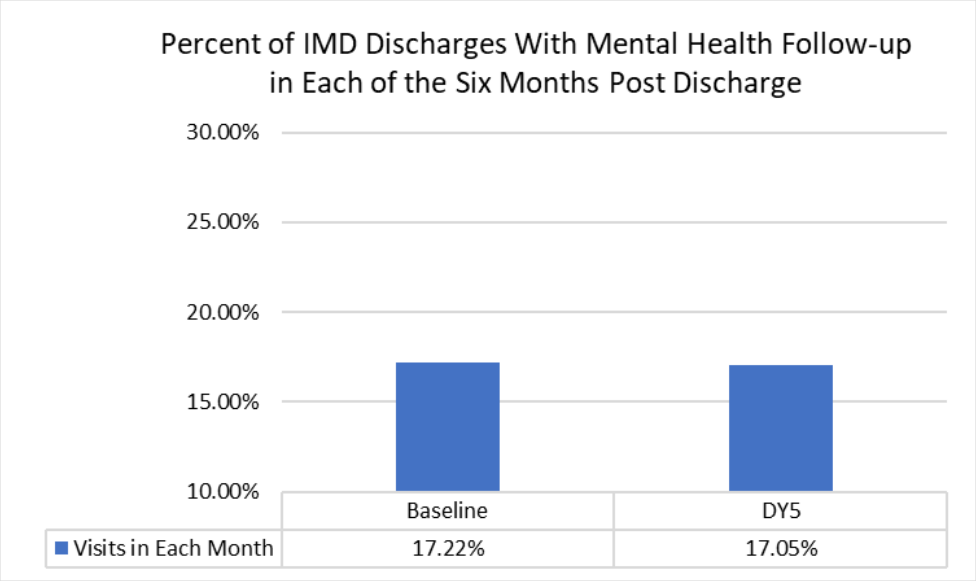
Measure 6.1.3 Percent of members Ages 21-64 who received mental health services each month in the six months following IMD discharge.

Measure Description: The percentage is calculated using the number of discharges from an IMD that had a follow-up visit with a mental health practitioner in each of the six months following discharge.

Data Source and Time Period: MMIS paid claims, and MCO encounters SFY2022-23. New Hampshire IMD admission and discharge data.

Analytical Approach: Welch two sample t-tests with and without outliers.

Findings: The percentage of members who had mental health follow-up in each of the six months post discharge was 17.22 percent at baseline and 17.05 percent in DY5. There was no statistically significant difference from baseline, with or without outliers.



SMI EVALUATION QUESTION SEVEN

Patterns and trends in Medicaid costs associated with members who received psychiatric IMD services in New Hampshire were examined. These measures capture all costs for the measurement year and are not associated with a Demonstration hypothesis or budget neutrality reporting.

This analysis examined the question ***"How does the cost of care change over time?"*** Measures examining cost over time are summarized in the table below.

Hypothesis	Measures
Exploratory	7.1.1. Per member per month (PMPM) Medicaid cost (Total Cost of Care) for members Ages 21-64
	7.1.2. PMPM cost of MH-Related treatment for members Ages 21-64
	7.1.3. PMPM cost of physical health care for members Ages 21-64

Measure 7.1.1 Per member per month (PMPM) Medicaid cost (Total Cost of Care) for members Ages 21-64

Measure 7.1.2 PMPM cost of MH-Related treatment for members Ages 21-64

Measure 7.1.3 PMPM cost of physical health care for members Ages 21-64

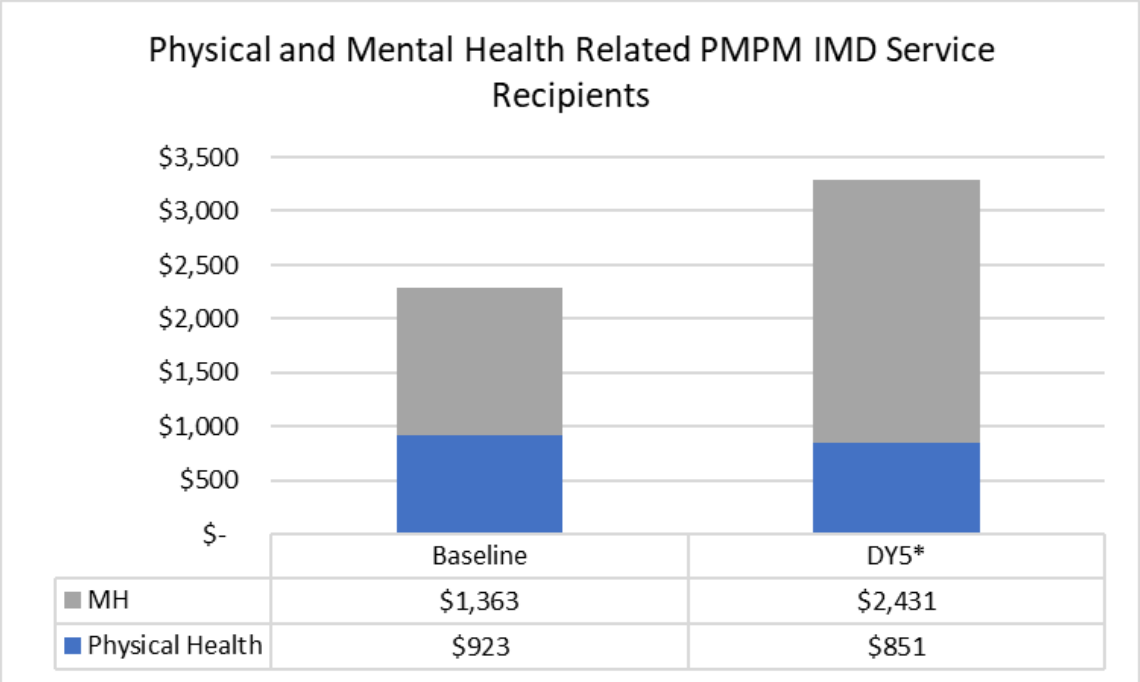
Measure Description: The PMPM was calculated using the sum of all Medicaid payments made for physical health and MH-related services divided by total member months. Breakouts are provided for MH-IMD and other MH treatment services.

Data Source and Time Period: MMIS paid claims, and MCO encounters SFY2022-23. New Hampshire IMD admission and discharge data.

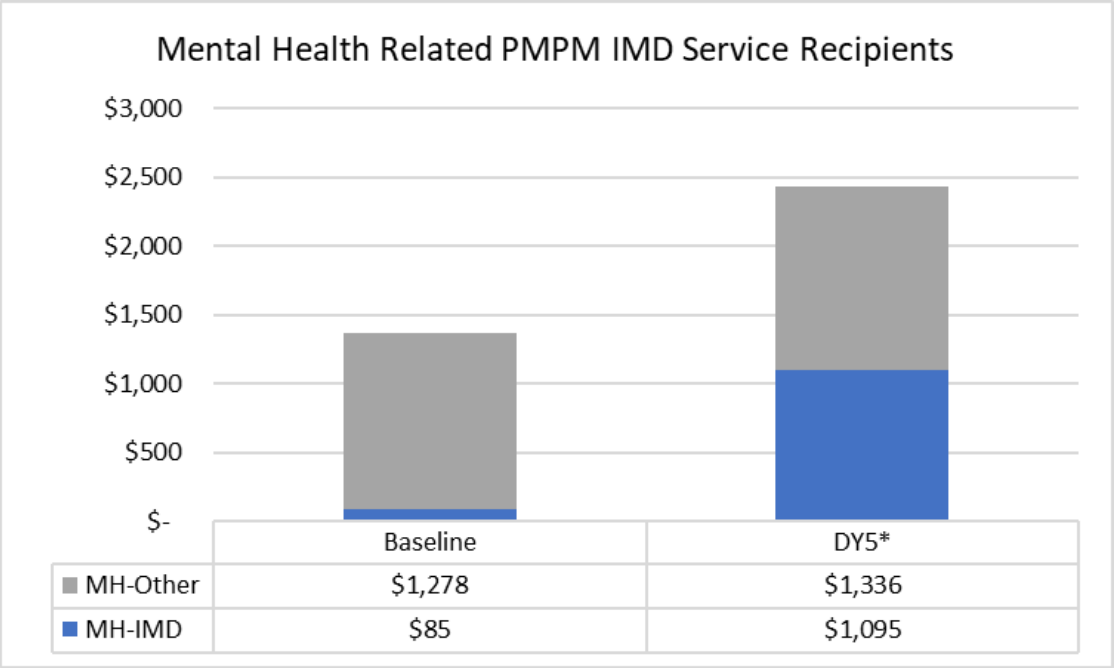
Analytical Approach: Welch two sample t-tests with and without outliers.

Findings: In the first year of the Demonstration Medicaid expenditures for mental health treatment increased from a baseline PMPM of $1,363 to $2,431 for individuals who received IMD services. The change was statistically significant both in the total cost of care and MH related PMPM, and when examined with and without outliers.

In examining MH-related expenditures, the IMD-related PMPM rose from $85 at baseline to $1,095 in DY1. There was a slight increase in other MH-related expenditures, with a baseline PMPM of $1,278 and DY1 of $1,336. There was no statistically significant change over baseline in physical health-related expenditures, with a baseline level of $923 PMPM and DY1 of $851.



**Statistically significant change over baseline for total and MH-related expenditures*



**Statistically significant change over baseline*

SMI EVALUATION QUESTION EIGHT

Patterns and trends in the category of service/drivers of Medicaid costs associated with members who received psychiatric IMD services in New Hampshire were examined. These measures capture all costs for the measurement year and are not associated with a Demonstration hypothesis or budget neutrality reporting.

This analysis examined the question ***"What are the cost drivers?"*** Measures examining cost drivers are summarized in the table below.

Hypothesis	Measures
Exploratory	8.1.2 PMPM cost of outpatient (non-ED) for members Ages 21-64
	8.1.3 PMPM cost of pharmacy for members Ages 21-64
	8.1.4 PMPM cost of outpatient ED for members Ages 21-64
	8.1.5 PMPM cost of inpatient care for members Ages 21-64
	8.1.6 PMPM cost of Long-term care for members Ages 21-64

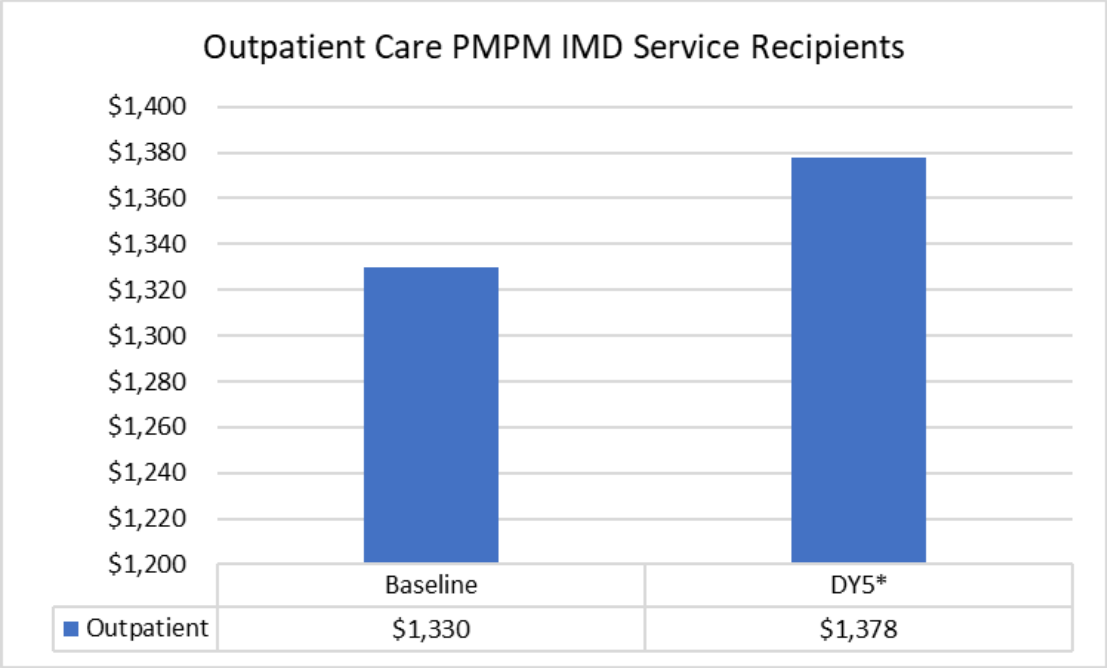
Measure 8.1.1 PMPM cost of outpatient (non-ED) for members Ages 21-64

Measure Description: The PMPM was calculated using the sum of all Medicaid payments made for outpatient (non-ED) care divided by total member months.

Data Source and Time Period: MMIS paid claims, and MCO encounters SFY2022-23. New Hampshire IMD admission and discharge data.

Analytical Approach: Welch two sample t-tests with and without outliers.

Findings: Expenditures for outpatient treatment, excluding ED services, rose from a baseline PMPM of $1,330 to $1,378 in DY1. The change in PMPM was statistically significant when outliers were removed from the calculation.



**Statistically significant change over baseline when outliers are removed*

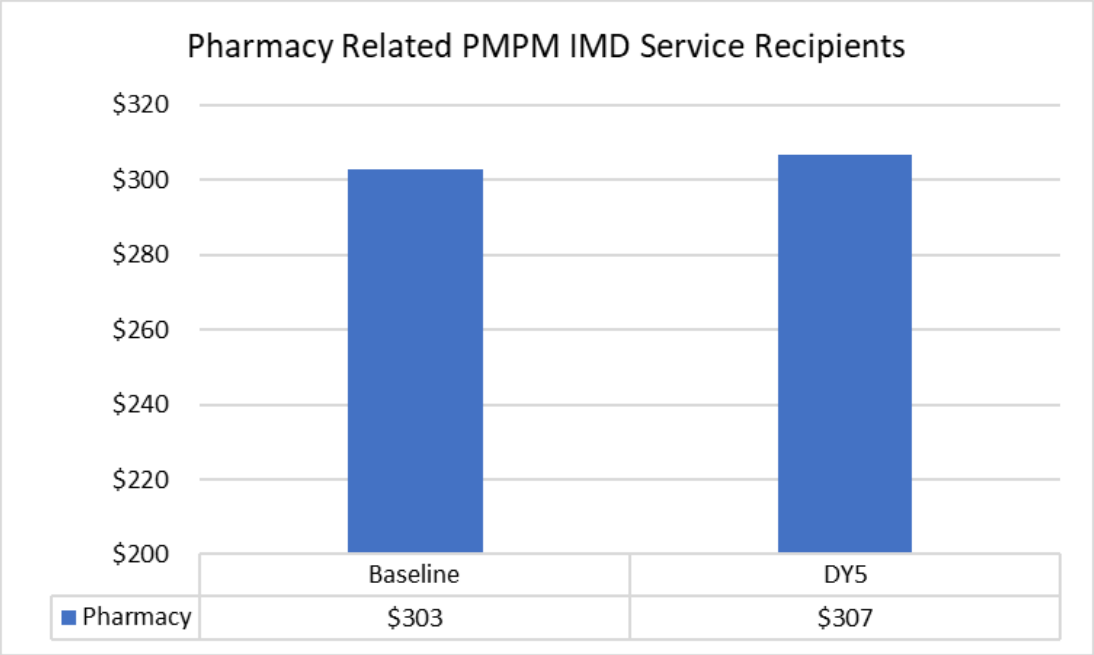
Measure 8.1.2 PMPM cost of pharmacy for members Ages 21-64

Measure Description: The PMPM was calculated using the sum of all Medicaid payments made for pharmacy services divided by total member months.

Data Source and Time Period: MMIS paid claims, and MCO encounters SFY2022-23. New Hampshire IMD admission and discharge data.

Analytical Approach: Welch two sample t-tests with and without outliers.

Findings: Pharmacy-related expenditures were consistent, with a baseline PPM of $303 and $307 in DY1. There was no statistically significant change when examined with or without outliers.



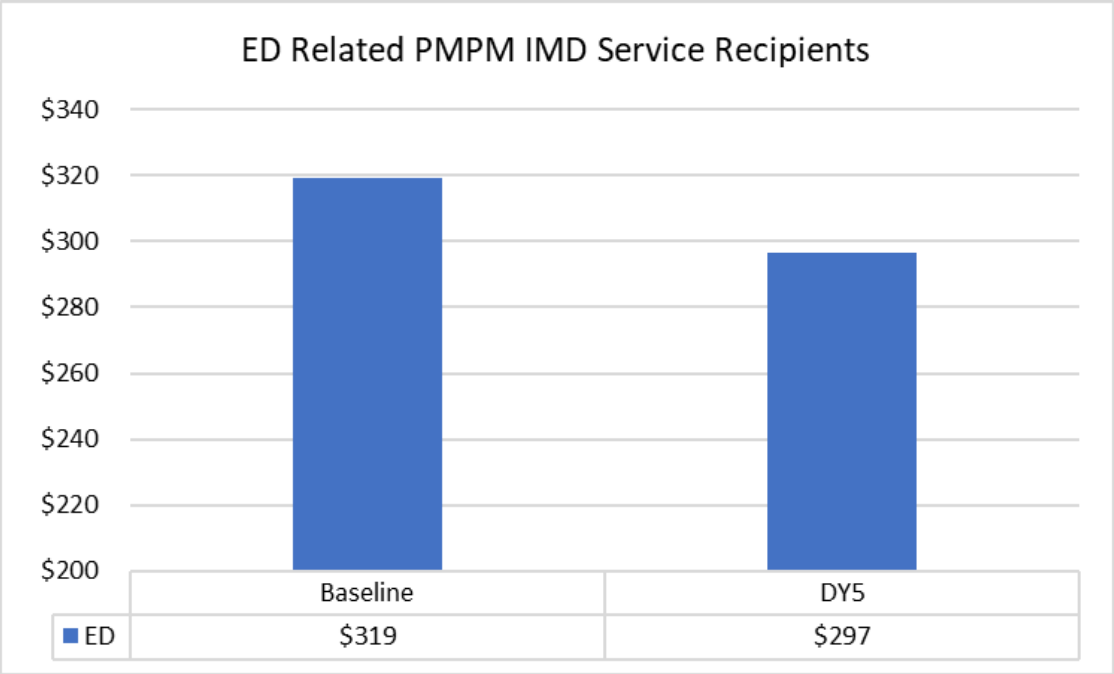
Measure 8.1.3 PMPM cost of outpatient ED for members Ages 21-64

Measure Description: The PMPM was calculated using the sum of all Medicaid payments made for outpatient-ED services divided by the total member months.

Data Source and Time Period: MMIS paid claims, and MCO encounters SFY2022-23. New Hampshire IMD admission and discharge data.

Analytical Approach: Welch two sample t-tests with and without outliers.

Findings: ED-related expenditures decreased slightly, with a baseline PMPM of $319 and $297 in DY1. The change was not statistically significant when examined with or without outliers.



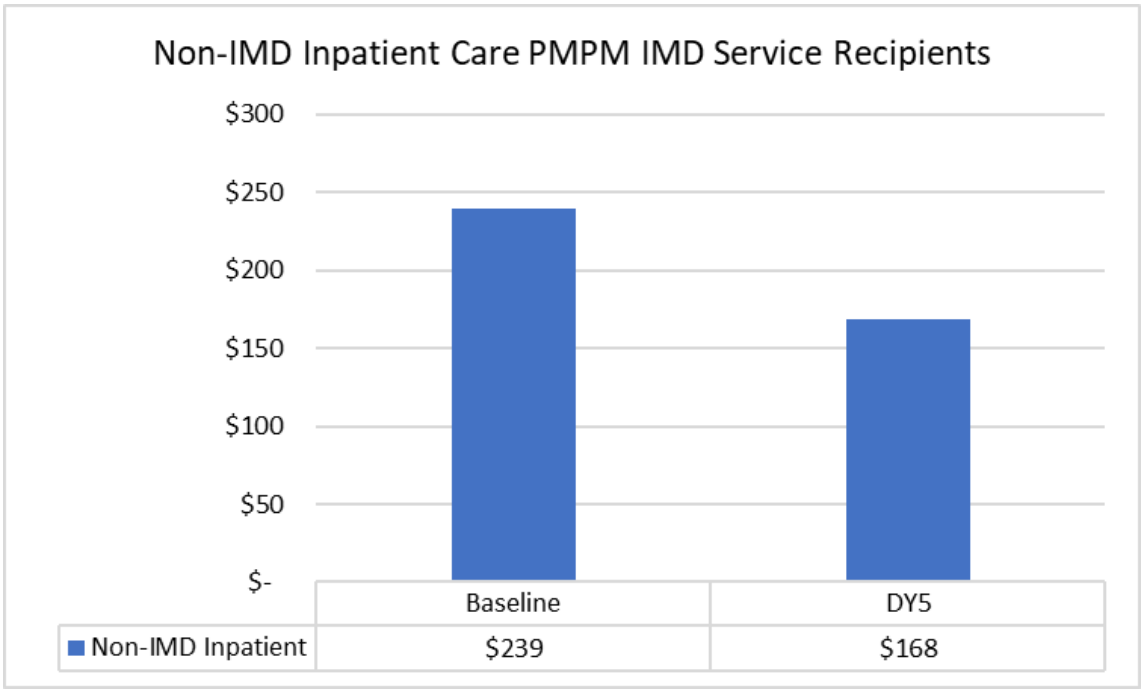
Findings Measure 8.1.4 PMPM cost of inpatient care for members Ages 21-64.

Measure Description: The PMPM was calculated using the sum of all Medicaid payments made for non-IMD inpatient care divided by the total member months.

Data Source and Time Period: MMIS paid claims, and MCO encounters SFY2022-23. New Hampshire IMD admission and discharge data.

Analytical Approach: Welch two sample t-tests with and without outliers.

Findings: Expenditures for non-IMD inpatient care declined slightly, with a baseline PMPM of $239 and $168 in DY1. The change was not statistically significant when examined with or without outliers.



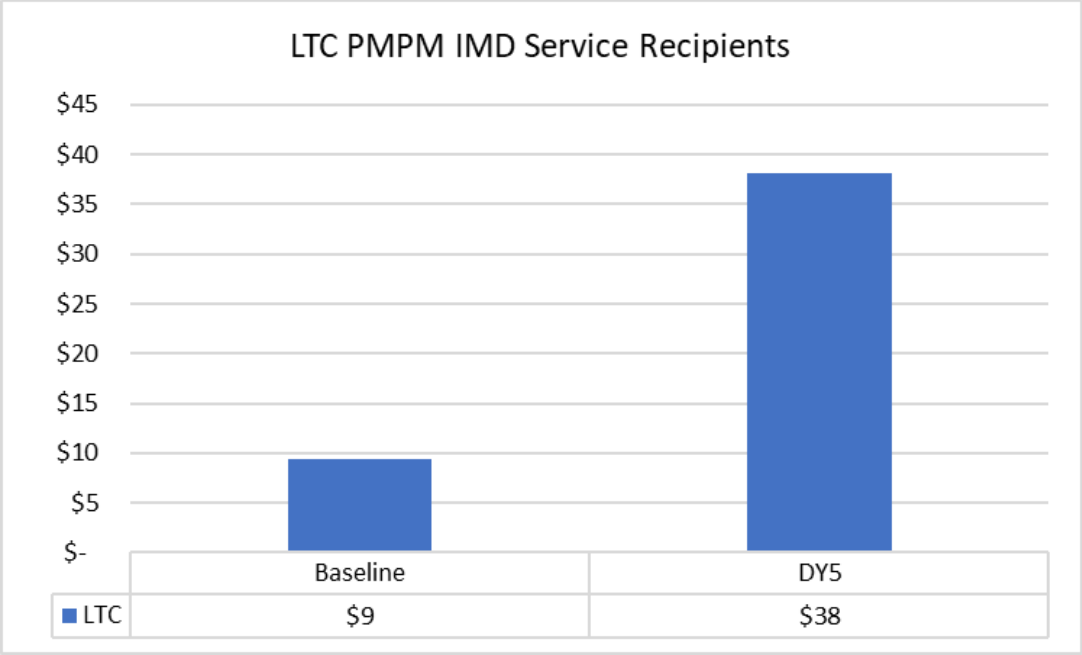
Measure 8.1.5 PMPM cost of Long-term care for members Ages 21-64

Measure Description: The PMPM was calculated using the sum of all Medicaid payments made for Long-Term Care services divided by total member months.

Data Source and Time Period: MMIS paid claims, and MCO encounters SFY2022-23.

Analytical Approach: Welch two sample t-test with and without outliers.

Findings: Expenditures related to long-term care rose from a baseline PMPM of $9 to $38 in DY1. The change was not statistically significant when examined with or without outliers.



12. SMI EVALUATION CONCLUSION

The evaluation examined eight research questions related to members receiving IMD services for an SMI. The SMI-IMD authority was granted for the final year of the Demonstration. After the first year of the SMI amendment, preliminary results suggest the Demonstration is associated with positive outcomes.

The development of a new evaluation design for the period beginning July 2024 will offer an opportunity to determine if the preliminary successes are maintained under the renewed Demonstration. A discussion of the findings by each evaluation question is presented below.

Evaluation Question One. Does the SMI amendment reduce ED utilization for enrollees who receive psychiatric treatment in a New Hampshire IMD?

Preliminary observations show a statistically significant decline in ED visits per 1,000 member months in the 90 days post discharge, when compared to utilization in the 90 days prior to IMD admission. The decline was seen in the baseline year and the first year of the SMI IMD amendment. The lower rate of ED admissions following IMD discharge suggests that IMD stays are associated with improved clinical stability post discharge.

Evaluation Question Two. Does the SMI amendment reduce length of stay in the ED while awaiting mental health treatment?

The length of stay in the ED prior to admission to New Hampshire IMDs more than doubled over baseline. However, DHHS staff noted that tracking ED stays was not standardized in the IMD electronic records system until January 1, 2022. In addition, in June of 2022, the State purchased Hampstead Hospital, adding a new facility for youth and young adults to the electronic record keeping system. The increase in days waiting in the ED could be the result of inconsistent data collection during the baseline period (i.e., July 1, 2021 – June 30, 2022).

Evaluation Question Three. Does the SMI amendment reduce preventable readmissions to NH IMDs?

Preliminary observations suggest low readmission rates for members receiving New Hampshire IMD services. Readmission to the IMD declined significantly in the first year of the SMI amendment; fewer than five percent of discharges were followed by another stay within 30 days compared to over 10 percent in the baseline year. When outliers were removed from the analysis, there was no significant difference between the years.

Fewer than one percent of readmissions did not receive community-based services prior to the readmission. Lack of mental health follow-up in the 30-days following discharge does not appear to be a factor in the readmissions measured.

Evaluation Question Four. Does the SMI amendment improve the availability of crisis stabilization services across the State?

The SMI Implementation Plan calls for continued support to develop mobile crisis units and hospital diversion capacity in communities statewide. Preliminary observations show that the Rapid Response Call Center increased call volume in the first year of the Demonstration.

At the close of the first year of the SMI amendment, mobile crisis teams were staffed in every Community Mental Health Center region of the State. In addition, 15 crisis beds were developed in communities across the State as part of the hospital/ED diversion efforts. These beds also serve as step down placements for members discharged from the hospital. A centralized call center for accessing crisis support and stabilization services was supported under the Demonstration.

Evaluation Question Five. Does the SMI amendment improve access to community-based care, including the integration of primary and behavioral health care?

Two hypotheses were examined under Evaluation Question Five. The first hypothesized that members receiving New Hampshire IMD services would maintain access to community-based care. Over 77 percent of IMD discharges had an ambulatory care visit in the first six months post discharge during the first year of the SMI amendment. This was a statistically significant change over the baseline level of 72 percent. In addition, 86 percent of adults who responded in 2023 indicated that they were able to meet with their PCP to discuss well-being during the year.

The second hypothesis suggested that access to mental health services would be maintained under the Demonstration. The MCO behavioral health survey was implemented in 2020 as a pilot and in 2021 as a full statewide survey. In 2023, respondents reported:

- 80 percent were able to meet with staff as often as they felt necessary, compared to79 percent in 2020 and 75 percent in 2021.
- 71 percent had calls returned within 24 hours, compared to 71 percent in 2020 and 68 percent in 2021.
- 81 percent felt services were available at convenient times, compared to 81 percent in 2020 and 75 percent in 2021.
- 75 percent received all the services they felt they needed, compared to 77 percent in 2020 and 70 percent in 2021.
- 53 percent were able to see a psychiatrist when they wanted, compared to 55 percent in 2020 and 48 percent in 2021.

Results support the hypotheses that integration of primary care and behavioral health care is being maintained. As the State plans for the implementation of the Certified Community Clinical Behavioral Health Center model in New Hampshire, integration is expected to improve.

Evaluation Question Six. Does the SMI amendment improve care coordination following discharge from New Hampshire IMD settings?

The percentage of members who received follow-up care has not changed significantly compared to the baseline period. Follow-up within seven days of discharge was 28 percent at baseline and 29 percent in the first year of the SMI IMD amendment. Follow-up within 30 days was 36 percent at baseline and nearly 39 percent in the first year. The percentage of discharges with mental health services in each of the six months following discharge was 17 percent in both years.

Rates of follow-up post IMD discharge were low at 7- and 30-day intervals; it therefore may be helpful to examine follow-up for IMD at more frequent intervals such as 45 and 90 days to better understand utilization patterns and outcomes. For example, lack of follow-up does not appear to be a contributing factor in the IMD readmission rate when examined at 30 days. Future evaluations could examine whether low readmission rates were also maintained at 45 or 90 days and whether mental health follow-up was associated with those readmissions.

Evaluation Question Seven. How does the cost of care change over time?

The exploratory expenditure analysis examined the change in total cost care, with breakouts for mental health and IMD-related expenditures. There was a statistically significant increase in the total PMPM and the MH-related portion of total expenditures. The IMD-related PMPM rose from $85 during the baseline period to $1,095 in the first year of the Demonstration. The other mental health-related PMPM increased from $1,278 at baseline to $1,336 in the first year of the Demonstration. Prior to the Demonstration the State did not claim IMD reimbursement for members ages 21-64.

During the first year of the Demonstration IMD providers were developing protocols for Medicaid claiming. Thus, some members did not have corresponding claims for their IMD stay.

Evaluation Question Eight. What are the cost drivers?

Cost drivers related to outpatient treatment (non-ED), pharmacy, ED, inpatient and long-term care were examined. There were no statistically significant changes in cost drivers, apart from non-IMD related inpatient treatment.

The outpatient PMPM was just over $1,300 in both years. The pharmacy-related PMPM remained consistent at just over $300 each year. The ED PMPM was approximately $300 in both years and the long-term care PMPM was less than $40 in both years.

Non-IMD related inpatient care was $239 at baseline and $168 during the first year of the amendment. However, the statistically significant change was not maintained for non-IMD related inpatient treatment when outliers were removed from the analysis.

INTERPRETATIONS, POLICY IMPLICATIONS AND INTERACTIONS WITH OTHER STATE INITIATIVES

Preliminary observations under the SMI related evaluation activities suggest that IMD enrollees are receiving high quality care, as evidenced by reduced frequency of ED visits in the 90 days following discharge and low readmission rates in the first 30 days following discharge.

Prior to its Demonstration request, the State engaged in extensive planning to revise and update its 10-Year Mental Health Plan. This document, completed with broad stakeholder input, represents a strategic plan to improve integration, quality and accessibility of a full continuum of mental health services, including prevention and early intervention.

The SMI-IMD Demonstration activities were identified as part of the State's overall mental health plan; both initiatives work in tandem. For example, the first goal area identified under the Demonstration is: *To reduce utilization and lengths of stay in hospital emergency departments (ED) among Medicaid beneficiaries with SMI/SED while awaiting mental health treatment in specialized settings*. In response to long wait times in the ED for psychiatric placement, DHHS is working to accelerate the development of a variety of initiatives identified in the 10-Year Mental Health Plan as part of Mission Zero.

Mission Zero was created in the fall of 2023 and is a public private partnership aimed at reducing psychiatric boarding in the ED. Projects that have been identified for an accelerated implementation timeline include the:

- Expansion of Certified Community Behavioral Health Clinics (CCBHC) to increase the availability of integrated mental and substance use disorder treatment.
- Creation of community-based crisis stabilization programs provide care for up to 23 hours and referrals to community-based resources.
- Enhancement of coordination and oversight of all adult inpatient referrals to ensure timely care in the right place.
- Expansion of Designated Receiving Facility (DRF) Beds, including a new 120-bed facility and an increase in five beds through the Dartmouth hospital system to serve the most vulnerable psychiatric patients.
- Expansion in transitional housing and step-down beds, including the creation of residential program for individuals with co-occurring BH issues, intellectual disability, and/or complex medical needs.
- Expansion of landlord incentives to support individual to remain in their existing housing, including working directly with rental property owners, landlords, and municipalities on strategies that mitigate risks and provide permanent, supportive housing.

Planning and ongoing oversight for Mission Zero is a collaborative effort between DHHS, the hospital system, CMHCs and the New Hampshire chapter of the National Association for Mental Illness (NAMI). Representatives from each of these organizations have been identified to serve as executive steering committee and day-to-day operational workgroup members.

The executive committee advises the DHHS on the strategic implementation of Mission Zero and ensures that working groups are established and that processes are transparent. The executive committee also oversees progress. The operational workgroup ensures patients are admitted to the most clinically appropriate and least restrictive level of care and hospital facility as quickly as possible.

Under the SMI amendment, the State also monitors the expansion of Critical Time Intervention programs statewide. CTI offers a time-limited, evidence-based practice that mobilizes support during periods of transition and has been used to prevent recurrent homelessness and readmissions.

CTI has been utilized nationally for people with SMI leaving shelters, transitioning from hospital-based care and/or being released from incarceration. New Hampshire's CTI efforts are expected to increase follow-up within seven and 30 days after discharge from an ED or hospitalization for mental illness. The long-term impact of these actions is expected to reduce preventable readmissions to acute care hospitals and residential settings (Goal #2 under the Demonstration).

Broad stakeholder input and ongoing monitoring of the 10-Year Mental Health Plan created a pre-existing framework for supporting the SMI-IMD Demonstration. This has allowed the State to accelerate initiatives that are expected to improve long term effectiveness and outcomes under the Demonstration.

LESSONS LEARNED AND RECOMMENDATIONS

The SMI-IMD amendment was implemented in the final year of the Demonstration. The SMI-IMD authorities under the Demonstration were sought as part of a larger system integration and behavioral health transformation project. This included ensuing access to the full continuum of psychiatric care, enhanced CMHC capacity, attention to early intervention and centralizing and coordination crisis stabilization services statewide.

Preliminary results are promising and suggest that embedding the Demonstration in the larger context of community mental health planning is associated with low IMD readmission rates, access to primary care and other community services. Enhancements expected as part of the State's 10-Year Mental Health Plan include improving follow-up after hospitalization and retention in treatment.

The State has also implemented a multi-pronged approach to addressing psychiatric boarding in the ED. It may be helpful to look at the impact of this initiative as well as retention in mental health treatment post IMD discharge for intervals between 30 days and six months, such as 45 and 90 days. These approaches could be explored in the revised evaluation design expected as part of the Demonstration's recent five-year renewal.

13. NURSING FACILITY DENTURES AMENDMENT BACKGROUND

On July 1, 2022, Governor Christopher T. Sununu signed legislation requiring the Department of Health and Human Services to implement an adult dental benefit by April 1, 2023. Through this legislation, DHHS was charged with implementing an adult dental benefit that includes diagnostic, preventive, limited periodontal, restorative, and oral surgery services for all Medicaid eligible adults ages 21 and older.

The removable denture portion of the benefit is limited to nursing facility residents and members who participate in the State's home- and community-based services (HCBS) waivers (Developmental Disability, Acquired Brain Disorder, and Choices for Independence 1915(c) Waivers). The denture benefit for members receiving HCBS services is provided through amendments to the existing 1915(c) waivers.

AMENDMENT APPROVAL

On March 17, 2023, CMS approved a third amendment to the Section 1115 Medicaid Demonstration to authorize Medicaid payments for removable prosthodontic (dentures) coverage for adults who reside in nursing facilities. This coverage is effective April 1, 2023 and for the remainder of the Demonstration period ending June 30, 2023. Clarifying, non-substantive revisions were approved on April 14, 2023. Subsequent to the dentures amendment, CMS extended the Demonstration for up to one year (with an expiration date of June 30, 2024), while the State and CMS continued discussions related to a five-year Demonstration renewal.

AMENDMENT DESCRIPTION AND GOALS

The overall objective of the Demonstration is to reduce negative health outcomes associated with missing teeth and improve the quality of life for nursing facility residents ages 21 and over through the provision of removable dentures. Demonstration goals include:

1. Improve access to removable prosthodontic services for nursing facility residents.
2. Reduce incidence of dental infections among nursing facility residents.
3. Reduce incidence of hospitalizations due to aspiration pneumonia among nursing facility residents.
4. Increase healthy weight gain in nursing facility residents.
5. Improve quality of life for nursing facility residents.

Under the Demonstration amendment, the State will add removable denture coverage for individuals ages 21 and older who reside in nursing facility settings. The benefit includes, but is not limited to, initial placement of full or partial upper/lower dentures, repairs and tooth

additions, and relining. Eligible beneficiaries may receive dentures once every five years or more frequently when deemed medically necessary. Repairs for existing dentures are covered when medically necessary.

AMENDMENT IMPLEMENTATION

The denture benefit is provided through a single managed care Dental Organization (DO), New Hampshire Delta Dental. There are no modifications to the current Medicaid fee-for-service or managed care arrangements under the Demonstration.

NURSING FACILITY DENTURES AMENDMENT POPULATION

The Demonstration serves Medicaid enrollees ages 21 and older who reside in nursing facilities and are approved for full Medicaid benefits under the State Plan, with the exception of the following groups:

- Qualified Medicare Beneficiaries (QMB).
- Special Low-Income Medicare Beneficiaries (SLMB).
- Qualified Individual Special Low-Income Medicare Beneficiaries (QI / SLMB2).
- Temporary eligibility groups.
- Non-citizens qualifying for emergency services only; and
- Family planning only beneficiaries.

14. DENTURES AMENDMENT EVALUATION QUESTIONS & HYPOTHESES

Under the Demonstration, the Dental Organization is expected to inform and educate nursing facility staff, Medicaid members, guardians, and other stakeholders on eligibility criteria and how to access the dentures benefit. Nursing facility staff will be responsible for identifying members needing repairs, new or replacement dentures.

Facilities complete an assessment of dental needs using the Medicare Minimum Data Set (MDS) upon admission and every three months thereafter. MDS assessments may be completed more often if there are significant changes in a resident's circumstances or clinical profile.

The evaluation proposes to examine the effect of replacing missing teeth on beneficiary health outcomes and quality of life. The ability to properly chew and swallow nutrient-rich foods is severely limited by missing and un-replaced teeth. Improperly chewed foods can also cause aspiration of food particles, leading to dental infection and/or aspiration pneumonia. Under the Demonstration members have access to repairs, new or replacement dentures as medically necessary to address these issues.

The State is working with the Dental Organization to assure:

- Nursing facility staff are aware of the benefit.
- Referrals, authorizations and, when needed, member appeals are timely.
- Access to treatment is enhanced through mobile dental services, where needed to address workforce shortages.

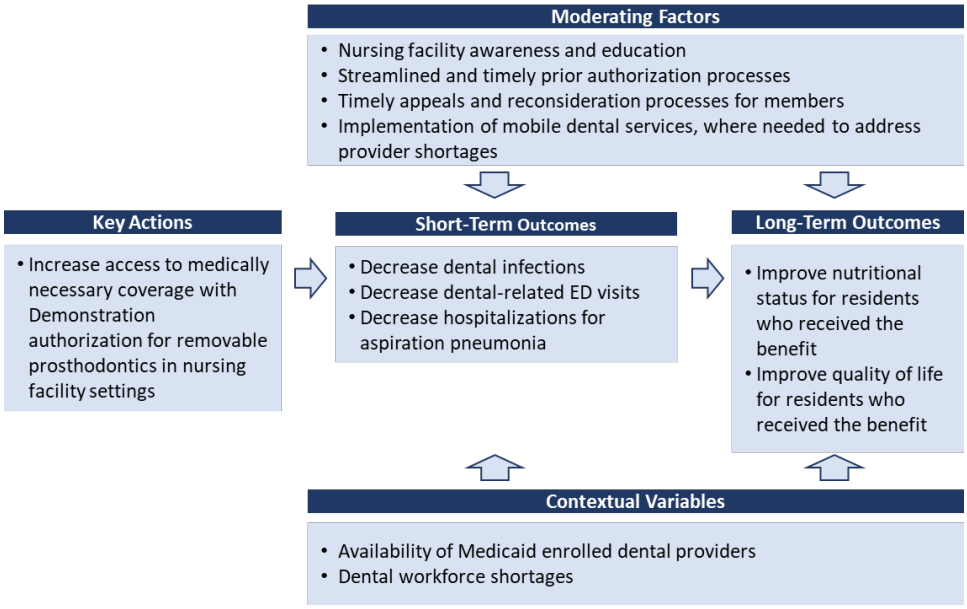
ALIGNMENT WITH XIX OBJECTIVES

The Demonstration amendment supports the federal Medicaid program in its core mission: to meet the health and wellness needs of our nation's vulnerable and low-income individuals and families. Demonstration amendment goals align with the Title XIX objective: to improve access to high-quality, person-centered services that produce positive health outcomes for individuals.

QUANTIFIABLE TARGETS AND DENTURES AMENDMENT LOGIC MODEL

The State expects improvement in the number of nursing facility residents who use the ED or otherwise need treatment for non-traumatic dental related conditions. In the long term, new or replacement dentures and repairs are expected to improve nutritional status and quality of life.

The expected short- and long-term goals are outlined in the logic model provided on the next page.



DENTURES AMENDMENT EVALUATION QUESTIONS AND HYPOTHESES

The dentures evaluation was designed to consider five research questions, and six hypotheses outlined below.

Evaluation Questions	Hypotheses
1. Does the Demonstration improve access to removable prosthodontics for nursing facility residents?	1. The demonstration will result in improved access to removable prosthodontic services for nursing facility residents.
2. Does the Demonstration reduce dental infections for nursing facility residents?	1. The demonstration will result in reduced incidence of dental infections among nursing facility residents.
	2. The demonstration will result in decreased non-traumatic dental-related ED visits among nursing facility residents.
3. Does the Demonstration reduce hospitalizations for nursing facility residents?	1. The demonstration will result in reduced incidence of hospitalizations due to aspiration pneumonia among nursing facility residents.
4. Does the Demonstration improve the nutritional status of residents who received the benefit? *	1. The demonstration will result in improved nutritional status among residents who received denture benefit.
5. Does the Demonstration improve Quality of Life of residents who receive the benefit? *	1. The demonstration will result in increased quality of life (e.g., participation in community meals and social events) among residents who received denture benefit.

**Research question and hypothesis suspended due to a lack of survey responses*

15. DENTURES EVALUATION METHODOLOGY

The proposed evaluation included quantitative techniques to examine change in dental-related infections, ED visits and hospitalizations against a baseline period, one year prior to the implementation of the dentures benefit. The Demonstration was renewed effective July 16, 2024. Thus, the current observations will serve as a baseline for the upcoming five-year period and to inform discussions for the revised evaluation design expected as part of the new Demonstration.

The remainder of this section provides an overview of the target population, evaluation period measures, data sources and analytic approach.

NURSING FACILITY DENTURES TARGET AND COMPARISON POPULATIONS

The evaluation includes all Medicaid members ages 21 and older who reside in nursing facilities. All Demonstration members are eligible for the benefit; as such, an in-state comparison group is not possible.

Currently, the State is not aware of another Medicaid program with a substantially similar population, taking into account differences in program eligibility and coverage policies, demographic and geographic characteristics, dental provider system, breadth of networks, availability, and provider payment rates. In addition, New Hampshire does not have a data-use agreement with any other State. These factors make the use of an out-of-state comparison group impractical at this time.

NURSING FACILITY DENTURES EVALUATION PERIOD

Data on dental related infections and hospitalizations was examined one year prior to the amendment (April 1, 2022 – March 30, 2023) and in the first 12 months following amendment approval (April 1, 2023 – March 30, 2024).

NURSING FACILITY DENTURES EVALUATION MEASURES

Details on each evaluation measure are presented in the following section. The evaluator worked with DHHS to define CPT codes and diagnostic categories relevant to non-traumatic ED visits and dental infections (Attachment 4).

DATA SOURCES, CLEANING AND VALIDATION

The quantitative measures identified for evaluation relied on the New Hampshire Medicaid Management Information System (MMIS) and Medicaid Eligibility and Enrollment System (EES). This includes Medicaid claims and encounters (paid, suspended, and denied) and Medicaid eligibility information. Evaluation methods are described below.

QUANTITATIVE DATA

The evaluator receives raw claims extracts quarterly and annually. The evaluator then performs a data audit process to identify problems and inconsistencies with the data received. This includes direct comparisons to previous raw claims extracts to evaluate trends and validate consistency. The evaluator worked with the State to answer questions and provide feedback to resolve discrepancies in output, as needed.

The evaluator held ad hoc meetings with State subject matter experts to discuss any anomalies found in the data. For example, results or sample size that represent a significant departure from the prior year without clear explanation will prompt individual meetings with data and program experts. In addition, the evaluator inventoried change in the measure specifications, if any, and changes in program operations or policy that may have occurred since the last data submission.

QUALITATIVE DATA

The evaluator collaborated with DHHS and the Dental Organization to develop a member survey that was distributed to nursing facility residents who received the dentures benefit. Surveys were distributed to nursing facility staff and residents six months after receiving their dentures. This allowed time for members to acclimate to the prosthodontics and for any pre-existing condition related to not having prosthodontics to subside.

The survey can be found in Attachment 5 and was designed to include questions that can be completed either by the member or through staff observation. Staff observation is to be used when the member cannot remember or respond independently due to a cognitive decline or medical condition. The survey addressed the following three topic areas:

- Nutritional Status (e.g., ability to eat a variety of foods from all food groups, improving and/or maintaining a healthy weight)
- Social Interactions (e.g., participation in congregate meals and other social events, frequency of verbal interactions with staff and peers)
- General Well-Being (e.g., overall satisfaction, level of oral pain, ability to effectively communicate wants and needs)

At the time of this evaluation, 19 residents were eligible to receive the survey. No responses were received by the DO. The DO has sent a second survey reminder and is discussing options to improve survey response rates for inclusion in future evaluations.

ANALYTIC METHODS

A Welch two sample t-test was used to examine the differences between the baseline period and first full year of the dentures benefit. An Interrupted Time Series (ITS) design was ruled out due to the issue of sparse data.

ITS requires a minimum of eight to twelve data points before and after the intervention period. To achieve even the minimum number of observations, data would need to be subdivided into monthly segments. The number of observations was very small in the annual data set and in any given month observations are too small to provide meaningful analysis.

The traditionally accepted significance level ($p \leq 0.05$) was used for all comparisons.

METHODOLOGICAL LIMITATIONS

Due to the quasi-experimental nature of the design and the limitations identified below, the evaluation results cannot be attributed to causal inference. The findings may suggest an association or correlation with various aspects of the Demonstration. However, language suggesting causation or analyses of counterfactuals may not be appropriate when describing results.

The dentures evaluation was designed to yield accurate and actionable findings but does have methodological limitations, most of which are inherent to Section 1115 demonstrations. Data and design limitations are outlined below.

Lack of True Experimental Control Groups: All nursing facility residents who meet medical necessity criteria for dentures are eligible under the Demonstration.

Small Population Size: The average number of nursing facility residents per month is approximately 3,600. All members who receive the dentures benefit are included in the evaluation target group.

Short Evaluation Period: The Demonstration amendment was effective for the last three months of the Demonstration period. Subsequent to the amendment's approval, CMS issued a temporary one-year extension for the current Demonstration while the State and CMS finalized the terms of the Demonstration renewal.

16. NURSING FACILITY DENTURES EVALUATION FINDINGS

Results are derived from MMIS paid claims, and MCO encounters for the period April 1, 2022 – March 30, 2024. Members ages 21 and older who reside in nursing facilities are included.

A Welch two sample t-test was used to assess the significance of change over baseline. Differences over baseline were not statistically significant for any measure studied.

Results for each hypothesis and measures by evaluation question are presented in the table below.

	Results			
	Baseline		2023-24	
Measure	Count	Rate	Count	Rate
Does the Demonstration improve access to removable prosthodontics for nursing facility residents?				
Hypothesis 1. The demonstration will result in improved access to removable prosthodontic services for nursing facility residents.				
The percentage of Medicaid members Ages 21 and older who reside in nursing facilities and receive dentures	-	-	34	0.64%
Does the Demonstration reduce dental infections for nursing facility residents?				
Hypothesis 1. The demonstration will result in reduced incidence of dental infections among nursing facility residents.				
The rate of dental infections per 1,000 member months for nursing facility residents	270	5.73	307	6.59
Hypothesis 2. The demonstration will result in decreased non-traumatic dental related visits among nursing facility residents.				
The rate of dental-related ED visits (non-traumatic) per 1,000 member months for nursing facility residents	10	0.21	11	0.24
Does the Demonstration reduce hospitalizations for nursing facility residents?				
Hypothesis 1. The demonstration will result in reduced incidence of hospitalizations due to aspiration pneumonia among nursing facility residents.				
The rate of inpatient admissions for aspiration pneumonia per 1,000 member months for nursing facility residents	357	7.58	253	5.43

17. NURSING FACILITY DENTURES CONCLUSION

There were no statistically significant differences between baseline and the first year of coverage for nursing facility residents. The dentures benefit was approved on April 1, 2023 and many operational policies were under development at the time of the evaluation.

DHHS and the DO were collaborating on the development of provider outreach and education for nursing facility providers and staff as well as member information and education. As more outreach and education is conducted by the DO it is expected that more members will be found eligible for dentures and/or repairs to existing prosthodontics.

To increase the response rate for member surveys, it may be necessary to conduct phone interviews with members and/or identify staff liaisons for each facility to assist in data collection. The State, DO and independent evaluator will continue to assess methods to improve survey responses.

ATTACHMENTS

ATTACHMENT 1: SUD EVALUATION MEASURES, ANALYTICS AND SUMMATIVE REPORT CHANGES

Analytic Approach Notes: The original design contemplated the use of the Mann Whitney test to address the possibility that the data was not normally distributed. Upon examination of the data, the evaluators concluded the central limit theorem is applicable. As part of the interim and summative report development, causal inference methods included univariate and multivariate regressions, t-test, and analysis of variance (ANOVA).

Demonstration Goal: Improve Access to SUD Treatment

Measure	Data Source	Analytic Approach	Interim and Summative Report Change
Hypothesis 1: Enrollees will have better access to SUD residential treatment services			
Percent of enrollees Ages 12 to 64 years with an SUD claim for treatment in an IMD with a discharge date during the year (SUD MP #5)	MMIS	Logistic Regression	None
Percent of adult enrollees Ages 18 to 64 years with an SUD claim for treatment in an IMD with a discharge date during the year (SUD MP #5)	MMIS		
Network availability (appointments, wait times, acceptance of Medicaid)	Survey	Descriptive	Secret shopper methodology was replaced by a provider survey
Number of beds in SUD residential programs	Survey; Provider Enrollment	Descriptive	Licensing and Provider enrollment reports were used as data sources
Hypothesis 2: Adolescent enrollees will have better access to in-state SUD residential treatment services			
Percent of adolescent Ages 12 to 17 years enrollees with an SUD claim for treatment in an IMD with a discharge date during the year (SUD MP #5)	MMIS	Logistic Regression	Measure suspended: The adolescent program was closed shortly after the start of the Demonstration.

Demonstration Goal: Improve Quality of SUD Treatment

Measure	Data Source	Analytic Approach	Interim and Summative Report Change
Hypothesis 1: Enrollees with SUD will have fewer ED visits for SUD			
Total number of ED visits for SUD per 1,000 demonstration enrollees during the year (SUD MP #23)	MMIS	Logistic Regression	None
Hypothesis 2: Enrollees with SUD will have fewer total ED visits			
Total number of ED visits per 1,000 demonstration enrollees during the year	MMIS	Logistic Regression	None
Hypothesis 3: Enrollees with SUD will have fewer ED visits post discharge from an SUD IMD			
The frequency and rate of change in ED use, 90-days prior to IMD admission and 90-days post IMD discharge	MMIS	Logistic Regression	None
Hypothesis 4: Enrollees with SUD will have improved rates of initiation and engagement in alcohol and other drug treatment (IET)			
The percentage of enrollees who initiate treatment through inpatient AOD admission, outpatient visit, intensive outpatient encounter or partial hospitalization, telehealth, or MAT within 14 days of the diagnosis (SUD MP #15)	MMIS	Logistic Regression	None
The percentage of enrollees who initiated treatment and who had two or more additional AOD services or MAT within 34 days of initiation visit (SUD MP #15)	MMIS		None
Hypothesis 5: Enrollees with SUD will have lower IMD readmission rates			
The percent of SUD IMD stays during the measurement period followed by a readmission within 30 days	MMIS	Logistic Regression	None
Hypothesis 6: Enrollees with SUD will have improved rates of treatment completion			
Count and percentage of members with a SUD who are retained in treatment (SUD MP #15)	MMIS	Logistic Regression	DHHS was asked by NCQA not to use State specific modifications to the HEDIS framework. The evaluation employed a new state-specific measure of continuity of care following an IMD discharge.
Hypothesis 7: Medicaid IMD providers will report consistency in program design and discharge planning policies			
Provider perception of administrative burden and discharge planning	Structured Interview	Thematic Analysis	A survey methodology was used in place of interviews to solicit provider feedback

Demonstration Goal: Maintain or Reduce Cost

Measure	Data Source	Analytic Approach	Interim and Summative Report Change
Hypothesis 1: The demonstration will be cost neutral			
Annual PMPM trend rates and per capita cost estimates for each eligibility group defined in STC 60	MMIS	Descriptive	
Hypothesis 2: The cost of adolescent residential SUD treatment services will be reduced			
Total Medicaid IMD expenditures for adolescents receiving residential treatment services	MMIS	Descriptive	Measure Suspended: The adolescent program was closed shortly after the start of the Demonstration.

Measure	Data Source	Analytic Approach	Interim and Summative Report Change
Exploratory analysis of patterns and trends in Medicaid costs associated with SUD IMD service recipients. Per member per month (PMPM) Medicaid cost for individuals who received an IMD service in the measurement year*			
Total Cost of Care, with SUD-related and non-SUD-related cost by age group	MMIS	Descriptive	None
Total SUD-related cost, with breakouts for SUD-IMD, SUD-other treatment by age group			None
Total annual cost of pharmacy, ED, Inpatient and Long-Term Care services by age group			None

*These measures capture all costs for the measurement year and are not associated with a demonstration hypothesis or budget neutrality reporting

ATTACHMENT 2: SUD PROVIDER SURVEY

New Hampshire SUD Residential Treatment Provider Survey		
For PHPG tracking purposes, provide your name and program information below.		
Facility Name:	Name of Person Completing the Survey:	Date Survey Completed:

Section 1: Aligning and Streamlining Regulatory Requirements

In 2018 and 2019, DHHS issued Substance Use Disorder Residential Treatment Facility (SUD-RTF) licensing rules (Part He-P 826) and made changes to the Medicaid coverage rule (Part He-W 513). One goal of these changes was to minimize administrative burden by streamlining provider requirements for the Division of Medicaid Services (DMS), Bureau of Drug and Alcohol Services (BDAS), and Health Care Licensing. A second goal was to clarify and enhance treatment and discharge planning requirements. Questions 1-10 relate to your awareness of and experience with these DHHS rules.

*"**Administrative Burden**"* refers to time not spent completing: direct client service; assessment scoring, treatment, or discharge planning; quality of care activities (i.e., supervision, staff training, peer reviews/case conferences, team meetings).

*"**Aligned**"* refers to administrative rules or provider contract requirements that do not contradict or conflict with the requirements of another rule or state agency contract.

*"**Coordination**"* refers to the process used to engage and communicate with providers outside of the facility such as scheduling post-discharge appointments with other service providers, soliciting input from other service providers for purposes of client assessment, treatment planning, discharge planning and outcome monitoring.

For each question below, please place a "✓" in the box that indicates how strongly you agree with the statement. If you have no opinion, please check "Neither Agree nor Disagree."

Question	Strongly Agree	Somewhat Agree	Neither Agree nor Disagree	Somewhat Disagree	Strongly Disagree
1. The Medicaid SUD residential treatment and Health Facility Licensing rules are aligned.					
2. The Medicaid SUD residential treatment rules are aligned with BDAS provider contract requirements.					
3. The Health Facility Licensing rules are aligned with BDAS provider contract requirements.					
4. The Medicaid SUD residential treatment rules are clear and easy to understand.					
5. The Health Facility Licensing rules are clear and easy to understand.					
6. The 2018 and 2019 Medicaid and Health Facility Licensing rule alignment reduced administrative burden.					
7. The Medicaid and Health Facility Licensing rules support our approach to discharge planning.					
8. The Medicaid and Health Facility Licensing rules support coordination with providers outside the facility.					

In questions 9-10, please provide us with more detail on your experience of the DHHS rules for SUD treatment.

9. Are there other state requirements (regulatory or contractual) that DHHS should consider eliminating or modifying? If yes, please describe.

10. Has your program requested a waiver of Medicaid rule requirements under section He-W 513.12? If yes, are there aspects of the rule that you feel should be formally changed to better address operational needs?

Section 2: Medicaid Coverage for All Levels of SUD Treatment

The Medicaid SUD Demonstration authorizes short-term stays in SUD residential treatment and inpatient treatment facilities, including facilities providing medically monitored withdrawal management and detox services. CMS requires that states support all levels of the ASAM recommended continuum of care.

Questions 11-13 relate to your experience with Medicaid coverage for SUD services and supports in New Hampshire.

For each question below, please place a "✓" in the box that indicates how strongly you agree with the statement. If you have no opinion, please check "Neither Agree nor Disagree."

11. When needed, Medicaid members can access:	**Strongly Agree**	**Somewhat Agree**	**Neither Agree nor Disagree**	**Somewhat Disagree**	**Strongly Disagree**
a. Screening, brief intervention, and referral to treatment					
b. Outpatient treatment services (ASAM 1.0)					
c. Intensive outpatient treatment services (ASAM 2.1)					
d. Partial hospitalization services (ASAM 2.5)					
e. Residential low-intensity SUD treatment services (ASAM 3.1)					
f. Residential SUD treatment services (ASAM 3.5)					
g. Medically monitored intensive inpatient services (ASAM 3.7)					
h. Medically managed intensive inpatient hospital services (ASAM 4.0)					
i. Co-occurring mental health and SUD treatment services (Any Level of Care)					
j. Recovery support services (e.g., peer support services, community support groups)					
k. Medication Assisted Treatment for opioid and other substance use disorders					

In questions 12-13, please provide us with more detail about your experience with the Medicaid system.
12. If you disagreed with any of the above statements, what are the most significant barriers to access?
13. Do you have other comments related to successes or challenges with Medicaid's coverage of SUD treatment services? If yes, please specify.

Section 3: Network Availability

For question 14-17, please respond using calendar days as the measurement period. If your facility does not provide a particular residential service, please indicate N/A.

	Question	Response (Calendar Days)		
14.	a. What is the current wait time for admission to a residential treatment bed (ASAM 3.5) at your facility?			
	b. What is the average length of stay in your residential treatment program?			
15.	a. What is the current wait time for admission to a medically monitored inpatient bed (ASAM 3.7) at your facility?			
	b. What is the average length of stay in your medically monitored inpatient program?			
16.	a. What is the current wait time for admission to a medically managed inpatient bed (ASAM 4.0) at your facility?			
	b. What is the average length of stay in your medically managed inpatient program?			
17.	Does your facility designate or limit the number of beds that are available for individuals who have Medicaid coverage? If "Yes," please indicate the number of beds available to Medicaid members.	**Yes**	**No**	**If Yes, Number of Beds Available to Medicaid Members**

ATTACHMENT 3: SMI EVALUATION MEASURES, ANALYTICS AND SUMMATIVE REPORT CHANGES

Analytic Approach Notes: The original design contemplated the use of quarterly measurement periods for DY4 (baseline) and DY5 (the first year of the amendment, depending on the size and validity of using a quarterly measurement approach for metrics that have been designed for annual measurement (e.g., HEDIS and CMS Core Set). Upon examination of the data, the evaluators concluded the study population was too small and the number of observations too infrequent to use quarterly observation points. Annual measures were assessed using t-tests. The reviewers accounted for the impact of potential outliers by running the analyses with and without removing outliers (defined as +/- 2 standard deviations from the population mean - as captured in the data set).

Measure	Data Source	Analytic Approach	Summative Report Change
Evaluation Question 1. Does the SMI amendment reduce ED utilization for enrollees who receive psychiatric treatment in a NH IMD?			
Hypothesis 1. The SMI amendment will contain ED utilization for mental health for enrollees who receive psychiatric treatment in an NH IMD.			
Rate of ED utilization for mental health diagnoses per 1,000 member months pre/post psychiatric IMD treatment for members Ages 21-64	MMIS; IMD dataset	Logistic Regression; ANOVA	Annual observation points were used and Welch two sample t-test with and without outliers
Evaluation Question 2. Does the SMI amendment reduce length of stay in the ED while awaiting mental health treatment?			
Hypothesis 1. The SMI amendment will contain the length of stay in the ED for enrollees who are awaiting treatment services in a NH IMD.			
Average number of days in the ED for members Ages 21-64 who are admitted to an IMD from the ED	MMIS; IMD dataset	Linear Regression; ANOVA	Annual observation points were used and Welch two sample t-test with and without outliers
Evaluation Question 3. Does the SMI amendment reduce preventable readmissions to NH IMDs?			
Hypothesis 1. The SMI amendment will contain preventable readmission to NH IMDs.			
Percent of members Ages 21-64 with readmissions to an inpatient psychiatric hospital within 30 days following IMD discharge	MMIS; IMD dataset	Logistic Regression; ANOVA	Annual observation points were used and Welch two sample t-test with and without outliers
Percent of members Ages 21-64 with IMD readmissions who did not receive follow-up care in the community within 30 days post discharge	MMIS; IMD dataset	Logistic Regression; ANOVA	
Evaluation Question 4. Does the SMI amendment improve the availability of crisis stabilization services across the State?			
Hypothesis 1. The SMI amendment will maintain the availability of crisis stabilization services statewide			
Percent of crisis center calls (payer agnostic) that were immediately resolved (NH residents)	DBH Call Center Data	Logistic Regression; ANOVA	Due to a change in vendors, data was not available as planned. Descriptive information on call volume/type was used
Percent of crisis center calls (payer agnostic) that were responded to by a mobile team within an hour of request			
Percent of regions with mobile crisis response teams	DBH Admin Data	Descriptive	None
Percent of regions with transitional bed capacity			None

Measure	Data Source	Analytic Approach	Summative Report Change
Evaluation Question 5. Does the SMI amendment improve access to community-based care, including the integration of primary and behavioral health care?			
Hypothesis 1. The SMI amendment will maintain access to community-based care, for members who received NH psychiatric IMD treatment services			
Percent of members Ages 21-64 with a preventive or ambulatory health service post IMD discharge	MMIS; IMD dataset	Logistic Regression; ANOVA	Annual observation points were used and Welch two sample t-test with and without outliers
Percent of adult MCO survey respondents who report they were able meet with a PCP to discuss physical well-being	MCO BH Adult Survey	Logistic Regression; ANOVA	None
Hypothesis 2. The SMI amendment will maintain access to mental health services.			
Percent of adult MCO survey respondents who report staff were able to see them as often as necessary	MCO BH Adult Survey	Logistic Regression; ANOVA	None
Percent of adult MCO survey respondents who report staff return calls within 24 hours			
Percent of adult MCO survey respondents who report services were available at times that were convenient			
Percent of adult MCO survey respondents who report they were able to get all the services they needed			
Percent of adult MCO survey respondents who report they were able to see a psychiatrist when they wanted			
Evaluation Question 6. Does the SMI amendment improve care coordination following discharge from NH IMD settings?			
Hypothesis 1. The SMI amendment will maintain care coordination following discharge from a NH IMD.			
Percent of members Ages 21-64 who had follow-up within 7 days after hospitalization for MH	MMIS; IMD dataset	Logistic Regression; ANOVA	Annual observation points were used and Welch two sample t-test with and without outliers
Percent of members Ages 21-64 who had follow-up within 30 days after hospitalization for MH	MMIS; IMD dataset	Logistic Regression; ANOVA	
Percent of members Ages 21-64 who received mental health services each month in the six months following IMD discharge	MMIS; IMD dataset	Logistic Regression; ANOVA	
Evaluation Question 7. How does the cost of care change over time?			
Patterns and trends in Medicaid costs associated with psychiatric IMDs in NH will be examined. These measures capture all costs for the measurement year and are not associated with a Demonstration hypothesis or budget neutrality reporting.			
Per member per month (PMPM) Medicaid cost (Total Cost of Care) for members Ages 21-64	MMIS; IMD dataset	Descriptive	Annual observation points were used; data detail allowed evaluators to perform a Welch two sample t-test with and without outliers
PMPM cost of MH-Related treatment for members Ages 21-64			
PMPM cost of physical health care for members Ages 21-64			

Measure	Data Source	Analytic Approach	Summative Report Change
Evaluation Question 8. What are the cost drivers?			
Trends in Medicaid cost drivers associated with psychiatric IMDs in NH will be examined. These measures capture all costs for the measurement year and are not associated with a Demonstration hypothesis or budget neutrality reporting.			
PMPM cost of outpatient (non-ED) for members Ages 21-64	MMIS; IMD dataset	Descriptive	Annual observation points were used; data detail allowed evaluators to perform a Welch two sample t-test with and without outliers
PMPM cost of pharmacy for members Ages 21-64			
PMPM cost of outpatient ED for members Ages 21-64			
PMPM cost of inpatient care for members Ages 21-64			
PMPM cost of Long-term care for members Ages 21-64			

ATTACHMENT 4: DIAGNOSTIC CODES DENTURES RELATED MEASURES

Dental Infections		
Diagnosis Code		Description
ICD09	52103	Dental caries extending into pulp
ICD09	5220	Pulpitis
ICD09	5221	Necrosis of the pulp
ICD09	5222	Pulp degeneration
ICD09	5224	Acute apical periodontitis of pulpal origin
ICD09	5225	Periapical abscess without sinus
ICD09	5226	Chronic apical periodontitis
ICD09	5227	Periapical abscess with sinus
ICD09	5229	Other and unspecified diseases of pulp and periapical tissues
ICD09	52330	Aggressive periodontitis, unspecified
ICD09	52331	Aggressive periodontitis, localized
ICD09	52332	Aggressive periodontitis, generalized
ICD09	52333	Acute periodontitis
ICD09	52340	Chronic periodontitis, unspecified
ICD09	52341	Chronic periodontitis, localized
ICD09	52342	Chronic periodontitis, generalized
ICD09	5273	Abscess of salivary gland
ICD09	5274	Fistula of salivary gland
ICD09	5283	Cellulitis and abscess of oral soft tissues
ICD10	K0253	Dental caries on pit and fissure surface penetrating into pulp
ICD10	K0263	Dental caries on smooth surface penetrating into pulp
ICD10	K0402	Irreversible pulpitis
ICD10	K041	Necrosis of pulp
ICD10	K042	Pulp degeneration
ICD10	K044	Acute apical periodontitis of pulpal origin
ICD10	K045	Chronic apical periodontitis
ICD10	K046	Periapical abscess with sinus
ICD10	K047	Periapical abscess without sinus
ICD10	K0490	Unspecified diseases of pulp and periapical tissues
ICD10	K0499	Other diseases of pulp and periapical tissues
ICD10	K0520	Aggressive periodontitis, unspecified
ICD10	K05211	Aggressive periodontitis, localized, slight
ICD10	K05212	Aggressive periodontitis, localized, moderate
ICD10	K05213	Aggressive periodontitis, localized, severe
ICD10	K05219	Aggressive periodontitis, localized, unspecified severity
ICD10	K05221	Aggressive periodontitis, generalized, slight
ICD10	K05222	Aggressive periodontitis, generalized, moderate
ICD10	K05223	Aggressive periodontitis, generalized, severe
ICD10	K05229	Aggressive periodontitis, generalized, unspecified severity
ICD10	K0530	Chronic periodontitis, unspecified
ICD10	K05311	Chronic periodontitis, localized, slight
ICD10	K05312	Chronic periodontitis, localized, moderate
ICD10	K05313	Chronic periodontitis, localized, severe
ICD10	K05319	Chronic periodontitis, localized, unspecified severity

Dental Infections		
Diagnosis Code		Description
ICD10	K05321	Chronic periodontitis, generalized, slight
ICD10	K05322	Chronic periodontitis, generalized, moderate
ICD10	K05323	Chronic periodontitis, generalized, severe
ICD10	K05329	Chronic periodontitis, generalized, unspecified severity
ICD10	K056	Periodontal disease, unspecified
ICD10	K113	Abscess of salivary gland
ICD10	K114	Fistula of salivary gland
ICD10	K122	Cellulitis and abscess of mouth

Aspiration Pneumonia		
Diagnosis Code		Description
ICD10	J69.0	Aspiration pneumonia
ICD10	J69.8	Pneumonitis caused by inhaling other solids and liquids

Dental-Related ED (Non-Traumatic)		
Diagnosis Code		Description
ICD09	5200	Anodontia
ICD09	5201	Supernumerary teeth
ICD09	5202	Abnormalities of size and form of teeth
ICD09	5203	Mottled teeth
ICD09	5204	Disturbances of tooth formation
ICD09	5205	Hereditary disturbances in tooth structure, not elsewhere classified
ICD09	5206	Disturbances in tooth eruption
ICD09	5207	Teething syndrome
ICD09	5208	Other specified disorders of tooth development and eruption
ICD09	5209	Unspecified disorder of tooth development and eruption
ICD09	5215	Hypercementosis
ICD09	5216	Ankylosis of teeth
ICD09	5217	Intrinsic posteruptive color changes
ICD09	5219	Unspecified disease of hard tissues of teeth
ICD09	52100	Dental caries, unspecified
ICD09	52101	Dental caries limited to enamel
ICD09	52102	Dental caries extending into dentine
ICD09	52103	Dental caries extending into pulp
ICD09	52104	Arrested dental caries
ICD09	52105	Odontoclasia
ICD09	52106	Dental caries pit and fissure
ICD09	52107	Dental caries of smooth surface
ICD09	52108	Dental caries of root surface
ICD09	52109	Other dental caries
ICD09	52110	Excessive attrition, unspecified
ICD09	52111	Excessive attrition, limited to enamel
ICD09	52112	Excessive attrition, extending into dentine
ICD09	52113	Excessive attrition, extending into pulp
ICD09	52114	Excessive attrition, localized

Dental-Related ED (Non-Traumatic)		
Diagnosis Code		Description
ICD09	52115	Excessive attrition, generalized
ICD09	52120	Abrasion, unspecified
ICD09	52121	Abrasion, limited to enamel
ICD09	52122	Abrasion, extending into dentine
ICD09	52123	Abrasion, extending into pulp
ICD09	52124	Abrasion, localized
ICD09	52125	Abrasion, generalized
ICD09	52130	Erosion, unspecified
ICD09	52131	Erosion, limited to enamel
ICD09	52132	Erosion, extending into dentine
ICD09	52133	Erosion, extending into pulp
ICD09	52134	Erosion, localized
ICD09	52135	Erosion, generalized
ICD09	52140	Pathological resorption, unspecified
ICD09	52141	Pathological resorption, internal
ICD09	52142	Pathological resorption, external
ICD09	52149	Other pathological resorption
ICD09	52181	Cracked tooth
ICD09	52189	Other specific diseases of hard tissues of teeth
ICD09	5220	Pulpitis
ICD09	5221	Necrosis of the pulp
ICD09	5222	Pulp degeneration
ICD09	5223	Abnormal hard tissue formation in pulp
ICD09	5224	Acute apical periodontitis of pulpal origin
ICD09	5225	Periapical abscess without sinus
ICD09	5226	Chronic apical periodontitis
ICD09	5227	Periapical abscess with sinus
ICD09	5228	Radicular cyst
ICD09	5229	Other and unspecified diseases of pulp and periapical tissues
ICD09	5235	Periodontosis
ICD09	5236	Accretions on teeth
ICD09	5238	Other specified periodontal diseases
ICD09	5239	Unspecified gingival and periodontal disease
ICD09	52300	Acute gingivitis, plaque induced
ICD09	52301	Acute gingivitis, non-plaque induced
ICD09	52310	Chronic gingivitis, plaque induced
ICD09	52311	Chronic gingivitis, non-plaque induced
ICD09	52320	Gingival recession, unspecified
ICD09	52321	Gingival recession, minimal
ICD09	52322	Gingival recession, moderate
ICD09	52323	Gingival recession, severe
ICD09	52324	Gingival recession, localized
ICD09	52325	Gingival recession, generalized
ICD09	52330	Aggressive periodontitis, unspecified
ICD09	52331	Aggressive periodontitis, localized
ICD09	52332	Aggressive periodontitis, generalized
ICD09	52333	Acute periodontitis
ICD09	52340	Chronic periodontitis, unspecified

Dental-Related ED (Non-Traumatic)		
Diagnosis Code		Description
ICD09	52341	Chronic periodontitis, localized
ICD09	52342	Chronic periodontitis, generalized
ICD09	5244	Malocclusion, unspecified
ICD09	5249	Unspecified dentofacial anomalies
ICD09	52400	Major anomalies of jaw size, unspecified anomaly
ICD09	52401	Major anomalies of jaw size, maxillary hyperplasia
ICD09	52402	Major anomalies of jaw size, mandibular hyperplasia
ICD09	52403	Major anomalies of jaw size, maxillary hypoplasia
ICD09	52404	Major anomalies of jaw size, mandibular hypoplasia
ICD09	52405	Major anomalies of jaw size, macrogenia
ICD09	52406	Major anomalies of jaw size, microgenia
ICD09	52407	Excessive tuberosity of jaw
ICD09	52409	Major anomalies of jaw size, other specified anomaly
ICD09	52410	Anomalies of relationship of jaw to cranial base, unspecified anomaly
ICD09	52411	Anomalies of relationship of jaw to cranial base, maxillary asymmetry
ICD09	52412	Anomalies of relationship of jaw to cranial base, other jaw asymmetry
ICD09	52419	Anomalies of relationship of jaw to cranial base, other specified anomaly
ICD09	52420	Unspecified anomaly of dental arch relationship
ICD09	52421	Malocclusion, Angle's class I
ICD09	52422	Malocclusion, Angle's class II
ICD09	52423	Malocclusion, Angle's class III
ICD09	52424	Open anterior occlusal relationship
ICD09	52425	Open posterior occlusal relationship
ICD09	52426	Excessive horizontal overlap
ICD09	52427	Reverse articulation
ICD09	52428	Anomalies of interarch distance
ICD09	52429	Other anomalies of dental arch relationship
ICD09	52430	Unspecified anomaly of tooth position
ICD09	52431	Crowding of teeth
ICD09	52432	Excessive spacing of teeth
ICD09	52433	Horizontal displacement of teeth
ICD09	52434	Vertical displacement of teeth
ICD09	52435	Rotation of tooth/teeth
ICD09	52436	Insufficient interocclusal distance of teeth (ridge)
ICD09	52437	Excessive interocclusal distance of teeth
ICD09	52439	Other anomalies of tooth position
ICD09	52450	Dentofacial functional abnormality, unspecified
ICD09	52451	Abnormal jaw closure
ICD09	52452	Limited mandibular range of motion
ICD09	52453	Deviation in opening and closing of the mandible
ICD09	52454	Insufficient anterior guidance
ICD09	52455	Centric occlusion maximum intercuspation discrepancy
ICD09	52456	Non-working side interference
ICD09	52457	Lack of posterior occlusal support
ICD09	52459	Other dentofacial functional abnormalities
ICD09	52460	Temporomandibular joint disorders, unspecified
ICD09	52461	Temporomandibular joint disorders, adhesions and ankylosis (bony or fibrous)
ICD09	52462	Temporomandibular joint disorders, arthralgia of temporomandibular joint

Dental-Related ED (Non-Traumatic)		
Diagnosis Code		Description
ICD09	52463	Temporomandibular joint disorders, articular disc disorder (reducing or non-reducing)
ICD09	52464	Temporomandibular joint sounds on opening and/or closing the jaw
ICD09	52469	Other specified temporomandibular joint disorders
ICD09	52470	Dental alveolar anomalies, unspecified alveolar anomaly
ICD09	52471	Alveolar maxillary hyperplasia
ICD09	52472	Alveolar mandibular hyperplasia
ICD09	52473	Alveolar maxillary hypoplasia
ICD09	52474	Alveolar mandibular hypoplasia
ICD09	52475	Vertical displacement of alveolus and teeth
ICD09	52476	Occlusal plane deviation
ICD09	52479	Other specified alveolar anomaly
ICD09	52481	Anterior soft tissue impingement
ICD09	52482	Posterior soft tissue impingement
ICD09	52489	Other specified dentofacial anomalies
ICD09	5250	Exfoliation of teeth due to systemic causes
ICD09	5253	Retained dental root
ICD09	5258	Other specified disorders of the teeth and supporting structures
ICD09	5259	Unspecified disorder of the teeth and supporting structures
ICD09	52510	Acquired absence of teeth, unspecified
ICD09	52511	Loss of teeth due to trauma
ICD09	52512	Loss of teeth due to periodontal disease
ICD09	52513	Loss of teeth due to caries
ICD09	52519	Other loss of teeth
ICD09	52520	Unspecified atrophy of edentulous alveolar ridge
ICD09	52521	Minimal atrophy of the mandible
ICD09	52522	Moderate atrophy of the mandible
ICD09	52523	Severe atrophy of the mandible
ICD09	52524	Minimal atrophy of the maxilla
ICD09	52525	Moderate atrophy of the maxilla
ICD09	52526	Severe atrophy of the maxilla
ICD09	52540	Complete edentulism, unspecified
ICD09	52541	Complete edentulism, class I
ICD09	52542	Complete edentulism, class II
ICD09	52543	Complete edentulism, class III
ICD09	52544	Complete edentulism, class IV
ICD09	52550	Partial edentulism, unspecified
ICD09	52551	Partial edentulism, class I
ICD09	52552	Partial edentulism, class II
ICD09	52553	Partial edentulism, class III
ICD09	52554	Partial edentulism, class IV
ICD09	52560	Unspecified unsatisfactory restoration of tooth
ICD09	52561	Open restoration margins
ICD09	52562	Unrepairable overhanging of dental restorative materials
ICD09	52563	Fractured dental restorative material without loss of material
ICD09	52564	Fractured dental restorative material with loss of material
ICD09	52565	Contour of existing restoration of tooth biologically incompatible with oral health
ICD09	52566	Allergy to existing dental restorative material
ICD09	52567	Poor aesthetics of existing restoration

Dental-Related ED (Non-Traumatic)		
Diagnosis Code		Description
ICD09	52569	Other unsatisfactory restoration of existing tooth
ICD09	52571	Osseointegration failure of dental implant
ICD09	52572	Post-osseointegration biological failure of dental implant
ICD09	52573	Post-osseointegration mechanical failure of dental implant
ICD09	52579	Other endosseous dental implant failure
ICD09	5260	Developmental odontogenic cysts
ICD09	5261	Fissural cysts of jaw
ICD09	5262	Other cysts of jaws
ICD09	5263	Central giant cell (reparative) granuloma
ICD09	5264	Inflammatory conditions of jaw
ICD09	5265	Alveolitis of jaw
ICD09	5269	Unspecified disease of the jaws
ICD09	52661	Perforation of root canal space
ICD09	52662	Endodontic overfill
ICD09	52663	Endodontic underfill
ICD09	52669	Other periradicular pathology associated with previous endodontic treatment
ICD09	52681	Exostosis of jaw
ICD09	52689	Other specified diseases of the jaws
ICD09	5270	Atrophy of salivary gland
ICD09	5271	Hypertrophy of salivary gland
ICD09	5272	Sialoadenitis
ICD09	5273	Abscess of salivary gland
ICD09	5274	Fistula of salivary gland
ICD09	5275	Sialolithiasis
ICD09	5276	Mucocele of salivary gland
ICD09	5277	Disturbance of salivary secretion
ICD09	5278	Other specified diseases of the salivary glands
ICD09	5279	Unspecified disease of the salivary glands
ICD09	5281	Cancrum oris
ICD09	5282	Oral aphthae
ICD09	5283	Cellulitis and abscess of oral soft tissues
ICD09	5284	Cysts of oral soft tissues
ICD09	5285	Diseases of lips
ICD09	5286	Leukoplakia of oral mucosa, including tongue
ICD09	5288	Oral submucosal fibrosis, including of tongue
ICD09	5289	Other and unspecified diseases of the oral soft tissues
ICD09	52800	Stomatitis and mucositis, unspecified
ICD09	52801	Mucositis (ulcerative) due to antineoplastic therapy
ICD09	52802	Mucositis (ulcerative) due to other drugs
ICD09	52809	Other stomatitis and mucositis (ulcerative)
ICD09	52871	Minimal keratinized residual ridge mucosa
ICD09	52872	Excessive keratinized residual ridge mucosa
ICD09	52879	Other disturbances of oral epithelium, including tongue
ICD09	5290	Glossitis
ICD09	5291	Geographic tongue
ICD09	5292	Median rhomboid glossitis
ICD09	5293	Hypertrophy of tongue papillae
ICD09	5294	Atrophy of tongue papillae

Dental-Related ED (Non-Traumatic)		
Diagnosis Code		Description
ICD09	5295	Plicated tongue
ICD09	5296	Glossodynia
ICD09	5298	Other specified conditions of the tongue
ICD09	5299	Unspecified condition of the tongue
ICD09	78492	Jaw pain
ICD09	7924	Nonspecific abnormal findings in saliva
ICD09	8300	Closed dislocation of jaw
ICD09	8301	Open dislocation of jaw
ICD09	8481	Sprain of jaw
ICD09	87343	Open wound of lip, without mention of complication
ICD09	87344	Open wound of jaw, without mention of complication
ICD09	87349	Open wound of other and multiple sites of face, without mention of complication
ICD09	87350	Open wound of face, unspecified site, complicated
ICD09	87351	Open wound of cheek, complicated
ICD09	87353	Open wound of lip, complicated
ICD09	87354	Open wound of jaw, complicated
ICD09	87360	Open wound of mouth, unspecified site, without mention of complication
ICD09	87361	Open wound of buccal mucosa, without mention of complication
ICD09	87362	Open wound of gum (alveolar process), without mention of complication
ICD09	87363	Open wound of tooth (broken) (fractured) (due to trauma), without mention of complication
ICD09	87364	Open wound of tongue and floor of mouth, without mention of complication
ICD09	87365	Open wound of palate, without mention of complication
ICD09	87369	Open wound of other and multiple sites of mouth, without mention of complication
ICD09	87370	Open wound of mouth, unspecified site, complicated
ICD09	87371	Open wound of buccal mucosa, complicated
ICD09	87373	Open wound of tooth (broken) (fractured) (due to trauma), complicated
ICD09	87374	Open wound of tongue and floor of mouth, complicated
ICD09	87375	Open wound of palate, complicated
ICD09	87372	Open wound of gum (alveolar process), complicated
ICD09	87379	Open wound of other and multiple sites of mouth, complicated
ICD09	V52.3	Fitting and adjustment of dental prosthetic device
ICD09	V52.4	Fitting and adjustment of orthodontic devices
ICD09	V52.5	Orthodontics aftercare
ICD09	V72.2	Dental examination
ICD10	A690	Necrotizing ulcerative stomatitis
ICD10	K000	Anodontia
ICD10	K001	Supernumerary teeth
ICD10	K002	Abnormalities of size and form of teeth
ICD10	K003	Mottled teeth
ICD10	K004	Disturbances in tooth formation
ICD10	K005	Hereditary disturbances in tooth structure, not elsewhere classified
ICD10	K006	Disturbances in tooth eruption
ICD10	K007	Teething syndrome
ICD10	K008	Other disorders of tooth development
ICD10	K009	Disorder of tooth development, unspecified
ICD10	K010	Embedded teeth
ICD10	K011	Impacted teeth

Dental-Related ED (Non-Traumatic)		
Diagnosis Code		Description
ICD10	K023	Arrested dental caries
ICD10	K0251	Dental caries on pit and fissure surface limited to enamel
ICD10	K0252	Dental caries on pit and fissure surface penetrating into dentin
ICD10	K0253	Dental caries on pit and fissure surface penetrating into pulp
ICD10	K0261	Dental caries on smooth surface limited to enamel
ICD10	K0262	Dental caries on smooth surface penetrating into dentin
ICD10	K0263	Dental caries on smooth surface penetrating into pulp
ICD10	K027	Dental root caries
ICD10	K029	Dental caries, unspecified
ICD10	K030	Excessive attrition of teeth
ICD10	K031	Abrasion of teeth
ICD10	K032	Erosion of teeth
ICD10	K033	Pathological resorption of teeth
ICD10	K034	Hypercementosis
ICD10	K035	Ankylosis of teeth
ICD10	K036	Deposits [accretions] on teeth
ICD10	K037	Posteruptive color changes of dental hard tissues
ICD10	K0381	Cracked tooth
ICD10	K0389	Other specified diseases of hard tissues of teeth
ICD10	K039	Disease of hard tissues of teeth, unspecified
ICD10	K0401	Reversible pulpitis
ICD10	K0402	Irreversible pulpitis
ICD10	K041	Necrosis of pulp
ICD10	K042	Pulp degeneration
ICD10	K043	Abnormal hard tissue formation in pulp
ICD10	K044	Acute apical periodontitis of pulpal origin
ICD10	K045	Chronic apical periodontitis
ICD10	K046	Periapical abscess with sinus
ICD10	K047	Periapical abscess without sinus
ICD10	K048	Radicular cyst
ICD10	K0490	Unspecified diseases of pulp and periapical tissues
ICD10	K0499	Other diseases of pulp and periapical tissues
ICD10	K0500	Acute gingivitis, plaque induced
ICD10	K0501	Acute gingivitis, non-plaque induced
ICD10	K0510	Chronic gingivitis, plaque induced
ICD10	K0511	Chronic gingivitis, non-plaque induced
ICD10	K0520	Aggressive periodontitis, unspecified
ICD10	K05211	Aggressive periodontitis, localized, slight
ICD10	K05212	Aggressive periodontitis, localized, moderate
ICD10	K05213	Aggressive periodontitis, localized, severe
ICD10	K05219	Aggressive periodontitis, localized, unspecified severity
ICD10	K05221	Aggressive periodontitis, generalized, slight
ICD10	K05222	Aggressive periodontitis, generalized, moderate
ICD10	K05223	Aggressive periodontitis, generalized, severe
ICD10	K05229	Aggressive periodontitis, generalized, unspecified severity
ICD10	K0530	Chronic periodontitis, unspecified
ICD10	K05311	Chronic periodontitis, localized, slight
ICD10	K05312	Chronic periodontitis, localized, moderate

Dental-Related ED (Non-Traumatic)		
Diagnosis Code		Description
ICD10	K05313	Chronic periodontitis, localized, severe
ICD10	K05319	Chronic periodontitis, localized, unspecified severity
ICD10	K05321	Chronic periodontitis, generalized, slight
ICD10	K05322	Chronic periodontitis, generalized, moderate
ICD10	K05323	Chronic periodontitis, generalized, severe
ICD10	K05329	Chronic periodontitis, generalized, unspecified severity
ICD10	K054	Periodontosis
ICD10	K055	Other periodontal diseases
ICD10	K056	Periodontal disease, unspecified
ICD10	K06010	Localized gingival recession, unspecified
ICD10	K06011	Localized gingival recession, minimal
ICD10	K06012	Localized gingival recession, moderate
ICD10	K06013	Localized gingival recession, severe
ICD10	K06020	Generalized gingival recession, unspecified
ICD10	K06021	Generalized gingival recession, minimal
ICD10	K06022	Generalized gingival recession, moderate
ICD10	K06023	Generalized gingival recession, severe
ICD10	K061	Gingival enlargement
ICD10	K063	Horizontal alveolar bone loss
ICD10	K068	Other specified disorders of gingiva and edentulous alveolar ridge
ICD10	K069	Disorder of gingiva and edentulous alveolar ridge, unspecified
ICD10	K080	Exfoliation of teeth due to systemic causes
ICD10	K08101	Complete loss of teeth, unspecified cause, class I
ICD10	K08102	Complete loss of teeth, unspecified cause, class II
ICD10	K08103	Complete loss of teeth, unspecified cause, class III
ICD10	K08104	Complete loss of teeth, unspecified cause, class IV
ICD10	K08109	Complete loss of teeth, unspecified cause, unspecified class
ICD10	K08121	Complete loss of teeth due to periodontal diseases, class I
ICD10	K08122	Complete loss of teeth due to periodontal diseases, class II
ICD10	K08123	Complete loss of teeth due to periodontal diseases, class III
ICD10	K08124	Complete loss of teeth due to periodontal diseases, class IV
ICD10	K08129	Complete loss of teeth due to periodontal diseases, unspecified class
ICD10	K08131	Complete loss of teeth due to caries, class I
ICD10	K08132	Complete loss of teeth due to caries, class II
ICD10	K08133	Complete loss of teeth due to caries, class III
ICD10	K08134	Complete loss of teeth due to caries, class IV
ICD10	K08139	Complete loss of teeth due to caries, unspecified class
ICD10	K08191	Complete loss of teeth due to other specified cause, class I
ICD10	K08192	Complete loss of teeth due to other specified cause, class II
ICD10	K08193	Complete loss of teeth due to other specified cause, class III
ICD10	K08194	Complete loss of teeth due to other specified cause, class IV
ICD10	K08199	Complete loss of teeth due to other specified cause, unspecified class
ICD10	K0820	Unspecified atrophy of edentulous alveolar ridge
ICD10	K0821	Minimal atrophy of the mandible
ICD10	K0822	Moderate atrophy of the mandible
ICD10	K0823	Severe atrophy of the mandible
ICD10	K0824	Minimal atrophy of maxilla
ICD10	K0825	Moderate atrophy of the maxilla

Dental-Related ED (Non-Traumatic)		
Diagnosis Code		Description
ICD10	K0826	Severe atrophy of the maxilla
ICD10	K083	Retained dental root
ICD10	K08401	Partial loss of teeth, unspecified cause, class I
ICD10	K08402	Partial loss of teeth, unspecified cause, class II
ICD10	K08403	Partial loss of teeth, unspecified cause, class III
ICD10	K08404	Partial loss of teeth, unspecified cause, class IV
ICD10	K08409	Partial loss of teeth, unspecified cause, unspecified class
ICD10	K08421	Partial loss of teeth due to periodontal diseases, class I
ICD10	K08422	Partial loss of teeth due to periodontal diseases, class II
ICD10	K08423	Partial loss of teeth due to periodontal diseases, class III
ICD10	K08424	Partial loss of teeth due to periodontal diseases, class IV
ICD10	K08429	Partial loss of teeth due to periodontal diseases, unspecified class
ICD10	K08431	Partial loss of teeth due to caries, class I
ICD10	K08432	Partial loss of teeth due to caries, class II
ICD10	K08433	Partial loss of teeth due to caries, class III
ICD10	K08434	Partial loss of teeth due to caries, class IV
ICD10	K08439	Partial loss of teeth due to caries, unspecified class
ICD10	K08491	Partial loss of teeth due to other specified cause, class I
ICD10	K08492	Partial loss of teeth due to other specified cause, class II
ICD10	K08493	Partial loss of teeth due to other specified cause, class III
ICD10	K08494	Partial loss of teeth due to other specified cause, class IV
ICD10	K08499	Partial loss of teeth due to other specified cause, unspecified class
ICD10	K0850	Unsatisfactory restoration of tooth, unspecified
ICD10	K0851	Open restoration margins of tooth
ICD10	K0852	Unrepairable overhanging of dental restorative materials
ICD10	K08530	Fractured dental restorative material without loss of material
ICD10	K08531	Fractured dental restorative material with loss of material
ICD10	K08539	Fractured dental restorative material, unspecified
ICD10	K0854	Contour of existing restoration of tooth biologically incompatible with oral health
ICD10	K0855	Allergy to existing dental restorative material
ICD10	K0856	Poor aesthetic of existing restoration of tooth
ICD10	K0859	Other unsatisfactory restoration of tooth
ICD10	K0889	Other specified disorders of teeth and supporting structures
ICD10	K089	Disorder of teeth and supporting structures, unspecified
ICD10	K090	Developmental odontogenic cysts
ICD10	K091	Developmental (nonodontogenic) cysts of oral region
ICD10	K098	Other cysts of oral region, not elsewhere classified
ICD10	K099	Cyst of oral region, unspecified
ICD10	K110	Atrophy of salivary gland
ICD10	K111	Hypertrophy of salivary gland
ICD10	K1120	Sialoadenitis, unspecified
ICD10	K1121	Acute sialoadenitis
ICD10	K1122	Acute recurrent sialoadenitis
ICD10	K1123	Chronic sialoadenitis
ICD10	K113	Abscess of salivary gland
ICD10	K114	Fistula of salivary gland
ICD10	K115	Sialolithiasis
ICD10	K116	Mucocele of salivary gland

Dental-Related ED (Non-Traumatic)		
Diagnosis Code		Description
ICD10	K117	Disturbances of salivary secretion
ICD10	K118	Other diseases of salivary glands
ICD10	K119	Disease of salivary gland, unspecified
ICD10	K120	Recurrent oral aphthae
ICD10	K121	Other forms of stomatitis
ICD10	K122	Cellulitis and abscess of mouth
ICD10	K1230	Oral mucositis (ulcerative), unspecified
ICD10	K1231	Oral mucositis (ulcerative) due to antineoplastic therapy
ICD10	K1232	Oral mucositis (ulcerative) due to other drugs
ICD10	K1233	Oral mucositis (ulcerative) due to radiation
ICD10	K1239	Other oral mucositis (ulcerative)
ICD10	K130	Diseases of lips
ICD10	K131	Cheek and lip biting
ICD10	K1321	Leukoplakia of oral mucosa, including tongue
ICD10	K1322	Minimal keratinized residual ridge mucosa
ICD10	K1323	Excessive keratinized residual ridge mucosa
ICD10	K1324	Leukokeratosis nicotina palati
ICD10	K1329	Other disturbances of oral epithelium, including tongue
ICD10	K133	Hairy leukoplakia
ICD10	K134	Granuloma and granuloma-like lesions of oral mucosa
ICD10	K135	Oral submucous fibrosis
ICD10	K136	Irritative hyperplasia of oral mucosa
ICD10	K1370	Unspecified lesions of oral mucosa
ICD10	K1379	Other lesions of oral mucosa
ICD10	K140	Glossitis
ICD10	K141	Geographic tongue
ICD10	K142	Median rhomboid glossitis
ICD10	K143	Hypertrophy of tongue papillae
ICD10	K144	Atrophy of tongue papillae
ICD10	K145	Plicated tongue
ICD10	K146	Glossodynia
ICD10	K148	Other diseases of tongue
ICD10	K149	Disease of tongue, unspecified
ICD10	K200	Eosinophilic esophagitis
ICD10	K2080	Other esophagitis without bleeding
ICD10	K2081	Other esophagitis with bleeding
ICD10	K2090	Esophagitis, unspecified without bleeding
ICD10	K2091	Esophagitis, unspecified with bleeding
ICD10	K2100	Gastro-esophageal reflux disease with esophagitis, without bleeding
ICD10	K2101	Gastro-esophageal reflux disease with esophagitis, with bleeding
ICD10	K219	Gastro-esophageal reflux disease without esophagitis
ICD10	K220	Achalasia of cardia
ICD10	K2210	Ulcer of esophagus without bleeding
ICD10	K2211	Ulcer of esophagus with bleeding
ICD10	K222	Esophageal obstruction
ICD10	K223	Perforation of esophagus
ICD10	K224	Dyskinesia of esophagus
ICD10	K225	Diverticulum of esophagus, acquired

Dental-Related ED (Non-Traumatic)		
Diagnosis Code		Description
ICD10	K226	Gastro-esophageal laceration-hemorrhage syndrome
ICD10	K2270	Barrett's esophagus without dysplasia
ICD10	K22710	Barrett's esophagus with low grade dysplasia
ICD10	K22711	Barrett's esophagus with high grade dysplasia
ICD10	K22719	Barrett's esophagus with dysplasia, unspecified
ICD10	K2281	Esophageal polyp
ICD10	K2282	Esophagogastric junction polyp
ICD10	K2289	Other specified disease of esophagus
ICD10	K229	Disease of esophagus, unspecified
ICD10	K23	Disorders of esophagus in diseases classified elsewhere
ICD10	M2600	Unspecified anomaly of jaw size
ICD10	M2601	Maxillary hyperplasia
ICD10	M2602	Maxillary hypoplasia
ICD10	M2603	Mandibular hyperplasia
ICD10	M2604	Mandibular hypoplasia
ICD10	M2605	Macrogenia
ICD10	M2606	Microgenia
ICD10	M2607	Excessive tuberosity of jaw
ICD10	M2609	Other specified anomalies of jaw size
ICD10	M2610	Unspecified anomaly of jaw-cranial base relationship
ICD10	M2611	Maxillary asymmetry
ICD10	M2612	Other jaw asymmetry
ICD10	M2619	Other specified anomalies of jaw-cranial base relationship
ICD10	M2620	Unspecified anomaly of dental arch relationship
ICD10	M26211	Malocclusion, Angle's class I
ICD10	M26212	Malocclusion, Angle's class II
ICD10	M26213	Malocclusion, Angle's class III
ICD10	M26219	Malocclusion, Angle's class, unspecified
ICD10	M26220	Open anterior occlusal relationship
ICD10	M26221	Open posterior occlusal relationship
ICD10	M2623	Excessive horizontal overlap
ICD10	M2624	Reverse articulation
ICD10	M2625	Anomalies of interarch distance
ICD10	M2629	Other anomalies of dental arch relationship
ICD10	M2630	Unspecified anomaly of tooth position of fully erupted tooth or teeth
ICD10	M2631	Crowding of fully erupted teeth
ICD10	M2632	Excessive spacing of fully erupted teeth
ICD10	M2633	Horizontal displacement of fully erupted tooth or teeth
ICD10	M2634	Vertical displacement of fully erupted tooth or teeth
ICD10	M2635	Rotation of fully erupted tooth or teeth
ICD10	M2636	Insufficient interocclusal distance of fully erupted teeth (ridge)
ICD10	M2637	Excessive interocclusal distance of fully erupted teeth
ICD10	M2639	Other anomalies of tooth position of fully erupted tooth or teeth
ICD10	M264	Malocclusion, unspecified
ICD10	M2650	Dentofacial functional abnormalities, unspecified
ICD10	M2651	Abnormal jaw closure
ICD10	M2652	Limited mandibular range of motion
ICD10	M2653	Deviation in opening and closing of the mandible

Dental-Related ED (Non-Traumatic)		
Diagnosis Code		Description
ICD10	M2654	Insufficient anterior guidance
ICD10	M2655	Centric occlusion maximum intercuspation discrepancy
ICD10	M2656	Non-working side interference
ICD10	M2657	Lack of posterior occlusal support
ICD10	M2659	Other dentofacial functional abnormalities
ICD10	M26601	Right temporomandibular joint disorder, unspecified
ICD10	M26602	Left temporomandibular joint disorder, unspecified
ICD10	M26603	Bilateral temporomandibular joint disorder, unspecified
ICD10	M26609	Unspecified temporomandibular joint disorder, unspecified side
ICD10	M26611	Adhesions and ankylosis of right temporomandibular joint
ICD10	M26612	Adhesions and ankylosis of left temporomandibular joint
ICD10	M26613	Adhesions and ankylosis of bilateral temporomandibular joint
ICD10	M26619	Adhesions and ankylosis of temporomandibular joint, unspecified side
ICD10	M26621	Arthralgia of right temporomandibular joint
ICD10	M26622	Arthralgia of left temporomandibular joint
ICD10	M26623	Arthralgia of bilateral temporomandibular joint
ICD10	M26629	Arthralgia of temporomandibular joint, unspecified side
ICD10	M26631	Articular disc disorder of right temporomandibular joint
ICD10	M26632	Articular disc disorder of left temporomandibular joint
ICD10	M26633	Articular disc disorder of bilateral temporomandibular joint
ICD10	M26639	Articular disc disorder of temporomandibular joint, unspecified side
ICD10	M26641	Arthritis of right temporomandibular joint
ICD10	M26642	Arthritis of left temporomandibular joint
ICD10	M26643	Arthritis of bilateral temporomandibular joint
ICD10	M26649	Arthritis of unspecified temporomandibular joint
ICD10	M26651	Arthropathy of right temporomandibular joint
ICD10	M26652	Arthropathy of left temporomandibular joint
ICD10	M26653	Arthropathy of bilateral temporomandibular joint
ICD10	M26659	Arthropathy of unspecified temporomandibular joint
ICD10	M2669	Other specified disorders of temporomandibular joint
ICD10	M2670	Unspecified alveolar anomaly
ICD10	M2671	Alveolar maxillary hyperplasia
ICD10	M2672	Alveolar mandibular hyperplasia
ICD10	M2673	Alveolar maxillary hypoplasia
ICD10	M2674	Alveolar mandibular hypoplasia
ICD10	M2679	Other specified alveolar anomalies
ICD10	M2681	Anterior soft tissue impingement
ICD10	M2682	Posterior soft tissue impingement
ICD10	M2689	Other dentofacial anomalies
ICD10	M269	Dentofacial anomaly, unspecified
ICD10	M270	Developmental disorders of jaws
ICD10	M271	Giant cell granuloma, central
ICD10	M272	Inflammatory conditions of jaws
ICD10	M273	Alveolitis of jaws
ICD10	M2740	Unspecified cyst of jaw
ICD10	M2749	Other cysts of jaw
ICD10	M2751	Perforation of root canal space due to endodontic treatment
ICD10	M2752	Endodontic overfill

Dental-Related ED (Non-Traumatic)		
Diagnosis Code		Description
ICD10	M2753	Endodontic underfill
ICD10	M2759	Other periradicular pathology associated with previous endodontic treatment
ICD10	M2761	Osseointegration failure of dental implant
ICD10	M2762	Post-osseointegration biological failure of dental implant
ICD10	M2763	Post-osseointegration mechanical failure of dental implant
ICD10	M2769	Other endosseous dental implant failure
ICD10	M278	Other specified diseases of jaws
ICD10	M279	Disease of jaws, unspecified
ICD10	R682	Dry mouth, unspecified
ICD10	R6884	Jaw pain
ICD10	S00502S	Unspecified superficial injury of oral cavity, sequela
ICD10	S00502A	Unspecified superficial injury of oral cavity, initial encounter
ICD10	S00502D	Unspecified superficial injury of oral cavity, subsequent encounter
ICD10	S00512A	Abrasion of oral cavity, initial encounter
ICD10	S00512D	Abrasion of oral cavity, subsequent encounter
ICD10	S00512S	Abrasion of oral cavity, sequela
ICD10	S00522A	Blister (nonthermal) of oral cavity, initial encounter
ICD10	S00522D	Blister (nonthermal) of oral cavity, subsequent encounter
ICD10	S00522S	Blister (nonthermal) oral cavity, sequela
ICD10	S00532A	Contusion of oral cavity, initial encounter
ICD10	S00532D	Contusion of oral cavity, subsequent encounter
ICD10	S00532S	Contusion of oral cavity, sequela
ICD10	S00542A	External constriction of oral cavity, initial encounter
ICD10	S00542D	External constriction of oral cavity, subsequent encounter
ICD10	S00542S	External constriction of oral cavity, sequela
ICD10	S00552A	Superficial foreign body of oral cavity, initial encounter
ICD10	S00552D	Superficial foreign body of oral cavity, subsequent encounter
ICD10	S00552S	Superficial foreign body of oral cavity, sequela
ICD10	S00572A	Other superficial bite of oral cavity, initial encounter
ICD10	S00572D	Other superficial bite of oral cavity, subsequent encounter
ICD10	S00572S	Other superficial bite of oral cavity, sequela
ICD10	S01401A	Unspecified open wound of right cheek and temporomandibular area, initial encounter
ICD10	S01401D	Unspecified open wound of right cheek and temporomandibular area, subsequent encounter
ICD10	S01401S	Unspecified open wound of right cheek and temporomandibular area, sequela
ICD10	S01402A	Unspecified open wound of left cheek and temporomandibular area, initial encounter
ICD10	S01402D	Unspecified open wound of left cheek and temporomandibular area, subsequent encounter
ICD10	S01402S	Unspecified open wound of left cheek and temporomandibular area, sequela
ICD10	S01409A	Unspecified open wound of unspecified cheek and temporomandibular area, initial encounter
ICD10	S01409D	Unspecified open wound of unspecified cheek and temporomandibular area, subsequent encounter
ICD10	S01409S	Unspecified open wound of unspecified cheek and temporomandibular area, sequela
ICD10	S01501A	Unspecified open wound of lip, initial encounter
ICD10	S01501D	Unspecified open wound of lip, subsequent encounter
ICD10	S01501S	Unspecified open wound of lip, sequela
ICD10	S01502A	Unspecified open wound of oral cavity, initial encounter
ICD10	S01502D	Unspecified open wound of oral cavity, subsequent encounter

Dental-Related ED (Non-Traumatic)		
Diagnosis Code		Description
ICD10	S01502S	Unspecified open wound of oral cavity, sequela
ICD10	S0300XD	Dislocation of jaw, unspecified side, subsequent encounter
ICD10	S0300XS	Dislocation of jaw, unspecified side, sequela
ICD10	S0301XA	Dislocation of jaw, right side, initial encounter
ICD10	S0301XD	Dislocation of jaw, right side, subsequent encounter
ICD10	S0301XS	Dislocation of jaw, right side, sequela
ICD10	S0302XA	Dislocation of jaw, left side, initial encounter
ICD10	S0302XD	Dislocation of jaw, left side, subsequent encounter
ICD10	S0302XS	Dislocation of jaw, left side, sequela
ICD10	S0303XA	Dislocation of jaw, bilateral, initial encounter
ICD10	S0303XD	Dislocation of jaw, bilateral, subsequent encounter
ICD10	S0303XS	Dislocation of jaw, bilateral, sequela
ICD10	S030XXA	Dislocation of jaw, initial encounter
ICD10	S030XXD	Dislocation of jaw, subsequent encounter
ICD10	S030XXS	Dislocation of jaw, sequela
ICD10	S032XXA	Dislocation of tooth, initial encounter
ICD10	S032XXD	Dislocation of tooth, subsequent encounter
ICD10	S032XXS	Dislocation of tooth, sequela
ICD10	S0340XA	Sprain of jaw, unspecified side, initial encounter
ICD10	S0340XD	Sprain of jaw, unspecified side, subsequent encounter
ICD10	S0340XS	Sprain of jaw, unspecified side, sequela
ICD10	S0341XA	Sprain of jaw, right side, initial encounter
ICD10	S0341XD	Sprain of jaw, right side, subsequent encounter
ICD10	S0341XS	Sprain of jaw, right side, sequela
ICD10	S0342XA	Sprain of jaw, left side, initial encounter
ICD10	S0342XD	Sprain of jaw, left side, subsequent encounter
ICD10	S0342XS	Sprain of jaw, left side, sequela
ICD10	S0343XA	Sprain of jaw, bilateral, initial encounter
ICD10	S0343XD	Sprain of jaw, bilateral, subsequent encounter
ICD10	S0343XS	Sprain of jaw, bilateral, sequela
ICD10	S034XXA	Sprain of jaw, initial encounter
ICD10	S034XXD	Sprain of jaw, subsequent encounter
ICD10	S030XXS	Sprain of jaw, sequela
ICD10	S0993XA	Unspecified injury of face, initial encounter
ICD10	S0993XD	Unspecified injury of face, subsequent encounter
ICD10	S0993XS	Unspecified injury of face, sequela
ICD10	Z0120	Encounter for dental examination and cleaning without abnormal findings
ICD10	Z0121	Encounter for dental examination and cleaning with abnormal findings
ICD10	Z463	Encounter for fitting and adjustment of dental prosthetic device
ICD10	Z464	Encounter for fitting and adjustment of orthodontic device

ATTACHMENT 5: DENTURES BENEFICIARY SURVEY

Lori A. Weaver
Commissioner

Henry D. Lipman
Director

STATE OF NEW HAMPSHIRE
DEPARTMENT OF HEALTH AND HUMAN SERVICES
DIVISION OF MEDICAID SERVICES

129 PLEASANT STREET, CONCORD, NH 03301
1-844-ASK-DHHS (1-844-275-3447)
Fax: 603-271-8431 TDD Access: 1-800-735-2964 www.dhhs.nh.gov

Medicaid Nursing Facility Beneficiary Survey: Denture Recipients

January 2024

You are receiving this survey as someone who received new (full or partial) dentures or had your dentures repaired as part of the Medicaid health insurance program. The New Hampshire Department of Health and Human Services (DHHS) provides this benefit, like all Medicaid covered benefits, under the requirements of the federal Medicaid program administered by the Center for Medicare and Medicaid Services (CMS). As part of our agreement with CMS, New Hampshire DHHS agreed to evaluate the helpfulness of the dental program for nursing facility residents.

We are asking for about 5 minutes of your time to let us know how your new dentures (or repairs) are feeling. We are interested in understanding how you are feeling about the denture benefit that you received. If you received new or replacement dentures (full or partial) or had your dentures repaired, please complete this survey.

This survey is voluntary, which means you do not have to complete it. The survey has no impact on the services you get from your Nursing Facility, Medicaid, your dental provider, or any other health provider or program. The results will not be shared with your dental provider.

You may complete the survey yourself or ask the staff at your nursing facility to help you.

If you have any questions about the survey, you may call or email:

Sarah A. Finne, DMD, MPH, Medicaid Dental Director
NH Department of Health and Human Services
Division of Medicaid Services
129 Pleasant Street
Concord, NH 03301
603-271-9217(W)

Thank you for your time and in helping us understand the impact of Medicaid-covered denture services.

New Hampshire Medicaid Nursing Facility Dentures Beneficiary Survey						
If you received new, replacement or repaired dentures (full or partial), please complete this survey. You may complete this survey on your own or you may ask someone for help. If you are not feeling well or can't remember how you felt before getting your dentures or repairs, you can ask the nursing staff for help or to complete the survey for you.						
Section 1. General Information						
Please tell us who is completing the survey and about the type of dentures you received:						
Date Survey Completed		Person Completing Survey (check one)			Member Member w/ Assistance Nursing Facility Staff	
Survey ID		Member Age		Gender		
Nursing Facility Name						
Type of Full or Partial Dentures Received		New		Replacement		Repairs

Section 2: Nutrition and Communication						
For each question below, please choose the box that indicates how strongly you agree with the statement. If you have no opinion, please choose "Neither Agree nor Disagree."						
Questions	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Don't Know
A. My dentures make it easier for me to eat a wider variety of foods. For example, foods that are crunchy, hard, soft, and chewy.						
B. My dentures make it easier for me to eat.						
C. Since getting my dentures my weight has improved.						
D. My dentures make it easier for people to understand what I am saying.						
E. Since I received my dentures, I visit with staff and friends more often.						
F. Since I received my dentures, I participate in more activities and/or events.						
G. My dentures make it easier for me to tell staff what I need.						
H. Since I received my dentures, I have less pain in my mouth.						

Lori A. Weaver
Commissioner

Henry D. Lipman
Director

STATE OF NEW HAMPSHIRE
DEPARTMENT OF HEALTH AND HUMAN SERVICES
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NF Administrators and Dental Health Liaisons

We are writing to inform you of a DHHS survey that will involve nursing facility residents and ask for your support in assisting Medicaid members who receive the survey.

Background

In 2023, the Centers for Medicare and Medicaid Services (CMS) authorized New Hampshire to make Medicaid payments for removable prosthodontics (dentures) for adults who reside in Nursing Facilities. This coverage began on April 1, 2023. As part of this agreement, CMS requires that the State conduct an independent evaluation of the dentures benefit for nursing facility residents.

The New Hampshire Department of Health and Human Services (DHHS), our independent evaluator, Pacific Health Policy Group (PHPG) and DentaQuest are working together to conduct the required evaluation. This evaluation includes a brief member survey for those individuals who received the nursing facility dentures benefit.

Member Survey

A survey will be sent approximately six months after the receipt of new or replacement dentures (e.g., full or partial) or repairs to existing dentures. The survey is electronic and is expected to take 5 minutes or less to complete. It asks about improvements in nutrition; social interactions; and general well-being.

The instrument is designed so that it can be completed by the member or by nursing facility staff if the member's physical, cognitive, or mental health precludes them from completing the questions. The instructions let the member know they can ask for help in completing the form.

Your Role

We are asking that you let members know the survey is important and that survey results are not shared with the dental provider, if asked; make your facility staff aware of the survey; and let staff know that it is permissible to help a resident complete the survey if asked

If you have any questions about the survey, please don't hesitate to contact DHHS or DentaQuest:
Sarah A. Finne, DMD, MPH
Medicaid Dental Director
NH Department of Health and Human Services
603-271-9217(W)