Jim Pillen
Governor

STATE OF NEBRASKA
OFFICE OF THE GOVERNOR
P.O. Box 94848 • Lincoln, Nebraska 68509-4848
Phone: (402) 471-2244 • jim.pillen@nebraska.gov

October 5, 2023

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

Dear Secretary Becerra,

The Nebraska Department of Health and Human Services, Division of Medicaid and Long-Term Care hereby submits the attached Section 1115 Demonstration Waiver Renewal Application to request a five (5) year renewal of the NE 1115 Substance Use Disorder (SUD) Demonstration Waiver Program. The current 1115 SUD Demonstration is approved for July 1, 2019, through June 30, 2024, and this renewal application is requesting to renew the demonstration waiver for an additional five (5) year period from July 1, 2024, to June 30, 2029.

Over the course of the initial demonstration period, the 1115 SUD waiver has allowed Nebraska to deliver high quality, clinically appropriate treatment services to those with substance use disorder challenges.

This Section 1115 Demonstration Waiver renewal is being requested without change. Nebraska seeks to promote recovery for people with substance use disorders by achieving the following:

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

The SUD demonstration aims to increase access to and improve the quality of services, while helping the Medicaid program avoid unnecessary care in costlier settings.

The Department has worked closely with CMS in the development of this waiver application and appreciates the guidance CMS has provided throughout this process. We look forward to working with CMS in its review of this application.

If you have any questions, please contact Todd Baustert, Deputy Director, Project and Performance Management, at Todd.Baustert@Nebraska.gov or by phone at (402) 471-5250.

Sincerely,

[redacted]

Nebraska Medicaid
Section 1115 Substance Use Disorder (SUD) Demonstration Waiver

Renewal Application

October 12, 2023

Table of Contents

Introduction 3
1 – Overview of the Nebraska Medicaid Delivery System 3
1.1 – Medicaid Managed Care Program 4
1.2 - Eligibility 4
1.3 – SUD Continuum of Care 4
1.4 – Cost Sharing 6
2 – NE 1115 SUD Demonstration Waiver Program 6
2.1 – Medication-Assisted Treatment (MAT) 6
2.2 – OTP and MMIW 7
3 – Renewal Request 8
4 – Goals, Objectives, and Evaluation 8
4.1 – Demonstration Goals and Hypotheses 9
4.2 – Interim Evaluation Report Executive Summary 10
4.3 – COVID-19 Public Health Emergency (PHE) 15
5 – Monitoring, Reporting and Quality 15
5.1 – Institutions for Mental Disease (IMD) Stays For Individuals Aged 21 to 64 Years Old 16
5.2 Monitoring Metrics 16
5.3 – Data Quality 19
6 – Budget Neutrality 20
6.1 – Budget Neutrality Waiver Summary 20
6.2 – Budget Neutrality Projections Narrative 22
7 – Compliance with Public Notice and Tribal Consultation 26
7.1 – Annual Public Forums 26
7.2 – Public Notice 26
7.3 – Tribal Consultation 27
Appendix 1 – Interim Evaluation Report 29
Appendix 2 – Health Information Technology (HIT) Plan 30
Appendix 3 – Budget Neutrality Workbook 31
Appendix 4 – Public Notice (including Tribal Public Notice) 32

Introduction

The Nebraska Department of Health and Human Services (DHHS), Division of Medicaid and Long-Term Care (MLTC) is requesting a five (5) year renewal of the NE 1115 Substance Use Disorder (SUD) Demonstration Waiver Program. The current 1115 SUD Demonstration is approved for July 1, 2019, through June 30, 2024, and this renewal application is requesting to renew the demonstration waiver for an additional five (5) year period, July 1, 2024, to June 30, 2029.

Nebraska's Substance Use Disorder (SUD) Demonstration Waiver provides Nebraska Medicaid expenditure authority to cover SUD treatment services provided in facilities that meet the definition of an Institution for Mental Diseases (IMDs). The expenditure authority under this 1115 waiver allows Nebraska Medicaid to better ensure members are receiving effective SUD treatment in the most appropriate setting. Coverage of residential services allows Medicaid enrollees to receive the appropriate level of care, reducing emergency department visits and increasing referrals for outpatient community-based services upon discharge.

This renewal application requests authority for the State of Nebraska to continue to operate the 1115 SUD Demonstration Waiver as approved without changes.

1 – Overview of the Nebraska Medicaid Delivery System

The Nebraska Medicaid Program provides health coverage to approximately 370,000[1] members with between 18 and 19 percent of Nebraska residents enrolled in the program in any given month[2]. At the time of initial application for the Section 1115 SUD Demonstration, Nebraska Medicaid had approximately 240,000 enrolled. Primary drivers of the increase in program enrollment include the expansion of health coverage to adults 19 to 64 years of age with income up to 138% of the federal poverty level (FPL) on October 1, 2020, and the impact of the federal COVID public health emergency continuous enrollment requirement.

Over 99 percent of Medicaid members are served through the state's managed care delivery system. The populations remaining in the fee-for-service (FFS) delivery system include individuals in the following categories:

- Aliens who are eligible for Medicaid for an emergency condition only;
- Beneficiaries who have excess income or who are required to pay a premium, except those who are continuously eligible due to a share of cost obligation to a nursing facility or for HCBS Waiver services;
- Beneficiaries who have received a disenrollment or waiver of enrollment;
- Participants in the Program for All-Inclusive Care for the Elderly; and
- Beneficiaries with Medicare coverage where Medicaid only pays co-insurance and deductibles.

[1] Based on enrollment data run for total managed care enrollment in June 2022 during DY3Q4. Data run in October 2022 to account for claims lag and retroactive Medicaid enrollment.
[2] Calculation based on current Nebraska Medicaid enrollment and the population of Nebraska from the 2020 Decennial Census: https://www.census.gov/programs-surveys/decennial-census/about/rdo.html

While Medicaid beneficiaries receiving long-term services and supports (LTSS) receive their physical health, behavioral health, and pharmacy services through their managed care plan, their LTSS benefits continue to be delivered through the legacy FFS system.

1.1 – Medicaid Managed Care Program

Established January 1, 2017, Nebraska's Managed Care Program, Heritage Health, provides comprehensive physical health, behavioral health, and pharmacy services to Nebraska Medicaid beneficiaries. SUD treatment services are delivered almost exclusively through Heritage Health.

At the time of the submission of this renewal request the Heritage Health program consists of three (3) managed care plans: United HealthCare, Nebraska Total Care, and Healthy Blue Nebraska. MLTC recently completed a new procurement for the Heritage Health program for contracts that will go into effect January 1, 2024. Healthy Blue Nebraska will be replaced by Molina Healthcare, with United Healthcare and Nebraska Total Care continuing as contracted Heritage Health plans. Table 1 indicates the individuals currently enrolled in with Heritage Health plans.

Table 1: Nebraska Heritage Health Plan Enrollment

Heritage Health Plan	Health Plan Enrollment (June 2022, DY3Q4)
UnitedHealthcare Community Plan	126,996
Nebraska Total Care	126,761
Healthy Blue Nebraska	116,573
Total	370,330

1.2 - Eligibility

Medicaid eligibility requirements will not differ from the approved Medicaid state plan.

1.3 – SUD Continuum of Care

Nebraska Medicaid provides a broad range of community-based and residential SUD services. This service offering reflects MLTC's strategy of investing in community-based treatment while ensuring access to a full continuum of SUD services. Under the waiver program, the service continuum has been expanded with the addition of state plan coverage for Opioid Treatment Program (OTP) and Medically Monitored Inpatient Withdrawal (MMIW).

Table 2 illustrates the American Society of Addiction Medicine (ASAM) Levels of Care currently addressed Medicaid SUD treatment services. Services that are impacted by the expenditure authority allowed under this demonstration waiver include a reference to 1115(a) authority and the services implemented as a part of this waiver notated with the associated authority and implementation date. The state is in active development of the state's Medical Service Definitions (MSDs) and the descriptions for ASAM have been updated with these changes through the state's overarching SUD

and behavioral health regulations update.

Table 2: Nebraska Medicaid SUD Services by ASAM Level of Care

ASAM Level of Care	ASAM Service Title	ASAM Brief Definition	Medicaid Service Authority[4]
1.0	Outpatient Services	Less than nine hours of service/week (adults); less than six hours/week (adolescents) for recovery or motivational enhancement therapies/strategies.	1915(b)
2.1	Intensive Outpatient Services	Nine or more hours of service/week (adults); six or more hours/week (adolescents) to treat multidimensional instability.	1915(b)
2.5	Partial Hospitalization Services	20 or more hours of service/week for multidimensional instability not requiring 24-hour care	1915(b)
3.1	Clinically Managed Low-Intensity Residential Services	24-hour structure with available trained personnel; at least five hours of clinical service/week and prepare for outpatient treatment.	1915(b) and 1115(a)
3.2-WM	Clinically Managed Residential Withdrawal Management	Moderate withdrawal but needs 24-hour support to complete withdrawal management and increase likelihood of continuing treatment or recovery.	1915(b)
3.3	Clinically Managed Population-Specific High-Intensity Residential Services	24-hour care with trained counselors to stabilize multidimensional imminent danger. Less intense milieu and group treatment for those with cognitive or other impairments unable to use full active milieu or therapeutic community and prepare for outpatient treatment.	1915(b) and 1115(a)
3.5	Clinically Managed High-Intensity Residential Services	24-hour care with trained counselors to stabilize multidimensional imminent danger and prepare for outpatient treatment. Able to tolerate and use full milieu or therapeutic community.	1915(b) and 1115(a)

ASAM Level of Care	ASAM Service Title	ASAM Brief Definition	Medicaid Service Authority[4]
3.7-WM	Medically Monitored Inpatient Withdrawal (MMIW)	Medically Monitored Inpatient Withdrawal Management (ASAM Level 3.7-WM) is a non-hospital intervention delivered by medical, nursing, mental health and substance use clinicians, which provide 24-hour medically monitored evaluation under physician-approved policies and procedures or clinical protocols.	State Plan Amendment Approved 11/3/2020
Opioid Treatment Program (OTP)	Must meet ASAM criteria for care placement	Opioid Treatment Programs (OTPs) provide medication-assisted treatment (MAT) for people diagnosed with an opioid use disorder (OUD). OTPs must be certified by SAMHSA and accredited by an independent, SAMHSA-approved accrediting body.	State Plan Amendment Approved 11/3/2020
Other	Peer Support	Certified Peer Support services are provided by individuals who have lived experience with mental health or substance use disorders (SUD).	State Plan

1.4 – Cost Sharing

Cost sharing requirements under the demonstration will not differ from the approved Medicaid state plan.

2 – NE 1115 SUD Demonstration Waiver Program

In accordance with the SUD Implementation Plan, the state submitted State Plan Amendments (SPAs) to add Medicaid coverage for Opioid Treatment Programs (OTPs) and Medically Monitored Inpatient Withdrawal (MMIW). These amendments were submitted during the first part of 2020 and approval was received by the state on November 3, 2020, with service dates retroactive to January 1, 2020.

2.1 – Medication-Assisted Treatment (MAT)

The addition of Medication-Assisted Treatment (MAT) into the Nebraska State Plan allows for the provision of or access to MAT drugs to treat substance use disorders (SUDs). As of October 1, 2020[3], residential treatment facilities, including Institutions for Mental Diseases (IMDs), must offer MAT on-site

[3] Nebraska Medicaid SPA 21-0006 MAT ABP Basic (August 24, 2021): https://dhhsemployees/sites/MLTC/RegulatoryCompliance/StatePlanAmendments/NE%2021-0006%20MAT%20Basic%20ABP/NE-21-0006%20MAT%20ABP%20SPA%20Approval.pdf

or facilitate access to MAT off-site. The allowance of MAT was implemented under the Section 1115 SUD Demonstration as a SPA.

To fulfill the SUD Demonstration's milestones and improve the continuum of care for SUDs, the state has updated each SUD Medical Service Definition (MSDs) to include the following language, "Facilitate access to MAT as medically necessary." The language, found under "Service Expectations," ensures that providers will provide or facilitate access to the continuum of care as appropriate at all levels of care. These requirements will be included in regulation as well as MCO contract updates.

MSDs were updated as part of an extensive service definition and regulation modernization project that included the DHHS Divisions of Medicaid and Long-Term Care, Behavioral Health, and provider and member stakeholders. These definitions MSDs were published on 3/31/2023 and can be found on the Nebraska Medicaid Behavioral Health Service Definitions website.

2.2 – OTP and MMIW

The implementation of Medicaid coverage for OTPs and MMIW has enhanced the SUD treatment continuum by adding additional treatment options in both community-based and residential settings. Within six (6) months of implementation, Medicaid received enrollment applications for the additional service types from all the certified OTPs and MMIW providers in Nebraska.

The visuals below depict the impact the service authorities have had on the ability for Nebraska Medicaid beneficiaries to receive the medically appropriate care needed for their specific circumstance. Figure 1 shows that as of the end of DY4Q1, over 5,000 individuals on average have received any SUD treatment by Medicaid providers, increasing from 1,527, with nearly an average of 1,000 individuals per quarter were positively impacted through the ability to receive treatment in an OTP, going up from 294 individuals on average at the beginning of the demonstration. In addition, as shown in Figure 2, utilization of withdrawal management increased to over 160 individuals on average per quarter.

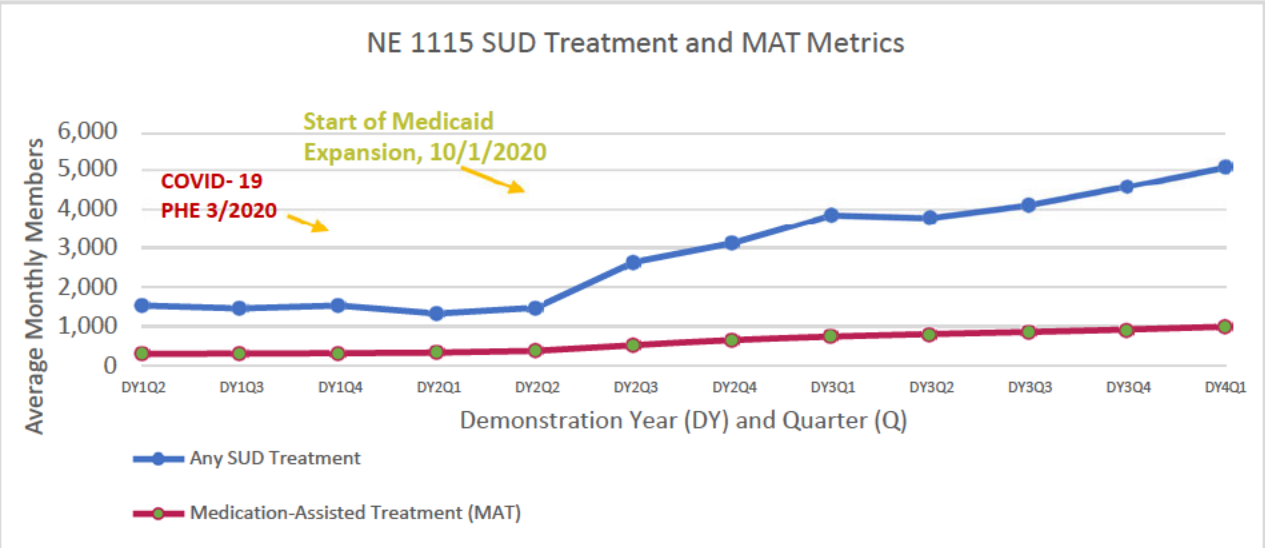


Figure 1 NE 1115 SUD Monitoring Measure Results for Any SUD Treatment and Medication-Assisted Treatment (MAT) by Average Members Per Quarter, 7/1/19 - 9/30/22.

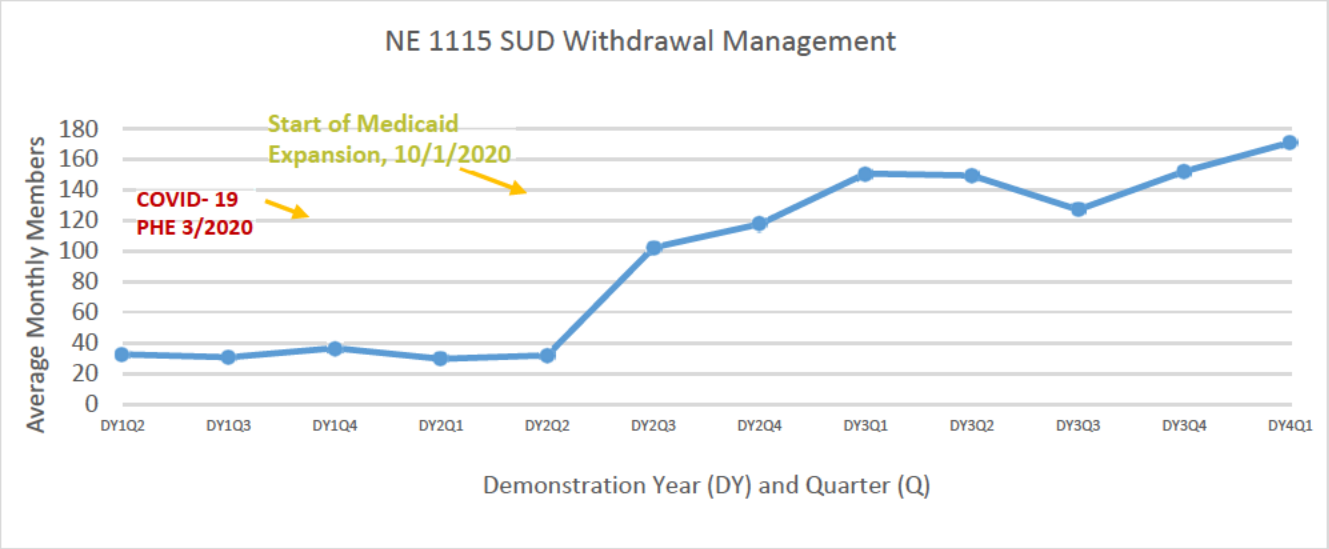


Figure 2 NE 1115 SUD Monitoring Measure Results for Withdrawal Management by Average Members Per Quarter, 7/1/19 - 9/30/22.

The state continues to screen enrollment requests and anticipates increased enrollment by providers in the coming demonstration years as new facilities and clinics are implemented to meet the need for providing services for SUD at the appropriate levels of care.

3 – Renewal Request

The state is requesting a five-year renewal of the Section 1115 Substance Use Disorder Demonstration Waiver Program for the period of July 1, 2024, through June 30, 2029.

The 1115 SUD Demonstration Waiver currently authorizes the state to provide expenditures for services in settings not otherwise covered for substance use disorder (SUD) treatment to eligible individuals within residential treatment programs in facilities that meet the definition of an institution for mental disease (IMD). This 1115 renewal application seeks to extend the expenditure authority to continue to operate as approved without changes.

4 – Goals, Objectives, and Evaluation

The SUD program demonstration describes six goals established by Nebraska DHHS for the program:

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

4.1 – Demonstration Goals and Hypotheses

The objective of the SUD program is to improve the state's ability to provide a full continuum of care for people experiencing SUD by improving access to evidence-based SUD treatment, and by improving the quality of available SUD treatment. By doing so, the State seeks to maintain or reduce the cost of care for beneficiaries with SUD. As such, the evaluation questions are:

1. Did the demonstration increase access to health care for beneficiaries with SUD?
2. Did the demonstration improve the quality of SUD treatment?
3. Did the demonstration maintain or reduce total cost of care?

Table *3* highlights the demonstration goals and connects them to the evaluation questions with the respective hypotheses and data sources. The Independent Evaluator (IE) will analyze varying components of the demonstration and determine the effectiveness and successes to determine overall implementation progress.

Table 3: Evaluation Hypotheses and Measures

Demonstration Goal	Evaluation Question	Hypothesis	Data Source
Improve Access to Health Care for Beneficiaries with SUD	Did the demonstration improve access to health care for beneficiaries with SUD?	The demonstration will increase access to evidence-based SUD treatment, reflected in increased utilization.	Claims; provider enrollment database; MCO reporting; N-SSATS; NSDUH
		The demonstration will increase access to evidence-based SUD treatment, reflected in increased capacity.	
		The demonstration will increase access to care for physical health conditions among beneficiaries with SUD	
Improve Quality of Care for Beneficiaries with SUD	Did the demonstration improve the quality of SUD treatment?	The demonstration will Improve rates of identification, initiation, and engagement, in treatment for SUD	Claims; National Center for Health Statistics
		The demonstration will improve rates of adherence to and retention in treatment for SUD	

Demonstration Goal	Evaluation Question	Hypothesis	Data Source
		The demonstration will reduce ED use for SUD	
		The demonstration will reduce readmissions for SUD	
		The demonstration will reduce overdose deaths, particularly those due to opioids	
Maintain or reduce costs	Did the demonstration maintain or reduce total cost of care?	The demonstration will reduce inpatient hospitalization and ED use for SUD	Claims
		The demonstration will reduce inpatient hospitalization and ED use for beneficiaries with SUD	

4.2 – Interim Evaluation Report Executive Summary

At the time of the Interim Evaluation Report, the state has completed key milestones per CMS acknowledgement and confirmation by the state's independent evaluator, Health Services Advisory Group, Inc. (HSAG), even as these implementation activities were delayed due to the COVID-19 PHE as priorities shifted to address urgent healthcare needs associated with the PHE. These implementation milestones, as noted below, have been completed as of this renewal request.

The executive summary, below, is preliminary at the time of this draft and may not be reflective in the final version of this renewal application.

Executive Summary

The Nebraska Department of Health and Human Services (DHHS) Section 1115 Substance Use Disorder (SUD) Demonstration Waiver (the Waiver) application was approved by the Centers for Medicare & Medicaid Services (CMS) on June 28, 2019, effective July 1, 2019, through June 30, 2024.[4] The Waiver allows DHHS to provide high-quality, clinically appropriate treatment to Medicaid enrollees 19 to 64 years of age primarily diagnosed with opioid use disorder (OUD) and/or other SUDs at Institutions for Mental Disease (IMDs). In addition to providing the appropriate level of care, the coverage of IMD stays reduces emergency department (ED) visits and increases referrals for outpatient (OP) and community-

[4] Centers for Medicare & Medicaid Services. CMS Initial Approval. Available at: https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/ne/ne-substance-use-disorder/ne-sud-demo-initial-appvl-20190628.pdf. Accessed on: Mar. 1, 2023.

based services upon discharge. Additionally, the Waiver enables the State to implement models focused on increasing home-and-community-based support for beneficiaries and improve access to evidence-based SUD services based on the American Society of Addiction Medicine (ASAM) criteria. The Waiver was designed to support three aims:

Aim One: Improve access to health care for beneficiaries with an SUD.

Aim Two: Improve quality of care for beneficiaries with an SUD.

Aim Three: Maintain or reduce costs.

Pursuant to the Special Terms and Conditions (STCs) of the Waiver, DHHS contracted with Health Services Advisory Group, Inc. (HSAG), as the independent evaluator to conduct a comprehensive evaluation of the Waiver. The purpose of the evaluation is to provide CMS and DHHS with an independent evaluation that ensures compliance with the requirements of Section 1115 Demonstration Waivers; assist in State and federal decision-making about the efficacy of the Waiver; and enable DHHS to further develop clinically appropriate, fiscally responsible, and effective Medicaid Section 1115 Demonstration Waivers. This is the Interim Evaluation Report for the Waiver. This report evaluates the first three years of the Waiver, July 1, 2019, through June 30, 2022. Following the conclusion of the Waiver in 2024, a Summative Evaluation Report will report an analysis of the full five-year demonstration period.

Conclusions

Aim One

Evaluation of this question was complicated by the coronavirus disease 2019 (COVID-19) public health emergency (PHE) and Medicaid expansion, two events that coincided with the initial implementation period of the Waiver, and close enough in time to the full implementation to preclude disentangling the effects of all events. The COVID-19 PHE impacted healthcare utilization as social distancing guidelines, mandated shut-downs, and stay-at-home orders were in effect. Medicaid expansion made it possible for people under the age of 65 who earn up to 138 percent of the federal poverty level (FPL) to receive Medicaid health insurance coverage. Expansion confounds assessment of the Waiver impact as increases in utilization could be a result of the large influx of members needing SUD services.

Successes and challenges associated with Aim One include the following.

Successes

Several measures indicated support for hypotheses that the Waiver would increase access to evidence-based SUD treatment reflected in increased utilization (Hypothesis 1) and increased capacity (Hypothesis 2):

- An increased percentage of beneficiaries with an SUD who received any SUD treatment service
- Improved rates of residential service utilization for an SUD
- An increased percentage of beneficiaries with an SUD who had a medication-assisted treatment (MAT) claim for an SUD
- An increasing number of Medicaid providers delivering SUD services

Following initial implementation of the Waiver that extended coverage to IMD stays of any duration, there were potential improvements in the average number of IMD stays for an SUD and average number of days of IMD treatment for an SUD among beneficiaries with an SUD. Additionally, the average length of stay (ALOS) of IMD stays for an SUD also stabilized around the statewide goal of 30 days. The number of beds available in IMD facilities providing SUD services also trended upward. However, due to the lack of pre-implementation data or a viable comparison group, these improvements cannot be attributed directly to the Waiver.

Several survey measures using data from the Substance Abuse and Mental Health Services Administration (SAMHSA), the National Survey on Drug Use and Health (NSDUH), and the National Survey of Substance Abuse Treatment Services (N-SSATS) also showed promise as rates trended in a desired direction. The treatment gap for beneficiaries with an illicit drug or substance use disorder is decreasing in Nebraska, although only pre-implementation data were available. There were slight improvements in the number of facilities providing any type of MAT per 100,000 adult Nebraskans. While the rate of facilities with opioid treatment programs (OTPs) per 100,000 adults in Nebraska remains lower than the national average, all Nebraska OTPs are being offered in OP facilities, and all OTPs are providing medication-assisted opioid therapy. However, no statistical testing was conducted as data for these measures were only available prior to the full implementation of the MAT/OTP component of the Waiver. As additional data points become available, HSAG will continue its assessment of these measures for the Summative Evaluation Report.

Challenges

There were some notable challenges to achieving Aim One:

- Reduced percentages of beneficiaries who use withdrawal management services following the full implementation of the Waiver and medically monitored inpatient withdrawal (MMIW) management service category.
- Lower rates of beneficiaries with an SUD who had an ambulatory or preventive care visit
- Zero residential (non-hospital) facilities offering OTPs

Evidence of decreasing percentages of beneficiaries who use withdrawal management services following full Waiver implementation in which coverage for MMIW became available may be indicative of a substitution effect; it is possible that the current measure does not capture treatment codes for the new services and that members are switching from existing withdrawal management services to more clinically appropriate MMIW services. Alternatively, challenges that providers noted in providing these services (ASAM Level 3.7) may have temporarily impacted the provision of existing withdrawal management services.

The hypothesis that the Waiver will increase access to care for physical health conditions among beneficiaries with an SUD was not supported by increased utilization of ambulatory and preventive care; however, lower rates of preventive and primary care may be largely influenced by COVID-19 PHE impacts during 2020 and 2021.

The number of OP facilities offering detoxification per 100,000 adults in Nebraska and the number of facilities offering opioid-specific detoxification per 100,000 adults in Nebraska continues to fall below the national averages.

Aim Two

Successes

Through activities related to promoting evidence-based assessment and referral, standardizing assessment, and placement criteria for patients, establishing qualifications for residential providers, and assuring compliance with treatment standards, the Waiver is hypothesized to improve the appropriateness and continuity of care for SUD beneficiaries. Several measures support the hypotheses:

Increased rates of adherence to and retention in treatment for an SUD

Reduction in the average number of ED visits for an SUD among beneficiaries with an SUD

Challenges

Key challenges were also present:

- An increasing trend in the rate of overall overdose deaths and opioid-specific overdose deaths in Nebraska from 2017 to 2020
- Increased rates of 30-day readmission for an SUD
- Decline in the percentage of beneficiaries initiating treatment within 14 days of a new SUD diagnosis

The increased rate of overdose deaths was exacerbated by the COVID-19 PHE, as was seen across the country during this time.[5] Compared to national rates, Nebraska experienced a greater increase in overdose deaths between 2019 and 2020; this may be explained by studies that show a disproportionate impact of the pandemic on drug use patterns among people living in rural areas.[6]

Although initiation of treatment for an SUD declined during this period, results on engagement in SUD treatment were mixed. The percentage of beneficiaries who initiated treatment and who had two or more additional services for an SUD within 34 days of the initiation visit improved during the initial implementation period, before worsening during the full implementation period.

Aim Three

Aim Three focuses on cost maintenance as an intended outcome of treating patients in the most appropriate settings and asks whether the Waiver maintained or reduced total cost of care. It is hypothesized that the increased cost of SUD treatment as a result of higher utilization (increase in claims for treatment, longer IMD stays, etc.) will be balanced out by reduced acute care utilization. Thus, the Waiver is hypothesized to reduce inpatient (IP) hospitalization and ED use specifically for an SUD (Hypothesis 1) as well as overall hospital admissions and ED visits for beneficiaries with an SUD (Hypothesis 2) and ultimately result in maintained or reduced total cost of SUD-related care (Hypothesis 3) and overall total cost of care (Hypothesis 4).

Successes

[5] Centers for Disease Control and Prevention. Overdose Deaths Accelerating During COVID-19. Available at: https://www.cdc.gov/media/releases/2020/p1218-overdose-deaths-covid-19.html. Accessed on: Mar. 7, 2023.

[6] Walters SM, Bolinski RS, Almirol E, et al (2022). "Structural and community changes during COVID-19 and their effects on overdose precursors among rural people who use drugs: a mixed-methods analysis," *Addiction Science & Clinical Practice* 17(24); Available at: https://ascpjournal.biomedcentral.com/articles/10.1186/s13722-022-00303-8. Accessed on: Mar. 17, 2023.

There was strong evidence of a decrease in inpatient (IP) hospitalizations following implementation of the Waiver, as evidenced by:

- Reductions in the average number of IP hospitalizations and average number of days of IP hospitalization among all beneficiaries ages 19–64, for an SUD specifically.
- Reductions in the average number, average number of days and ALOS of IP hospitalization for any cause among beneficiaries with an SUD diagnosis.

Challenges

Several measures demonstrated mixed results and neither supports nor fails to support the associated hypotheses. The ALOS of IP hospitalization for an SUD did not demonstrate any statistically significant results but was trending in the desired direction. The average number of ED visits for any cause among beneficiaries with an SUD diagnosis demonstrated a relative decrease in the trend upon initial implementation and a relative increase in the trend upon full implementation. Therefore, this measure neither supported nor failed to support the hypothesis that the Waiver would reduce IP hospitalization and ED use or beneficiaries with an SUD.

In general, the results of the analysis on cost for SUD treatment neither supported nor failed to support the hypothesis that the Waiver would reduce or maintain total cost of SUD-related care (Hypothesis 3). A decrease in the average SUD-IMD cost at the start of each implementation period suggests trending of SUD-IMD costs in the desired direction, but the change in monthly trend during both implementation periods was not statistically significant. Although there was a decreasing trend for other SUD costs, these costs increased significantly upon initial implementation, and non-SUD costs also followed a similar pattern of mixed results.

Similarly, analysis of the total cost of care and costs stratified by category of service also neither supported nor failed to support the hypothesis that the Waiver would reduce or maintain total cost of care overall (Hypothesis 4). There are some indications of improvements. ED and IP costs demonstrated continued cost reductions through the Waiver period; in particular, statistically significant decreasing monthly trends during the initial implementation period compared to projected costs had the baseline period continued suggest support for Hypothesis 4. Pharmacy and professional costs also demonstrated evidence of an increase following full implementation of the MAT/OTP component of the Waiver.

Overall Results

The findings demonstrate that beneficiaries increased utilization of SUD treatment services, particularly residential services, and MAT throughout the Waiver period. This increase may reflect the Waiver's emphasis on expanding residential providers' treatment methods and increasing the number of practitioners trained on MAT. Analysis of the number of Medicaid providers delivering SUD services showed an approximately 21 percent increase from the baseline years to 2022 and may reflect provider capacity building efforts.

The number of IMD stays and number of days of IMD treatment increased between the start of the initial implementation period and the start of the full implementation period in alignment with the Waiver's goals. There were also improvements in meeting the statewide target for ALOS in an IMD of 30 days; six out of the last eight months of the Waiver period were below 30 days and two months were only slightly above 30 days, indicating that the ALOS stabilized around the statewide goal of 30 days at the time of evaluation.

The evaluation showed a significant decrease in both the level and trend of ED visits for an SUD at the time of full implementation, suggesting evidence of the Waiver's impact on reducing ED utilization among beneficiaries with an SUD. As the full implementation of the Waiver effected increased availability of OTPs and more facilities providing MAT statewide, this decline may be representative of a shift away from reliance on EDs for SUD treatment. Decreasing ED costs during the initial implementation period lends additional support for reduced ED utilization by beneficiaries with an SUD.

The Waiver was also associated with improvements in IP stays for an SUD and IP stays for any cause. The average number of stays, average number of days and ALOS for an SUD specific and any-cause IP stays declined during the study period. Furthermore, examination of IP costs demonstrated a continued reduction in costs throughout the Waiver period.

Finally, pharmacy costs were increasing during the baseline period but began to decrease during the initial implementation period. Upon full implementation of the MAT/OTP services, pharmacy costs increased again as would be expected with wider accessibility of MAT treatment.

Lessons Learned and Recommendations

While the Waiver shows promise across several dimensions of care and improvements, there are some lessons learned and recommendations related to the provision of new services stemming from key informant interviews.

Issue: Some providers noted difficulties in providing ASAM Level 3.7 MMIW management services.

Recommendation: The State should continue working with managed care organizations (MCOs) and providers to streamline or expedite the credentialling process. The State could also reiterate to providers that there are no changes to the provision or billing of existing services to reduce any confusion or uncertainty providers may have regarding billing State plan services.

Issue: Some providers felt uncomfortable prescribing methadone treatment.

Recommendation: The State and/or MCOs could assist providers in prescribing methadone treatment, including providing clinical guidelines and recommendations. MCOs could facilitate collaboration among providers and existing methadone treatment facilities to address providers' concerns about lack of experience providing methadone treatment.

4.3 – COVID-19 Public Health Emergency (PHE)

Due to the coronavirus disease (COVID-19) public health emergency (PHE), Nebraska's SUD demonstration experienced delays implementing some of the action items outlined in the implementation plan and STCs. Based on these actions and the ongoing efforts to meet the milestones, the delays caused by the COVID-19 PHE have not prevented the state from continuing significant progress toward meeting the milestones.

5 – Monitoring, Reporting and Quality

In accordance with STC 18b, the state received approval of the Monitoring Protocol on November 16, 2020. Since approval, the state has submitted both annual and quarterly monitoring reports inclusive of

the CMS required measures and state-specific measures for Health IT. The state continues to monitor the impact of the SUD demonstration.

5.1 – Institutions for Mental Disease (IMD) Stays For Individuals Aged 21 to 64 Years Old

The expenditure authority under this 1115 demonstration waiver allows Nebraska Medicaid to better ensure members are receiving effective SUD treatment in the most appropriate setting. Figure 3 reviews the total IMD stays, stays over 15 days, and stays under 15 days. Of these, stays over 15 days account for 68 percent of the total stays reported by the MCOs. The state has observed the percentage of all stays that exceed 15 days stabilizing around 68 to 70 percent, indicating the need Nebraska Medicaid beneficiaries have for these services. To date, without the waiver authority, Nebraska would be unable to reimburse for over 2,200 stays since the beginning of the demonstration, July 1, 2019, through September 30, 2022.

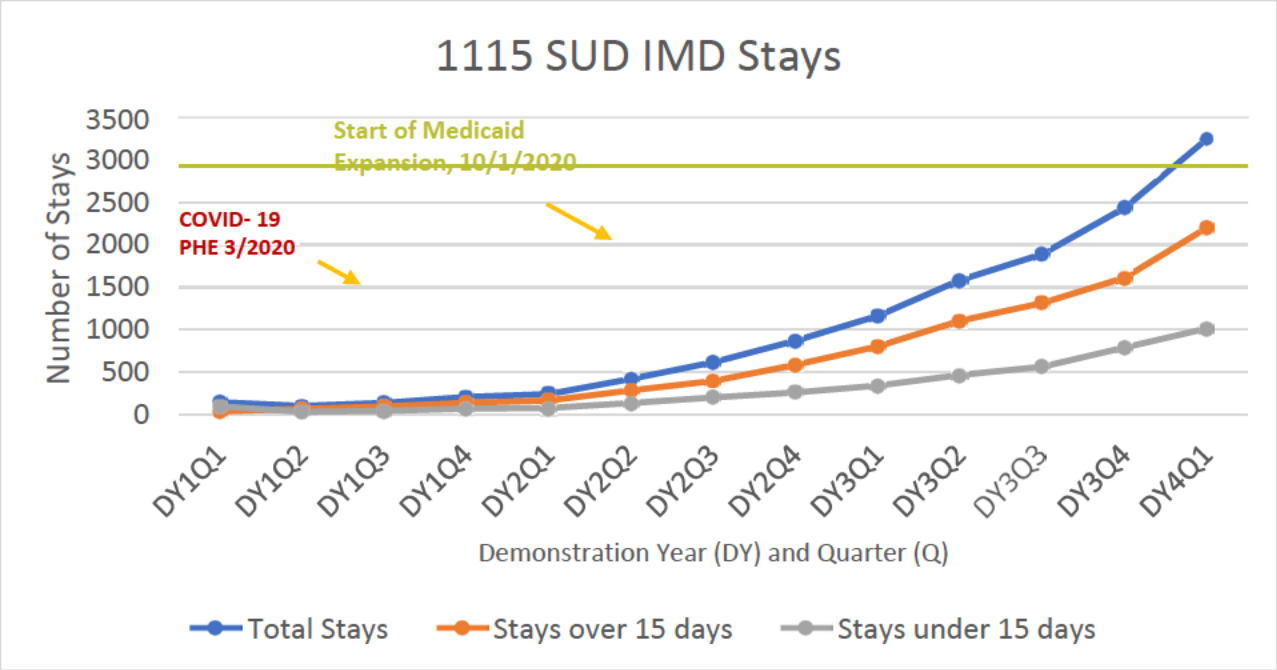


Figure 3: 1115 SUD IMD Stays claims data since the beginning of the demonstration, July 1, 2019, through September 30, 2022. Stays over 15 days account for 68% of total IMD Stays for individuals aged 21 to 64 years old.

5.2 Monitoring Metrics

Over the course of the demonstration, the state has monitored the progress of SUD related metrics as determined by the state's Monitoring Protocol. The state determined the reporting of the CMS specific measures and an additional three (3) state-specific measures for Health IT. Below are reviews of the telehealth-specific measure and a look at follow-up after ED visit, metric 17-1.

The state chose to monitor telehealth for SUD as part of the state defined health IT metrics (metric Q3) at the start of the demonstration. Figure 4, below, uses the quarter over quarter results of that metric to

highlight the increase in utilization of SUD telehealth. The start of the demonstration saw low utilization of telehealth for SUD, with the first two reporting periods having only 15 and 11 average visits per month. However, starting in DY1Q3, the impacts of the COVID-19 PHE drove a significant increase to 906 average monthly telehealth visits in DY1Q4. Since DY3Q2, the average monthly telehealth visits have mostly stabilized at a higher level than before the initial COVID-19 PHE driven increase. As mentioned in subsection 4.2 – Interim Evaluation Report, the state received confirmation from the State Demonstrations Group on December 16, 2021, verifying the completion of Milestone 4.

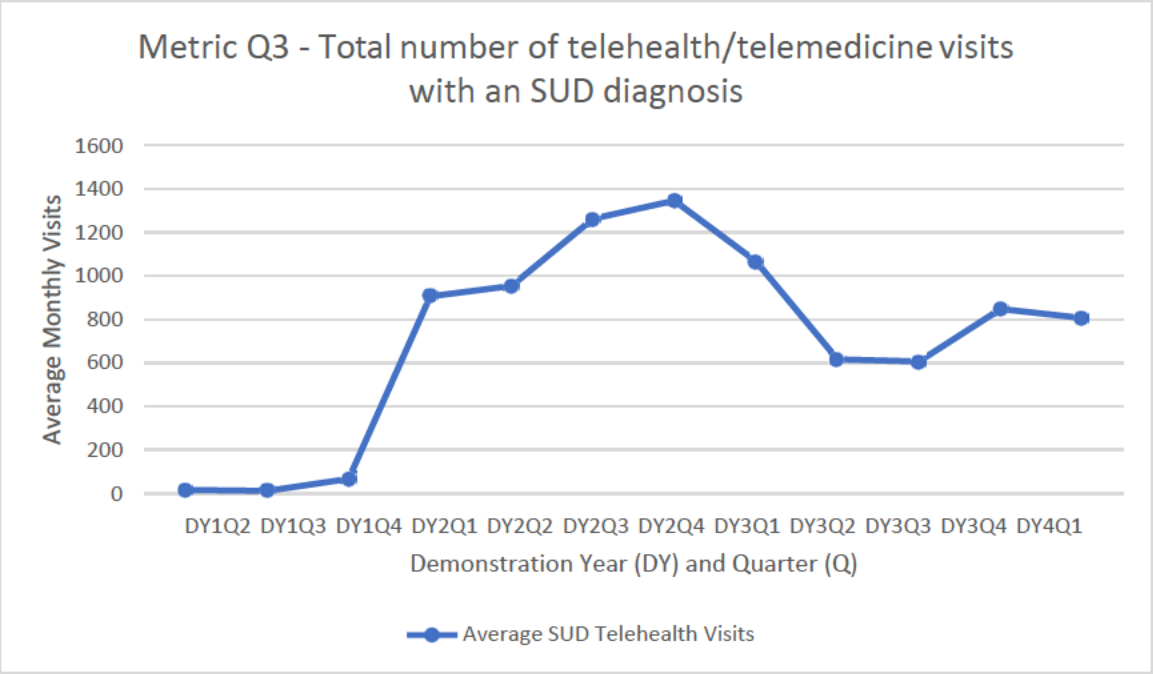


Figure 4: Q3 - Total number of telehealth/telemedicine visits with an SUD diagnosis. Figure shows the percentage changes, quarter over quarter, indicating increased utilization since the beginning of the demonstration.

The state would like to highlight several metrics to speak to the ED utilization portion of Goal #4 "Reduced utilization of emergency departments and inpatient hospital settings for treatment where the utilization is preventable or medically inappropriate through improved access to other continuum of care services." Below are metrics #17-1 Follow-up after Emergency Department Visit for Alcohol or Other Drug Dependence (FUA-AD) and #23 Emergency Department Utilization for SUD per 1000 Medicaid beneficiaries as Figure 5 and Figure 6 respectively.

Figure 5 and Figure 6 look at the trends for ED utilization during the demonstration thus far.

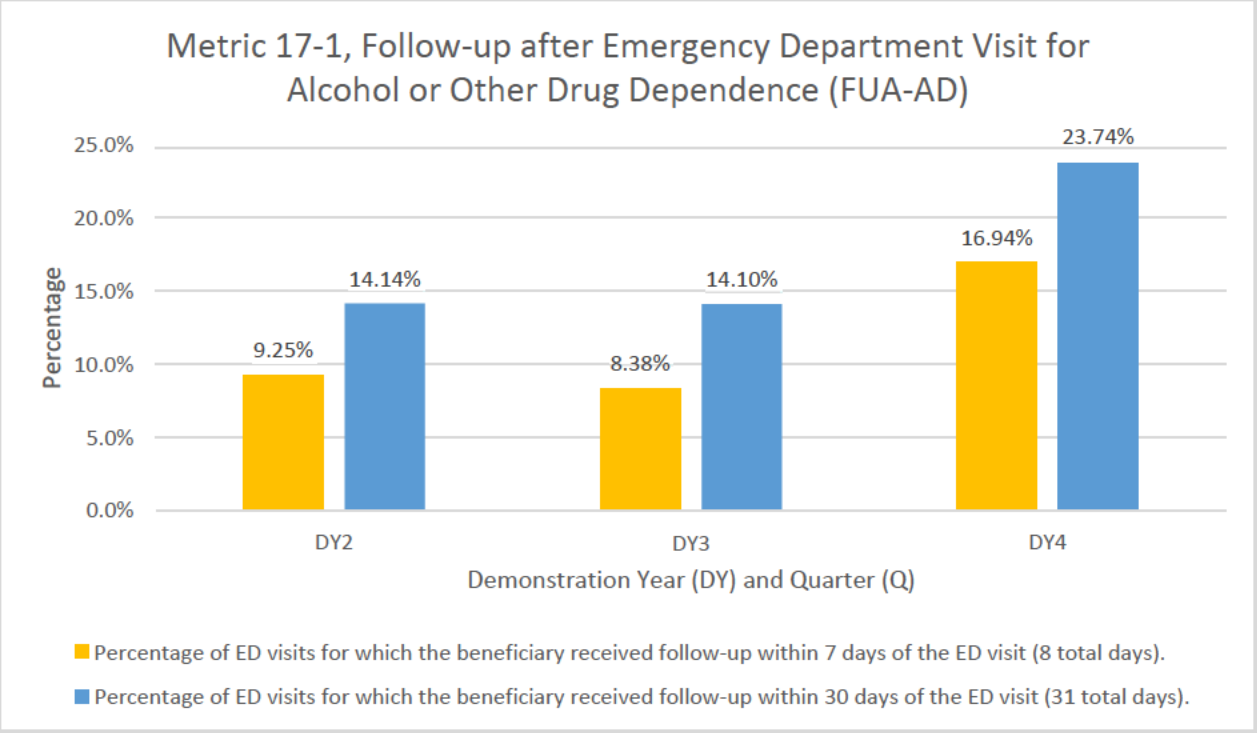


Figure 5: NE 1115 Monitoring Protocol Metric 17-1 Follow-up after Emergency Department Visit for Alcohol or Other Drug Dependence (FUA-AD) results from Demonstration Year (DY) 2 to DY4. Measure calculated on an annual basis.

Figure 5 highlights the progression of follow-up adherence after an Emergency Department (ED) visit for alcohol or other drug dependence within 7 and 30 days from the ED visit. As indicated in the chart, in DY2 the state saw adherence at 9.25 percent and 14.14 percent for follow ups within 7 and 30 days, respectively. During the most recent demonstration year, DY4, the state reported adherence at 16.94 percent and 23.74 percent, indicating an increased adherence by Medicaid beneficiaries utilizing the recommendations for the continuum of care post-ED visit. Of note, the total beneficiaries in the demonstration denominator increased by 149.6% percent from DY2 to DY4. The state presumes the Adult Expansion and COVID-19 PHE factoring into the increases in demonstration population for the measure; however, the measure still demonstrates progress in completing follow up visits during the demonstration period.

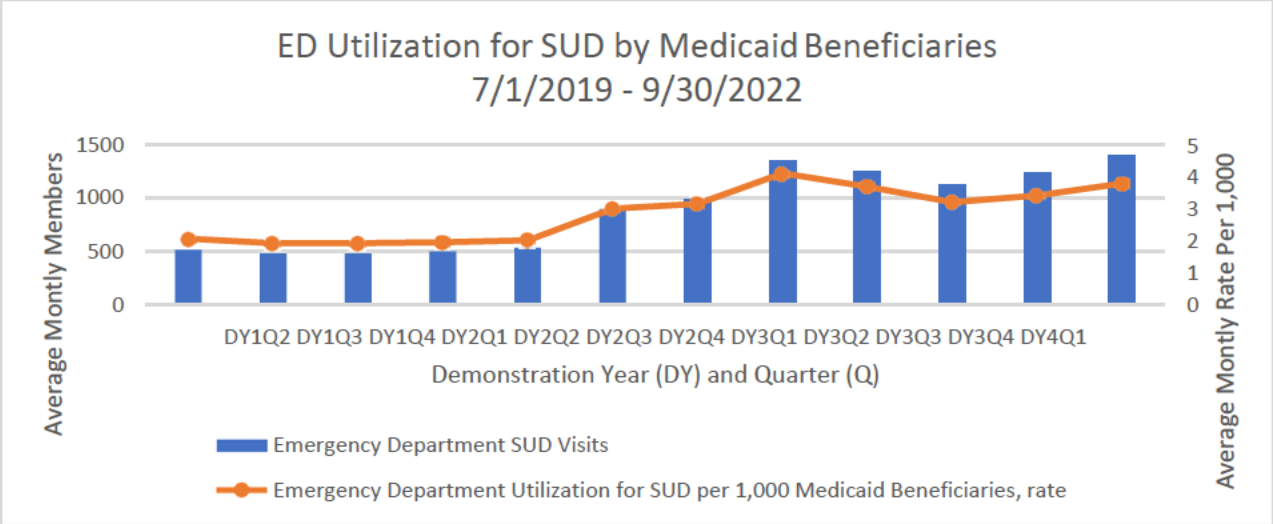


Figure 6: Emergency Department Utilization for SUD per 1,000 Medicaid Beneficiaries, average members per month and per 1,000 beneficiaries.

Figure 6 highlights the impact of Medicaid expansion on the SUD ED visits during the demonstration. An immediate impact in SUD ED utilization is seen the very first quarter of Medicaid expansion in DY2Q3 which then rises over the next two quarters compared to the prior utilization experience. However please note that even though the overall SUD ED visits have increased, the rate per 1,000 has improved for comparable quarters, such as DY3Q2 compared to DY3Q4. While it is still too early to say with complete confidence, the information is pointing toward the SUD ED rates stabilizing and even improving since the implementation of the demonstration.

5.3 – Data Quality

Nebraska MLTC is required to conduct an annual external quality review (EQR) of the services provided by contracted Medicaid managed care entities (MCEs). The state contracts with the EQRO Health Services Advisory Group, Inc. (HSAG) to assess and report the impact of its Medicaid managed care program, Heritage Health, and each of the participating MCEs on the accessibility, timeliness, and quality of services.

HSAG completes all EQR activities identified as mandatory by 42 CFR 438.358 annually. The final aggregate 2022 Technical Report is found on MLTC's Heritage Health Resources public website and it includes the results of the following activities:

- Validation of performance improvement projects (PIPs)
- Validation of performance measures – HEDIS methodology
- Validation of performance measures – Dental PAHP
- Assessment of compliance with Medicaid and CHIP managed care regulations
- Validation of network adequacy

This report is intended to help the Heritage Health Program to:

- Identify areas for quality improvement
- Ensure alignment among an MCE's Quality Assessment and Performance Improvement (QAPI) requirements, the state's quality strategy, and the annual EQR activities
- Purchase high-value care
- Achieve a higher performance health care delivery system for Medicaid and CHIP beneficiaries
- Improve states' ability to oversee and mange MCEs they contract with for services
- Help MCEs improve their performance with respect to quality, timeliness, and accessibility to care

While the Technical Report includes results which could be impacted by the NE 1115 SUD Demonstration waiver, such as the validation of PIPs and performance measures which are related to SUD services and an assessment of the adequacy of the MCE Behavioral Health provider network, it does not include an assessment specific to this waiver.

6 – Budget Neutrality

The following includes historical enrollment and expenditure totals from the first three years of the initial demonstration period and projected totals for the extension period. Each year listed in the table below represents twelve months of data collected in the months January through December. Expenditures reported represent the capitation payments paid to the MCOs for those receiving qualifying SUD services in IMDs. The state's actuarial partner provided the projections methodology and analysis for the renewal period.

6.1 – Budget Neutrality Waiver Summary

Table 4 reviews the initial waiver period expenditures for the total waiver population and the prospective renewal period expenditures and waiver population totals, with and without the expansion population.

Table 4: Total Eligible Waiver Population with Respective Total Expenditures

SUD 1115 Waiver Summary

DY	SFY	Total Member Months	Total PMPM	Total Dollars	Non-Expansion Member Months	Non-Expansion PMPM	Non-Expansion Dollars	Expansion Member Months	Expansion PMPM	Expansion Dollars
DY1[1]	SFY20	562	$781.19	$439,029	562	$781.19	$439,029	-	$-	$-
DY2[1]	SFY21	1,778	$872.97	$1,552,147	688	$826.97	$568,957	1,090	$902.01	$983,190
DY3[1]	SFY22	3,521	$915.86	$3,224,734	1,035	$896.43	$927,803	2,486	$923.95	$2,296,930
DY4[2]	SFY23	3,591	$1,072.09	$3,850,328	1,056	$971.83	$1,025,961	2,536	$1,113.83	$2,824,366
DY5[2]	SFY24	3,663	$1,117.08	$4,092,136	1,077	$1,007.17	$1,084,530	2,586	$1,162.84	$3,007,606
DY6[3]	SFY25	3,735	$1,062.49	$3,968,405	1,097	$1,026.88	$1,126,487	2,638	$1,077.30	$2,841,917
DY7[3]	SFY26	3,810	$1,106.81	$4,216,930	1,119	$1,063.77	$1,190,362	2,691	$1,124.70	$3,026,568
DY8[3]	SFY27	3,886	$1,153.00	$4,480,547	1,141	$1,102.01	$1,257,396	2,745	$1,174.19	$3,223,152
DY9[3]	SFY28	3,964	$1,201.48	$4,762,676	1,164	$1,142.87	$1,330,296	2,800	$1,225.85	$3,432,380
DY10[3]	SFY29	4,043	$1,252.02	$5,061,916	1,187	$1,185.20	$1,406,836	2,856	$1,279.79	$3,655,080

Note: 1. DY1 through DY3 reflect actual SUD IMD member months and capitation payments made to the MCOs; capitation payments are based on the capitation rates (HH and Dental) effective for the month of IMD stay. Historical figures, notably DY3, may change with additional paid runout since SUD IMD member months are based on SUD IMD stay utilization data. 2. DY4 and DY5 reflect projected member months based on the actual SFY22 member months and PMPMs from the initial 1115 Waiver Budget Neutrality submission. Projected member months may change in final version, as a result of review of SFY22 and emerging SFY23 SUD IMD utilization with additional claims runout. 3. DY6 through DY10 reflect the draft 1115 Waiver renewal member months and PMPMs.

6.2 – Budget Neutrality Projections Narrative

CBIZ Optumas (Optumas) worked in conjunction with the state to update the SUD 1115 budget neutrality template for the 5-year renewal waiver period outlined in Table 5.

The remainder of this document describes the assumptions used in the accompanying SUD 1115 budget neutrality template called "NE SUD 1115 Waiver Model – DY6-DY10."

Table 5: Five-Year Demonstration Years

Current Approved Waiver - Demonstration Year (DY)				
DY1	**DY2**	**DY3**	**DY4**	**DY5**
7/1/2019 - 6/30/2020	7/1/2020 - 6/30/2021	7/1/2021 - 6/30/2022	7/1/2022 - 6/30/2023	7/1/2023 - 6/30/2024

Waiver Renewal - Demonstration Year (DY)				
DY6	**DY7**	**DY8**	**DY9**	**DY10**
7/1/2024 - 6/30/2025	7/1/2025 - 6/30/2026	7/1/2026 - 6/30/2027	7/1/2027 - 6/30/2028	7/1/2028 - 6/30/2029

Medicaid Eligibility Group (MEG)

The MEG structure is unchanged from the current approved 1115 SUD IMD waiver for the non-expansion populations. These MEGs include ABD, Dual and FAM. The current approved demonstration includes two separate MEGs for the adult expansion population, originally intended to recognize the differentiation of medically frail vs non-Medically frail beneficiaries. This renewal consolidates these two separate MEGs into a single MEG consistent with DHHS's alignment of benefit packages for the adult expansion population. In this waiver renewal, DHHS is including one Expansion (EXP) MEG. Table 6 illustrates MEGs in the current demonstration and the renewal MEGs.

Table 6: Medicaid Eligibility Group (MEG) Structure

Originally Approved Waiver MEG	**Renewal Waiver MEG**
ABD	ABD
Dual	Dual
FAM	FAM
EXP – Non-Medically Frail	EXP
EXP – Medically Frail	

Historical Data Assumption

Optumas utilized actual SUD IMD utilizers and their corresponding Heritage Health and Dental capitation rates for the historical data in the SUD 1115 budget neutrality template. Optumas reviewed multiple calendar and state fiscal years of data and determined that July 1, 2021 – June 30, 2022 (SFY22) was the most recent complete historical period. As a result, this period was selected as the base data projection point for the SUD 1115 budget neutrality template.

Projected IMD Member Months/Caseloads

As stated above, SFY22 enrollment (limited to SUD IMD utilizers) is the initial base point for the number of projected SUD IMD Member Months/Caseloads. SFY22 includes members continuously enrolled due to the Maintenance of Effort (MOE) requirements in effect during the COVID-19 Public Health Emergency (PHE), within the broad Medicaid program. As a result, there may be certain SUD IMD utilizers who will ultimately be disenrolled due to the unwinding of this provision. Since the base period represents beneficiaries who utilized a SUD IMD, the impact of the unwinding of the MOE is not expected to have an impact. Thus, SFY22 is deemed reasonable for the starting base enrollment. The projected caseload growth is assumed 2% annually for each MEG, which is consistent with the growth assumed in the current approved 1115 SUD IMD waiver. Table 7 shows the Projected IMD Member Months/Caseloads by DY. This information can be found in the "IMD Caseloads" tab in the SUD 1115 budget neutrality template.

Table 7: Projected IMD Member Months/Caseloads

		Waiver Renewal - Demonstration Year (DY)				
MEG	**SF22 Actual MMs**	**DY6**	**DY7**	**DY8**	**DY9**	**DY10**
ABD	250	265	270	275	281	287
Dual	235	249	254	259	264	269
FAM	549	583	595	607	619	631
EXP	2,486	2,638	2,691	2,745	2,800	2,856

Historical PMPM Adjustments

While SFY22 capitation rates were determined to be the most recent complete historical period, there are programmatic and fee schedule changes that are necessary to account for before projecting to the new waiver period. The capitated rates used in the historical base data were adjusted for benefit and fee schedule changes implemented by DHHS. Below is a description of each item that was included in the "Historical PMPM Adjustment" tab in the SUD 1115 budget neutrality template. Table 8 illustrates the impact of these adjustments on the SFY22 historical PMPMs, each impacting the proportion of the historical data associated with the Heritage Health capitation rates.

- Provider Rate Increase of 17% effective July 1, 2022, for Behavioral Health providers.
- The SFY22 Q1 time period has been adjusted to reflect the Expansion Benefit Changes effective October 1, 2021, which allowed member who previously were covered under the "Basic" benefit package to be eligible for vision services, over-the-counter drugs, and dental services.
- A new benefit for Continuous Glucose Monitoring (CGM) was effective January 1, 2023, and therefore not reflected in the historical SFY22 PMPMs.
- Removal of an explicit negative adjustment to the SFY22 capitation rates related to the estimated acuity changes due to the continuous enrollment provision of the Public Health Emergency (PHE).

Table 8: Historical PMPM Adjustments

MEG	SFY22 Unadjusted	SFY22 Adjusted	Percent Change
ABD	$2,044.05	$2,074.13	1.5%
Dual	$311.66	$326.65	4.8%
FAM	$625.18	$653.52	4.5%
EXP	$923.95	$946.75	2.5%

Projected Without Waiver PMPMs

The SFY22 Adjusted PMPMs were projected to DY6 through DY10 (shown in Table 9Table 8) using the trend factors included reflected in the current approved 1115 SUD IMD waiver, shown in Table 10. There are 36 trend months between the historical SFY22 period and DY6 of the waiver renewal.

Table 9: Projected Without Waiver PMPMs

		Waiver Renewal – Demonstration Year (DY)				
MEG	SFY22 Adjusted	DY6	DY7	DY8	DY9	DY10
ABD	$2,074.13	$2,306.29	$2,389.32	$2,475.34	$2,564.45	$2,656.77
Dual	$326.65	$363.22	$376.30	$389.85	$403.88	$418.42
FAM	$653.52	$728.78	$755.74	$783.70	$812.70	$842.77
EXP	$946.75	$1,077.30	$1,124.70	$1,174.19	$1,225.85	$1,279.79

Table 10: Trend Rates

MEG	Current Approved Waiver Annual Trend Rates
ABD	3.60%
Dual	3.60%
FAM	3.70%
EXP	4.40%

Budget Neutrality Summary

The Without and With Waiver are equivalent and treated as "Hypothetical" consistent with the current demonstration. The budget neutrality expenditure estimates for SUD 1115 Waiver Renewal are summarized in Table 11 below:

Table 11: Budget Neutrality Expenditure Estimates

	Waiver Renewal - Demonstration Year (DY)					
MEG	**DY6**	**DY7**	**DY8**	**DY9**	**DY10**	**Total DY6-DY10**
ABD	$611,167	$645,116	$680,719	$720,610	$762,493	**$3,420,105**
Dual	$90,442	$95,580	$100,971	$106,624	$112,555	**$506,172**
FAM	$424,879	$449,665	$475,706	$503,061	$531,788	**$2,385,099**
EXP	$2,841,917	$3,026,568	$3,223,152	$3,432,380	$3,655,080	**$16,179,097**
Total	**$3,968,405**	**$4,216,930**	**$4,480,547**	**$4,762,676**	**$5,061,916**	**$22,490,474**

The complete Budget Neutrality workbook is included as Appendix 3.

7 – Compliance with Public Notice and Tribal Consultation

7.1 – Annual Public Forums

Pursuant to 42 CFR 431.420(c), the state held a public forum on Wednesday December 14th, from 2pm to 3pm CST and plans for future public forums in subsequent demonstration years. The Nebraska Demonstration Waivers team presented an overview of the current SUD waiver and plans for future work. Attendees included approximately 20 unique providers and stakeholders. The state received positive feedback from the providers on being able to provide services to Medicaid beneficiaries. The state informed attendees of the SUD Renewal and received support in favor of renewing for an additional five-year period. The state looks forward to future forums with providers and stakeholders.

7.2 – Public Notice

The Department posted a notice of the 1115 SUD Renewal Application on MLTC's dedicated public notice page: https://dhhs.ne.gov/Pages/Medicaid-Public-Notices.aspx

NEBRASKA DEPARTMENT OF HEALTH AND HUMAN SERVICES PUBLIC NOTICE

Posted: April 12, 2023

In accordance with 42 CFR 431.408, the Nebraska Department of Health and Human Services (DHHS), Division of Medicaid and Long-Term Care (MLTC) hereby provides notice of two (2) public hearings for the public to ask questions and provide feedback on the Nebraska Section 1115 Substance Use Disorder (SUD) Demonstration Waiver Renewal application. The 1115 SUD demonstration waiver, effective July 1, 2019, provides Nebraska DHHS with the authority to receive federal Medicaid financial participation (FFP) for the coverage of SUD treatment-related stays in Institutions for Mental Diseases (IMDs) for adults ages 21-64. More specifically, the authority allows the state the flexibility to include in managed care capitation rate development IMD stays that exceed the 15-day limit found in 42 CFR 438.6(e). DHHS is requesting renewal for another five (5) year period, July 1, 2024, through June 30, 2029, without changes to the waiver.

The public hearings will be held Friday, May 12th, at 11 AM - 12 PM CST and Thursday, May 18th, at 12:30 PM - 1:30 PM CST in the Lower-level Public Hearing Room located at the Nebraska State Office Building (301 Centennial Mall S, Lincoln, NE 68509).

Webex Invite Links:
Friday, May 12th, at 11 AM - 12 PM CST
WebEx invite link: https://sonvideo.webex.com/sonvideo/j.php?MTID=m2db7654930f8a5e1bc6c0bf4d2c31fc9
Password: asEJpC9MG23

Thursday, May 18th, at 12:30 PM - 1:30 PM CST
WebEx invite link: https://sonvideo.webex.com/sonvideo/j.php?MTID=mc6fdc585ef52f3ce3f862bf2704d6f76
Password: AEazmJ42NJ4

Please email the Demonstration Waivers Team at DHHS.DemonstrationWaivers@nebraska.gov with any questions prior to the public hearing. For more information on the Section 1115 SUD Demonstration Waiver, visit the Substance Use Disorder Demonstration Program website.

Show Less

Figure 7: 30-Day Notice of Public Hearings for the NE 1115 SUD Renewal Application Public Comment Period

Public comments on the renewal application were accepted from May 2nd, 2023, to June 1, 2023.

Comprehensive information on the 1115 SUD Renewal Application, public comment opportunities, and a copy of the full public notice were made available on the Department's dedicated waiver application webpage: https://dhhs.ne.gov/Pages/Substance-Use-Disorder-Demonstration.aspx

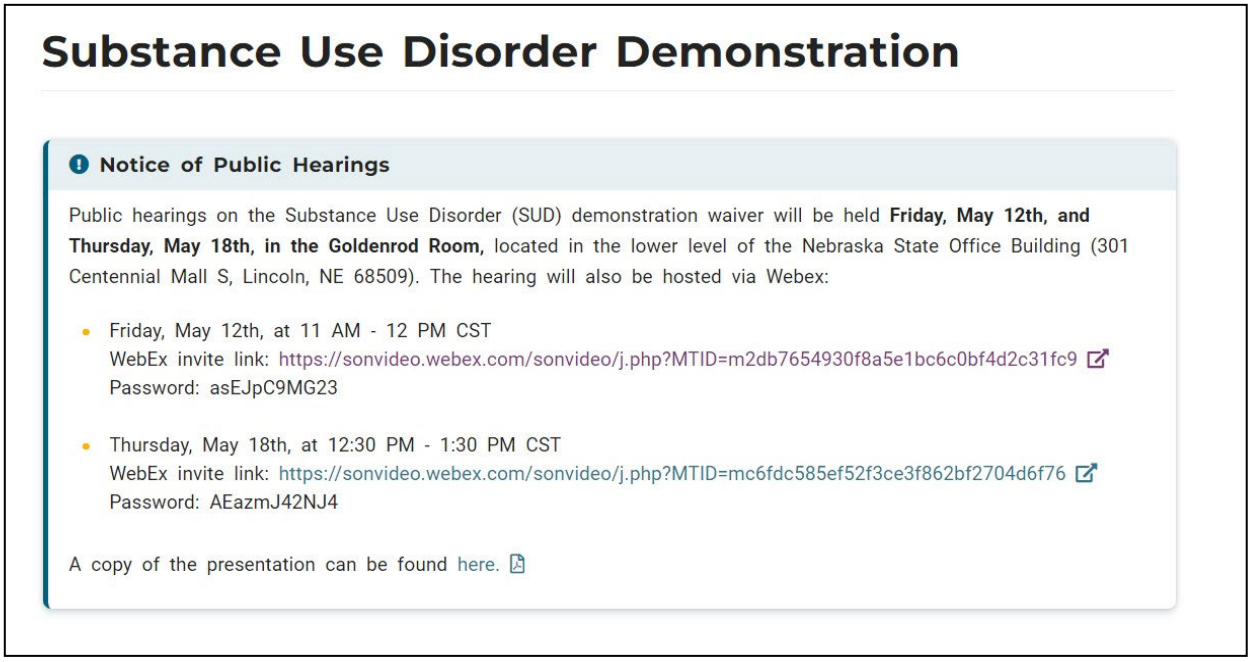


Figure 8: Notice of Public Hearings and Public Comment Period on the Nebraska SUD Public Site

Comments could be submitted physically to:

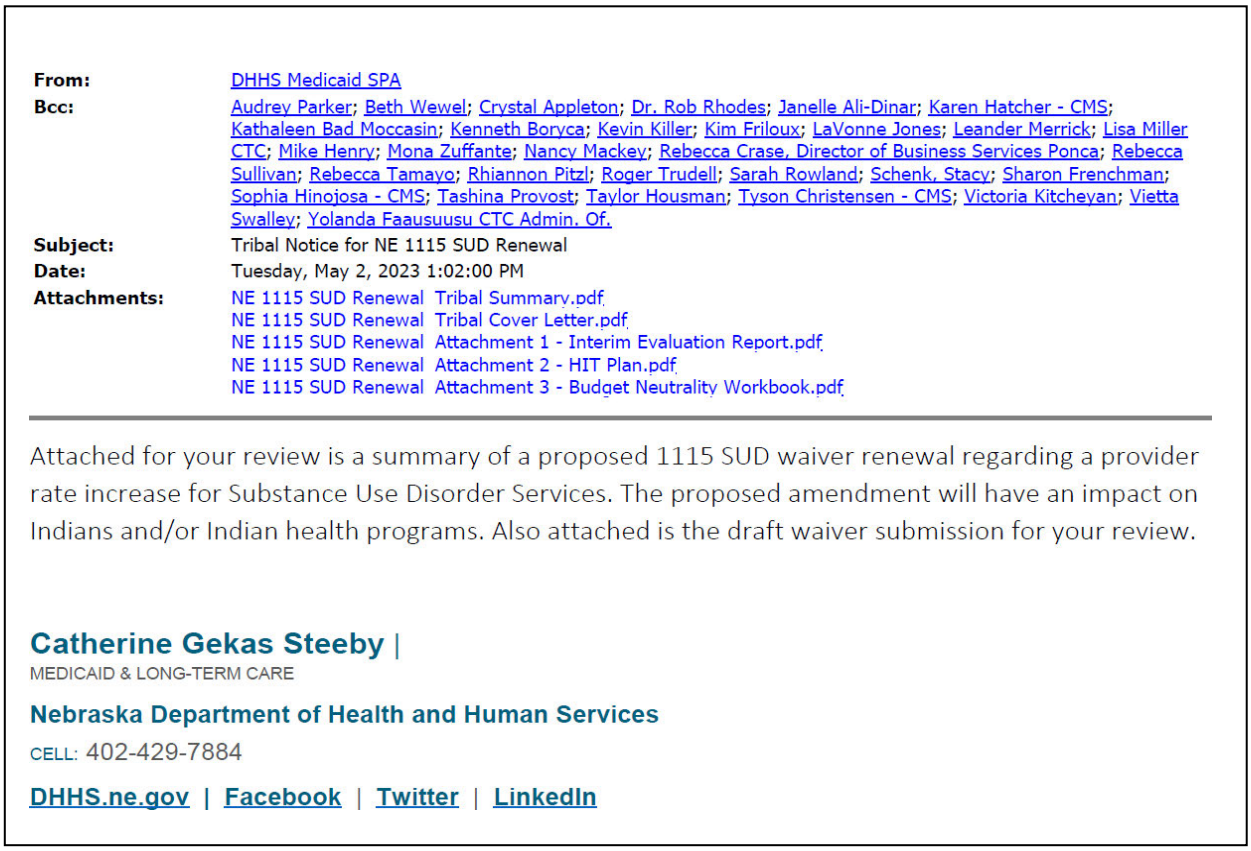
Nebraska Department of Health and Human Services Division of Medicaid and Long-Term Care
301 Centennial Mall S
PO Box # 95026
Attn. Milla Jones
Lincoln, Nebraska 68509-5026

Electronic comments could be sent via fax (402) 471-9103 or e-mail to DHHS.DemonstrationWaivers@nebraska.gov.

The Department hosted two open public hearings where an overview of the 1115 waiver renewal application and program overview were presented. The Department received no written or verbal comments from the public.

7.3 – Tribal Consultation:

On May 2, 2023, the Department sent electronic notification to representatives of the state's federally recognized tribal organizations of the opportunity to review and comment on the demonstration waiver application. Tribal organizations were allowed 30 calendar days to provide comments with a comment deadline of June 1, 2023. The Department submitted Tribal Notice cover letter and summary, found in Appendix 4 – Public Notice (including Tribal Public Notice).



From: DHHS Medicaid SPA

Bcc: Audrey Parker; Beth Wewel; Crystal Appleton; Dr. Rob Rhodes; Janelle Ali-Dinar; Karen Hatcher - CMS; Kathaleen Bad Moccasin; Kenneth Boryca; Kevin Killer; Kim Friloux; LaVonne Jones; Leander Merrick; Lisa Miller CTC; Mike Henry; Mona Zuffante; Nancy Mackey; Rebecca Crase, Director of Business Services Ponca; Rebecca Sullivan; Rebecca Tamayo; Rhiannon Pitzl; Roger Trudell; Sarah Rowland; Schenk, Stacy; Sharon Frenchman; Sophia Hinojosa - CMS; Tashina Provost; Taylor Housman; Tyson Christensen - CMS; Victoria Kitcheyan; Vietta Swalley; Yolanda Faausuusu CTC Admin. Of.

Subject: Tribal Notice for NE 1115 SUD Renewal

Date: Tuesday, May 2, 2023 1:02:00 PM

Attachments: NE 1115 SUD Renewal Tribal Summary.pdf
NE 1115 SUD Renewal Tribal Cover Letter.pdf
NE 1115 SUD Renewal Attachment 1 - Interim Evaluation Report.pdf
NE 1115 SUD Renewal Attachment 2 - HIT Plan.pdf
NE 1115 SUD Renewal Attachment 3 - Budget Neutrality Workbook.pdf

Attached for your review is a summary of a proposed 1115 SUD waiver renewal regarding a provider rate increase for Substance Use Disorder Services. The proposed amendment will have an impact on Indians and/or Indian health programs. Also attached is the draft waiver submission for your review.

Catherine Gekas Steeby |
MEDICAID & LONG-TERM CARE

Nebraska Department of Health and Human Services
CELL: 402-429-7884

DHHS.ne.gov | **Facebook** | **Twitter** | **LinkedIn**

Figure 9: Confirmation of Tribal Notice Submission for 1115 SUD Renewal

The Department received no written or verbal comments from tribal organizations.

Appendix 1 – Interim Evaluation Report

State of Nebraska Department of Health and Human Services

Nebraska Substance Use Disorder (SUD) Demonstration Waiver

Interim Evaluation Report

April 2023

HSAG HEALTH SERVICES ADVISORY GROUP

HSAG HEALTH SERVICES ADVISORY GROUP

Table of Contents

Executive Summary **1**
Conclusions 1
Aim One 1
Aim Two 3
Aim Three 4
Overall Results 5
Lessons Learned and Recommendations 5

1. Background **1-1**
Historical Background of the Nebraska Substance Use Disorder Waiver 1-1
Background of the Waiver 1-2
Implementation of the Waiver 1-3
Heritage Health Adult Expansion Program 1-4
Amendments 1-5
Demographics 1-5
Evaluation Activities 1-8

2. Evaluation Questions and Hypotheses **2-1**
Demonstration Goals 2-1
Hypotheses and Research Questions 2-1
Aim One: Improve Access to Health Care for Beneficiaries with an SUD 2-2
Aim Two: Improve Quality of Care for Beneficiaries with an SUD 2-3
Aim Three: Maintain or Reduce Costs 2-4

3. Methodology **3-5**
Evaluation Design Summary 3-5
Target and Comparison Populations 3-6
Evaluation Period 3-6
Evaluation Measures 3-7
Data Sources 3-8
Administrative 3-9
National Surveys 3-9
Key Informant Interviews 3-9
Analytic Methods 3-10
Interrupted Time Series 3-10
Trend Analysis 3-12
Descriptive Time Series 3-12
Other Analyses 3-12

4. Methodological Limitations **4-1**
Evaluation Design 4-1
Data Sources 4-2

5. Results **5-1**
Results Summary 5-1
Aim One: Improve Access to Health Care for Beneficiaries with an SUD 5-2
Aim Two: Improve Quality of Care for Beneficiaries With an SUD 5-25

Aim Three: Maintain or Reduce Costs 5-37

6. Conclusions 6-1
Aim One 6-3
Successes 6-3
Challenges 6-4
Aim Two 6-4
Successes 6-4
Challenges 6-4
Aim Three 6-5
Successes 6-5
Challenges 6-5

7. Interpretations, Policy Implications, and Interactions with Other State Initiatives 7-1
Interpretations 7-1
Policy Implications 7-1
COVID-19 PHE 7-1
Provision of Waiver Services 7-2
Interactions with Other State Initiatives 7-3
Background on Other State Initiatives 7-3
Department of Health and Human Services Programs 7-3
Division of Behavioral Health Programs 7-4
Other State Initiatives 7-5
Grants and Funding 7-6
COVID-19 Initiatives 7-7

8. Lessons Learned and Recommendations 8-1

Executive Summary

The Nebraska Department of Health and Human Services (DHHS) Section 1115 Substance Use Disorder (SUD) Demonstration Waiver (the Waiver) application was approved by the Centers for Medicare & Medicaid Services (CMS) on June 28, 2019, effective July 1, 2019, through June 30, 2024.[1] The Waiver allows DHHS to provide high-quality, clinically appropriate treatment to Medicaid enrollees 19 to 64 years of age primarily diagnosed with opioid use disorder (OUD) and/or other SUDs at Institutions for Mental Disease (IMDs). In addition to providing the appropriate level of care, the coverage of IMD stays reduces emergency department (ED) visits and increases referrals for outpatient (OP) and community-based services upon discharge. Additionally, the Waiver enables the State to implement models focused on increasing home-and-community-based support for beneficiaries and improve access to evidence-based SUD services based on the American Society of Addiction Medicine (ASAM) criteria. The Waiver was designed to support three aims:

- **Aim One**: Improve access to health care for beneficiaries with an SUD.
- **Aim Two**: Improve quality of care for beneficiaries with an SUD.
- **Aim Three**: Maintain or reduce costs.

Pursuant to the Special Terms and Conditions (STCs) of the Waiver, DHHS contracted with Health Services Advisory Group, Inc. (HSAG), as the independent evaluator to conduct a comprehensive evaluation of the Waiver. The purpose of the evaluation is to provide CMS and DHHS with an independent evaluation that ensures compliance with the requirements of Section 1115 Demonstration Waivers; assist in State and federal decision-making about the efficacy of the Waiver; and enable DHHS to further develop clinically appropriate, fiscally responsible, and effective Medicaid Section 1115 Demonstration Waivers. This is the Interim Evaluation Report for the Waiver. This report evaluates the first three years of the Waiver, July 1, 2019, through June 30, 2022. Following the conclusion of the Waiver in 2024, a Summative Evaluation Report will report an analysis of the full five-year demonstration period.

Conclusions

Aim One

Evaluation of this question was complicated by the coronavirus disease 2019 (COVID-19) public health emergency (PHE) and Medicaid expansion, two events that coincided with the initial implementation period of the Waiver, and close enough in time to the full implementation to preclude disentangling the effects of all events. The COVID-19 PHE impacted healthcare utilization as social distancing guidelines, mandated shut-downs, and stay-at-home orders were in effect. Medicaid expansion made it possible for people under the age of 65 who earn up to 138 percent of the federal poverty level (FPL) to receive Medicaid health insurance coverage. Expansion confounds assessment of the Waiver impact as increases in utilization could be a result of the large influx of members needing SUD services.

[1] Centers for Medicare & Medicaid Services. CMS Initial Approval. Available at: https://www medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/ne/ne-substance-use-disorder/ne-sud-demo-initial-appvl-20190628.pdf. Accessed on: Mar. 1, 2023.

Successes and challenges associated with Aim One include the following.

Successes

Several measures indicated support for hypotheses that the Waiver would increase access to evidence-based SUD treatment reflected in increased utilization (Hypothesis 1) and increased capacity (Hypothesis 2):

- An increased percentage of beneficiaries with an SUD who received any SUD treatment service
- Improved rates of residential service utilization for an SUD
- An increased percentage of beneficiaries with an SUD who had a medication-assisted treatment (MAT) claim for an SUD
- An increasing number of Medicaid providers delivering SUD services

Following initial implementation of the Waiver that extended coverage to IMD stays of any duration, there were potential improvements in the average number of IMD stays for an SUD and average number of days of IMD treatment for an SUD among beneficiaries with an SUD. Additionally, the average length of stay (ALOS) of IMD stays for an SUD also stabilized around the statewide goal of 30 days. The number of beds available in IMD facilities providing SUD services also trended upward. However, due to the lack of pre-implementation data or a viable comparison group, these improvements cannot be attributed directly to the Waiver.

Several survey measures using data from the Substance Abuse and Mental Health Services Administration (SAMHSA), the National Survey on Drug Use and Health (NSDUH), and the National Survey of Substance Abuse Treatment Services (N-SSATS) also showed promise as rates trended in a desired direction. The treatment gap for beneficiaries with an illicit drug or substance use disorder is decreasing in Nebraska, although only pre-implementation data were available. There were slight improvements in the number of facilities providing any type of MAT per 100,000 adult Nebraskans. While the rate of facilities with opioid treatment programs (OTPs) per 100,000 adults in Nebraska remains lower than the national average, all Nebraska OTPs are being offered in OP facilities, and all OTPs are providing medication-assisted opioid therapy. However, no statistical testing was conducted as data for these measures were only available prior to the full implementation of the MAT/OTP component of the Waiver. As additional data points become available, HSAG will continue its assessment of these measures for the Summative Evaluation Report.

Challenges

There were some notable challenges to achieving Aim One:

- Reduced percentages of beneficiaries who use withdrawal management services following the full implementation of the Waiver and medically monitored inpatient withdrawal (MMIW) management service category.
- Lower rates of beneficiaries with an SUD who had an ambulatory or preventive care visit
- Zero residential (non-hospital) facilities offering OTPs

Evidence of decreasing percentages of beneficiaries who use withdrawal management services following full Waiver implementation in which coverage for MMIW became available may be indicative of a substitution effect; it is possible that the current measure does not capture treatment codes for the new services and that members are switching from existing withdrawal management services to more clinically appropriate MMIW services.

Alternatively, challenges that providers noted in providing these services (ASAM Level 3.7) may have temporarily impacted the provision of existing withdrawal management services.

The hypothesis that the Waiver will increase access to care for physical health conditions among beneficiaries with an SUD was not supported by increased utilization of ambulatory and preventive care; however, lower rates of preventive and primary care may be largely influenced by COVID-19 PHE impacts during 2020 and 2021.

The number of OP facilities offering detoxification per 100,000 adults in Nebraska and the number of facilities offering opioid-specific detoxification per 100,000 adults in Nebraska continues to fall below the national averages.

Aim Two

Successes

Through activities related to promoting evidence-based assessment and referral, standardizing assessment and placement criteria for patients, establishing qualifications for residential providers, and assuring compliance with treatment standards, the Waiver is hypothesized to improve the appropriateness and continuity of care for SUD beneficiaries. Several measures support the hypotheses:

- Increased rates of adherence to and retention in treatment for an SUD
- Reduction in the average number of ED visits for an SUD among beneficiaries with an SUD

Challenges

Key challenges were also present:

- An increasing trend in the rate of overall overdose deaths and opioid-specific overdose deaths in Nebraska from 2017 to 2020
- Increased rates of 30-day readmission for an SUD
- Decline in the percentage of beneficiaries initiating treatment within 14 days of a new SUD diagnosis

The increased rate of overdose deaths was exacerbated by the COVID-19 PHE, as was seen across the country during this time.[2] Compared to national rates, Nebraska experienced a greater increase in overdose deaths between 2019 and 2020; this may be explained by studies that show a disproportionate impact of the pandemic on drug use patterns among people living in rural areas.[3]

Although initiation of treatment for an SUD declined during this period, results on engagement in SUD treatment were mixed. The percentage of beneficiaries who initiated treatment and who had two or more additional services for an SUD within 34 days of the initiation visit improved during the initial implementation period, before worsening during the full implementation period.

---

2 Centers for Disease Control and Prevention. Overdose Deaths Accelerating During COVID-19. Available at: https://www.cdc.gov/media/releases/2020/p1218-overdose-deaths-covid-19 html. Accessed on: Mar. 7, 2023.

3 Walters SM, Bolinski RS, Almirol E, et al (2022). "Structural and community changes during COVID-19 and their effects on overdose precursors among rural people who use drugs: a mixed-methods analysis," *Addiction Science & Clinical Practice* 17(24); Available at: https://ascpjournal.biomedcentral.com/articles/10.1186/s13722-022-00303-8. Accessed on: Mar. 17, 2023.

Aim Three

Aim Three focuses on cost maintenance as an intended outcome of treating patients in the most appropriate settings and asks whether the Waiver maintained or reduced total cost of care. It is hypothesized that the increased cost of SUD treatment as a result of higher utilization (increase in claims for treatment, longer IMD stays, etc.) will be balanced out by reduced acute care utilization. Thus, the Waiver is hypothesized to reduce inpatient (IP) hospitalization and ED use specifically for an SUD (Hypothesis 1) as well as overall hospital admissions and ED visits for beneficiaries with an SUD (Hypothesis 2) and ultimately result in maintained or reduced total cost of SUD-related care (Hypothesis 3) and overall total cost of care (Hypothesis 4).

Successes

There was strong evidence of a decrease in inpatient (IP) hospitalizations following implementation of the Waiver, as evidenced by:

- Reductions in the average number of IP hospitalizations and average number of days of IP hospitalization among all beneficiaries ages 19–64, for an SUD specifically.
- Reductions in the average number, average number of days and ALOS of IP hospitalization for any cause among beneficiaries with an SUD diagnosis.

Challenges

Several measures demonstrated mixed results and neither supports nor fails to support the associated hypotheses. The ALOS of IP hospitalization for an SUD did not demonstrate any statistically significant results but was trending in the desired direction. The average number of ED visits for any cause among beneficiaries with an SUD diagnosis demonstrated a relative decrease in the trend upon initial implementation and a relative increase in the trend upon full implementation. Therefore, this measure neither supported nor failed to support the hypothesis that the Waiver would reduce IP hospitalization and ED use or beneficiaries with an SUD.

In general, the results of the analysis on cost for SUD treatment neither supported nor failed to support the hypothesis that the Waiver would reduce or maintain total cost of SUD-related care (Hypothesis 3). A decrease in the average SUD-IMD cost at the start of each implementation period suggests trending of SUD-IMD costs in the desired direction, but the change in monthly trend during both implementation periods was not statistically significant. Although there was a decreasing trend for other SUD costs, these costs increased significantly upon initial implementation, and non-SUD costs also followed a similar pattern of mixed results.

Similarly, analysis of the total cost of care and costs stratified by category of service also neither supported nor failed to support the hypothesis that the Waiver would reduce or maintain total cost of care overall (Hypothesis 4). There are some indications of improvements. ED and IP costs demonstrated continued cost reductions through the Waiver period; in particular, statistically significant decreasing monthly trends during the initial implementation period compared to projected costs had the baseline period continued suggest support for Hypothesis 4. Pharmacy and professional costs also demonstrated evidence of an increase following full implementation of the MAT/OTP component of the Waiver.

Overall Results

The findings demonstrate that beneficiaries increased utilization of SUD treatment services, particularly residential services, and MAT throughout the Waiver period. This increase may reflect the Waiver's emphasis on expanding residential providers' treatment methods and increasing the number of practitioners trained on MAT. Analysis of the number of Medicaid providers delivering SUD services showed an approximately 21 percent increase from the baseline years to 2022 and may reflect provider capacity building efforts.

The number of IMD stays and number of days of IMD treatment increased between the start of the initial implementation period and the start of the full implementation period in alignment with the Waiver's goals. There were also improvements in meeting the statewide target for ALOS in an IMD of 30 days; six out of the last eight months of the Waiver period were below 30 days and two months were only slightly above 30 days, indicating that the ALOS stabilized around the statewide goal of 30 days at the time of evaluation.

The evaluation showed a significant decrease in both the level and trend of ED visits for an SUD at the time of full implementation, suggesting evidence of the Waiver's impact on reducing ED utilization among beneficiaries with an SUD. As the full implementation of the Waiver effected increased availability of OTPs and more facilities providing MAT statewide, this decline may be representative of a shift away from reliance on EDs for SUD treatment. Decreasing ED costs during the initial implementation period lends additional support for reduced ED utilization by beneficiaries with an SUD.

The Waiver was also associated with improvements in IP stays for an SUD and IP stays for any cause. The average number of stays, average number of days and ALOS for an SUD specific and any-cause IP stays declined during the study period. Furthermore, examination of IP costs demonstrated a continued reduction in costs throughout the Waiver period.

Finally, pharmacy costs were increasing during the baseline period but began to decrease during the initial implementation period. Upon full implementation of the MAT/OTP services, pharmacy costs increased again as would be expected with wider accessibility of MAT treatment.

Lessons Learned and Recommendations

While the Waiver shows promise across several dimensions of care and improvements, there are some lessons learned and recommendations related to the provision of new services stemming from key informant interviews.

- **Issue**: Some providers noted difficulties in providing ASAM Level 3.7 MMIW management services.
  - **Recommendation**: The State should continue working with managed care organizations (MCOs) and providers to streamline or expedite the credentialling process. The State could also reiterate to providers that there are no changes to the provision or billing of existing services to reduce any confusion or uncertainty providers may have regarding billing State plan services.
- **Issue**: Some providers felt uncomfortable prescribing methadone treatment.
  - **Recommendation**: The State and/or MCOs could assist providers in prescribing methadone treatment, including providing clinical guidelines and recommendations. MCOs could facilitate collaboration among providers and existing methadone treatment facilities to address providers' concerns about lack of experience providing methadone treatment.

1. Background

Section 1115 of the Social Security Act provides states an opportunity to design and test methods for providing and funding healthcare services that meet the objectives of the federal Medicaid program and Children's Health Insurance Program (CHIP) but differ from services required by federal statute through Section 1115 Demonstration Waivers. Section 1115 Demonstration Waivers allow states flexibility in how healthcare is provided within the state, within federal guidelines. The Centers for Medicare & Medicaid Services (CMS) has designed a national evaluation strategy to ensure that demonstrations meet program objectives and to inform Medicaid policy in the future.

CMS approved the Nebraska Department of Health and Human Services (DHHS) Section 1115 Substance Use Disorder (SUD) Demonstration Waiver (the Waiver) on June 28, 2019, with a demonstration period of July 1, 2019, through June 30, 2024. The following section outlines the history, guidance, and application of the Waiver including the goals of the Waiver, evaluation activities and timeline, and the demographics of the beneficiaries impacted in accordance with the Special Terms and Conditions (STCs).[1-1]

Historical Background of the Nebraska Substance Use Disorder Waiver

The public health crisis caused by the abuse of prescription and illicit opioids adversely impacted the quality of life of individuals across the United States, including those residing in Nebraska. According to the 2020 Nebraska Behavioral Risk Factor Surveillance System (BRFSS), 2.9 percent of Nebraska adults 18 years of age or older misused opioids in 2020.[1-2] Based on data collected by the Centers for Disease Control and Prevention (CDC), the drug overdose rate in Nebraska was 6.9 to 11 overdoses per 100,000 people in 2020.[1-3] Data collected by substance abuse treatment Centers (SATCs) in Nebraska identified alcohol and methamphetamines as the most predominantly used substances in 2016.[1-4]

DHHS took steps to address the SUD and opioid use disorder (OUD) needs of its Medicaid population. Prior to the Waiver, Nebraska Medicaid provided a range of SUD services at multiple levels of care, including outpatient (OP), intensive outpatient (IOP), withdrawal management, peer support, and clinically managed residential services. The State integrated physical health, behavioral health, and substance use treatment services provided to enrollees and launched several OUD initiatives. These OUD initiatives included publishing the Pain Management Guidance document to serve as a resource to providers treating chronic and acute pain, removing barriers to the administration of naloxone in State law, developing free field guides for the safe handling of opioids for Nebraska

---

1-1 Centers for Medicare & Medicaid Services. CMS Initial Approval. Available at: https://www medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/ne/ne-substance-use-disorder/ne-sud-demo-initial-appvl-20190628.pdf. Accessed on: Mar. 16, 2023.

1-2 Nebraska Department of Health and Human Services. Nebraska Public Health Atlas. Available at: https://atlas-dhhs ne.gov/Atlas/BRFSS. Accessed on: Mar. 16, 2023.

1-3 Centers for Disease Control and Prevention. 2020 Drug Overdose Death Rates. Available at: https://www.cdc.gov/drugoverdose/deaths/2020 html. Accessed on: Mar. 16, 2023.

1-4 Nebraska Department of Health and Human Services. State Initial Application. Available at: ne-sud-demo-pa.pdf (medicaid.gov). Accessed on: Mar. 16, 2023.

State Patrol, expanding provider education for medication-assisted treatment (MAT), developing the Prescription Drug Monitoring Program (PDMP), and hosting prescription drug takebacks.[1-5]

On January 1, 2017, DHHS launched the Heritage Health managed care program to integrate physical health, behavioral health, and pharmacy services for Medicaid enrollees into a single statewide, comprehensive delivery system. As a part of this program, DHHS sought to continue using facilities that qualify as Institutions for Mental Disease (IMD) to provide residential SUD treatment services to enrollees 21 to 64 years of age and include IMD stays in the development of capitation rates. The Medicaid and CHIP Managed Care Final Rule, implemented by CMS on July 5, 2016, limited capitated payments to short-term IMD stays of 15 or fewer days for residential SUD treatment. DHHS submitted a Section 1115 SUD Demonstration Waiver application on November 27, 2018, to gain the authority to continue making capitated payments for SUD treatment services received at IMDs, regardless of the average length of stay (ALOS).[1-6]

Background of the Waiver

On June 28, 2019, CMS approved DHHS' request to implement the Waiver for a five-year period from July 1, 2019, through June 30, 2024.[1-7] The Waiver authorizes the State to provide high-quality, clinically appropriate treatment to Medicaid enrollees 19 to 64 years of age primarily diagnosed with OUD and/or other SUDs at IMDs. In addition to providing the appropriate level of care, the coverage of IMD stays reduces emergency department (ED) visits and increases referrals for OP and community-based services upon discharge. Additionally, the Waiver enables the State to implement models focused on increasing home-and-community-based support for beneficiaries and improve access to evidence-based SUD services based on the American Society of Addiction Medicine (ASAM) criteria.

The Waiver seeks to achieve six primary goals to enable the State to provide a full continuum of care for Nebraskans with an SUD, presented in Figure 1-1.

1-5 Nebraska Department of Health and Human Services. Nebraska Coalition to Prevent Opioid Abuse. Available at: https://ago nebraska.gov/sites/ago nebraska.gov/files/doc/Strategic%20Initiatives%20Update%202020.pdf. Accessed on: Mar. 16, 2023.

1-6 Centers for Medicare & Medicaid Services. Initial Application. Available at: https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/ne/ne-sud-demo-pa.pdf. Accessed on: Mar. 16, 2023.

1-7 Centers for Medicare & Medicaid Services. Initial Approval. Available at: https://www medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/ne/ne-substance-use-disorder/ne-sud-demo-initial-appvl-20190628.pdf. Accessed on: Mar. 16, 2023.

Figure 1-1—Goals of the Waiver

Goal 1	Increased rates of identification, initiation, and engagement in treatment for SUD
Goal 2	Increased adherence to and retention in treatment
Goal 3	Reductions in overdose deaths, particularly those due to opioids
Goal 4	Reduced utilization of EDs and inpatient hospital settings for treatment where the utilization is preventable or medically inappropriate through improved access to other continuum of care services
Goal 5	Fewer readmissions to the same or higher level of care where readmission is preventable or medically inappropriate
Goal 6	Improved access among beneficiaries with SUD

The Waiver aims to achieve these goals by improving access to evidence-based SUD treatment and improving the quality of available SUD treatment. The Waiver seeks to increase access to IMD stays, medically monitored inpatient withdrawal (MMIW) services, and MAT for beneficiaries with OUD.

Implementation of the Waiver

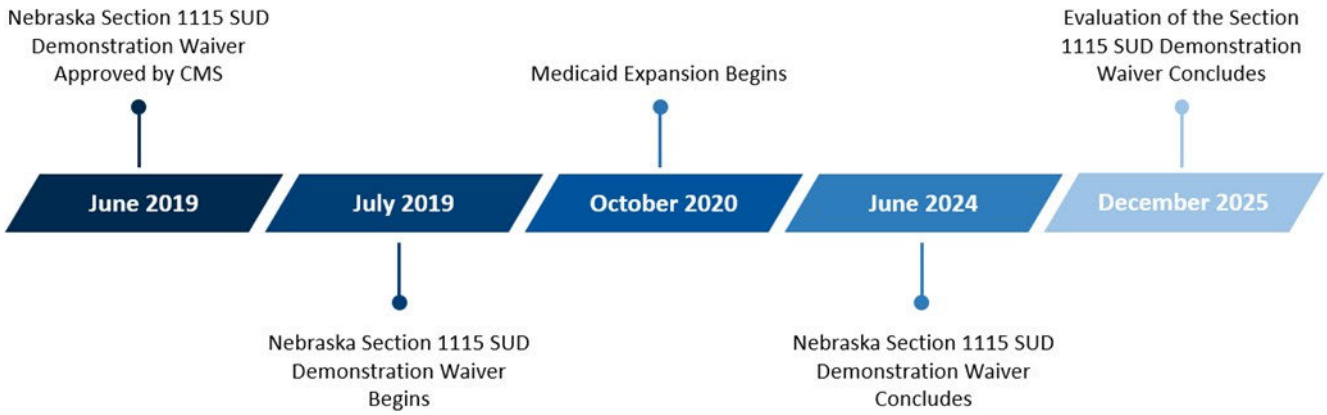
CMS approved the Waiver implementation plan on July 9, 2019.[1-8] The implementation plan outlined the State's strategy to implement each of the six CMS SUD milestones:

- **Milestone 1**: Access to critical levels of care for OUD and other SUDs
- **Milestone 2**: Widespread use of evidence-based, SUD-specific patient placement criteria
- **Milestone 3**: Use of nationally recognized, evidence-based, SUD program standards to set residential treatment provider qualifications
- **Milestone 4**: Sufficient provider capacity at each level of care, including MAT
- **Milestone 5**: Implementation of comprehensive treatment and prevention strategies to address opioid abuse and OUD
- **Milestone 6**: Improved care coordination and transitions between levels of care

Figure 1-2 displays a timeline of the key demonstration milestones for the Waiver.

[1-8] Centers for Medicare & Medicaid Services. CMS Approval – SUD Implementation Plan. Available at: https://www medicaid.gov/medicaid/section-1115-demonstrations/downloads/ne-sud-demo-appvd-sud-implementation-plan-20190709.pdf. Accessed on: Mar. 16, 2023.

Figure 1-2—Timeline of Key Demonstration Events



Due to the coronavirus disease 2019 (COVID-19) public health emergency (PHE), Nebraska's Waiver experienced delays in the implementation of some action items outlined in the implementation plan. Of particular significance, the roll outs of service delivery for opioid treatment programs (OTPs) and MMIW were delayed from an anticipated start on October 1, 2020, to June 1, 2021. In addition to the delayed implementation of the demonstration components, DHHS reported delays in updating managed care organization (MCO) contract language to:

- Reflect the specific requirement for utilization management and level of care assessments
- Require provider education regarding the requirements to facilitate MAT
- Require reviews of residential treatment providers to ensure the types of services, hours of clinical care, and credentials for staff for residential treatment settings are compliant with ASAM criteria
- Reflect specific requirements for care management follow-up after SUD treatment discharge

While the COVID-19 PHE caused delays in the implementation of these specific action items, the State anticipated a completion date of January 1, 2023. On March 31, 2023, DHHS publicly posted updates encompassing a complete review of specific language components as a part of the larger effort to reconcile and combine SUD and behavioral health service definitions and regulations in the State. DHHS also reported conducting current state analyses across three different areas while progressing toward completion of the delayed action items. First, DHHS reviewed MCO policies, procedures, and contract language detailing guidance on program standards in the ASAM criteria. Second, DHHS reviewed the current State Division of Public Health (DPH) standards regarding Medicaid and Long-Term Care (MLTC) provider screening and enrollment compliance standards and MCO processes for auditing providers to ensure compliance with these standards. Third, DHHS performed an analysis of the current MCO best practices for care and treatment coordination, identifying a widespread model for providing whole person care (WPC), and the role of Integrated Health and Social Services (IHSS) in care transitions as well as best practices for linking beneficiaries in residential facilities to community-based services and supports.

Heritage Health Adult Expansion Program

Effective October 1, 2020, DHHS expanded Medicaid eligibility to individuals 19 to 64 years of age whose income is at or below 138 percent of the federal poverty level (FPL) through its Heritage Health Adult (HHA)

expansion program. As of December 1, 2021, more than 55,000 newly eligible Nebraskans had enrolled in HHA.[1-9] HHA expansion occurred 15 months following the approved implementation date of the Waiver and coincided with the addition of MMIW and OTP services. Therefore, the impact of these HHA expansion elements must be considered when assessing the Waiver, as they were expected to increase the number of Medicaid members, members with an SUD diagnosis, and members accessing SUD services.

Amendments

On May 29, 2020, DHHS submitted an amendment requesting the authorization of federal Medicaid financial participation (FPP) for the coverage of SUD treatment-related inpatient (IP) stays in IMDs for the Medicaid expansion population covered under HHA.[1-10] The amendment would ensure that Medicaid beneficiaries eligible under the adult expansion category with an SUD would be able to receive treatment in an appropriate, cost-effective setting. DHHS requested an effective date of October 1, 2020, for the amendment to directly coincide with the start of the HHA expansion program. On September 1, 2020, CMS replied to the request notifying DHHS that an amendment was not required in order to add the new adult group to the demonstration population.[1-11]

On November 12, 2021, DHHS submitted the Managed Care Risk Mitigation COVID-19 PHE Section 1115 Demonstration application. On January 18, 2022, CMS approved the application as an amendment under the Waiver.[1-12] The amendment tests whether, in context of the COVID-19 PHE, an exemption from the regulatory prohibition in 42 Code of Federal Regulations (CFR) § 438.6(b)(1) promotes the objectives of Medicaid. This exemption allows states to enter into or modify a risk modification arrangement with an MCO after the applicable rating period has begun, and expects to support states in making appropriate, equitable payments during the PHE to aid in maintaining beneficiaries' access to care. This amendment had no impact on the Waiver's implementation or resulting data.

Demographics

The target population for the Waiver is all Medicaid beneficiaries 19 to 64 years of age. The HHA Medicaid expansion group consists of individuals 19 to 64 years of age whose income is at or below 138 percent of the FPL.

Figure 1-3 demonstrates monthly Waiver population enrollment from state fiscal year (SFY) 2017–2022. Enrollment among the Waiver population was stable prior to 2020 until the COVID-19 PHE began in March 2020. From March 2020 to October 2020, when the HHA program expanded Medicaid coverage, enrollment

[1-9] Nebraska Department of Health and Human Services. Nebraska Medicaid Annual Report State Fiscal Year 2021. Available at: https://nebraskalegislature.gov/FloorDocs/107/PDF/Agencies/Health_and_Human_Services__Department_of/107_20211130-091110.pdf. Accessed on: Mar. 16, 2022.

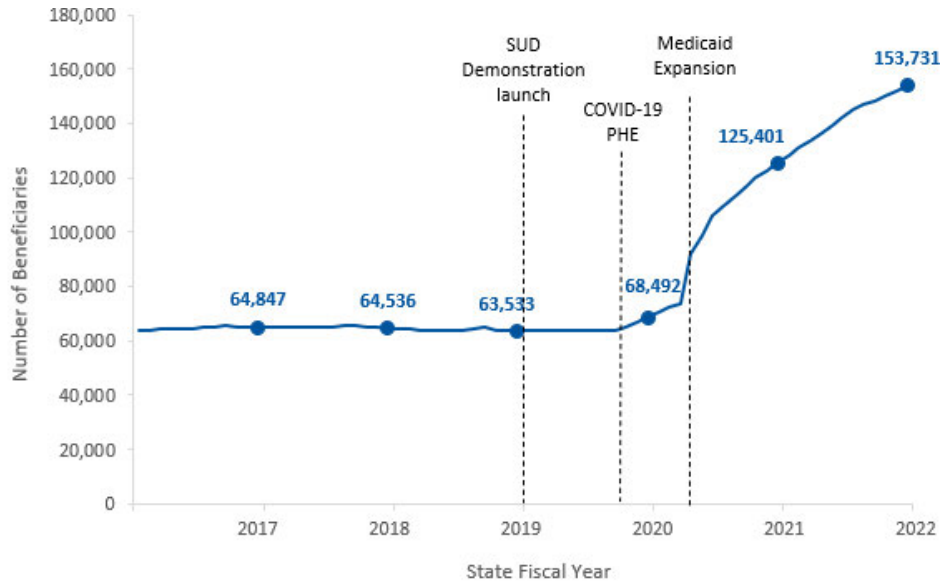
[1-10] Centers for Medicare & Medicaid Services. Amendment Request – Addition of Adult Expansion Category. Available at: https://www medicaid.gov/medicaid/section-1115-demonstrations/downloads/ne-sud-demo-pa2.pdf. Accessed on: Mar. 16,2022.

[1-11] Centers for Medicare & Medicaid Services. CMS Amendment Update – New Adult Group. Available at: https://www medicaid.gov/medicaid/section-1115-demonstrations/downloads/ne-sud-demo-amend-update-new-adult-group-09012020.pdf. Accessed on: Mar. 16, 2022.

[1-12] Centers for Medicare & Medicaid Services. Risk Mitigation Approval. Available at: https://www medicaid.gov/medicaid/section-1115-demonstrations/downloads/ne-sud-demo-risk-mitigation-appvl-01182022.pdf. Accessed on: Mar. 16, 2022.

increased 43 percent from 63,888 beneficiaries to 91,728 beneficiaries, respectively. Following Medicaid expansion, enrollment continued to increase, reaching a peak of 153,731 members at the end of SFY 2022.

Figure 1-3—Total Monthly Waiver Population, SFY 2017–2022



Note: Data labels denote total Medicaid enrollment at the end of the SFY (June 30)

Figure 1-4 shows that from SFY 2017–2020, approximately half of Waiver beneficiaries were enrolled for a full 12 months in each year, and one quarter of Waiver beneficiaries had fewer than six months of Medicaid enrollment. In SFY 2021, the percentage of Waiver beneficiaries enrolled in Medicaid for a full 12 months and fewer than six months decreased to 48 percent and 19 percent, respectively. The percentage of Waiver beneficiaries enrolled for the full year reached a peak of 69 percent in SFY 2022, while the percentage of beneficiaries enrolled in Medicaid for less than six months decreased to a low of 13 percent. This increase in continuous enrollment is likely due to the federally mandated Medicaid continuous coverage protection through the COVID-19 PHE.[1-13]

[1-13] Kaiser Family Foundation. The Families First Coronavirus Response Act: Summary of Key Provisions. Available at https://www.kff.org/global-health-policy/issue-brief/the-families-first-coronavirus-response-act-summary-of-key-provisions/. Accessed on Mar. 16, 2023.

Figure 1-4—Duration of Medicaid Enrollment Among Waiver Beneficiaries, SFY 2017–2022

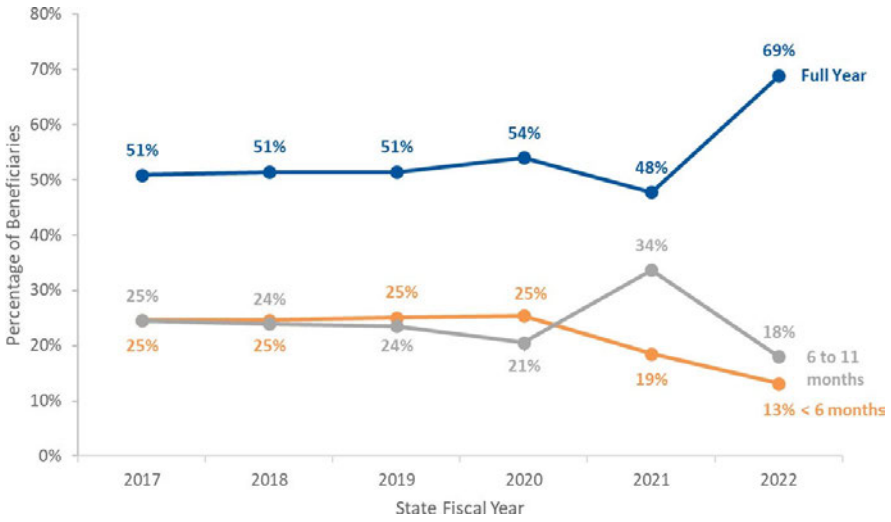
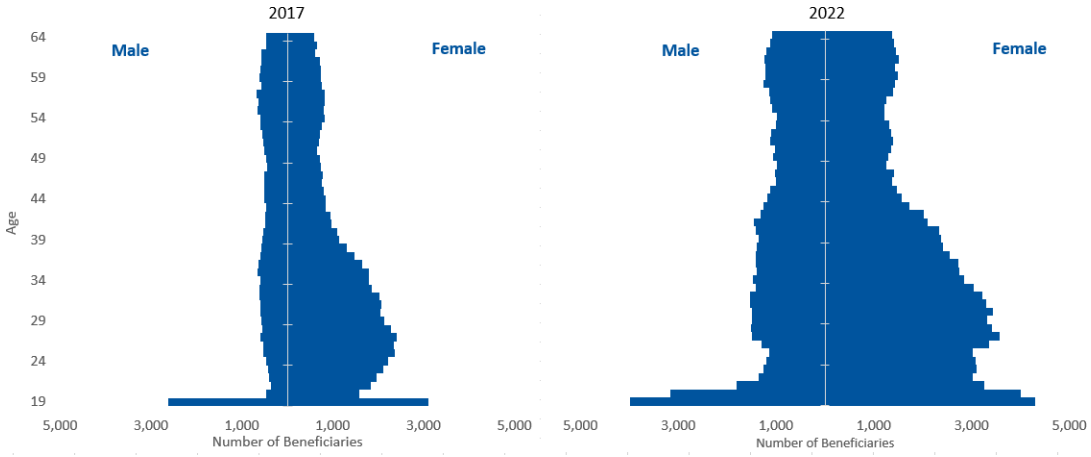


Figure 1-5 illustrates the changes in the age and gender distribution of Waiver beneficiaries between pre-Medicaid expansion in SFY 2017 and SFY 2022 following Medicaid expansion and the COVID-19 PHE. The majority of enrolled Waiver beneficiaries during both periods were women ages 19–39, making up 68 percent of Waiver beneficiaries prior to the Medicaid expansion and 64 percent of Waiver beneficiaries following the expansion. For other age groups, the distributions of men and women were similar pre-expansion and post-expansion.

Figure 1-5—Age Distribution by Gender of the Waiver Population, SFY 2017 and 2022



Evaluation Activities

In accordance with the STCs, DHHS contracted with an independent evaluator, Health Services Advisory Group, Inc. (HSAG), to conduct a comprehensive evaluation of the Waiver.[1-14] The goal of the evaluation is to provide the State and CMS a thorough, independent evaluation of the Waiver in order to estimate the impacts of the program and provide recommendations to improve program efficacy. Key evaluation activities include:

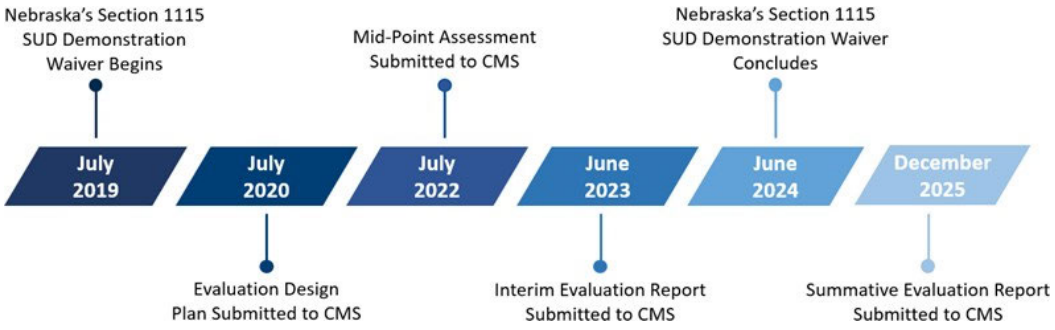
- **Evaluation Design**—The State's plan for how the evaluation of the Waiver will be conducted. The evaluation design presents the goals of the demonstration, the evaluation questions and hypothesis, and the methodologies that will be utilized to determine the extent to which the demonstration has achieved its stated goals. The evaluation design for the Waiver was developed by Public Consulting Group and approved by CMS on August 28, 2020.[1-15]
- **Mid-Point Assessment (MPA)**—The report outlined the status of the implementation process of the Waiver. The report examined the progress toward each demonstration milestone outlined in the implementation plan, identified any risks to meeting those milestones, and provided recommendations for improving the demonstration. The MPA was developed by HSAG and submitted to CMS on July 1, 2022.
- **Interim Evaluation Report**—This report discusses the evaluation progress and findings for the Waiver from July 1, 2019, through June 30, 2022. The report includes the background and goals of the demonstration, the hypotheses and evaluation questions the demonstration addresses, and the methodology of analyses. The report provides interpretations of analyses, discussion of the implications, assessment of outcomes, and recommendations to the State for the remainder of the demonstration period.
- **Summative Evaluation Report**—The report will follow the same structure as the Interim Evaluation Report, and will evaluate the entire demonstration period from July 1, 2019, through June 30, 2024.

Figure 1-6 displays the timeline of the evaluation activities.

1-14 Centers for Medicare & Medicaid Services. CMS Initial Approval. Available at: https://www medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/ne/ne-substance-use-disorder/ne-sud-demo-initial-appvl-20190628.pdf. Accessed on: Mar. 17, 2023.

1-15 Centers for Medicare & Medicaid Services. CMS SUD Evaluation Design Approval. Available at: https://www medicaid.gov/medicaid/section-1115-demonstrations/downloads/ne-sud-demo-appvd-sud-eval-dsgn-20200828.pdf. Accessed on: Mar. 17, 2023.

Figure 1-6—Timeline of Evaluation Activities



2. Evaluation Questions and Hypotheses

The primary purpose of the interim evaluation is to determine whether Nebraska's Section 1115 Substance Use Disorder (SUD) Demonstration Waiver (the Waiver) is achieving the six goals outlined in the Background section. This section provides the program's logic models, hypotheses, and research questions, which focus on evaluating the impact of the Waiver on these goals.

Demonstration Goals

The Waiver supports improvements to achieve six primary goals set by the Centers for Medicare & Medicaid Services (CMS) (cited earlier in this report):

1. Increased rates of identification, initiation, and engagement in treatment for SUD.
2. Increased adherence to and retention in treatment.
3. Reduction in overdose deaths, particularly those due to opioids.
4. Reduced utilization of emergency departments (EDs) and inpatient (IP) hospital settings for treatment where the utilization is preventable or medically inappropriate through improved access to other continuum of care services.
5. Fewer readmissions to the same or higher level of care where readmission is preventable or medically inappropriate.
6. Improved access among beneficiaries with an SUD.

These goals are consistent with the six implementation milestones for SUD provided by CMS.

- **CMS Milestone 1**: Access to critical levels of care for opioid use disorder (OUD) and other SUDs.
- **CMS Milestone 2**: Widespread use of evidence-based, SUD-specific patient placement criteria.
- **CMS Milestone 3**: Use of nationally recognized, evidence-based, SUD program standards to set residential treatment provider qualifications.
- **CMS Milestone 4**: Sufficient provider capacity at each level of care, including medication-assisted treatment (MAT).
- **CMS Milestone 5**: Implementation of comprehensive treatment and prevention strategies to address opioid abuse and OUD.
- **CMS Milestone 6**: Improved care coordination and transitions between levels of care.

To accomplish these goals, the Waiver includes key data-driven activities and interventions to improve access to evidence-based SUD treatment and improve the quality of evidence-based SUD treatment.

Hypotheses and Research Questions

Three aims and their corresponding evaluation questions led to the development of 12 hypotheses, each of which was identified to comprehensively evaluate the goals of the Waiver. The three aims of the Waiver are:

1. Improve access to health care for beneficiaries with an SUD
2. Improve quality of care for beneficiaries with an SUD
3. Maintain or reduce costs

Hypotheses were developed based on the potential for improvement, the ability to measure performance, and the use of comparison groups to isolate the effects of the demonstration and interventions. The hypotheses and evaluation questions are presented below with the program aims they were designed to evaluate.

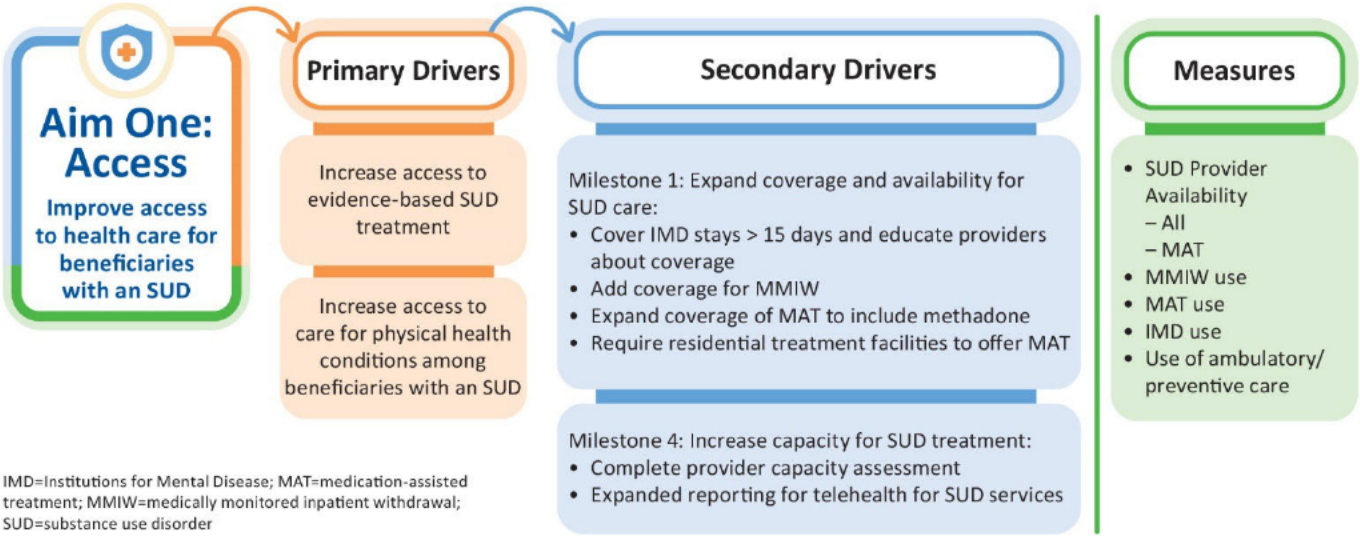
Aim One: Improve Access to Health Care for Beneficiaries with an SUD

Logic Model

In Aim One, the Waiver targets expanding coverage and capacity for SUD treatment. The evaluation design outlines a logic model that relates the goals of CMS and the Waiver to the primary drivers that contribute to achieving the goals, the secondary drivers necessary to achieve the primary drivers, and the measures.

Figure 2-1 illustrates the logic model for Aim One.

Figure 2-1—Aim One Logic Model



IMD=Institutions for Mental Disease; MAT=medication-assisted treatment; MMIW=medically monitored inpatient withdrawal; SUD=substance use disorder

Hypotheses and Evaluation Question

The hypotheses and evaluation question for Aim One are presented in Table 2-1.

Table 2-1—Aim One Evaluation Question and Hypotheses

Evaluation Question	Hypotheses
Did the demonstration improve access to healthcare for beneficiaries with an SUD?	The demonstration will increase access to evidence-based SUD treatment, reflected in increased utilization. The demonstration will increase access to evidence-based SUD treatment, reflected in increased capacity. The demonstration will increase access to care for physical health conditions among beneficiaries with an SUD.

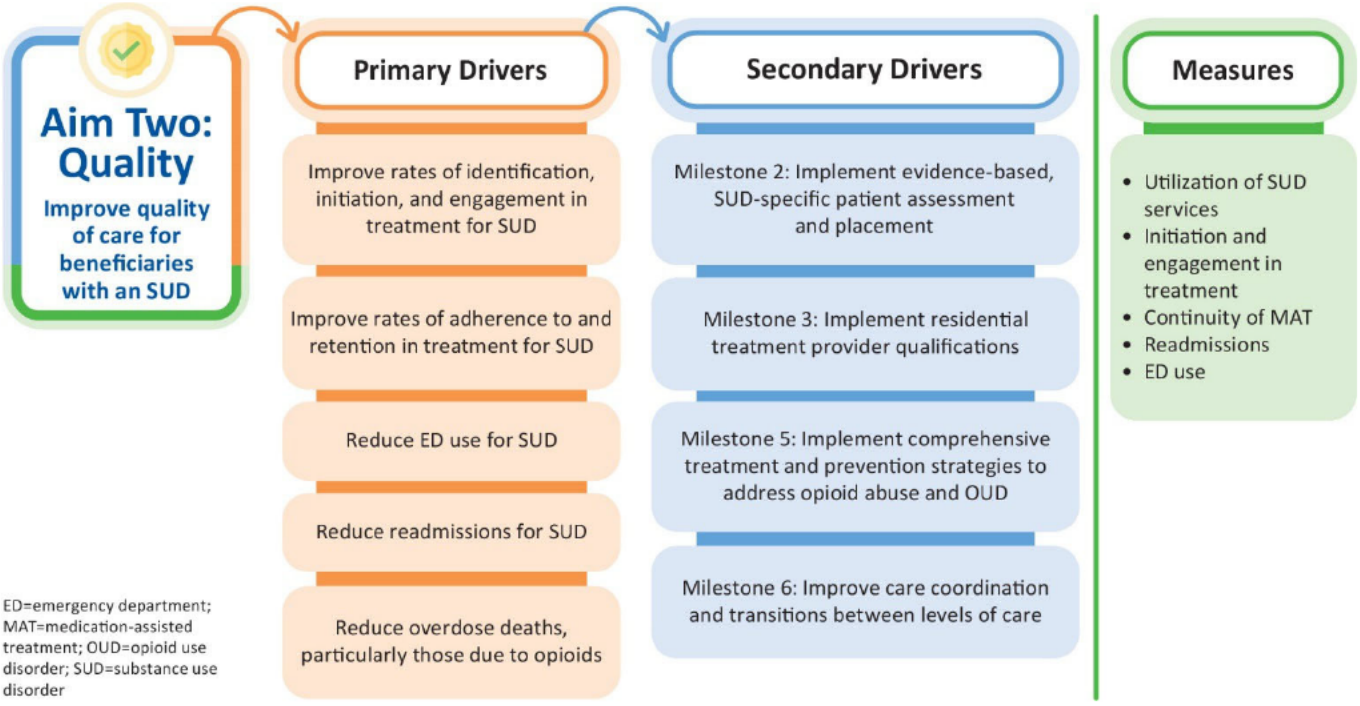
Aim Two: Improve Quality of Care for Beneficiaries with an SUD

Logic Model

Aim Two seeks to improve quality as a result of implementing several waiver components and expanding coverage. The evaluation design outlines a logic model that relates the goals of CMS and the Waiver to the primary drivers that contribute to achieving the goals, the secondary drivers necessary to achieve the primary drivers, and the measures.

Figure 2-2 illustrates the logic model for Aim Two.

Figure 2-2—Aim Two Logic Model



Hypotheses and Evaluation Question

The hypotheses and evaluation question for Aim Two are presented in Table 2-2.

Table 2-2—Aim Two Evaluation Question and Hypotheses

Evaluation Question	Hypotheses
Did the demonstration improve the quality of SUD treatment?	The demonstration will improve rates of identification, initiation, and engagement, in treatment for SUD. The demonstration will improve rates of adherence to and retention in treatment for SUD. The demonstration will reduce ED use for SUD. The demonstration will reduce readmissions for SUD. The demonstration will reduce overdose deaths, particularly those due to opioids.

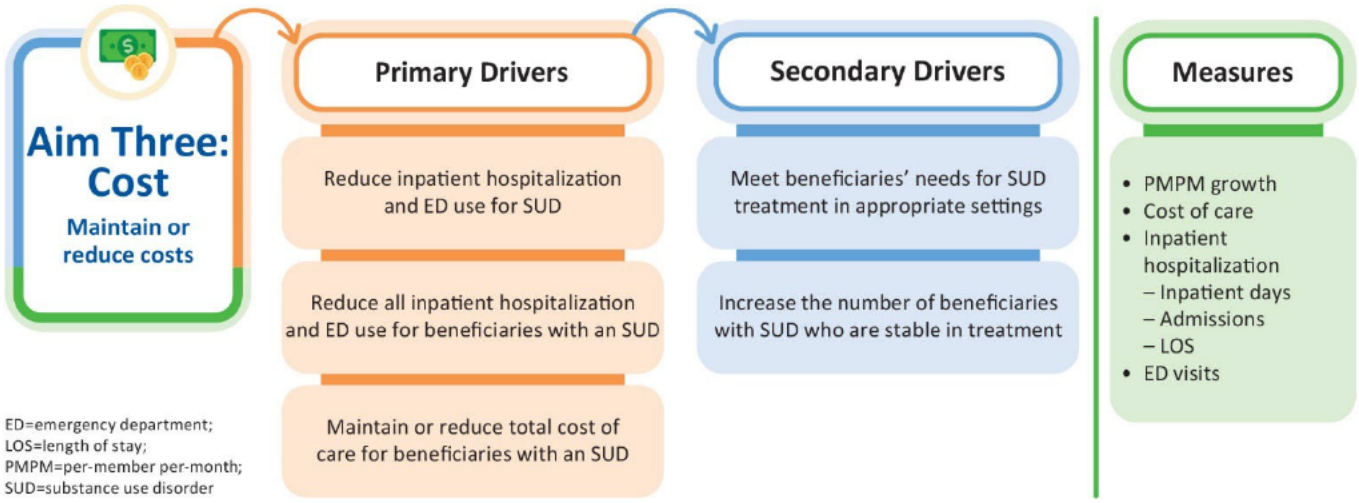
Aim Three: Maintain or Reduce Costs

Logic Model

In Aim Three, cost maintenance is an intended outcome of treating patients in the most appropriate setting and improving follow-up. The evaluation design outlines a logic model that relates the goals of CMS and the Waiver to the primary drivers that contribute to achieving the goals, the secondary drivers necessary to achieve the primary drivers, and the measures.

Figure 2-3 illustrates the logic model for Aim Three.

Figure 2-3—Aim Three Logic Model



Hypotheses and Evaluation Question

The hypotheses and evaluation question for Aim Three are presented in Table 2-3.

Table 2-3—Aim Three Evaluation Question and Hypotheses

Evaluation Question	Hypotheses
Did the demonstration maintain or reduce total cost of care?	The demonstration will reduce inpatient hospitalization and ED use for an SUD. The demonstration will reduce inpatient hospitalization and ED use for beneficiaries with an SUD. The demonstration will reduce or maintain total cost of SUD-related care. The demonstration will reduce or maintain total cost of care.

3. Methodology

The primary goal of an impact assessment in policy and program evaluation is to establish causal relationship between the introduction of a policy or program and related outcomes. To accomplish this, a comparison of outcomes between the intervention group and a valid counterfactual—the intervention group had its members not been exposed to the intervention—must be made. The gold standard for experimental design is a randomized controlled trial, which would be implemented by first identifying an intervention population, and then randomly assigning individuals to the intervention and the rest to a control group, which would serve as the counterfactual. However, random assignment is rarely feasible in practice, particularly as it relates to healthcare policies.

As such, a variety of quasi-experimental or observational methodologies have been developed for evaluating the effect of policies on outcomes. The research questions presented in the previous section will be addressed through at least one of these methodologies. The selected methodology largely depends on data availability factors relating to (1) data to measure the outcomes, (2) data for a valid comparison group, and (3) data collection during the time periods of interest—typically defined as one or two years prior to implementation and annually thereafter. Table 3-1 illustrates a list of analytic approaches that will be used as part of the evaluation and whether the approach requires data gathered at the baseline (i.e., pre-implementation) or allows for causal inference to be drawn. It also notes key requirements unique to a particular approach.

Table 3-1—Analytic Approaches

Analytic Approach	Baseline Data	Allows Causal Inference	Notes
Interrupted time series	✓	✓	Requires sufficient data points prior to and following implementation
Trend analysis	✓		Requires multiple baseline data points
Descriptive time series analysis			Relies on descriptive interpretation; does not involve statistical testing

Evaluation Design Summary

The interim evaluation of the Nebraska Section 1115 Substance Use Disorder (SUD) Demonstration Waiver (the Waiver) utilized a mixed-methods evaluation design.[3-1] Quantitative methods included descriptive statistics showing change over time in both counts and rates for specific metrics, or interrupted time series (ITS) and trend analysis to assess whether the waiver interventions effected changes across specific outcome measures. A valid comparison group could not be used because data were unavailable for a comparable population not targeted by the intervention. Additionally, out-of-state Medicaid data through the Transformed Medicaid Statistical Information System (T-MSIS) Analytic Files (TAF) were not available or viable at the time of evaluation for the

3-1 Centers for Medicare & Medicaid Services. CMS SUD Evaluation Design Approval. Available at: ne-sud-demo-appvd-sud-eval-dsgn-20200828.pdf (medicaid.gov). Accessed on: Mar. 17, 2023.

Interim Evaluation Report. T-MSIS data from other states may be viable for the Summative Evaluation Report, but only covering a limited period of the demonstration due to the two-to-three-year data lag.

A qualitative component of the Waiver was also completed. Providers, staff at the Nebraska Department of Health and Human Services (DHHS), and managed care organizations (MCOs) were interviewed to share their perceptions of and experience with the Waiver.

Target and Comparison Populations

The Waiver targeted adult Medicaid beneficiaries ages 19–64 with an SUD diagnosis. The target population included those who became eligible for Medicaid as a result of the Heritage Health Adult (HHA) expansion that began on October 1, 2020. In accordance with the Centers for Medicare & Medicaid Services (CMS)-approved evaluation design, adults older than 65 years of age were excluded from evaluation as Medicaid is rarely the primary payer for this group.[3-2] Adolescents under age 19 have the ability to access the services provided by the Waiver, however, they are not specifically targeted and were not included in analyses.

Because all Medicaid beneficiaries are eligible for services under the Waiver, no true in-state comparison population is available for this demonstration. As such, the ITS approach will compare post-waiver trends to pre-waiver trends. Where appropriate, comparisons of statewide outcomes to national trends will be made but are not considered a true counterfactual.

Evaluation Period

The formal launch date of the Waiver was July 9, 2019. The evaluation design for the Interim Evaluation Report defines the pre-implementation baseline period as July 9, 2017–July 8, 2019. However, to better align measure calculations with the most common baseline period in the monitoring metrics specifications, the measurement periods were adjusted to align with the state fiscal year (SFY) (i.e., July 1–June 30). As such, the pre-implementation baseline period and post-implementation period for the Interim Evaluation Report evaluation are defined as July 1, 2017–June 30, 2019, and July 1, 2019–June 30, 2022, respectively (Table 3-2).

Table 3-2—Evaluation Time Periods

Pre-implementation	Post-Implementation
July 1, 2017–June 30, 2019	July 1, 2019–June 30, 2022

However, implementation of the Waiver occurred at two primary points in time. Prior to the Waiver, coverage of Institutions for Mental Disease (IMD) stays less than 15 days had been available under an "in-lieu of service" authority. When the Waiver launched in July 2019, the Section 1115 authority allowed for Medicaid to begin covering SUD services in IMDs for durations greater than 15 days. DHHS anticipated being ready to offer additional new services under the Waiver (i.e., medically monitored inpatient withdrawal [MMIW] management and medication-assisted treatment/opioid treatment programs [MAT/OTP]) by October 2020 after a ramp-up period; however, the coronavirus disease 2019 (COVID-19) public health emergency (PHE) led to a delay in implementation of these services until June 2021.

3-2 Ibid

The phased approach of the Waiver implementation as well as the use of monthly measures for this evaluation allows for further refinement of the periods considered in the analysis. Thus, Health Services Advisory Group, Inc. (HSAG) considered three separate periods in the analysis, as presented in Table 3-3.

Table 3-3—Analytic Time Periods

Time Period	Dates	Description
Pre-implementation	July 1, 2017–June 30, 2019	Pre-implementation/Baseline
Initial implementation	July 1, 2019–May 31, 2021	IMD stays > 15 days covered
Full implementation	June 1, 2021–June 30, 2022	IMD stays > 15 days covered MMIW and MAT/OTP coverage

The COVID-19 PHE likely had substantial impacts on the healthcare system through social distancing measures, stay-at-home orders, and mandated shutdowns, which ultimately is expected to impact performance measure rates. Similarly, Medicaid expansion in October 2020 led to an influx of new beneficiaries and broader changes to the system that may have altered the impact of the Waiver. As such, the confounding impacts of both the COVID-19 PHE and Medicaid expansion were controlled for in the analysis and are described in detail in the Analytic Methods section.

Evaluation Measures

The evaluation measures were based on data sources that provided valid and reliable data which were readily available throughout the Waiver and evaluation activities. HSAG reviewed the quality and completeness of each data source to determine whether the data used were complete and accurate. As often as possible, measures in the evaluation were selected from nationally recognized measure stewards. However, due to the highly specialized and targeted nature of the evaluation, most measures were customized based on existing measure specifications, such as the Healthcare Effectiveness Data and Information Set (HEDIS®)[3-3] technical specifications or SUD monitoring metrics, in order to provide the most consistent and accurate calculation of measures. Table 3-4 displays the evaluation measures. Full measure specifications for each evaluation measure are presented in Appendix C.

Table 3-4—Evaluation Measures

Measure Number	Measure Name	Measure Stewards
1	Percentage of Beneficiaries Receiving Any SUD Treatment Service	CMS-constructed
2	Percentage of Beneficiaries Who Use Residential Services for SUD	CMS-constructed
3	Percentage of Beneficiaries Who Use Withdrawal Management Services	CMS-constructed
4	Percentage of Beneficiaries Who Have a Claim for MAT for SUD	CMS-constructed
5	Average Number of IMD Stays for SUD	CMS-constructed
6	Average Number of Days of IMD Treatment for SUD	CMS-constructed
7	Average Length of Stay of IMD Stays for SUD	CMS-constructed
8	Number of Providers Enrolled in Medicaid and Who Deliver SUD Services	CMS-constructed

3-3 HEDIS® is a registered trademark of the National Committee for Quality Assurance (NCQA).

Measure Number	Measure Name	Measure Stewards
9	Number of Providers Enrolled in Medicaid and Who Deliver MAT for SUD Services	CMS-constructed
10	Number of Beds Available in IMD Facilities Providing SUD Services	State-identified
11	Number of Outpatient Facilities Offering Detoxification	SAMHSA
12	Number of Facilities Offering Opioid-Specific Detoxification	SAMHSA
13	Opioid Treatment Programs	SAMHSA
14	Outpatient Facilities Offering OTPs	SAMHSA
15	Residential (Non-Hospital) Facilities Offering OTPs	SAMHSA
16	Medication-Assisted Opioid Therapy Provided at Facilities with OTPs	SAMHSA
17	Any Type of MAT	SAMHSA
18	Needing But Not Receiving Treatment at a Specialty Facility for Illicit Drug/SUD in the Past Year	SAMHSA
19	Percentage of Medicaid Beneficiaries with an SUD Who Had an Ambulatory or Preventive Care Visit	HEDIS
20	Percentage of Beneficiaries Who Initiated Treatment Within 14 Days of a New SUD Diagnosis	NCQA, NQF #0004
21	Percentage of Beneficiaries Who Initiated Treatment and Who Had Two or More Additional Services for SUD Within 34 Days of the Initiation Visit	NCQA, NQF #0004
22	Continuity of Pharmacotherapy for OUD	USC, NQF #3175
23	Average Number of ED Visits for SUD	State-identified
24	30-Day Readmission	CMS-constructed
25	Rate of Overdose Deaths, Overall and Due to Opioids	CDC
26	Average Number of Inpatient Stays for SUD	CMS-constructed
27	Average Number of Days of Inpatient Hospitalization for SUD	CMS-constructed
28	Average Length of Stay of Inpatient Hospitalization for SUD	CMS-constructed
29	Average Number of Inpatient Stays for Any Cause	CMS-constructed
30	Average Number of Days of Inpatient for Any Cause	CMS-constructed
31	Average Length of Stay of Inpatient Hospitalization for Any Cause	CMS-constructed
32	Average Number of ED Visits for Any Cause	CMS-constructed
33	PMPM Cost for SUD Treatment	CMS-constructed
34	PMPM Cost	CMS-constructed

Note: CDC: Centers for Disease Control and Prevention; CMS: Centers for Medicare & Medicaid Services; ED: emergency department; HEDIS: Healthcare Effectiveness Data and Information Set; IMD: institution for mental diseases; MAT: medication assisted treatment; NCQA: National Committee for Quality Assurance; NQF: National Quality Forum; OTP: opioid treatment program; OUD: opioid use disorder; PMPM: per member per month; SAMHSA: Substance Abuse and Mental Health Services Administration; SUD: substance use disorder; USC: University of Southern California

Data Sources

Multiple data sources were used to evaluate the 12 hypotheses of the evaluation.

- Administrative Data

  - Medicaid claims and eligibility data
  - MCO non-claims reporting data
  - Provider enrollment data
- National Surveys
  - National Survey on Drug Use and Health (NSDUH) data
  - National Survey of Substance Abuse Treatment Services (N-SSATS) data
  - Centers for Disease Control and Prevention (CDC) National Center for Health Statistics data
- Key Informant Interviews

Administrative

Administrative claims and encounter data supplied by DHHS were used to calculate most measures in this Interim Evaluation Report. The claims and encounter data included member enrollment and eligibility files; member demographics; provider files; provider specialty reference data; and institutional, professional, and pharmacy claims data. MCO non-claims reporting data included templated reports that MCOs submit on non-claims data, quality measures, and qualitative information on an ad hoc basis. The provider enrollment database, which lists all providers contracts with MCOs to furnish Medicaid-reimbursed services, was used to calculate the number of providers offering SUD treatment.

National Surveys

NSDUH is a comprehensive survey of substance use, SUDs, mental health, and the receipt of treatment for those disorders. Prior to 2020, NSDUH conducted face-to-face household interviews. Starting in 2020, NSDUH conducted both face-to-face household interviews and web-based interviews. Information from this survey was used where possible to provide context for similar measures nationally. N-SSATS is an annual survey of public and private substance abuse treatment facilities that gathers general information, characteristics of facilities and client count information. Overdose mortality data were obtained from the CDC National Center for Health Statistics.

Key Informant Interviews

HSAG conducted semi-structured interviews with State administrators, providers, and MCO staff involved in the provision of care to Nebraska Medicaid beneficiaries as a part of the Waiver. The interviews collected data on perceptions and experiences during the early stages of the Waiver regarding:

- Experiences with access, care coordination and transitions, and quality of care for SUD treatment recipients.
- Perceptions of barriers and drivers of success associated with the implementation of the Waiver.
- Unintended consequences encountered during the implementation of the Waiver.
- Impacts of the COVID-19 PHE on the implementation of the Waiver.

To engage with key informant interviewees, HSAG collaborated with DHHS to identify a list of providers and MCOs who have experience delivering services under the Waiver, as well as knowledgeable DHHS staff. HSAG recruited provider interviewees by geographic region; location within each region (e.g., urban versus rural providers); and relevant specialty. After stratifying the provider lists, HSAG sampled providers to maximize

variation in provider types and locations so that the data obtained from the interviews represents an informative sample of perspectives from a diverse group of stakeholders. In September 2021, identified stakeholders were outreached via email and interviews were scheduled accordingly. The interviews were conducted virtually from October 2021 through February 2022. A total of 10 healthcare providers, 14 DHHS staff members, and three MCOs were interviewed for the Interim Evaluation Report. Interviews lasted approximately 60 minutes to allow time for all participants to voice their detailed perspectives and experiences. The interviews were recorded and transcribed with the participants' permission to highlight key themes while maintaining their anonymity.

Notes and transcription were analyzed using open coding techniques to identify key themes and concepts raised by interviewees. Axial coding techniques were subsequently used to identify relationships between the concepts identified during open coding. The results of the analysis did not provide a statistically representative sample of experiences with the implementation of the Waiver. Rather, the responses obtained through key informant interviews were intended to provide the context for the breadth and variety of experiences among key stakeholders. Particularly with respect to provider responses, experiences of other providers may differ from those described in this report.

Analytic Methods

Multiple analytic techniques were used depending on the type of data for the measure and the availability of data.

Descriptive content analysis was used to present data related to process evaluation measures gathered from document reviews. The data were summarized to describe the activities undertaken, including highlighting specific successes and challenges.

Descriptive statistics, including frequency distributions and time series (presentation of rates over time), were used for quantitative process measures to describe the output of specific Waiver activities. These analysis techniques were also used for some short-term outcome measures in cases where the role of the measure was to describe changes in the population, but not to show specific effects of the Waiver.

Interrupted Time Series

The ITS design included monthly observations of each measure over time, beginning two years prior to the Waiver implementation. The simple ITS model of a single baseline period and single intervention period was extended to accommodate the phased implementation of the Waiver, which varies from the traditional design by considering an initial implementation period followed by a full implementation period. Thus, two counterfactuals were considered for the analysis: (1) a counterfactual based on the projected baseline trend as it would have happened without being "interrupted" by the initial Waiver implementation, as well as (2) a counterfactual based on the projected trajectory of the initial implementation trend, had the additional waiver components not been implemented. Specific outcome measures were collected for multiple time periods both before and after the demonstration period and related interventions. The trend and level of outcome measurements collected after the initial implementation were compared to the baseline projected trend and level of outcome measurements to evaluate the impact of the program. However, the trend and level of outcome measurements collected after the full implementation were compared to those of the *prior* period (initial implementation) instead of the baseline period. The generic ITS model used for the evaluation is:

$$\begin{aligned} \mathbb{W}_{tt} = \beta\beta_0 + \beta\beta_1 tttttttt_{tt} + \beta\beta_2 ttiitttttttiiii\_ppppppt_{tt} + \beta\beta_3 tttttttt \times ttiitttttttiiii\_ppppppt_{tt} + \beta\beta_4 ffffiiii\_ppppppt_{tt} \\ + \beta\beta_5 tttttttt \times ffffiiii\_ppppppt_{tt} + \mu\mu_{tt} \end{aligned}$$

Where Y_t is the outcome of interest for the time period t, *time* represents the time since the start of the evaluation period, *initial_post* is a dummy variable to indicate the time period post-initial implementation, ttttttt × ttiitttttttiiii_ppppppttt is the interaction term between *time* and *initial_post, full_post* is a dummy variable indicating the time period post-full implementation, and ttttttt × fffffiiii_ppppppttt is the interaction term between time and *full_post*. The coefficient, β_0, identifies the starting level of outcome *Y*, β_1 is the slope of the outcome between the measurements before the program, β_2 is the level change in the outcome at initial implementation, β_3 is the change in the slope for the measurements after initial implementation, β_4 is the level change of the outcome at full implementation, and β_5 is the change in the slope of the measurements after full implementation.

Indicator variables were added to the ITS model specified above for each quarter of the year to adjust for seasonality in the trend. Adjustment for the COVID-19 PHE was made by creating an indicator variable for Quarter (Q) 2 of 2020 to represent the initial wave of COVID-19 PHE-related shutdowns and stay-at-home orders, and a separate indicator variable for Q3 of 2020 through the end of Q1 of 2021 to reflect subsequent state-specific public health orders. As Medicaid expansion is expected to impact outcomes related to healthcare coverage, access, and quality, a separate indicator variable for the expansion time period was added to control for this influx of beneficiaries.

There are four coefficients of interest from the ITS analysis. The level change variables $\beta\beta_2$ and $\beta\beta_4$ indicate an "immediate" effect and represent how the outcome level has changed from the baseline period to the first observation in the initial implementation period, as well as from the initial implementation to the first observation in the full implementation period, respectively. The change in monthly trend variables $\beta\beta_3$ and $\beta\beta_5$ indicates an effect over time and represent the change in slope of the monthly trend comparing the initial implementation period to the baseline period, and the full implementation period to the initial implementation period, respectively.

Separate ITS models were conducted on the total waiver population and non-expansion population. As data for the total and non-expansion populations was available for the entire evaluation study period, the ITS model specified above with both initial and full implementation periods was used. For each ITS model Newey-West standard errors were estimated to account for possible autocorrelation and heteroscedasticity.[3-4, 3-5]

For the total and non-expansion population ITS models, administrative claims data from SFY 2017 served as an intake year prior to the baseline period for identifying members with an SUD diagnosis according to *Medicaid Section 1115 SUD Demonstrations: Technical Specifications for Monitoring Metrics, version 5.0*, *Metric #3: Medicaid Beneficiaries with SUD diagnosis (monthly)*. Metric #3 uses an 11-month lookback period to identify SUD members; therefore, members during this intake period necessarily had a claim for an SUD and rates for this time period are biased as a result of the identification of SUD members. As the baseline period for the Interim Evaluation Report begins SFY 2018, this intake period is not included in the analysis and this bias has limited impact for the total and non-expansion populations. However, for the expansion population, where members began receiving Medicaid coverage in October 2020, the bias resulting from the SUD identification method is present and is expected to impact rates during the first 12 months following expansion. As such, the period of October 2020 through September 2021 is excluded from the total population ITS model and expansion population analysis and October 2021 is treated as the first time the expansion population "enters" the analysis. As this

3-4 Linden Consulting. Conducting interrupted time-series analysis for single- and multiple-group comparisons. Available at: http://www.lindenconsulting.org/documents/ITSA_Article.pdf. Accessed on: Mar. 16, 2023.

3-5 Turner SL, *et al*. "Evaluation of statistical methods used in the analysis of interrupted time series studies: a simulation study." *BMC Medical Research Methodology* 21(2021). Available at: https://www.ncbi nlm.nih.gov/pmc/articles/PMC8403376/. Accessed on: Feb. 27, 2023.

effectively precludes an ITS analysis for the expansion population, a descriptive analysis of measure rates for this population was conducted instead

Trend Analysis

For measures wherein an ITS analysis was not available, a regression model incorporating both the linear trend in the baseline period and dummy variables for the evaluation period years was used for trend analysis. In this model, observed rates during the evaluation period were compared against the projected rates if the baseline trend had continued. Logistic regression was utilized to evaluate measures with binary outcomes. The general form of the model is:

$$\ln(YY) = \beta\beta_0 + \beta\beta_1 TTTTTTT + \blacklozenge\!\!?\!\!\blacklozenge\ \beta\beta_{tt}\delta\delta_{tt}$$

Where β_0 is the intercept representing the natural log of the rate at the first baseline year; β_1 is the average annual change in the logged rate during the baseline period, as a function of *TIME*; and $\sum \beta\beta_{tt}\delta\delta_{tt}$ represents the impact of a series of dummy variables representing each evaluation year *t*. The coefficients for these dummy variables represent the difference in the logged rate from the last year of the baseline period to the year represented by the dummy variable. *TIME* is the piecewise trend parameter for the baseline period defined as a linear trend in the baseline period and is held constant in the evaluation period by setting it equal to the value of the last year of the baseline period.

A series of hypothesis tests of the linear combination of coefficients were performed to determine if the evaluation period rates were significantly different from the projected evaluation period rates based on the *TIME* coefficient and the intercept.

Descriptive Time Series

Measures for which there are insufficient data points for a robust ITS analysis and no viable comparison group were assessed through a descriptive analysis of trends in the data.

Other Analyses

Financial Analysis

The cost analysis is designed to analyze the differences between actual and projected costs and trends for the evaluation period. Note that the cost analyses do not refer to or attempt to replicate the formal Budget Neutrality test required under Section 1115 Demonstration Waiver programs, which sets a fixed target under which waiver expenditures must fall that was set at the time the waiver was approved. HSAG's methodology for analyzing the Waiver's costs is based on CMS' guidance for assessing the costs of SUD or serious mental illness (SMI) evaluations.[3-6]

[3-6] United States Department of Health and Human Services. Appendix C: Approaches to Analyzing Costs Associated with Section 1115 Demonstrations for Beneficiaries with Serious Mental Illness/Serious Emotional Disturbance or Substance Use Disorders. Available at: https://www.hhs.gov/guidance/document/appendix-c-analyzing-costs-associated-demonstrations-smised-or-sud-0. Accessed on: Mar. 17, 2023.

SUD diagnoses were defined as having an SUD-related treatment service or SUD diagnosis in one of the following HEDIS MY 2020 Value Sets or Medications Lists:

- Alcohol and Other Drug (AOD) Medication Treatment Value Set
- Alcohol Use Disorder Treatment Medication Lists
- Opioid Use Disorder Treatment Medication Lists
- Alcohol Abuse and Dependence
- Opioid Abuse and Dependence
- Other Drug Abuse and Dependence

Members were considered a part of the SUD cost analysis group beginning the first month in which they had a relevant diagnosis or treatment claim for an SUD, and up to 11 additional months that did not include relevant claims, if the beneficiary remained enrolled in Medicaid. If a member had additional claims with a relevant diagnosis or treatment code, their inclusion in the SUD cost analysis group was extended to include up to 11 additional months following the subsequent claim, if the member remained enrolled in Medicaid.

Cost of care for SUD beneficiaries based on managed care plan payment amounts and fee-for-service reimbursement amounts were calculated for each member in each month. To identify costs associated with the diagnosis and treatment of SUD, total costs were split into SUD-IMD costs, Other SUD costs and Non-SUD costs. To identify the source of treatment cost drivers for beneficiaries, total costs were stratified by the categories of service presented in Table 3-5. Data were aggregated across all members in order to calculate per-member per-month (PMPM) costs for each month of the Waiver and 24 months prior.[3-7] ITS analyses were conducted for total cost of care, as well as for each level of cost stratification mentioned above. Seasonality indicators and variables indicating time periods affected by the COVID-19 PHE and Medicaid expansion were included in the model to control for these factors.

Table 3-5—Categories of Service

Categories of Service
IP
OP (ED and Non-ED)
LTC
Professional
Pharmacy

Note: ED: emergency department; IP: Inpatient LTC: long-term care; OP: outpatient

3-7 CMS guidance describes constructing an interrupted time series with member-level controls. However, due to a low prevalence of costs for most members—especially when stratified by category of service—robust statistical analysis at the member-level was not feasible. CMS guidance references literature on evaluating healthcare expenditures using a two-part model as one mechanism to account for this issue; however, the method described in the literature is not applied in an ITS framework, which relies on assessing trends in costs. Given the frequency of months in which beneficiaries did not incur any costs and the unbalanced nature of the panel dataset, member-level trends could not be reliably estimated.

4. Methodological Limitations

Evaluation Design

In this Interim Evaluation Report, Health Services Advisory Group, Inc. (HSAG), presents baseline and evaluation period rates for performance measures and other metrics that align with the primary objectives of the Nebraska Section 1115 Substance Use Disorder (SUD) Demonstration Waiver (the Waiver). A particular strength of this evaluation is the use of varied data sources to address a wide breadth of metrics assessing service utilization, access to care, quality of care, and beneficiary well-being.

Four key limitations exist for the data, measures, and methods used for this Interim Evaluation Report. First, a viable in-state comparison population was not available as the Waiver was implemented for all beneficiaries throughout the State simultaneously, and all beneficiaries who were eligible for the Waiver interventions received them. A comparison group of similarly situated Medicaid beneficiaries who have not received the programming changes delivered by the Waiver will be critical for obtaining a proper counterfactual comparison in the Summative Evaluation Report. The comparison group will serve as the basis for understanding what may have happened to the healthcare and health outcomes of beneficiaries if the program being evaluated had not been put in place. It is possible that Transformed Medicaid Statistical Information System (T-MSIS) data from the Centers for Medicare & Medicaid Services (CMS), while unavailable for this report, may become available for use in forming a counterfactual comparison group for the Waiver population by the time the Summative Evaluation Report is developed. Additionally, at the time of the Interim Evaluation Report, data could not be obtained from another state with similar population characteristics and similar Medicaid policies and procedures in place. Therefore, the counterfactual comparison used in this report is the comparison of measure rates projected out from the baseline into the evaluation period of the Waiver. Where sufficient data points were available, HSAG employed an interrupted times series (ITS) analysis to make comparisons while accounting for underlying seasonal trends and external factors that could influence the outcome. The results indicate whether the measure rates increased or decreased, and whether the results represented statistically significant changes in performance. It is also possible that co-interventions or other events occurring at the same time as the Waiver may have confounded measure rates; as such, a comparison of rates during the baseline period to the evaluation period would not be able to disentangle those effects from Waiver effects.

A second key limitation of the results presented in this Interim Evaluation Report is the impact of the coronavirus disease 2019 (COVID-19) public health emergency (PHE). The COVID-19 PHE impacted the healthcare industry and the entire population on a global scale, requiring substantial changes to the processes used in the delivery of healthcare. In Nebraska, as was true across the country, healthcare utilization was significantly reduced in 2020 (and to a lesser extent in 2021) and is likely to have impacted the results shown in this Interim Evaluation Report. Where possible, adjustments for the impact of the COVID-19 PHE were made in the analyses. For measures analyzed using ITS, knowledge of state-specific case counts, shutdowns, and stay-at-home orders was incorporated into the model to account for the effect of the COVID-19 PHE by controlling for affected quarters or years in the regression analyses. However, it is still possible that program impacts were confounded by the impact of the COVID-19 PHE, and the analysis cannot fully disentangle the two sources of change.

A third key limitation stems from the fact that administrative data for June 2022 contained only four months of run-out. Based on analyses of the data, it is estimated that four months of run-out captured an average of approximately 88.7 percent of paid claims/encounters. Although this may reduce the value of some measures, where decreases in outcome measures are identified, the trends extend to months for which full run-out was available and the impact on the analysis was minimal.

Lastly, the timing of the Waiver also coincided with the expansion of Medicaid in October 2020 during which a substantial number of Nebraskans became newly eligible. As such, it is difficult to separate the impact of Medicaid expansion from Waiver program impacts. While adjustment for the post-expansion time period was made in the model for the total Waiver population, the results for the total population ITS should be interpreted with caution as Waiver impacts may be conflated with expansion impacts. Furthermore, the identification of SUD members according to *Monitoring Metric #3: Medicaid Beneficiaries with SUD diagnosis (monthly)* necessitated removing the first 12 months of rates in the expansion population to avoid biasing the results.[4-1] Doing so eliminated much of the data points prior to full implementation and allowed only a descriptive analysis of the expansion population measure rates. Additional methodological adjustments to account for expansion effects, prevent SUD group identification bias, and incorporate all time points will be considered for the Summative Evaluation Report.

Data Sources

The data used in the Interim Evaluation Report includes administrative data, Medicaid claims/encounter data, member enrollment and eligibility data, demographic data, managed care organization (MCO) reports, and national survey data. The variety of data sources for this evaluation is a major strength as it allows the State to uniquely answer research questions that might not otherwise be possible with administrative data. While using numerous data sources in this Interim Evaluation Report is a desirable strength, each source has weaknesses which are important to understand within the context of the evaluation. The claims and encounter data used to calculate performance metrics were generated as part of the billing process for Medicaid and, as a result, may not be as complete or sensitive for identifying specific healthcare processes and outcomes as might have been expected from a thorough review of a patient's medical chart. This weakness may be mitigated in part if the lack of sensitivity in the claims and encounter data remains relatively stable over time and if the measures calculated from these data follow trends consistent with the underlying processes and outcomes of interest.

National survey data from the National Survey of Substance Abuse Treatment Services (N-SSATS) and the National Survey on Drug Use and Health (NSDUH) were used to assess certain outcomes that could not be captured through administrative data. Data from the National Center for Health Statistics were used to assess the rate of overdose deaths including those due to opioids. All publicly available data from these sources were retrieved but may not have covered the entirety of the evaluation period; in particular, 2022 survey data were not available at the time of this report. Data files from MCO reports were used to identify Institutions for Mental Disease (IMD) stays for measures five, six and seven; however, HSAG was unable to independently confirm and validate these IMD stays for the Interim Evaluation Report. While the MCO reports contained sufficient data to calculate IMD measures related to the number of stays, number of days and average length of stay, they lacked available data on costs related to these stays. As a result, a different approach for identify costs related to IMD stays was necessary; cost information for IMD stays from the claims and encounter data extract was used instead. It is important to note that due to the use of various data sources, the IMD stays represented in the cost analyses may not exactly match the stays that are reported for the IMD measures. HSAG and the Nebraska Department of Health and Human Services (DHHS) will work together to align on the methodology for IMD stays identification for the Summative Evaluation Report.

4-1 Centers for Medicare & Medicaid Services, Mathematica. *Medicaid Section 1115 Substance Use Disorder Demonstrations: Technical Specifications for Monitoring Metrics;* September 2022: Version 5.

5. Results

The following section details measure results by hypotheses and related evaluation questions for the Nebraska Section 1115 Substance Use Disorder (SUD) Demonstration Waiver (the Waiver). This Interim Evaluation Report provides results from the baseline period and first three years of the evaluation period. Details on measure definitions and specifications can be found in Appendix C. Table 5-1 presents the criteria used to determine whether results supported the hypothesis for each measure.

Table 5-1—Measure Conclusion Criteria

Conclusion	Criteria
Supports	• Statistical testing results were significant in a favorable direction. • For measures without statistical testing, there was conclusive evidence of moderate to large, sustained improvements in the results.
Neither supports nor fails to support (NS/FS)	• Statistical testing results were not significant for both implementation periods, or there were apparent ambiguous results in each implementation period. • For measures without statistical testing, there was no conclusive evidence of moderate to large, sustained increases or decreases in the results.
Does not support	• Statistical testing results were significant in an unfavorable direction. • For measures without statistical testing, there was conclusive evidence of moderate to large, sustained worsening in the results.
Insufficient data	• There were no pre-implementation data or insufficient data points during the Waiver implementation period to make a determination of increases/decreases in rates directly attributable to the Waiver.

Results Summary

To determine the impact the Waiver had on the percentage of beneficiaries receiving any SUD treatment service, Health Services Advisory Group, Inc. (HSAG), conducted an interrupted time series (ITS) analysis, controlling for seasonality, the coronavirus disease 2019 (COVID-19) public health emergency (PHE)-affected time periods, and the expansion of the Medicaid program. Members enrolled through Medicaid expansion were not included in the measure rates until October of 2021 to allow for a one-year ramp-up period for identifying SUD members (see the Methodology section for additional details). Additionally, analysis focused on the non-expansion Medicaid population in order to best isolate the impact of the intervention in the absence of Medicaid expansion, however, results for the total Waiver population and Medicaid expansion population are also presented for comparison.

For each ITS measure, the first figure provides a comparison between the observed rates and the estimated counterfactuals (the projected rates had each Waiver period not been implemented) for both the non-expansion Medicaid members and the total Medicaid population. The blue line represents the model-based average rates for each month, and the dashed grey lines represent the estimated counterfactual projection of the baseline period trend through June 2021 and the projection of the initial implementation period trend from June 2021 to June 2022. Three vertical reference lines are also included in the figure; the short dash grey reference lines denote the start of the initial and full implementation periods beginning in July 2019 and June 2021, respectively. The long dash grey reference line represents when expansion members are included in the analysis in October 2021. Additionally, a second figure is included to display the monthly rates for the total Medicaid population (blue), the

non-expansion members (green), and the expansion-only members (orange). This figure also includes similar vertical reference lines as were included in the first figure.

Aim One: Improve Access to Health Care for Beneficiaries with an SUD

Evaluation Question 1: Did the demonstration improve access to healthcare for beneficiaries with an SUD?

Hypothesis 1: The demonstration will increase access to evidence-based SUD treatment reflected in increased utilization.

Percentage of Beneficiaries Receiving Any SUD Treatment Services (Measure 1)

Measure 1 assesses whether the Waiver has increased access to SUD treatment by determining the percentage of beneficiaries who are receiving any SUD service. For non-expansion beneficiaries, analysis showed that the baseline trend was flat at -0.01 percentage points per month. However, after initial implementation with the Institutions for Mental Disease (IMD) coverage of stays > 15 days, the rate increased significantly by 0.15 percentage points per month compared to projected rates had the baseline trend continued (p=0.001). Following full implementation of the Waiver and the addition of the medication-assisted treatment (MAT) and opioid treatment program (OTP) services, the trend decreased by 0.21 percentage points per month compared to projected rates had the initial implementation trend continued (p<0.001).

Although no statistical testing was performed, rates for the expansion population were noticeably higher following their inclusion in the analysis beginning in October 2021. This may be driven by ongoing pent-up demand as these members continue to access needed services.

Based on the overall improvement in the rates for the non-expansion group during the Waiver period compared to the baseline period and the significant increase in rates for the initial implementation period compared to projected rates had the baseline trend continued, this measure supports the hypothesis that the Waiver will increase access to SUD treatment.

Table 5-2 shows the primary results from the ITS analysis. Full regression results are available in Appendix A. Figure 5-1 illustrates the mode-based average rate in each month (blue line) and projected rates had the baseline trend and initial implementation trend (grey dashed lines) continued. Figure 5-2 displays the average rate in the expansion population (orange) compared to the non-expansion (green) and total (blue) populations from July 2017 to June 2022.

Table 5-2—ITS Results (Measure 1, Non-Expansion and Total Population)

	Non-Expansion		Total	
Variable	Estimate	*p*-value	Estimate	*p*-value
Intercept	26.35p.p ***	<0.001	26.42p.p.***	<0.001
Baseline monthly trend	-0.01p.p.	0.683	-0.01p.p.	0.710
Level change at initial implementation	0.75p.p	0.375	0.72p.p.	0.408
Change in monthly trend – initial implementation	0.15p.p.**	0.001	0.15p.p.**	0.001
Level change at full implementation	-0.98p.p	0.438	-1.02p.p.	0.407
Change in monthly trend – full implementation	-0.21p.p.***	<0.001	-0.13p.p.*	0.081

*p< 0.1, **p<0.05, ***p<0.001
p.p. = percentage point
Note: Full model results are presented in Appendix A.

Figure 5-1—Illustration of ITS Analysis (Measure 1, Non-Expansion and Total Population)

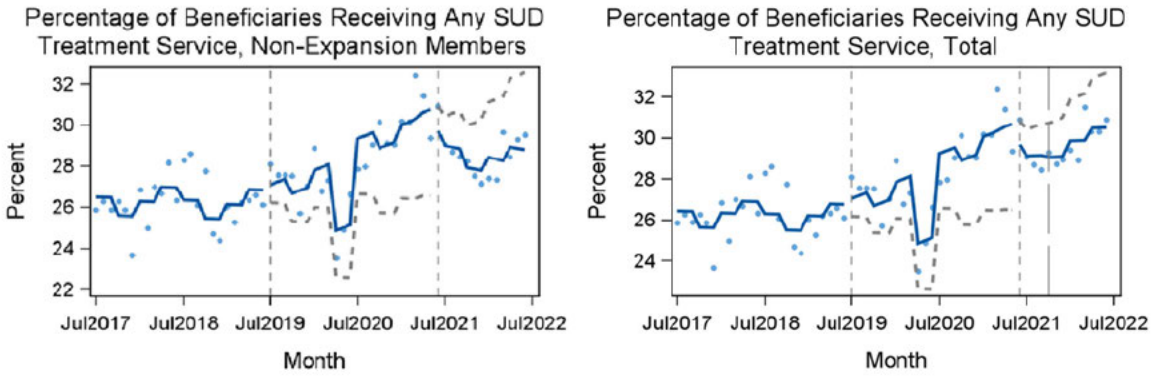
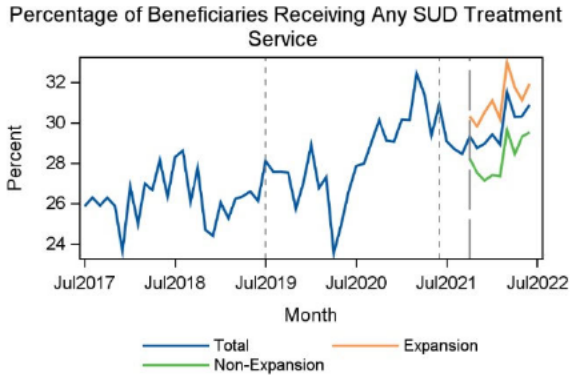


Figure 5-2—Measure 1 Trend Over Time; Non-Expansion, Total, and Expansion Populations



Measure 1 Conclusion: Supports the hypothesis

Percentage of Beneficiaries Who Use Residential Services for SUD (Measure 2)

Measure 2 assesses whether the Waiver has increased access to SUD treatment by determining the percentage of beneficiaries who use residential services for SUD. Prior to the initial implementation of the Waiver, baseline rates were flat at 0.01 percentage points per month. After the initial implementation, during which coverage was extended to IMD stays longer than 15 days, there was a statistically significant level change of 0.36 percentage points (p=0.003). The trend upon initial implementation decreased by 0.01 percentage points per month compared to projected rates had the baseline trend continued; however, this change was not statistically significant (p=0.475). After full implementation with the addition of MAT/OTP services, there was a statistically significant level change of -0.25 percentage points (p=0.084) and a statistically significant increase in the trend of 0.03 percentage points per month compared to projected rates had the baseline trend continued (p=0.022). These results are consistent with implementation plan goals to promote and expand the offering of MAT on-site at residential treatment facilities or facilitate off-site access. The impact of the COVID-19 PHE is evidenced by a dip occurring in the rates in early 2020.

Based on the significant increase in the non-expansion rates each month in the full implementation period compared to the projected rates had the initial implementation trend continued, this measure supports the hypothesis that the Waiver will increase the percentage of beneficiaries who use residential services for SUD.

Figure 5-3 illustrates the model-based average rate in each month (blue line) and projected rates had the baseline trend and initial implementation trend (grey dashed lines) continued. Table 5-3 show the primary results from the ITS analysis. Full regression results are available in Appendix A. Figure 5-4 displays the average rate for the total Medicaid population (blue), the non-expansion members (green), and the expansion-only members (orange) from July 2017 to June 2022.

Table 5-3—ITS Results (Measure 2, Non-Expansion and Total Population)

	Non-Expansion		Total	
Variable	Estimate	*p*-value	Estimate	*p*-value
Intercept	0.89p.p.***	<0.001	0.87p.p.***	<0.001
Baseline monthly trend	0.01p.p.	0.466	0.01p.p.	0.459
Level change at initial implementation	0.36p.p.**	0.003	0.36p.p.**	0.003
Change in monthly trend – initial implementation	-0.01p.p.	0.475	-0.01p.p.	0.482
Level change at full implementation	-0.25p.p.*	0.084	-0.27p.p.*	0.085
Change in monthly trend – full implementation	0.03p.p.**	0.022	0.05p.p.	0.197

*p< 0.1, **p < 0.05, ***p<0.001
Note: Full model results are presented in Appendix A.

Figure 5-3—Illustration of ITS Analysis (Measure 2, Non-Expansion and Total Population)

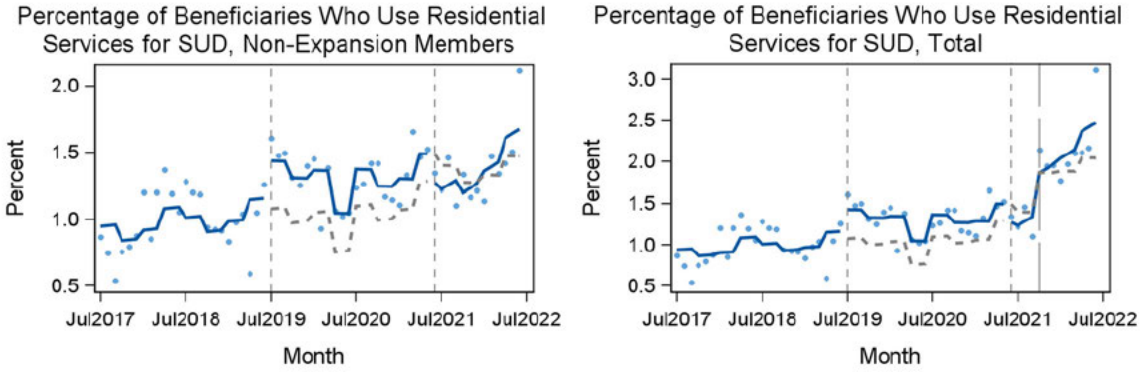
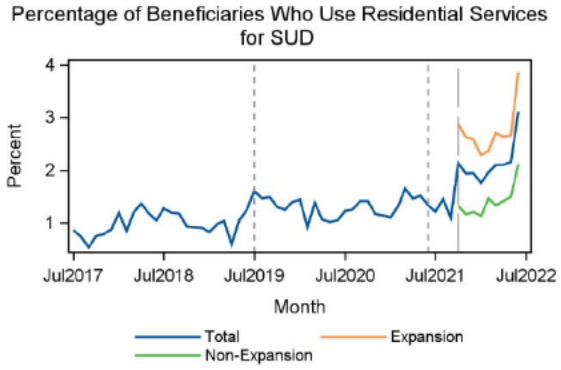


Figure 5-4—Measure 2 Trend Over Time; Non-Expansion, Total, and Expansion Populations



Measure 2 Conclusion: Supports the hypothesis

Percentage of Beneficiaries Who Use Withdrawal Management Services (Measure 3)

Measure 3 seeks to determine whether the Waiver increased the percentage of beneficiaries with an SUD who use withdrawal management services. Following full implementation of the Waiver, which added services for medically monitored inpatient withdrawal (MMIW) management and MAT/OTP, there was a statistically significant level change of -0.36 percentage points compared to the initial implementation period (p=0.067). There were no statistically significant changes in monthly trend comparing the initial implementation period to the baseline period, or when comparing the full implementation period to the initial implementation period (p=0.469 and p=0.799, respectively). The impact of the COVID-19 PHE is evidenced in the drop-in rates occurring in April 2020. Rates for Medicaid expansion members were consistently higher than those for the non-expansion and total groups.

Impacts on use of withdrawal management services are not expected to be observed until full implementation of the MMIW component in June 2021. Observed rates in the full implementation period are consistently lower than the projected trend had the trend in the baseline and initial implementation periods continued and may suggest a substitution effect in which management of withdrawal shifted to more clinically appropriate settings available under the new MMIW service category. As such, these measure results do not support the hypothesis.

Figure 5-5 illustrates the model-based average rate in each month (blue line) and projected rates had the baseline trend and initial implementation trend (grey dashed lines) continued. Table 5-4 shows the primary results from the ITS analysis. Full regression results are available in Appendix A. Figure 5-6 displays the average rate in the expansion population (orange line) compared to the non-expansion (green line) and total populations (blue line) from July 2017 to June 2022.

Table 5-4—Primary Results of ITS Analysis (Measure 3, Non-Expansion and Total Population)

	Non-Expansion		Total	
Variable	Estimate	*p*-value	Estimate	*p*-value
Intercept	0.38p.p.***	<0.001	0.37p.p.***	<0.001
Baseline monthly trend	0.01p.p.**	0.002	0.01p.p.**	0.001
Level change at initial implementation	-0.07p.p.	0.406	-0.08p.p.	0.355
Change in monthly trend – initial implementation	0.00p.p.	0.469	0.00p.p.	0.439
Level change at full implementation	-0.36p.p.*	0.067	-0.35p.p.*	0.058
Change in monthly trend – full implementation	0.00p.p.	0.799	0.00p.p.	0.731

*p< 0.1, **p < 0.05, ***p<0.001
p.p. = percentage point
Note: Full model results are presented in Appendix A.

Figure 5-5—Illustration of ITS Analysis (Measure 3, Non-Expansion and Total Population)

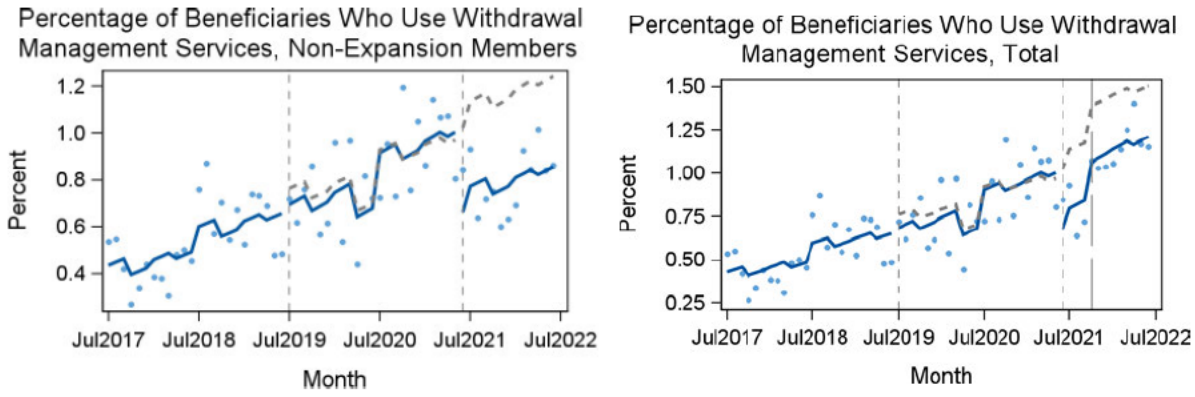
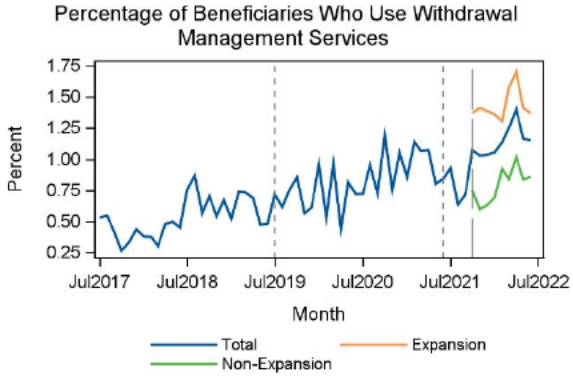


Figure 5-6—Measure 3 Trend Over Time; Non-Expansion, Total, and Expansion Populations



Measure 3 Conclusion: Does not support the hypothesis

Percentage of Beneficiaries Who Have a Claim for MAT for SUD (Measure 4)

Measure 4 seeks to determine whether the Waiver increased access to MAT for SUD by assessing the number of beneficiaries who have a claim for MAT among those diagnosed with an SUD. The monthly trend in the initial implementation period decreased by 0.03 percentage points per month compared to projected rates had the baseline trend continued, a statistically significant change at the 10 percent level (p=0.079). A large level change at initial implementation of 0.73 percentage points was also statistically significant (p=0.015). This level change may be driven by the expanded coverage of IMD stays resulting in a higher number of MAT claims captured for members with an SUD. The change in monthly trend during the full implementation period increased by 0.02 percentage points per month compared to projected rates had the initial implementation trend continued, also a statistically significant change (p=0.031).

The rates for the total Medicaid population followed a similar upward trend as the non-expansion population. Between October 2021 and June 2022, the rates of expansion beneficiaries who had a claim for MAT for an SUD were consistently lower than the rates for the non-expansion and total groups.

Based on the overall improvement of the rates over time and the improvement in the rates at full implementation, compared to projected rates had the initial implementation period trend continued, this measure supports the hypothesis that the Waiver increased access to MAT for SUD.

Table 5-5 shows the primary results from the ITS analysis. Full regression results are available in Appendix A. Figure 5-7 illustrates the model-based average rate in each month (blue line) and projected rates had the baseline trend and initial implementation trend (grey dashed lines) continued. Figure 5-8 displays the average rate in the expansion population (orange) compared to the non-expansion (green) and total (blue) populations from July 2017 to June 2022.

Table 5-5—Primary Results of ITS Analysis (Measure 4, Non-Expansion and Total Population)

	Non-Expansion		Total	
Variable	Estimate	*p*-value	Estimate	*p*-value
Intercept	5.85p.p.***	<0.001	5.86p.p.***	<0.001
Baseline monthly trend	0.02p.p.	0.315	0.02p.p.	0.321
Level change at initial implementation	0.73p.p.**	0.015	0.74p.p.**	0.015
Change in monthly trend - initial implementation	-0.03p.p.*	0.079	-0.03p.p.*	0.078
Level change at full implementation	0.25p.p.	0.425	0.24p.p.	0.430
Change in monthly trend - full implementation	0.02p.p.**	0.031	0.02p.p.	0.452

*p< 0.1, **p < 0.05, ***p<0.001
p.p. = percentage point
Note: Full model results are presented in Appendix A.

Figure 5-7—Illustration of ITS Analysis (Measure 4, Non-Expansion and Total Population)

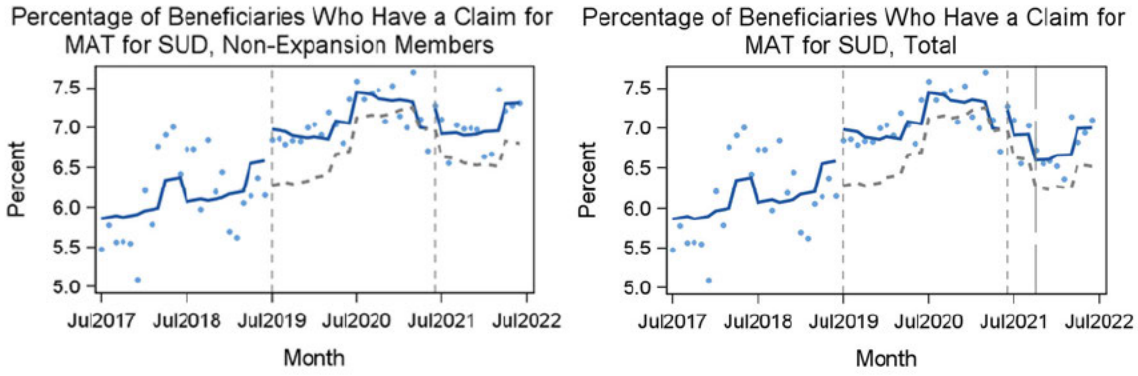
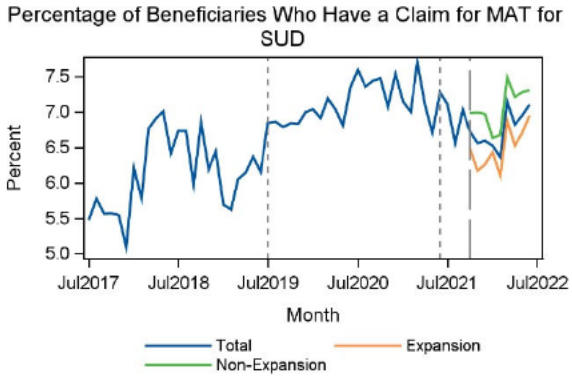


Figure 5-8—Measure 4 Trend Over Time; Non-Expansion, Total, and Expansion Populations



Measure 4 Conclusion: Supports the hypothesis

Average Number of IMD Stays for SUD (Measure 5)

Measure 5 was evaluated in two components, Measure 5a and Measure 5b. Measure 5a assesses the rate of IMD stays for SUD per 1,000 beneficiaries with an SUD diagnosis from a managed care organization (MCO) report on IMD stays from July 2019 to June 2022. To assess whether changes in the number of IMD stays for an SUD in the Waiver population are due to a change in the overall number of IMD stays for an SUD per beneficiary, or a change in the number of members with an SUD treated in an IMD, Measure 5b was calculated as a complement to Measure 5a and represents the rate of SUD beneficiaries with an IMD stay for an SUD, per 1,000 beneficiaries with an SUD diagnosis.

Because data reporting began in July 2019, coinciding with initial implementation of the Waiver, this rate represents only the post-implementation period. These data were provided to HSAG as reported by each MCO, and thus could not be confirmed or independently validated.

Approximately 10 IMD stays per 1,000 beneficiaries with an SUD diagnosis were reported at the start of the measurement period in July 2019 and declined by nearly two-thirds (65 percent) by September 2019. The higher rate in July 2019 may be related to initial implementation of the Waiver at this time, which extended Medicaid coverage to IMD stays greater than 15 days; however, without pre-implementation data, attribution to the Waiver cannot be made. The rate increased substantially in January 2021, where it remained elevated compared to prior rates. Figure 5-9 shows the average number of IMD stays for an SUD per 1,000 beneficiaries with an SUD diagnosis in each month from July 2019 to June 2022. Overall, the trend in the number of SUD beneficiaries treated in an IMD (Measure 5b) followed a similar trajectory over time as the number of IMD stays for an SUD (Measure 5a). Upon initial implementation, approximately nine per 1,000 beneficiaries with an SUD were treated in an IMD. This rate declined to 3.3 per 1,000 beneficiaries by September 2019. Figure 5-10 illustrates the average number of beneficiaries with an IMD stay per 1,000 beneficiaries diagnosed with an SUD in each month.

While the rate of IMD stays per 1,000 beneficiaries with an SUD and the rate of SUD beneficiaries treated in an IMD for an SUD per 1,000 beneficiaries with an SUD were trending in an upward trajectory overall, due to the lack of pre-implementation data and viable comparison group, there are insufficient data to attribute any changes to the Waiver.

Figure 5-9—Average Number of IMD Stays per 1,000 Beneficiaries Diagnosed with an SUD (Measure 5a)

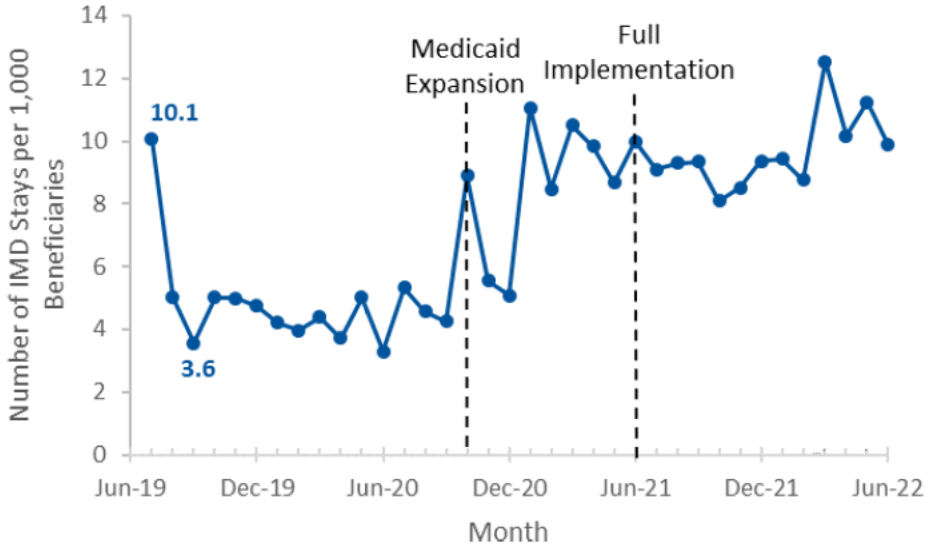
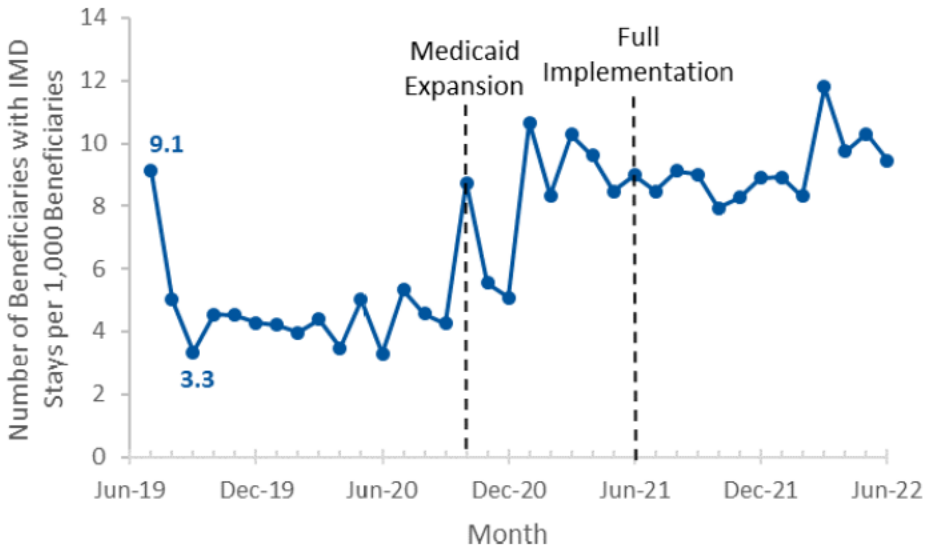


Figure 5-10—Average Number of Beneficiaries with an IMD Stay per 1,000 Beneficiaries Diagnosed with an SUD (Measure 5b)



Measure 5 Conclusion: Insufficient data

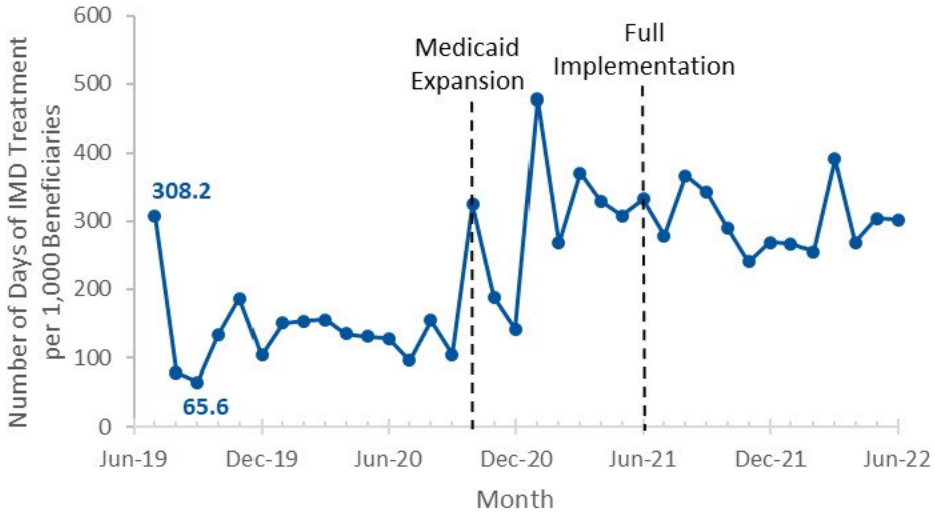
Average Number of Days of IMD Treatment for SUD (Measure 6)

Measure 6 assesses the average number of days of IMD treatment for SUD among beneficiaries with an SUD in Nebraska. Data for this measure were obtained from an MCO report on IMD stays from July 2019 to June 2022. These data were provided to HSAG as reported by each MCO, and thus could not be confirmed or independently validated.

At the time of initial implementation of the Waiver component extending coverage to IMD stays greater than 15 days, the average number of days of IMD treatment was 308.2 days per 1,000 beneficiaries with an SUD. The rate dropped to 65.6 days of IMD treatment for an SUD per 1,000 beneficiaries with an SUD in September 2019. Similar to Measure 5, the number of IMD days increased substantially in January 2021, where it remained elevated compared to prior rates. Figure 5-11 shows the average number of days of IMD treatment for SUDs per 1,000 beneficiaries with an SUD diagnosis in each month.

While the average number of days of IMD treatment for an SUD trended in an upward trajectory overall, due to the lack of pre-implementation data and viable comparison group, there are insufficient data to attribute any changes in the rate to the Waiver.

Figure 5-11—Average Number of Days of IMD Treatment for an SUD per 1,000 Beneficiaries with an SUD Diagnosis



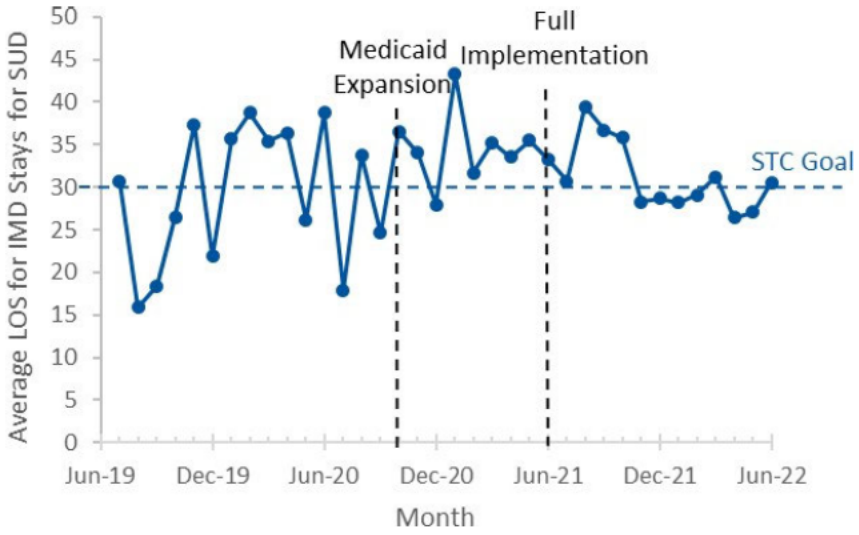
Measure 6 Conclusion: Insufficient data

Average Length of Stay of IMD Stays for SUD (Measure 7)

Measure 7 assesses the average length of stay (ALOS) of IMD stays for SUD in Nebraska. Data for these calculations are from an MCO report on IMD stays from July 2019 to June 2022. These data were provided to HSAG as reported by each MCO, and thus could not be confirmed or independently validated.

The IMD component of the Waiver allowed Medicaid to cover IMD stays with an ALOS greater than 15-days and had a goal of an ALOS of 30 days for beneficiaries with an SUD diagnosis. Figure 5-12 shows the ALOS of IMD stays for an SUD for each month with the State goal of 30 days represented by a dashed blue line. Rates varied substantially from month to month since the initial implementation of the Waiver in July 2019 through early 2021. Between November 2021 to June 2022, the ALOS in an IMD stabilized at 28.7 days, in line with the goal of a statewide ALOS of 30 days. Although the rates fluctuated around an average of 30 days, which is in alignment with the goals of the Waiver's Special Terms and Conditions (STCs), due to the lack of pre-implementation data and a viable comparison group, these results cannot be directly attributed to the implementation of the Waiver.

Figure 5-12—Average Length of Stay of IMD Stays for an SUD



Measure 7 Conclusion: Insufficient data

Hypothesis 2: The demonstration will increase access to evidence-based SUD treatment, reflected in increased capacity.

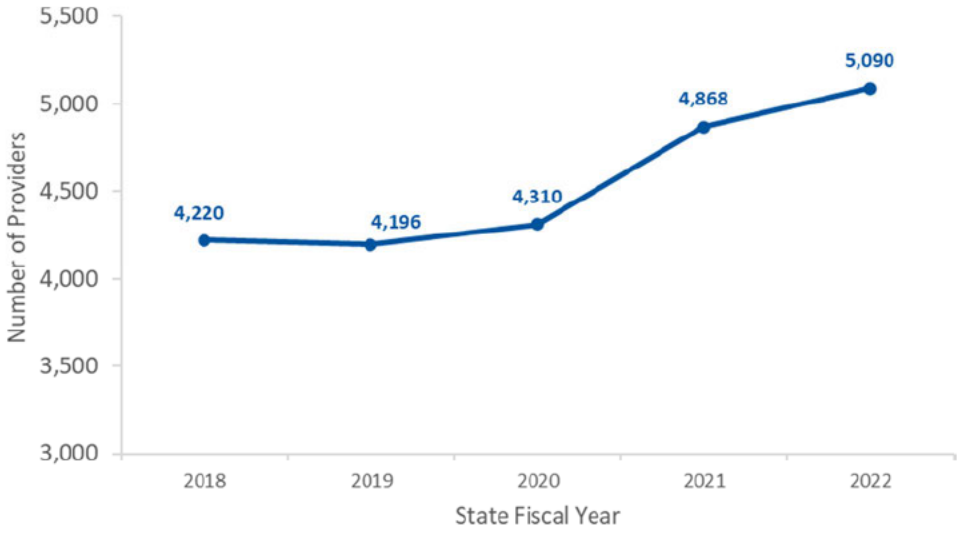
Number of Providers Enrolled in Medicaid and Who Deliver SUD Services (Measure 8)

Measure 8 seeks to determine whether the Waiver increased access to evidence-based SUD treatment, reflected in an increased number of Medicaid providers who deliver SUD services. This measure deviates slightly from the original measure name in the evaluation design, *Number of Providers Enrolled in Medicaid and Qualified to Deliver SUD Services*, to reflect that administrative claims/encounter data and provider data files were used to calculate this measure, which represents the actual counts of providers billing for SUD services. From state fiscal year (SFY) 2018 to 2022, the number of providers enrolled in Medicaid and who deliver SUD services increased each year, rising from 4,220 to 5,090 providers, a 20.6 percent increase presented in Table 5-6 and Figure 5-13. Because there was no comparison group, results presented are descriptive in nature and no causal conclusions can be drawn.

Table 5-6—Number of Providers Enrolled in Medicaid and Who Deliver SUD Services, SFY 2018—2022

	Baseline Period		Evaluation Period		
	2018	2019	2020	2021	2022
Number of Providers Enrolled in Medicaid and Who Deliver SUD Services	4,220	4,196	4,310	4,868	5,090

Figure 5-13—Number of Providers Enrolled in Medicaid and Who Deliver SUD Services, SFY 2018—2022



Measure 8 Conclusion: Supports the hypothesis

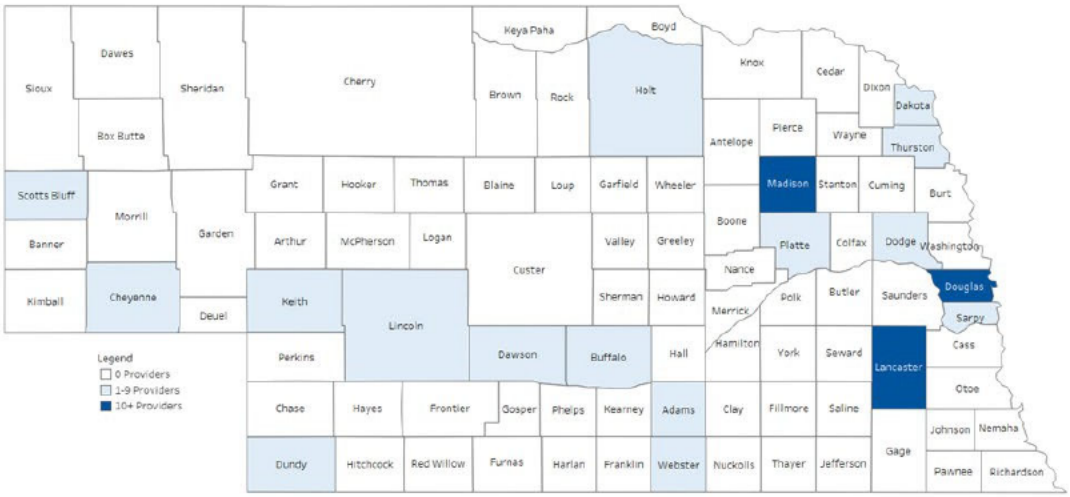
Number of Providers Enrolled in Medicaid and Who Deliver MAT for SUD Services (Measure 9)

Measure 9 assesses whether the Waiver increased access to evidence-based SUD treatment, reflected in an increased number of Medicaid providers who deliver MAT for SUD services. As of January 3, 2023, the total number of providers enrolled in Medicaid and who deliver MAT for SUD services was 105. This number was retrieved using the most up-to-date Substance Abuse and Mental Health Services Administration (SAMHSA) provider data available.

Of the 93 counties in Nebraska, 18 counties have at least one provider who delivers MAT services for SUD. As shown in Figure 5-14 these providers are primarily located in the two most populous counties of Douglas and Lancaster, which include the cities of Omaha and Lincoln, respectively. Full results are available in Appendix A.

Because the reported rate captures only a cross-sectional snapshot of the number of providers enrolled in Medicaid and who deliver MAT for SUD services at one time point, this measure has insufficient data to make a determination of whether the results are attributable to the Waiver.

Figure 5-14—Providers Enrolled in Medicaid and Who Deliver MAT for SUD Services by County, 2023[5-1]



Measure 9 Conclusion: Insufficient data

Number of Beds Available in IMD Facilities Providing SUD Services (Measure 10)

Measure 10 assesses the capacity of IMD facilities providing SUD services in the State of Nebraska. Data for this measure were available from March 2021 to June 2022 and were obtained from the Nebraska Mental Health Substance Use (MHSU) Center Roster, which tracks and monitors facility capacity expansions during the Waiver period. As of June 2021, at the end of the SFY 2021, a total of 594 beds were available in Nebraska IMD facilities providing SUD services. The capacity increased to 660 available beds in June 2022 at the end of SFY 2022.

Of the 93 counties in Nebraska, only seven counties reported beds in IMD facilities providing SUD services, presented in Table 5-7. Douglas County added the most beds in IMD facilities providing SUD services from June 2021 to June 2022, increasing capacity by 44 beds from 251 to 295. Hall and Platte counties did not report an increase in the number of beds, and Holt County had a decrease of one bed. In Madison County, zero beds were available in June 2021; 33 beds were added by June 2022. Lancaster County had a slight decrease in its count, falling from 171 beds in June 2021 to 155 beds in June 2022. Otoe County increased capacity by adding six additional beds by June 2022.

All data points presented were at the time of or following full implementation of the Waiver. While overall the number of beds in the State increased from June 2021 to June 2022, the lack of sufficient pre-Waiver data only allows for descriptive analyses and no causal attributions to Waiver impacts can be made.

5-1 Pottawattamie (Iowa) County borders Nebraska and contains one provider enrolled in Medicaid and delivers MAT for SUD services.

Table 5-7—Number of Beds Available in IMD Facilities Providing SUD Services, Total and by County (Measure 10)

Number of Beds by County	June 2021	June 2022
Douglas	251	295
Hall	43	43
Holt	76	75
Lancaster	171	155
Madison	0	33
Otoe County	28	34
Platte County	25	25
Nebraska (Total)	**594**	**660**

Measure 10 Conclusion: Insufficient data

Number of Outpatient Facilities Offering Detoxification (Measure 11)

Measure 11 assesses the number of outpatient (OP) facilities offering detoxification using results from the National Survey of Substance Abuse Treatment Services (N-SSATS). Data were available from 2017–2020. For comparison to national benchmarks, the ratio of facilities per 100,000 in the adult United States population aged 18 years and older was calculated. The survey reference date for each year was in late March.

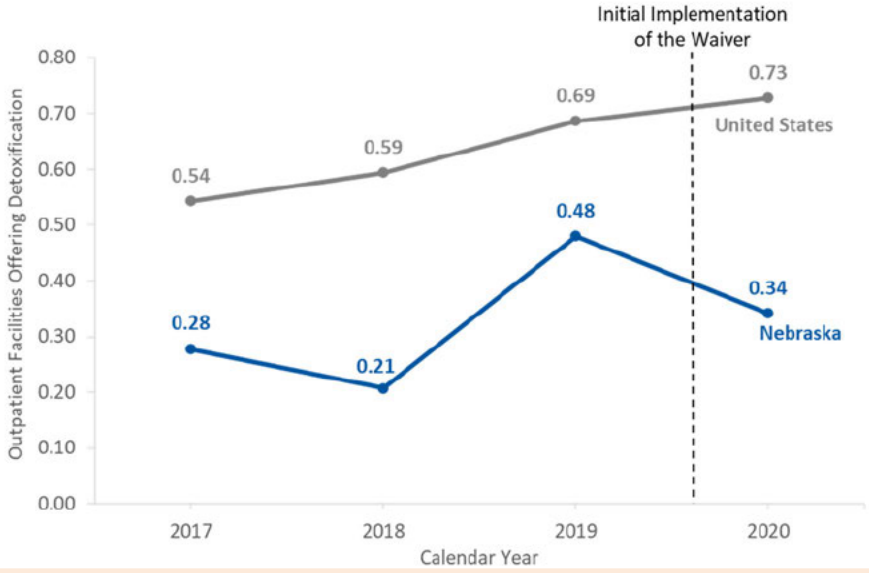
The ratio of Nebraska's OP facilities offering detoxification to its adult population varied between 2017 and 2020. While decreasing from 0.28 in 2017 to 0.21 in 2018, the rate spiked to 0.48 in 2019 when there were seven OP facilities offering detoxification. The rate then decreased to 0.34 in 2020. In comparison, the United States ratio of OP facilities offering detoxification increased each year during this period, increasing steadily from 0.54 in 2017 to 0.73 in 2020. Overall, Nebraska had fewer OP facilities providing services for detoxification relative to the size of the adult population compared to the United States average from 2017 to 2020. Because full implementation of the MAT/OTP service categories did not occur until June 2021, results presented here effectively represent the pre-implementation period. Full results and assessment of the Waiver's full implementation will be presented in the Summative Evaluation Report. Measure 11 results are presented in Table 5-8 and Figure 5-15.

Table 5-8—Number of Outpatient Facilities Offering Detoxification

	Nebraska			United States		
	# of OP Facilities Offering Detox	18+ Population	# of Facilities per 100,000 Adult Residents	# of OP Facilities Offering Detox	18+ Population	# of Facilities per 100,000 Adult Residents
2017	4	1,440,013	0.28	1,366	251,400,193	0.54
2018	3	1,449,377	0.21	1,505	253,368,356	0.59
2019*	7	1,458,334	0.48	1,752	255,200,373	0.69
2020	5	1,462,537	0.34	1,869	256,662,010	0.73

*Initial implementation of the Waiver began July 1, 2019; however, full implementation of the MAT/OTP service categories did not occur until June 2021.

Figure 5-15—Number of Outpatient Facilities Offering Detoxification per 100,000 Adult Residents



Measure 11 Conclusion: Insufficient data

Number of Facilities Offering Opioid-Specific Detoxification (Measure 12)

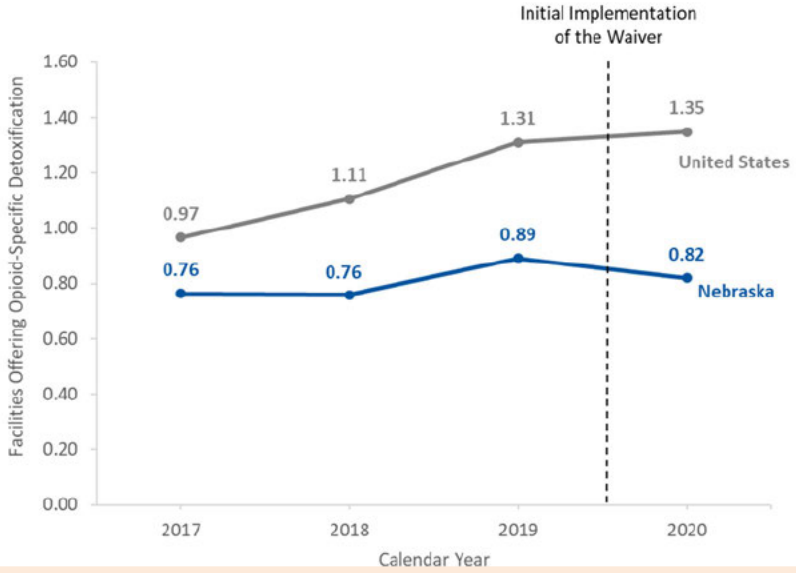
Measure 12 aims to evaluate the number of facilities offering opioid-specific detoxification. There were 0.76 facilities offering opioid-specific detoxification per 100,000 adult residents in Nebraska in 2017 and 2018. This rate increased to 0.89 in 2019 before decreasing to 0.82 in 2020. Across the United States, the rate of facilities offering opioid-specific detoxification per 100,000 adult residents increased each year from 2017 to 2020. Compared to the United States average, Nebraska consistently had fewer facilities providing opioid-specific detoxification relative to the size of the adult population across all years reported. Because full implementation of the MAT/OTP service categories did not occur until June 2021, results presented here effectively represent the pre-implementation period. Full results and assessment of the Waiver's full implementation will be presented in the Summative Evaluation Report. The results for Measure 12 are presented in Table 5-9 and Figure 5-16.

Table 5-9—Number of Facilities Offering Opioid-Specific Detoxification

	Nebraska			United States		
	# of Facilities Offering Opioid-Specific Detox	18+ Population	# of Facilities per 100,000 Adult Residents	# of Facilities Offering Opioid-Specific Detox	18+ Population	# of Facilities per 100,000 Adult Residents
2017	11	1,440,013	0.76	2,430	251,400,193	0.97
2018	11	1,449,377	0.76	2,800	253,368,356	1.11
2019*	13	1,458,334	0.89	3,342	255,200,373	1.31
2020	12	1,462,537	0.82	3,459	256,662,010	1.35

*Initial implementation of the Waiver began July 1, 2019; however, full implementation of the MAT/OTP service categories did not occur until June 2021.

Figure 5-16—Number of Facilities Offering Opioid-Specific Detoxification per 100,000 Adult Residents



Measure 12 Conclusion: Insufficient data

Opioid Treatment Programs (Measure 13)

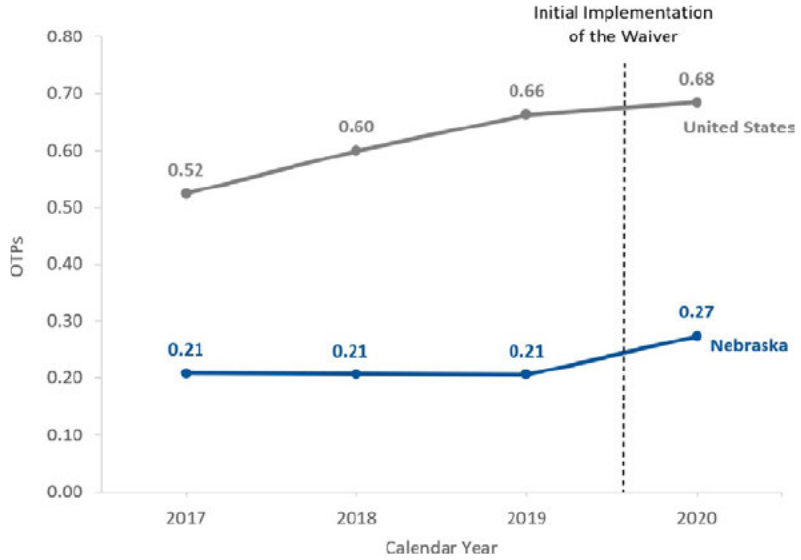
Measure 13 assesses the number of facilities with OTPs available. In Nebraska, there were three OTPs available from 2017–2019, equivalent to 0.21 per 100,000 adult residents. A fourth OTP was made available in 2020, bringing the rate to 0.27 per 100,000 adult residents. In comparison, the ratio of OTPs to 100,000 adult residents increased each year across the United States population and was consistently higher than that of Nebraska. However, as data presented here occurred before full implementation of the MAT/OTP component of the Waiver in June 2021, evidence of an increase in the number of OTPs is not expected. Full results and assessment of the Waiver's full implementation will be presented in the Summative Evaluation Report. Measure 13 results are presented in Table 5-10 and Figure 5-17.

Table 5-10—Opioid Treatment Programs

	Nebraska			United States		
	# of OTPs	18+ Population	# of OTPs per 100,000 Adult Residents	# of OTPs	18+ Population	# of OTPs per 100,000 Adult Residents
2017	3	1,440,013	0.21	1,317	251,400,193	0.52
2018	3	1,449,377	0.21	1,519	253,368,356	0.60
2019*	3	1,458,334	0.21	1,691	255,200,373	0.66
2020	4	1,462,537	0.27	1,754	256,662,010	0.68

*Initial implementation of the Waiver began July 1, 2019; however, full implementation of the MAT/OTP service categories did not occur until June 2021.

Figure 5-17—Opioid Treatment Programs (OTPs) per 100,000 Adult Residents



Measure 13 Conclusion: Insufficient data

Outpatient Facilities Offering OTPs (Measure 14)

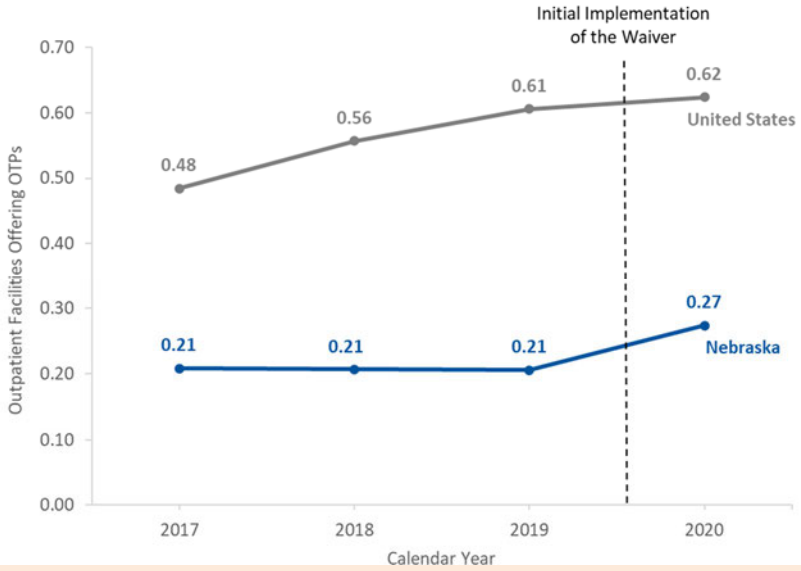
Measure 14 assesses the number of OP facilities that offer OTPs. In Nebraska, there were three OP facilities offering OTPs from 2017–2019, equivalent to 0.21 per 100,000 adult residents. A fourth OP facility offering an OTP was made available in 2020. Nebraska counts of OP facilities offering OTPs match the counts of total facilities offering OTPs as seen in Measure 13, indicating that all OTPs in Nebraska are in OP facilities. Across the United States, the ratio of OP facilities offering OTPs per 100,000 adult residents increased each year, with 0.48 in 2017 and increasing to 0.62 by 2020. This ratio was also higher than that of Nebraska for all reported years. As data reported here occurred before full implementation of the MAT/OTP component of the Waiver in June 2021, evidence of an increase in the number of OP facilities offering OTPs is not expected. Full results and assessment of the Waiver's full implementation will be presented in the Summative Evaluation Report. The results for Measure 14 are displayed in Table 5-11 and Figure 5-18.

Table 5-11—Outpatient Facilities Offering Opioid Treatment Programs (OTPs)

	Nebraska			United States		
	# of OP Facilities Offering OTPs	18+ Population	# of Facilities per 100,000 Adult Residents	# of OP Facilities Offering OTPs	18+ Population	# of Facilities per 100,000 Adult Residents
2017	3	1,440,013	0.21	1,218	251,400,193	0.48
2018	3	1,449,377	0.21	1,411	253,368,356	0.56
2019*	3	1,458,334	0.21	1,546	255,200,373	0.61
2020	4	1,462,537	0.27	1,602	256,662,010	0.62

*Initial implementation of the Waiver began July 1, 2019; however, full implementation of the MAT/OTP service categories did not occur until June 2021.

Figure 5-18—Outpatient Facilities Offering Opioid Treatment Programs (OTPs) per 100,000 Adult Residents



Measure 14 Conclusion: Insufficient data

Residential (Non-Hospital) Facilities Offering OTPs (Measure 15)

Measure 15 assesses the number of residential (non-hospital) facilities offering OTPs. Between 2017 and 2020, Nebraska did not report any residential facilities offering an OTP. As a result, there were insufficient data available to draw any conclusions, and no comparisons were made to national data, which ranged between 0.04 and 0.06 facilities per 100,000 adult residents.

Measure 15 Conclusion: Insufficient data

Medication-Assisted Opioid Therapy Provided at Facilities with OTPs (Measure 16)

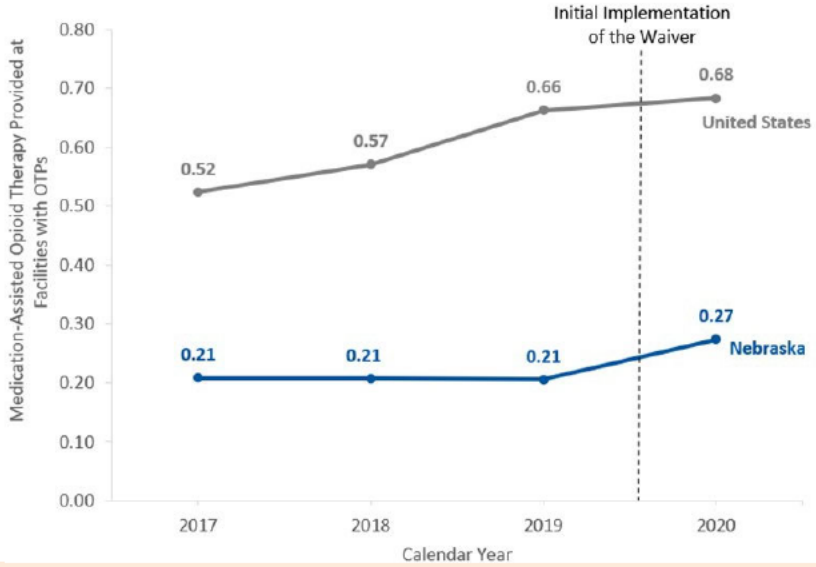
Measure 16 examines the number of facilities with OTPs that provide medication-assisted opioid therapy. In Nebraska, there were three facilities offering OTPs that provided medication-assisted opioid therapy from 2017–2019, equivalent to 0.21 per 100,000 adult residents. A fourth facility with OTPs began to provide medication-assisted opioid therapy in 2020 after the launch of the Waiver. These counts match the counts of the number of facilities offering OTPs in Nebraska as observed in Measure 13, indicating that all facilities with OTPs provided medication-assisted opioid therapy from 2017–2020. Rates in Nebraska were lower than that of the national average for each year, which increased consistently from 0.52 in 2017 to 0.68 in 2020. As data reported here occurred before full implementation of the MAT/OTP component of the Waiver in June 2021, evidence of an increase in the number of residential facilities offering OTPs is not expected. Full results and assessment of the Waiver's full implementation will be presented in the Summative Evaluation Report. Results for Measure 16 are presented in Table 5-12 and Figure 5-19

Table 5-12—Medication-Assisted Opioid Therapy Provided at Facilities with OTPs

	Nebraska			United States		
	Medication-Assisted Opioid Therapy Provided at Facilities with OTPs	18+ Population	# of Facilities per 100,000 Adult Residents	Medication-Assisted Opioid Therapy Provided at Facilities with OTPs	18+ Population	# of Facilities per 100,000 Adult Residents
2017	3	1,440,013	0.21	1,317	251,400,193	0.52
2018	3	1,449,377	0.21	1,447	253,368,356	0.57
2019*	3	1,458,334	0.21	1,691	255,200,373	0.66
2020	4	1,462,537	0.27	1,754	256,662,010	0.68

*Initial implementation of the Waiver began July 1, 2019, but full implementation of the MAT/OTP service categories did not occur until June 2021.

Figure 5-19—Medication-Assisted Opioid Therapy Provided at Facilities with OTPs per 100,000 Adult Residents



Measure 16 Conclusion: Insufficient data

Any Type of MAT (Measure 17)

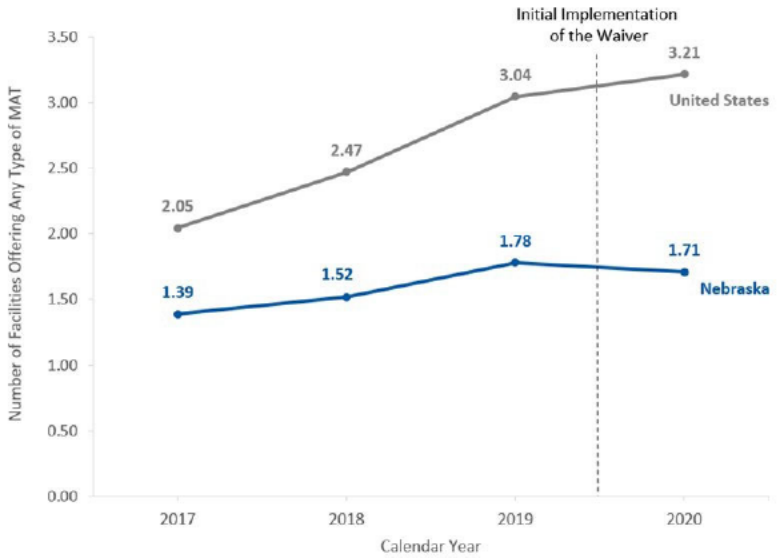
Measure 17 assesses the number of facilities that offered any type of MAT. In Nebraska, the number of facilities offering any type of MAT increased from 20 in 2017 to a peak of 26 in 2019 before decreasing to 25 in 2020. This is reflected in the ratio of facilities offering any type of MAT per 100,000 adult residents; the rate increased from 1.39 in 2017 to a peak of 1.78 in 2019 before decreasing to 1.71 in 2020. In comparison, the national average increased steadily during that timeframe from 2.05 in 2017 to 3.21 in 2020. While the number of Nebraska facilities offering any type of MAT is trending in the desired direction, all data reported here occurred before full implementation of the MAT/OTP component of the Waiver in June 2021; thus, an increase in the number of facilities offering MAT during this time period would not necessarily be expected. Full results and assessment of the Waiver's full implementation will be presented in the Summative Evaluation Report. The results for Measure 17 are displayed in Table 5-13 and Figure 5-20.

Table 5-13—Any Type of Medication-Assisted Treatment (MAT)

	Nebraska			United States		
	# of Facilities Offering Any Type of MAT	18+ Population	# of Facilities per 100,000 Adult Residents	# of Facilities Offering Any Type of MAT	18+ Population	# of Facilities per 100,000 Adult Residents
2017	20	1,440,013	1.39	5,143	251,400,193	2.05
2018	22	1,449,377	1.52	6,259	253,368,356	2.47
2019*	26	1,458,334	1.78	7,770	255,200,373	3.04
2020	25	1,462,537	1.71	8,250	256,662,010	3.21

*Initial implementation of the Waiver began July 1, 2019, but full implementation of the MAT/OTP service categories did not occur until June 2021.

Figure 5-20—Any Type of Medication Assisted Treatment (MAT) per 100,000 Adult Residents



Measure 17 Conclusion: Insufficient data

Needing But Not Receiving Treatment at a Special Facility for Illicit Drug/SUD in the Past Year (Measure 18)

Measure 18 seeks to examine the treatment gap for beneficiaries with an illicit drug or substance use disorder. Data were obtained from the National Survey on Drug Use and Health (NSDUH) Restricted-Use Data Analysis System (RDAS), with data available in year-pairs for state-level analyses. The year-pairs of data relevant to the Interim Report evaluation are 2017–2018 and 2018–2019. State estimates for 2019–2020 were not available due to SAMHSA's concerns regarding the mode of survey collection.[5-2] Estimates are inclusive of all ages surveyed, as age stratifications were not available for these data. Rates were calculated by dividing the number of respondents who needed illicit drug or SUD treatment from a specialty facility but did not receive it by the

5-2 Substance Abuse and Mental Health Services Administration. State Data Tables and Reports From the 2019-2020 NSDUH. Available at: https://www.samhsa.gov/data/nsduh/state-reports-NSDUH-2020. Accessed on: Mar 10, 2023.

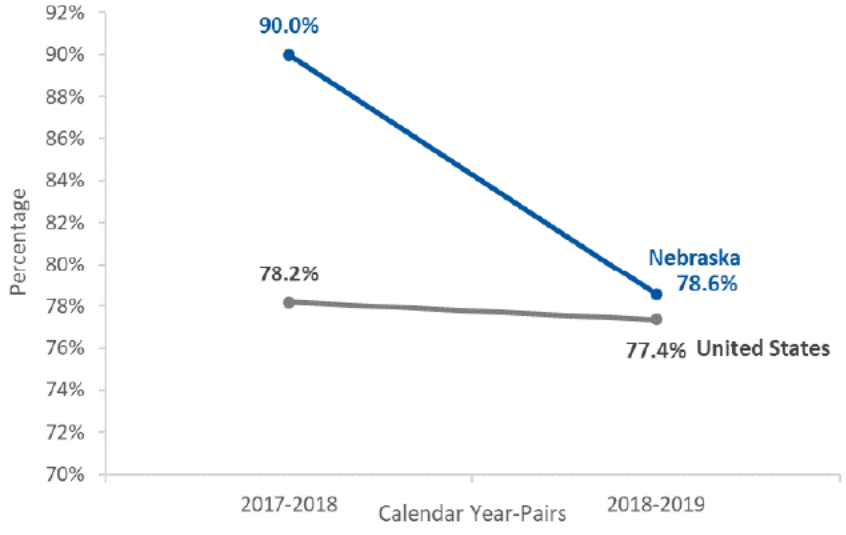
number of respondents who needed treatment. In Nebraska, 90 percent of survey respondents who needed treatment did not receive it in survey year-pair 2017–2018 and this rate decreased to 78.6 percent in 2018–2019.[5-3] Rates for the total United States population remained stable during this time, declining slightly from 78.2 percent in 2017–2018 to 77.4 percent in 2018–2019. As all data reported occurred before initial implementation of the Waiver in July 2021, there are insufficient data to make any determination of the Waiver impact. If additional data overlapping with the Waiver evaluation period become available in the future, an assessment of the Waiver's impact on this measure will be presented in the Summative Evaluation Report. Results for Measure 18 are displayed in Table 5-14 and Figure 5-21.

Table 5-14—Needing But Not Receiving Treatment at a Specialty Facility for Illicit Drug/SUD in the Past Year

	Nebraska			United States		
	Needed SUD Treatment but Did Not Receive	Needed SUD Treatment	Rate	Needed SUD Treatment but Did Not Receive	Needed SUD Treatment	Rate
2017-2018	9,000 (3,000)	10,000 (3,000)	90.0%	3,624,000 (131,000)	4,636,000 (151,000)	78.2%
2018-2019	11,000 (3,000)	14,000 (3,000)	78.6%	3,694,000 (123,000)	4,775,000 (140,000)	77.4%

Note: The numerators and denominators in this table are weighted counts to represent statewide estimates. Standard errors are in parentheses.

Figure 5-21—Needing But Not Receiving Treatment at a Specialty Facility for Illicit Drug/SUD in the Past Year



5-3 Note, please use caution when interpreting results due to small sample sizes, particularly among the Nebraska population. The counts reported do not represent the raw number of respondents. Observations are weighted so that the weighted sample represents the civilian, noninstitutionalized population for the total United States population and for each state.

Measure 18 Conclusion: Insufficient data

Hypothesis 3: The demonstration will increase access to care for physical health conditions among beneficiaries with an SUD.

Percentage of Medicaid Beneficiaries with an SUD Who Had an Ambulatory or Preventive Care Visit (Measure 19)

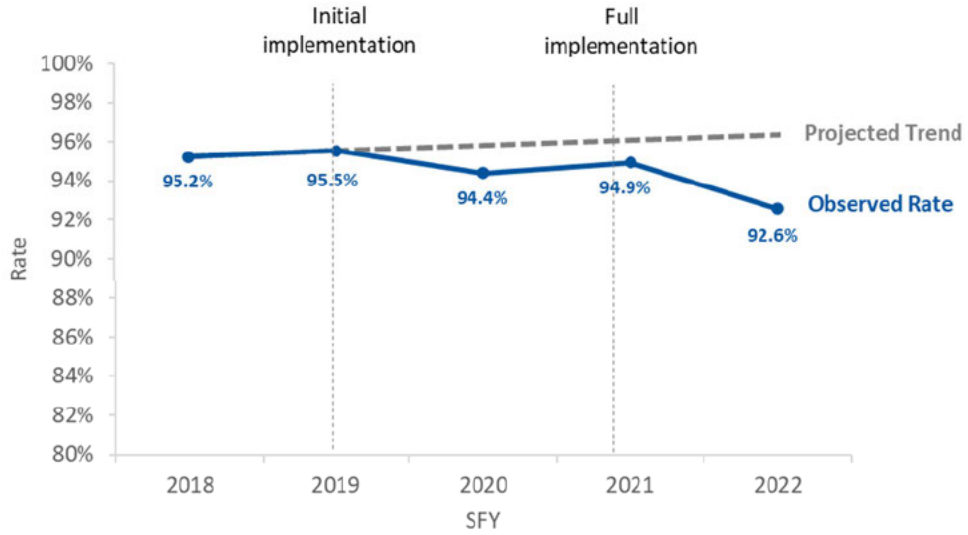
Measure 19 assesses the percentage of Medicaid beneficiaries with an SUD who had an ambulatory or preventive care visit each year. Table 5-15 and Figure 5-22 show that the observed rates of beneficiaries receiving ambulatory or preventive care services after initial implementation of the Waiver fell below the projected rates had the baseline trend continued into the Waiver period. The difference was statistically significant at the 10 percent level for SFY 2022 (p=0.062) but was not statistically significant for SFY 2020 or 2021 (p=0.108, p=0.353, respectively). This illustrates that the rate of members with an SUD receiving preventive/ambulatory health services declined relative to the outcome projected during the Waiver period; thus, results do not support the hypothesis.

Table 5-15—Percentage of Individuals with an SUD Receiving Preventive/Ambulatory Health Services

SFY	Denominator	Rate	Predicted Rate	*p*-value
2018	3,496	95.2%	--	--
2019	3,563	95.5%	--	--
2020	3,836	94.4%	95.8%	0.108
2021	5,607	94.9%	96.1%	0.353
2022	11,809	92.6%	96.4%*	0.062

*p< 0.1, **p < 0.05, ***p<0.001
Note: "–" represents numbers that cannot be calculated or are not applicable.

Figure 5-22—Percentage of Individuals with an SUD Receiving Preventive/Ambulatory Health Services



Measure 19 Conclusion: Does not support the hypothesis

Key Informant Interview Responses

State administrators, MCOs, and provider informants commented on how the Waiver increased access to healthcare for beneficiaries with an SUD, including:

- Member access to services expanded with the coverage of OTP, MAT, and American Society of Addiction Medicine (ASAM) Level 3.7 services under Medicaid.
  - MCOs worked with existing OTP and residential providers to expand ASAM Level 3.7 services and recruited new providers to add services covered by the Waiver to their portfolio.
- Patients accessed services they were unable to access before the Waiver.
  - Providers noted that patients experienced relief knowing they would not be billed for receiving necessary care.
- Providers no longer turned Medicaid patients away from needed care due to services not being covered.
- Patients avoided waitlists for care due to direct coverage of services under Medicaid.
- Stays in IMDs were covered for the Medicaid expansion population.

A common challenge discussed by State administrators, MCOs, and providers was Nebraska's diverse urban and rural environments. Informants commented on difficulties experienced by beneficiaries accessing providers in rural and frontier areas, specifically, the need to travel long distances to receive treatment services in western Nebraska due to most providers practicing on the eastern side of the State. Informants additionally shared:

- Rurality clearly contributed to gaps in access to care.
  - Patients traveled long distances from western Nebraska to reach detoxification centers that accepted Medicaid.
  - In some cases, treatment services in Kansas and Colorado were the closest options for patients in western Nebraska; however, these states would not accept Nebraska Medicaid to treat an SUD.
  - Patients could find recovery housing to step down into in the largest city, Omaha, but could not find the same resources in the second largest city, Lincoln.
  - A lack of overseeing physicians in rural areas prevented the prescription of MAT.
  - Patients drove long distances to receive care that may not have been at the appropriate ASAM level simply because no other options existed.
- Targeted approaches to provide care in rural communities had mixed results.
  - Providers used telehealth to deliver care to rural patients; however, poor Internet access was often a barrier to successful utilization of the delivery platform.
  - MCOs increased their efforts to aid rural communities by focusing on identification of these areas with gaps in access to care.
  - State administrators expressed concern about the distribution of knowledge of the Waiver in rural areas, commenting that beneficiaries were unable to utilize services they did not know existed.

A chief concern among MCOs was the general lack of demand for SUD treatment services in Nebraska. According to the MCOs, Nebraska had not experienced the large impact of the opioid crisis compared to other states across the country. The lack of demand for opioid services resulted in:

- A lack of willingness among providers to invest in and expand their workforce and capacity to serve SUD and opioid use disorder (OUD) members or include the new OTP and MMIW services covered by the Waiver.
  - Providers hesitated to deliver opioid services if they would not break even financially due to low demand.
  - Use of alcohol and methamphetamines were more prevalent; therefore, more providers were equipped to treat these issues compared to opioids.
- Active attempts by MCOs to recruit new providers to deliver Waiver services to increase the number of providers available.
  - MCOs targeted known SUD providers to cover the higher levels of ASAM newly reimbursable through the Waiver, as well as providers new to both SUD treatment and Medicaid.

One MCO noted that it did not believe that beneficiaries lacked access to SUD treatment services because of the unavailability of providers interested in SUD treatment services due to the low demand for the service. A second MCO remarked that if demand were to grow and return on investment potential increased, there would be no barriers to growing provider capacity.

The COVID-19 PHE resulted in challenges providing access to healthcare throughout the Waiver. There was an initial drop in the availability of services due to the PHE. Social distancing resulted in decreased capacity due to limits on how many individuals could be in an area or building at one time. The requirement for a negative COVID-19 test became a barrier to care as patients waited for test results to arrive and were unable to receive care if they tested positive. Due to COVID-19, existing patients in ASAM 3.5 residential shelters were not stepping down into lower levels of care. As a result, at the beginning of COVID-19 new patients could not enter ASAM 3.5 residential shelters.

Additional comments made on the impact to access to care included:

- The Waiver did not negatively impact the availability of or access to pre-existing SUD services or ASAM levels of care, as no providers chose to remove any pre-existing ASAM levels to provide ASAM Level 3.7 services.
- Access did not expand at one provider's organization because the Waiver did not have a direct effect on expanding Medicaid eligibility.
- Expanding the provider's service portfolio and increasing access to care is still an ongoing process.
  - One provider shared plans to provide intensive outpatient (IOP) services in the near future.
- State informants noted it was difficult to distinguish between the impact of the Waiver and the impact of the Medicaid expansion, as Medicaid expansion increased the number of beneficiaries MCOs were able to serve simultaneously with the rollout of the Waiver.

A complete summary of key informants' interview responses can be found in Appendix D.

Aim Two: Improve Quality of Care for Beneficiaries With an SUD

Evaluation Question 1: Did the demonstration improve the quality of SUD treatment?

Hypothesis 1: The demonstration will improve rates of identification, initiation, and engagement in treatment for SUD.

Percentage of Beneficiaries Who Initiated Treatment Within 14 Days of a New SUD Diagnosis (Measure 20)

Measure 20 assesses whether the Waiver has increased the rate of members with a new SUD diagnosis who initiated treatment for SUD within 14 days. For the non-expansion beneficiaries, rates declined during the baseline period and worsened during initial implementation of the Waiver by 0.18 percentage points per month compared to the projected rates had the baseline continued, a decline that was not statistically significant (p=0.121). Following full implementation after the addition of MAT/OTP services, rates continued to worsen by 0.34 percentage points per month compared to the projected rates had the initial implementation trend continued, a statistically significant change (p=0.029). The COVID-19 PHE appeared to have little impact on rates for this measure, with a slight dip occurring in the observed rates in June 2020.

Based on the overall decrease in the rates from baseline through full implementation of the Waiver and the significant worsening of rates each month in the full implementation period compared to the projected rates had the initial implementation trend continued, this measure does not support the hypothesis that the Waiver will improve rates of initiation in treatment for members with a new SUD diagnosis within 14 days.

Table 5-16 shows the primary results from the ITS analysis. Full regression results are available in Appendix A. Figure 5-23 illustrates the model-based average rate in each month (blue line) and projected rates had the baseline trend and implementation trend (grey dashed lines) continued. Figure 5-24 displays the average rate in the expansion population (orange) compared to the non-expansion (green) and total (blue) populations from July 2017 to May 2022.

Table 5-16—ITS Results (Measure 20, Non-Expansion and Total Population)

	Non-Expansion		Total	
Variable	Estimate	*p*-value	Estimate	*p*-value
Intercept	46.34p.p.***	<0.001	46.53p.p.***	<0.001
Baseline monthly trend	-0.14p.p.	0.115	-0.15p.p.*	0.082
Level change at initial implementation	1.99p.p.	0.416	2.26p.p.	0.363
Change in monthly trend – initial implementation	-0.18p.p.	0.121	-0.19p.p.	0.105
Level change at full implementation	2.05p.p.	0.177	1.18p.p.	0.394
Change in monthly trend – full implementation	-0.34p.p.**	0.029	-0.31p.p.	0.221

*p< 0.1, **p < 0.05, ***p<0.001
p.p. = percentage point
Note: Full model results are presented in Appendix A.

Figure 5-23—Illustration of ITS Analysis (Measure 20, Non-Expansion and Total Population)

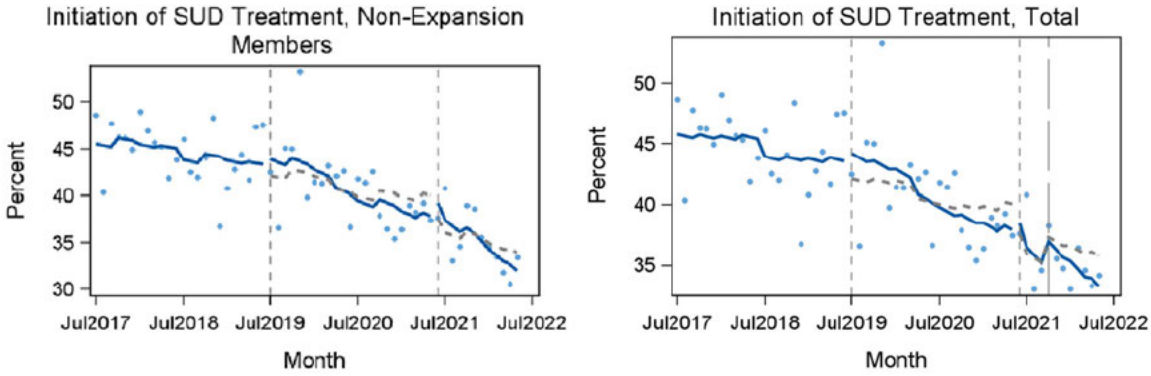
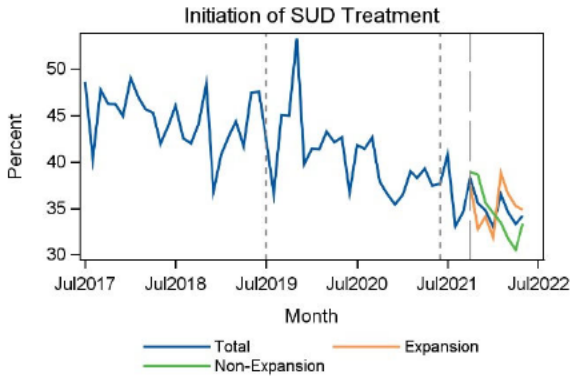


Figure 5-24—Measure 20 Trend Over Time; Non-Expansion, Total, and Expansion Populations



Measure 20 Conclusion: Does not support the hypothesis

Percentage of Beneficiaries Who Initiated Treatment and Who Had Two or More Additional Services for SUD Within 34 Days of the Initiation Visit (Measure 21)

Measure 21 assesses whether the Waiver increased rates of engagement in SUD treatment by assessing the percentage of beneficiaries with a new SUD diagnosis who had two or more claims for SUD treatment within 34 days. Overall, rates for this measure were highly variable throughout the baseline and evaluation periods, ranging between approximately 4 percent and 9 percent. Compared to National Committee for Quality Assurance (NCQA) National Benchmarks for 2022, rates for the non-expansion population consistently fell beneath the 33rd percentile, with rates often falling under the 10th percentile. The baseline trend for the non-expansion group declined slightly before showing a non-statistically significant improvement in the initial implementation period of 0.10 percentage points per month compared to projected rates had the baseline trend continued (p=0.111). However, the trend in the full implementation period exhibited a statistically significant decline of 0.24 percentage points per month compared to projected rates had the initial implementation period continued (p=0.047). Given the variability in the rates, additional data points will allow for a better assessment of the full implementation trend in the Summative Evaluation Report.

Based on the overall improvement in the rates during the initial implementation period and the significant worsening in the full implementation period compared to projected rates had the initial implementation period

continued, this measure neither supports nor fails to support the hypothesis that the Waiver improved rates of engagement in SUD treatment.

Table 5-17 shows the primary results from the ITS analysis. Full regression results are available in Appendix A. Figure 5-25 illustrates the model-based average rate in each month (blue line) and projected rates had the baseline trend and initial implementation trend (grey dashed lines) continued. Figure 5-26 displays the average rate in the expansion population (orange) compared to the non-expansion (green) and total (blue) populations from July 2017 to May 2022.

Table 5-17—ITS Results (Measure 21, Non-Expansion and Total Population)

	Non-Expansion		Total	
Variable	Estimate	*p*-value	Estimate	*p*-value
Intercept	7.05p.p.***	<0.001	7.13p.p.***	<0.001
Baseline monthly trend	-0.05p.p.	0.199	-0.05p.p.*	0.093
Level change at initial implementation	-0.06p.p.	0.942	0.11p.p.	0.885
Change in monthly trend – initial implementation	0.10p.p.	0.111	0.09p.p.*	0.099
Level change at full implementation	2.10p.p.	0.254	1.75p.p.	0.191
Change in monthly trend – full implementation	-0.24p.p.**	0.047	-0.59p.p.**	0.001

*p< 0.1, **p < 0.05, ***p<0.001
p.p. = percentage point
Note: Full model results are presented in Appendix A.

Figure 5-25—Illustration of ITS Analysis (Measure 21, Non-Expansion and Total Population)

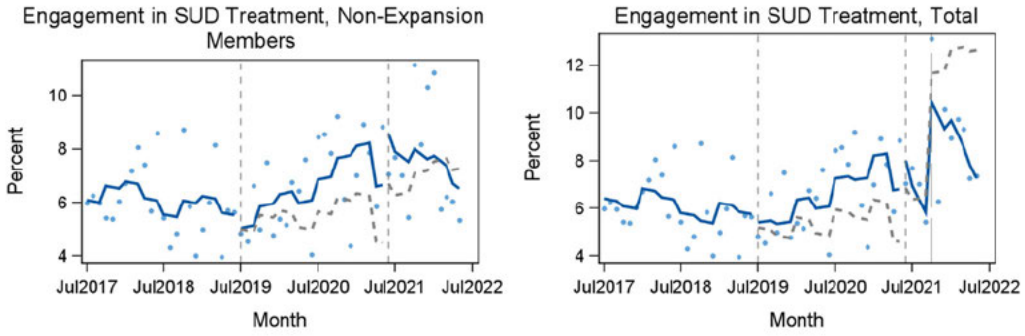
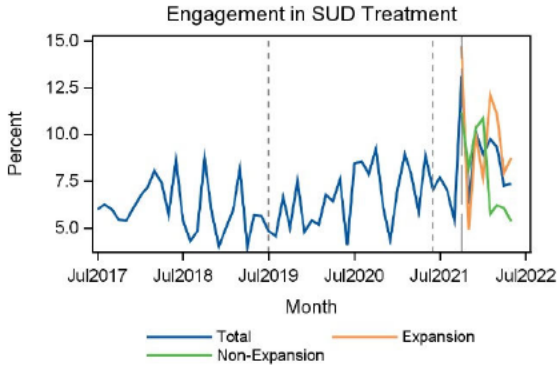


Figure 5-26—Measure 21 Trend Over Time; Non-Expansion, Total, and Expansion Populations



Measure 21 Conclusion: Neither supports nor fails to support the hypothesis

Hypothesis 2: The demonstration will improve rates of adherence to and retention in treatment for SUD.

Continuity of Pharmacotherapy for OUD (Measure 22)

Measure 22 assesses whether the Waiver has improved rates of adherence to and retention in treatment for SUD by determining the percentage of beneficiaries receiving MAT for OUD with at least 180 days of continuous treatment.[5-4]

Prior to the initial implementation period, baseline rates declined by 0.72 percentage points per month. However, after initial implementation of the Waiver, the monthly trend increased by 0.31 percentage points compared to projected rates had the baseline trend continued, though this change was not statistically significant (p= 0.375). After the full implementation with the addition of MAT/OTP services, the monthly trend in the full implementation period increased by 2.97 percentage points compared to the projected rates had the initial implementation trend continued. This was a statistically significant result (p=0.030). These increases in the trend also coincided with increases of the level change during the initial implementation and full implementation, though only the increase in level change during the initial implementation was statistically significant at the 10 percent level (p=0.073).

Data for the expansion group were only available for October 2021 through December 2021, and no significant changes were observed during this period.

Based on the statistically significant findings of the increased level change at initial implementation and the increased change in monthly trend in the full implementation compared to the initial implementation among non-expansion members, this measure supports the hypothesis that the Waiver will improve rates of adherence to and retention in treatment for SUD.

Table 5-18 shows the primary results from the ITS analysis. Full regression results are available in Appendix A. Figure 5-27 illustrates the model-based average rate in each month (blue line) and projected rates had the baseline trend and initial implementation trend (grey dashed lines) continued. Figure 5-28 displays the average rate in the expansion population (orange) compared to the non-expansion (green) and total (blue) populations from July 2017 to December 2021.

Table 5-18—ITS Results (Measure 22, Non-Expansion and Total Population)

	Non-Expansion		Total	
Variable	Estimate	*p*-value	Estimate	*p*-value
Intercept	30.75p.p.***	<0.001	30.43p.p.***	<0.001
Baseline monthly trend	-0.72p.p.**	0.006	-0.69p.p.**	0.008
Level change at initial implementation	9.68p.p.*	0.073	8.89p.p.	0.101
Change in monthly trend – initial implementation	0.31p.p.	0.375	0.34p.p.	0.346
Level change at full implementation	8.94p.p.	0.280	13.11p.p.	0.119

5-4 To allow for the 180-day follow-up period, rates were not calculated for treatments beginning in January 2022 through December 2022.

Variable	Non-Expansion Estimate	Non-Expansion *p*-value	Total Estimate	Total *p*-value
Change in monthly trend – full implementation	2.97p.p.**	0.030	0.36p.p.	0.874

*p< 0.1, **p < 0.05, ***p<0.001
p.p. = percentage point
Note: Full model results are presented in Appendix A.

Figure 5-27—Illustration of ITS Analysis (Measure 22, Non-Expansion and Total Population)

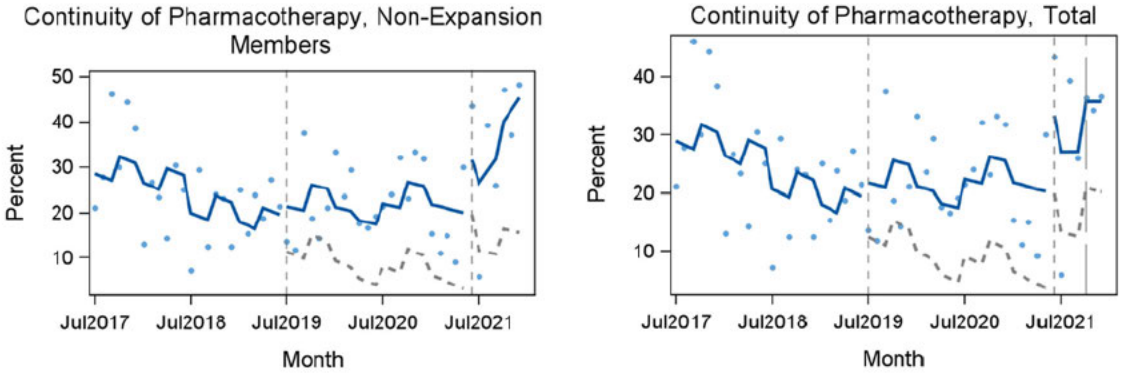
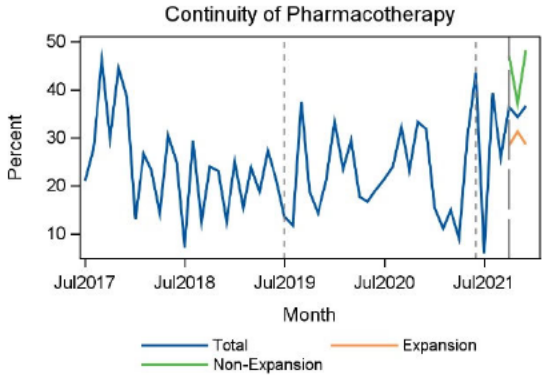


Figure 5-28—Measure 22 Trend Over Time; Non-Expansion, Total and Expansion Populations



Measure 22 Conclusion: Supports the hypothesis

Hypothesis 3: The demonstration will reduce ED use for SUD.

Average Number of ED Visits for SUD (Measure 23)

Measure 23 assesses emergency department (ED) utilization for an SUD among beneficiaries to assess if the Waiver has reduced the number of ED visits for SUD. Baseline rates increased by 0.02 visits per 1,000 beneficiaries per month. During the initial implementation period, rates increased by 0.02 visits per 1,000 beneficiaries per month compared to projected rates had the baseline trend continued, though this was not a statistically significant finding (p=0.155). At the time of full implementation of the Waiver, which added services for MMIW and MAT/OTP, there was a statistically significant downward shift of 0.78 visits per 1,000 members. Additionally, the change in monthly trend decreased by 0.14 visits per 1,000 members per month compared to the projected trend from the initial implementation period, a statistically significant decline (p<0.001). These

decreases may have been driven by the increased availability of OTPs and facilities providing MAT statewide after the Waiver's full implementation and resulting in less reliance on Eds for SUD.

Based on the statistically significant decrease in the level change at full implementation and in the full implementation rates compared to projected rates had the initial trend continued, this measure supports the hypothesis that the Waiver will reduce ED visits for SUD.

Figure 5-29 illustrates the model-based average in each month (blue line) and projected rates had the baseline trend and initial implementation trend (grey dashed lines) continued. Table 5-19 shows the primary results from the ITS analysis. Full regression results are available in Appendix A. Figure 5-30 displays the average rate in the expansion population (orange line) compared to the non-expansion (green line) and total populations (blue line) from July 2017 to June 2022.

Table 5-19—ITS Results (Measure 23, Non-Expansion and Total Population)

	Non-Expansion		Total	
Variable	Estimate	*p*-value	Estimate	*p*-value
Intercept	5.59***	<0.001	5.59***	<0.001
Baseline monthly trend	0.02	0.211	0.02	0.226
Level change at initial implementation	0.31	0.212	0.32	0.203
Change in monthly trend – initial implementation	0.02	0.155	0.02	0.162
Level change at full implementation	-0.78**	0.029	-0.91**	0.023
Change in monthly trend – full implementation	-0.14***	<0.001	-0.09**	0.037

*p< 0.1, **p < 0.05, ***p<0.001
Note: Full model results are presented in Appendix A.

Figure 5-29—Illustration of ITS Analysis (Measure 23, Non-Expansion and Total Population)

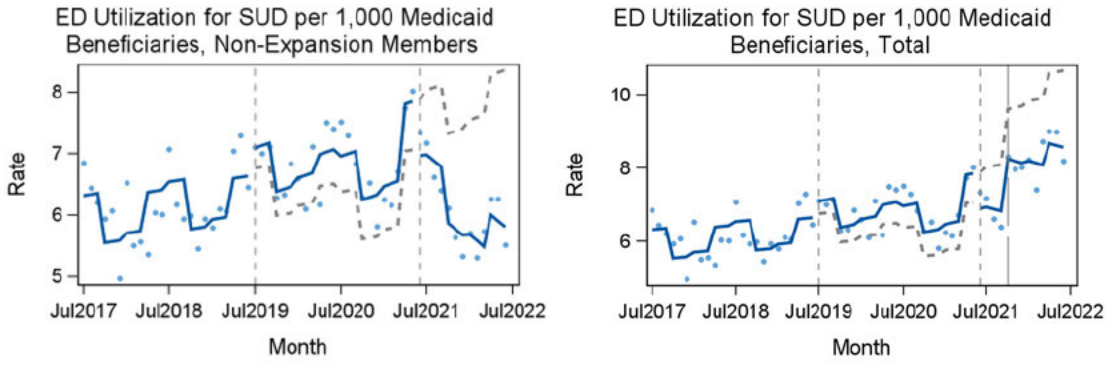
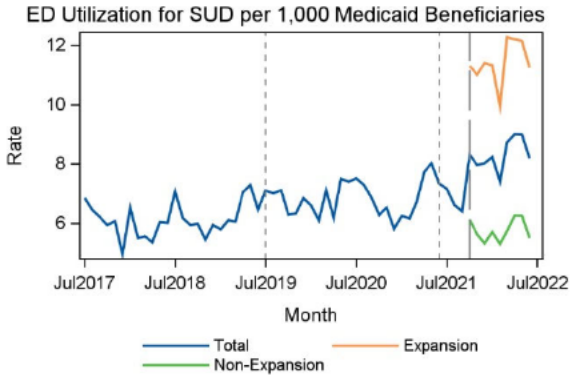


Figure 5-30—Measure 23 Trend Over Time; Non-Expansion, Total and Expansion Populations



Measure 23 Conclusion: Supports the hypothesis

Hypothesis 4: The demonstration will reduce readmissions for SUD.

30-Day Readmission (Measure 24)

Measure 24 seeks to determine whether the Waiver reduced readmissions for SUD by assessing the percentage of readmissions within 30 days of an IP stay among beneficiaries with an SUD. For non-expansion beneficiaries, the baseline trend was decreasing by 0.09 percentage points per month. The initial implementation trend worsened by 0.21 percentage points per month compared to projected rates had the baseline trend continued, a statistically significant finding (p=0.009). However, following full implementation of the Waiver, the trend improved by 0.17 percentage points per month compared to projected rates had the initial implementation trend continued (p=0.491).

Notably, rates for 30-day readmissions for an SUD increased during the peak of the COVID-19 PHE, particularly in April and May 2020. Additionally, rates for the expansion population were consistently lower throughout the full implementation period compared to the non-expansion population.

Based on the significant increase in rates during the initial implementation period for the non-expansion group compared to projected rates had the baseline trend continued, this measure does not support the hypothesis that the Waiver will reduce readmissions for beneficiaries with an SUD. The improvement in the change in monthly trend for the full implementation period compared to the initial implementation period is promising, but additional data points will be needed to evaluate further.

Figure 5-31 illustrates the model-based average rate in each month (blue line) and projected rates had the baseline trend and initial implementation trend (grey dashed lines) continued. Table 5-20 shows the primary results from the ITS analysis. Full regression results are available in Appendix A. Figure 5-32 displays the average rate in the expansion population (orange line) compared to the non-expansion (green line) and total populations (blue line) from July 2017 to May 2022.

Table 5-20—ITS Results (Measure 24, Non-Expansion and Total Population)

Variable	Non-Expansion		Total	
	Estimate	*p*-value	Estimate	*p*-value
Intercept	25.37p.p.***	<0.001	25.07p.p.***	<0.001
Baseline monthly trend	-0.09p.p.	0.105	-0.10p.p.**	0.034
Level change at initial implementation	0.16p.p.	0.877	0.54p.p.	0.568
Change in monthly trend – initial implementation	0.21p.p.**	0.009	0.20p.p.**	0.005
Level change at full implementation	-2.00p.p.	0.224	-2.25p.p.	0.114
Change in monthly trend – full implementation	-0.17p.p.	0.491	-0.39p.p.	0.139

*p< 0.1, **p < 0.05, ***p<0.001
p.p. = percentage point
Note: Full model results are presented in Appendix A.

Figure 5-31—Illustration of ITS Analysis (Measure 24, Non-Expansion and Total Population)

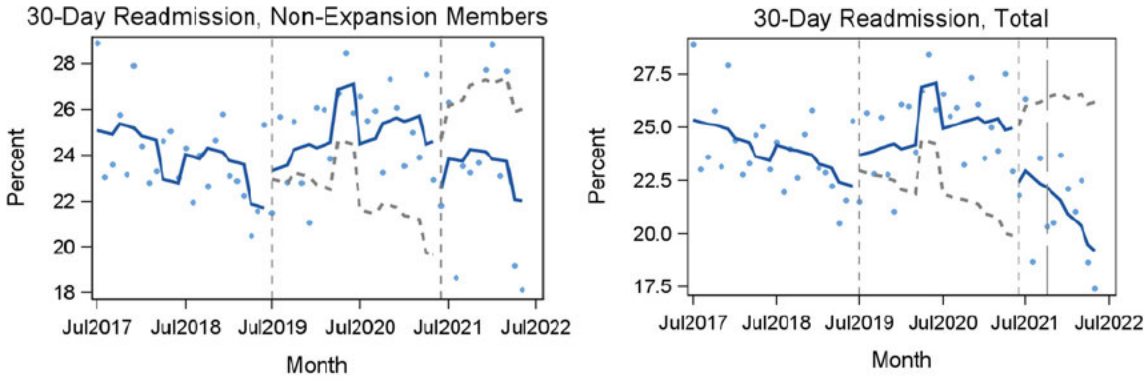
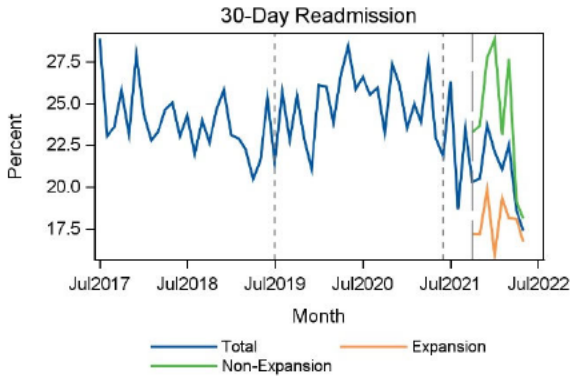


Figure 5-32—Measure 24 Trend Over Time; Non-Expansion, Total, and Expansion Populations



Measure 24 Conclusion: Does not support the hypothesis

Hypothesis 5: The demonstration will reduce overdose deaths, particularly those due to opioids.

Rate of Overdose Deaths, Overall and Due to Opioids (Measure 25)

Measure 25 aims to determine whether the Waiver has reduced the rate of overdose deaths overall, particularly those due to opioids. Using data obtained from the Centers for Disease Control and Prevention (CDC) Wide-ranging Online Data for Epidemiologic Research (WONDER) system, the total number and rates of all overdose deaths and opioid-specific overdose deaths were calculated for Nebraska and United States residents. Data on Medicaid recipients specifically were not available. For Nebraskans statewide, both the rate of overdose deaths overall and the rate of opioid-specific overdose deaths increased from calendar year 2017–2020, rising from 12.1 to 17.6 overdose deaths overall per 100,000 Nebraskans and from 4.8 to 8.1 opioid-specific overdose deaths per 100,000 Nebraskans. During this time, the proportion of overdose deaths attributable to opioids among Nebraskans increased from to 39.7 percent to 45.7 percent. Although overdose deaths remained relatively unchanged between 2017 and 2019, a more pronounced increase in the rate of overdose deaths occurred between 2019 and 2020. The increased rate of overdose deaths was likely exacerbated by the COVID-19 PHE, and may be due to reduced access to healthcare and recovery support services.[5-5, 5-6, 5-7]

Nationwide, overdose deaths overall and specifically due to opioids followed a similar trend from 2017–2020. Overdose deaths rose from 35.2 to 45.2 per 100,000 United States residents and opioid-specific overdose deaths rose from 23.1 to 33.0 per 100,000 United States residents. The proportion of overdose deaths attributable to opioids among United States residents increased from 68.9 percent to 75.9 percent between 2017–2020. Similar to Nebraska, the overall and opioid-specific death rates fluctuated slightly prior to 2020 and increased from 2019 to 2020, which was primarily driven by the COVID-19 PHE. [5-8]

The rates of overdose deaths nationwide were overall higher than those of Nebraska from 2017–2020. Even though the United States overdose rate was much higher than the rate reported in Nebraska, the Nebraska population experienced a greater relative increase in the rate of overdose deaths compared to the United States population between 2019 and 2020. The average rates of overdose death among Nebraskans between 2017 and 2019 were 65 percent lower than the national rates. However, the Nebraska overdose rate increased by 37.5 percent between 2019 and 2020 compared to a 29.5 percent increase in overdose deaths nationwide during the same time period. This difference suggests that the COVID-19 PHE may have had a disproportionate impact on Nebraskans compared to all United States residents. Table 5-21 and Figure 5-33 below show the yearly overall and opioid-specific overdose deaths with associated mortality rates per 100,000 Nebraska and United States residents, and the proportion of overdose deaths attributable to opioids.

The increasing trend in the rate of overall overdose deaths and opioid-specific overdose deaths in Nebraska from 2017 to 2020 indicates that this measure does not support the hypothesis; however, these results may be largely impacted by the COVID-19 PHE.

5-5 Centers for Disease Control and Prevention. Overdose Deaths Accelerating During COVID-19. Available at: https://www.cdc.gov/media/releases/2020/p1218-overdose-deaths-covid-19 html. Accessed on: Mar. 7, 2023.

5-6 Ghose R, Forati AM, Mantsch JR, *et al*. "Impact of the COVID-19 Pandemic on Opioid Overdose Deaths: a Spatiotemporal Analysis." *J Urban Health* 99(2). Available at: https://www.ncbi nlm.nih.gov/pmc/articles/PMC8856931/. Accessed on: Mar. 7, 2023.

5-7 Indian Health Service. Opioids and the COVID-19 Pandemic. Available at: https://www.ihs.gov/opioids/covid19/. Accessed on: Mar. 7, 2023.

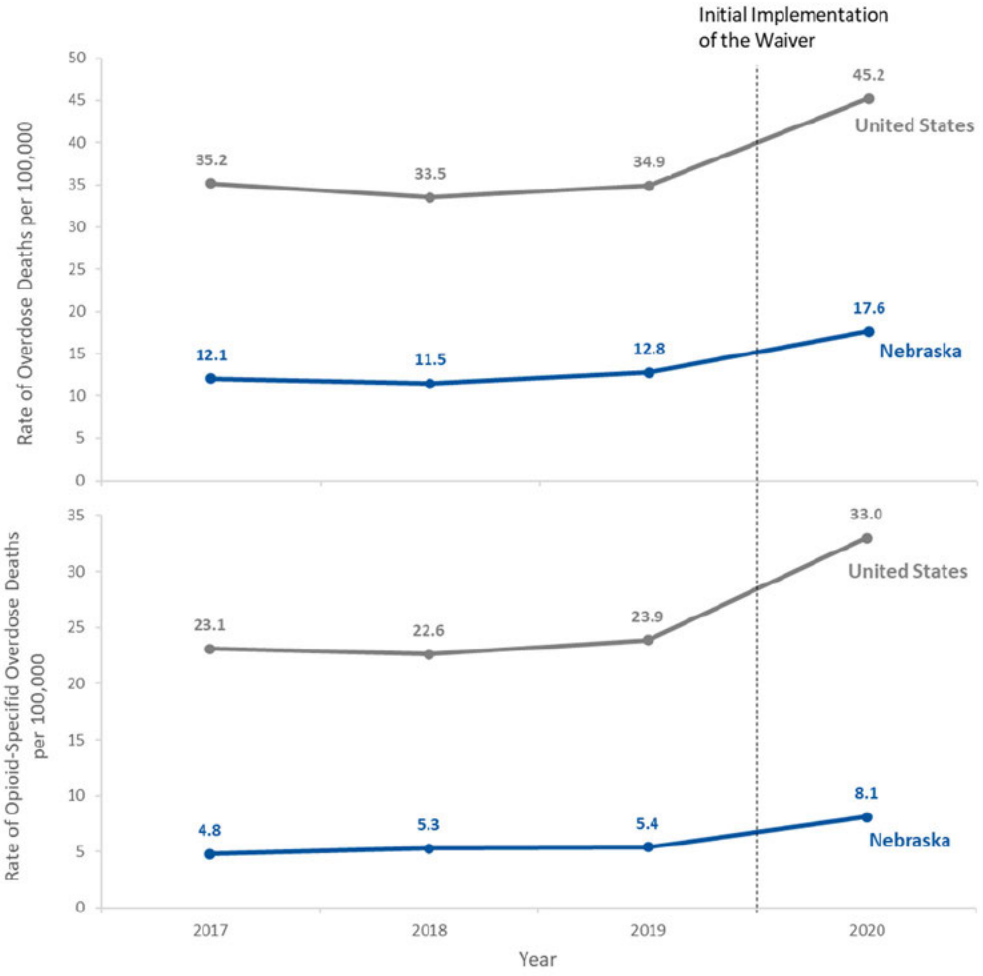
5-8 Centers for Disease Control and Prevention. Overdose Deaths Accelerating During COVID-19. Available at: https://www.cdc.gov/media/releases/2020/p1218-overdose-deaths-covid-19 html. Accessed on: Mar. 7, 2023.

Table 5-21—Rate of Overall and Opioid-Specific Overdose Deaths (Measure 25)

Nebraska	2017	2018	2019*	2020
Overdose Deaths, All – Count	136	129	143	197
Overdose Deaths, All – Mortality Rate per 100,000	12.1	11.5	12.8	17.6
Overdose Deaths, Opioid	54	59	60	90
Overdose Deaths, Opioid – Mortality Rate per 100,000	4.8	5.3	5.4	8.1
Proportion of Overdose Deaths Attributable to Opioids	39.7%	45.7%	42.0%	45.7%
Population*	1,123,572	1,122,832	1,120,149	1,117,572
United States	**2017**	**2018**	**2019***	**2020**
Overdose Deaths, All – Count	66,132	62,835	65,519	85,417
Overdose Deaths, All – Mortality Rate per 100,000	35.2	33.5	34.9	45.2
Overdose Deaths, Opioid	45,548	44,435	47,149	64,874
Overdose Deaths, Opioid – Mortality Rate per 100,000	23.1	22.6	23.9	33
Proportion of Overdose Deaths Attributable to Opioids	68.9%	70.7%	72.0%	75.9%
Population**	196,963,895	197,017,177	196,886,283	196,842,788

*Initial implementation of the Waiver began July 1, 2019.
**Includes only ages 19–64

Figure 5-33—Rates of Overall and Opioid-Specific Overdose Deaths (Measure 25)



Measure 25 Conclusion: Does not support the hypothesis

Key Informant Interview Responses

State administrators, MCOs, and providers commented on how the Waiver increased the quality of healthcare for beneficiaries with an SUD. State administrators highlighted the changes in the continuum of care the State provided clearly as a result of the Waiver and the Medicaid coverage of OTP and MAT. According to providers, the reduced delays in receiving care increased positive engagement with the patient and success in treatment. Examples provided by informants included the ability to:

- Administer drugs in new settings for different durations.
- Offer "mid-level" services to patients who need more assistance than OP providers can provide, but who do not require ED or IP treatment.
- Improve care coordination, including between providers and MCOs, and transitions between levels of care.

- Expand facilities by providing reimbursement for services through the Waiver.
- Increase support for minority patients in their treatment processes through engagement with 12-step programs and through building relationships with community-based providers and utilizing care managers.
- Implement comprehensive treatment and prevention strategies.

During the beginning of implementation of the Waiver, informants noted gaps in the continuum of care, sharing:

- A lag between when patients arrived for treatment and when they began receiving treatment due to time required to complete intake paperwork.
- Difficulty alerting and educating providers about new services.
- A desire to see the monitoring process of high utilizers of SUD be further strengthened and expanded.
  - For example, case managers often spent time locating placements for patients whereas, with strengthened resources, they could be more focused on patient care.

Providers noted concerns about reauthorizations disrupting appropriate treatment. Providers shared that Medicaid often did not reapprove patients to remain in the appropriate level of care if the patient did not appear to make progress according to MCOs' definitions. According to providers, MCOs did not take transition time or the patient's personal situations into account, such as a criminal background or mental health issues, which might slow individuals' progress in their treatment program. As a result, patients were transitioned to lower levels of care against the recommendation of their providers. Providers believed this contributed to patient recidivism. One provider noted that frequent reauthorizations were not required under the previous region funding structure.

Additional challenges preventing an increase in quality of care noted by single informants were:

- Facilities with multiple provider types did not always accept individuals with an SUD because the facility did not meet the Waiver's MMIW criteria.
- Providers felt uncomfortable prescribing methadone and lacked experience in methadone treatment.
- No clear pre-existing managed care model resulted in the Nebraska Department of Health and Human Services (DHHS) working the Centers for Medicare & Medicaid Services (CMS) to create a managed care model.
- Credentialing providers to deliver ASAM Level 3.7 services.
  - A considerable amount of time was spent assisting providers in understanding new services, including ASAM Level 3.7, and what was required to receive the proper credentials to provide those services.
  - Providers struggled with the IP accreditation criteria associated with ASAM Level 3.7.
  - An MCO experienced backlogs in credentialing providers.

The COVID-19 PHE shifted care delivery from in-person to telehealth, affecting the quality of care received. Several providers shared that patient care was negatively impacted. One provider noted that patients in 12-step programs who shifted to a virtual setting received less support upon exit from the program than they would have in-person. A second provider cited a lack of accountability for patients receiving telehealth services; during the providers' temporary residential treatment shutdown in 2020 when telehealth was used, the provider experienced an unprecedented number of patients not attending appointments. A third provider highlighted the monetary costs incurred by adding proper security measures to video conferencing platforms for healthcare utilization. Other

providers shared that telehealth was a benefit to their practice. For several, their first experience using telehealth to deliver care occurred during the COVID-19 PHE. Providers noted that telehealth made the care experience easier for patients.

A complete summary of key informants' interview responses can be found in Appendix D.

Aim Three: Maintain or Reduce Costs

Evaluation Question 1: Did the demonstration maintain or reduce total cost of care?

Hypothesis 1: The demonstration will reduce inpatient hospitalization and ED use for SUD.

Average Number of Inpatient Stays for SUD (Measure 26)

Measure 26 assesses whether the Waiver reduced IP hospitalization for SUD by looking at the number of IP stays with an SUD diagnosis among beneficiaries ages 19–64. The rate of IP stays with an SUD diagnosis among non-expansion beneficiaries followed a downward trajectory during the measurement period, decreasing from 4.1 stays per 1,000 beneficiaries in July 2017 to 1.8 stays per 1,000 beneficiaries in June 2022. There was no change in the monthly trend of stays per 1,000 beneficiaries during the initial implementation period compared to the baseline period (p=0.773). There was a statistically significant (p=0.033) increase of 0.37 stays per 1,000 beneficiaries in the level change at initial implementation when the Waiver allowed for coverage of all IMD stays regardless of length. However, the change in monthly trend decreased at full implementation with the addition of MAT/OTP programs compared to the projected rates had the trend from initial implementation continued, by 0.08 stays per 1,000 beneficiaries per month, a statistically significant change (p<0.001).

Based on the consistent decrease in rates from baseline to full implementation and the statistically significant decrease in the monthly trend at full implementation compared to projected rates had the initial implementation trend continued, this measure supports the hypothesis that the Waiver will reduce IP hospitalization for SUD.

Table 5-22 shows the primary results from the ITS analysis. Full regression results are available in Appendix A. Figure 5-34 illustrates the model-based average rate in each month (blue line) and projected rates had the baseline trend and initial implementation trend (grey dashed lines) continued. Figure 5-35 displays the average rate in the expansion population (orange) compared to the non-expansion (green) and total (blue) populations from July 2017 to June 2022.

Table 5-22—ITS Results (Measure 26, Non-Expansion and Total Population)

	Non-Expansion		Total	
Variable	Estimate	*p*-value	Estimate	*p*-value
Intercept	3.66***	<0.001	3.69***	<0.001
Baseline monthly trend	-0.02**	0.038	-0.02**	0.043
Level change at initial implementation	0.37**	0.033	0.35**	0.042
Change in monthly trend – initial implementation	0.00	0.773	0.00	0.814
Level change at full implementation	0.05	0.862	0.02	0.940
Change in monthly trend – full implementation	-0.08***	<0.001	-0.08**	0.010

*p< 0.1, **p < 0.05, ***p<0.001
Note: Full model results are presented in Appendix A.

Figure 5-34—Illustration of ITS Analysis (Measure 26, Non-Expansion and Total Population)

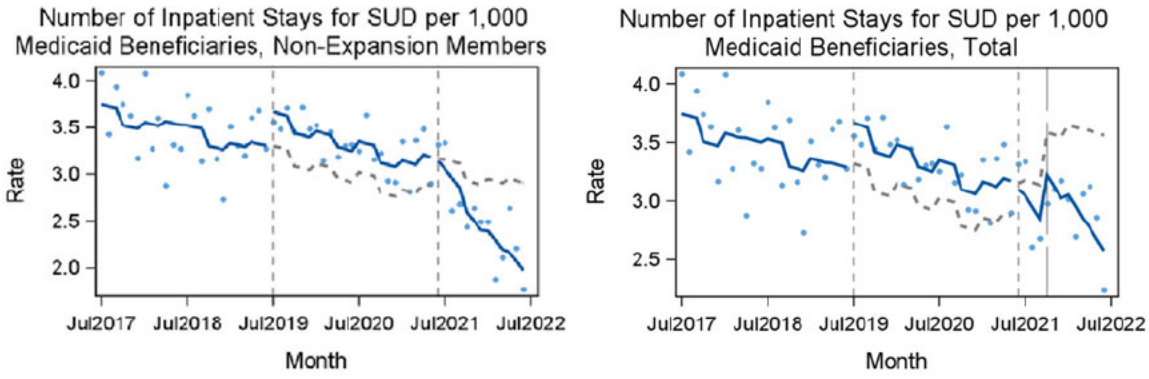
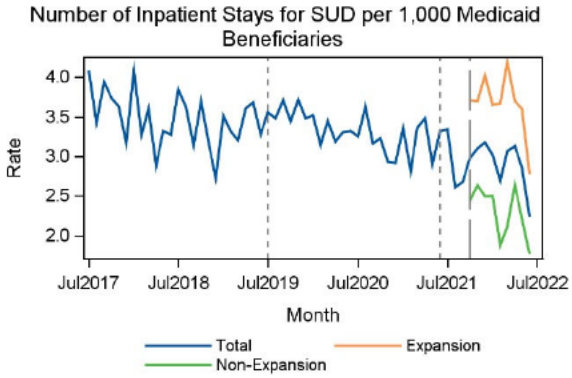


Figure 5-35—Measure 26 Trend Over Time; Non-Expansion, Total, and Expansion Populations



Measure 26 Conclusion: Supports the hypothesis

Average Number of Days of Inpatient Hospitalization for SUD (Measure 27)

Measure 27 seeks to determine whether the Waiver decreased the total number of days of IP hospitalization for SUD among beneficiaries ages 19–64. The number of days of IP hospitalization for an SUD among non-expansion beneficiaries decreased from a three-month average of 28.2 days per 1,000 beneficiaries from July through August 2017 to 13.3 days per 1,000 beneficiaries from April through June 2022. Prior to the initial implementation of the Waiver, the baseline number of days of IP hospitalization for an SUD was decreasing each month (p=0.217). After the initial implementation when Medicaid coverage was extended to IMD stays greater than 15 days, rates during the initial implementation period decreased 0.09 days each month per 1,000 beneficiaries compared to the projected rates had the baseline period continued, although this decrease was not statistically significant (p=0.462). Following the full implementation of the Waiver which added services for MMIW and MAT/OTP, the trend decreased further by 0.37 days each month per 1,000 beneficiaries compared to the projected trend had the initial implementation period continued, which was statistically significant (p=0.005). The number of days of IP hospitalization for an SUD for the total Medicaid population followed a similar trend, decreasing from a three-month average of 28.2 days per 1,000 beneficiaries from July through August 2017 to 16.0 days per 1,000 beneficiaries from April through June 2022.

As rates were decreasing throughout the entire measurement period and there was a statistically significant decrease in the trend during full implementation relative to the projected rates had the initial implementation trend continued, this measure supports the hypothesis that the Waiver reduced IP hospitalization for SUD.

Figure 5-36 illustrates the model-based average in each month (blue line) and projected rates had the baseline trend and initial implementation trend (grey dashed lines) continued. Table 5-23 shows the primary results from the ITS analysis. Full regression results are available in Appendix A. Figure 5-37 displays the average rate in the expansion population (orange line) compared to the non-expansion (blue line) and total populations (green line) from July 2017 to June 2022.

Table 5-23—ITS Results (Measure 27, Non-Expansion and Total Population)

	Non-Expansion		Total	
Variable	Estimate	*p*-value	Estimate	*p*-value
Intercept	27.51***	<0.001	27.47***	<0.001
Baseline monthly trend	-0.14	0.217	-0.13	0.234
Level change at initial implementation	2.37	0.107	2.13	0.151
Change in monthly trend – initial implementation	-0.09	0.462	-0.08	0.509
Level change at full implementation	-1.06	0.540	-1.08	0.517
Change in monthly trend – full implementation	-0.37**	0.005	-0.14	0.570

*p< 0.1, **p < 0.05, ***p<0.001
Note: Full model results are presented in Appendix A.

Figure 5-36—Illustration of ITS Analysis (Measure 27, Non-Expansion and Total Population)

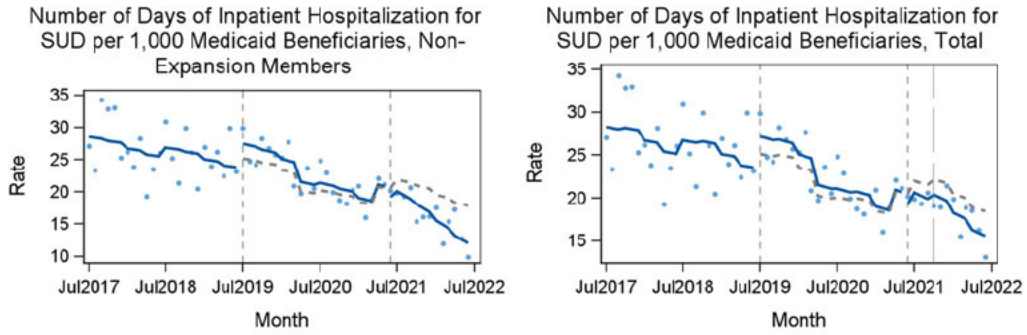
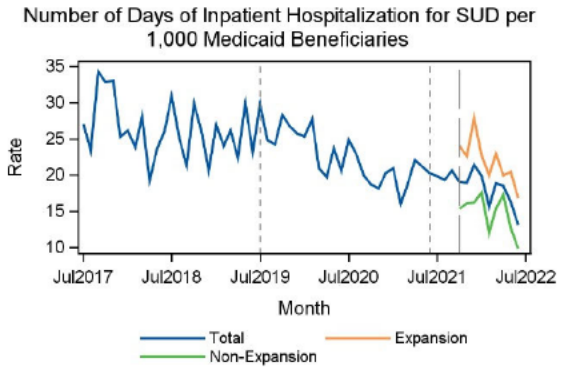


Figure 5-37—Measure 27 Trend Over Time; Non-Expansion, Total, and Expansion Populations



Measure 27 Conclusion: Supports the hypothesis

Average Length of Stay of Inpatient Hospitalization for SUD (Measure 28)

Measure 28 seeks to determine whether the Waiver reduced the ALOS of IP hospitalization for SUD. For non-expansion beneficiaries, the trend during initial implementation decreased by 0.02 days compared to the projected average had the baseline trend continued, although this change was not statistically significant (p=0.422). The trend following full implementation of the Waiver remained effectively unchanged compared to projected rates had the initial implementation trend continued, which was not statistically significant (p=0.898). A sharp decrease in the ALOS of IP hospitalizations for an SUD occurred in March and April 2020, likely due to the COVID-19 PHE's impact on reducing hospital utilization and access.[5-9]

The total Waiver population followed a similar trend as the non-expansion population during initial implementation. However, the trend worsened during full implementation, where the ALOS increased by 0.08 days compared to projected rates had the initial implementation trend continued, although this change was not statistically significant (p=0.112).

The ALOS during each implementation period did not demonstrate statistically significant changes compared to the projected averages, but the observed rates were trending in the desired downward direction among both the non-expansion and total populations. Continued assessment of this measure with additional data points will be included in the Summative Evaluation Report. Therefore, this measure neither supports nor fails to support the hypothesis that the Waiver will reduce IP hospitalizations for SUD.

Table 5-24 shows the primary results from the ITS analysis. Full regression results are available in Appendix A. Figure 5-38 illustrates the model-based average rate in each month (blue line) and projected rates had the baseline trend and initial implementation trend (grey dashed lines) continued. Figure 5-39 displays the average rate in the expansion population (orange) compared to the non-expansion (green) and total (blue) populations from July 2017 to June 2022.

Table 5-24—ITS Results (Measure 28, Non-Expansion and Total Population)

	Non-Expansion		Total	
Variable	Estimate	*p*-value	Estimate	*p*-value
Intercept	6.77***	<0.001	6.69***	<0.001
Baseline monthly trend	0.01	0.543	0.01	0.480
Level change at initial implementation	-0.31	0.281	-0.33	0.270
Change in monthly trend – initial implementation	-0.02	0.422	-0.02	0.426
Level change at full implementation	-0.44	0.371	-0.40	0.455
Change in monthly trend – full implementation	0.00	0.898	0.08	0.112

*p< 0.1, **p < 0.05, ***p<0.001
Note: Full model results are presented in Appendix A.

5-9 Birkmeyer JD, Barnato A, Birkmeyer N, *et al*.., "The Impact of the COVID-19 Pandemic on Hospital Admissions in the United States," *Health Affairs*, Available at: https://www.healthaffairs.org/doi/10.1377/hlthaff.2020.00980. Accessed on: Mar. 10, 2023.

Figure 5-38—Illustration of ITS Analysis (Measure 28, Non-Expansion and Total Population)

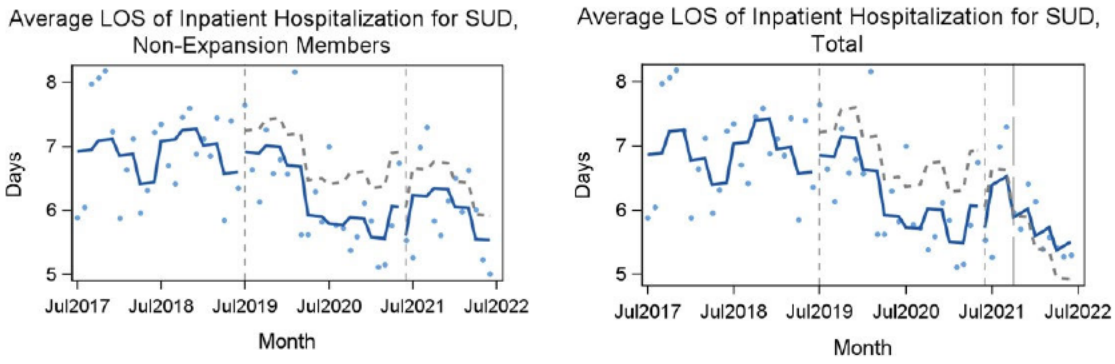
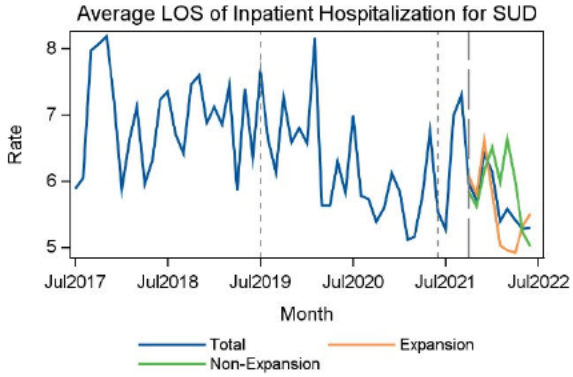


Figure 5-39—Measure 28 Trend Over Time; Non-Expansion, Total, and Expansion Populations



Measure 28 Conclusion: Neither supports nor fails to support the hypothesis

Hypothesis 2: The demonstration will reduce inpatient hospitalization and ED use for beneficiaries with an SUD.

Average Number of Inpatient Stays for Any Cause (Measure 29)

Measure 29 assesses whether the Waiver has reduced the IP hospitalizations for beneficiaries with an SUD by examining the number of IP stays for any cause among beneficiaries with an SUD. Rates for this measure followed an overall downward trend from baseline through full implementation of the Waiver. For the non-expansion population, baseline rates were decreasing by 0.44 stays per 1,000 beneficiaries per month and continued to decrease in the initial implementation by 0.41 stays per 1,000 beneficiaries per month compared to projected rates had the baseline trend continued, a statistically significant finding (p=0.002). Despite this change in the trend, rates increased by an average of 8.45 stays per 1,000 beneficiaries upon initial implementation (p=0.002). Although not statistically significant, rates continued to decrease in the full implementation period by 0.08 stays per 1,000 beneficiaries per month compared to projected rates had the initial implementation trend continued (p=0.757).

Considering the decrease in rates throughout the evaluation periods from baseline, and the statistically significant decrease in the initial implementation rates compared to projected rates had the baseline trend continued, this measure supports the hypothesis that the Waiver will reduce IP hospitalizations for beneficiaries with an SUD.

Table 5-25 shows the primary results from the ITS analysis. Full regression results are available in Appendix A. Figure 5-40 illustrates the model-based average rate in each month (blue line) and projected rates had the baseline trend and initial implementation trend (grey dashed lines) continued. Figure 5-41 displays the average rate in the expansion population (orange) compared to the non-expansion (green) and total (blue) populations from July 2017 to June 2022.

Table 5-25—ITS Results (Measure 29, Non-Expansion and Total Population)

	Non-Expansion		Total	
Variable	Estimate	*p*-value	Estimate	*p*-value
Intercept	77.34***	<0.001	77.39***	<0.001
Baseline monthly trend	-0.44**	0.002	-0.45**	0.002
Level change at initial implementation	8.45**	0.002	8.56**	0.002
Change in monthly trend – initial implementation	-0.41**	0.002	-0.41**	0.003
Level change at full implementation	-2.28	0.462	-2.40	0.461
Change in monthly trend – full implementation	-0.08	0.757	-0.59	0.158

*p< 0.1, **p < 0.05, ***p<0.001
Note: Full model results are presented in Appendix A.

Figure 5-40—Illustration of ITS Analysis (Measure 29, Non-Expansion and Total Population)

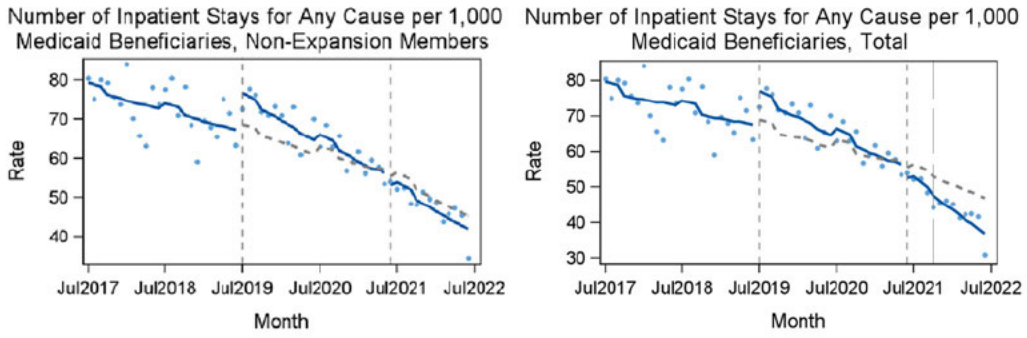
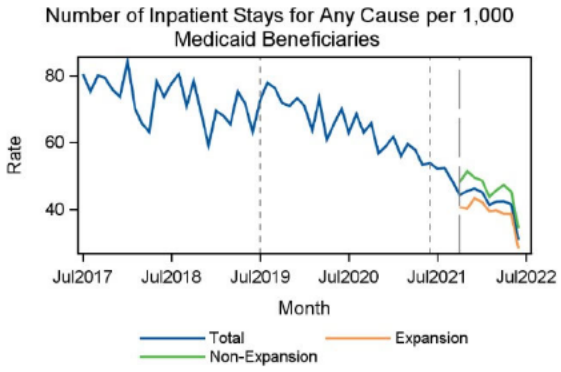


Figure 5-41—Measure 29 Trend Over Time; Non-Expansion, Total and Expansion Populations



Measure 29 Conclusion: Supports the hypothesis

Average Number of Days of Inpatient for Any Cause (Measure 30)

Measure 30 assesses whether the Waiver has reduced IP hospitalization by calculating the number of IP days for any cause among beneficiaries with an SUD. The total number of days for IP stays of any cause for beneficiaries with an SUD among non-expansion beneficiaries was reduced by half from the start of the baseline period to the end of the evaluation period. From July 2017 through September 2017 the number of IP days averaged 592.6 days per 1,000 beneficiaries and fell to 296.9 days per 1,000 beneficiaries from April 2022 through June 2022.

Among non-expansion beneficiaries, the number of IP days decreased by 3.31 per 1,000 beneficiaries each month during the baseline. The number of days decreased further during the initial implementation period, declining by an average of 2.92 days per 1,000 beneficiaries each month compared to the projected rates had the baseline trend continued, a statistically significant difference (p=0.043). The change in monthly trend at full implementation with the addition of MAT/OTP programs also continued to decrease significantly, declining by an average of 7.92 days each month per 1,000 beneficiaries compared to the projected rates had the initial implementation trend continued (p=0.022).

Following the initial and full implementations of the Waiver there was a statistically significant decrease in the average number of days for IP stays of any cause. Based on these results, this measure supports the hypothesis that the Waiver will reduce IP hospitalization for beneficiaries with an SUD.

Table 5-26 illustrates the model-based average in each month (blue line) and projected rates had the baseline trend and initial implementation trend (grey dashed lines) continued. Table 5-26 shows the primary results from the ITS analysis. Full regression results are available in Appendix A. Figure 5-43 displays the average rate in the expansion population (orange line) compared to the non-expansion (blue line) and total populations (green line) from July 2017 to June 2022.

Table 5-26—ITS Results (Measure 30, Non-Expansion and Total Population)

	Non-Expansion		Total	
Variable	Estimate	*p*-value	Estimate	*p*-value
Intercept	624.25***	<0.001	623.43***	<0.001
Baseline monthly trend	-3.31**	0.006	-3.32**	0.005
Level change at initial implementation	24.76	0.207	25.06	0.198
Change in monthly trend – initial implementation	-2.92**	0.043	-2.93**	0.042
Level change at full implementation	31.68	0.312	23.31	0.411
Change in monthly trend – full implementation	-7.92**	0.022	-4.43	0.343

*p< 0.1, **p < 0.05, ***p<0.001

Note: Full model results are presented in Appendix A.

Figure 5-42—Illustration of ITS Analysis (Measure 30, Non-Expansion and Total Population)

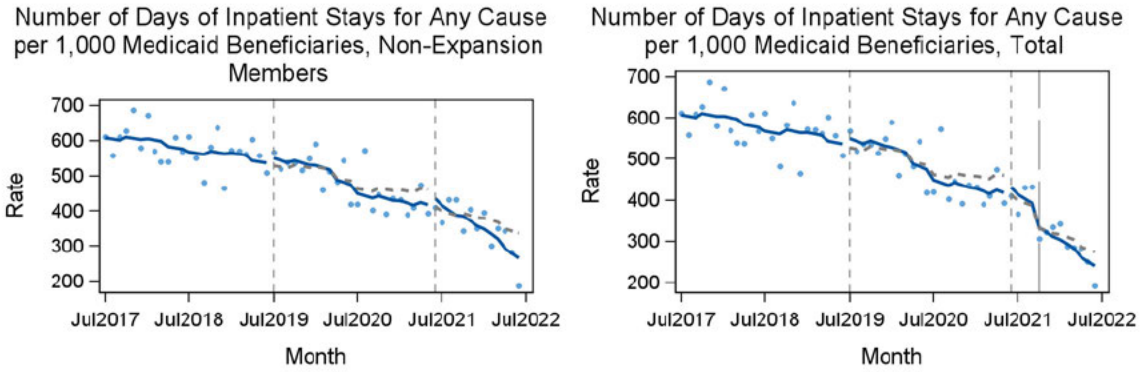
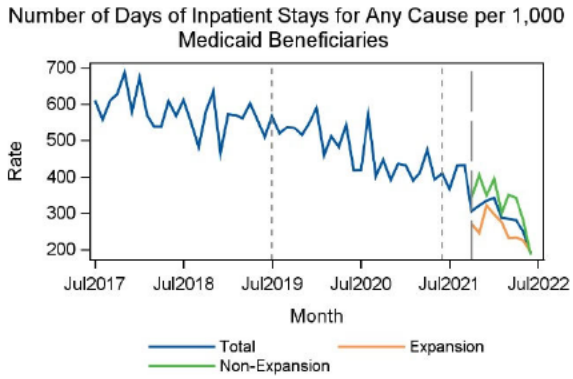


Figure 5-43—Measure 30 Trend Over Time; Non-Expansion, Total, and Expansion Populations



Measure 30 Conclusion: Supports the hypothesis

Average Length of Stay of Inpatient Hospitalization for Any Cause (Measure 31)

Measure 31 assesses whether the Waiver has reduced the ALOS of IP stays for beneficiaries with an SUD. The baseline trend increased slightly before decreasing by 0.03 days per month in the initial implementation period when the exclusion of IMD stays greater than 15 days was lifted, compared to projected averages had the baseline trend continued, which was statistically significant at the 10 percent level (p=0.081). This trend continued after the full implementation, in which the average length of IP stay decreased by 0.08 days per month compared to projected rates had the initial implementation period continued. This change in the trend was statistically significant at the 10 percent level (p=0.055). The sustained decrease in the early implementation period may have been related to the COVID-19 PHE, particularly in the latter half of 2020 and early 2021. Increases in the ALOS in the late implementation period may represent pent-up demand resulting from lingering systemic impacts of the COVID-19 PHE for the non-expansion population and pent-up demand in the expansion population resulting from a lack of healthcare coverage prior to the expansion of Medicaid.

Based on the statistically significant decrease in the initial implementation rates compared to projected rates had the baseline trend continued, and in the full implementation rates compared to projected rates had the initial implementation rates continued, the measure supports the hypothesis that the Waiver will reduce the ALOS of IP hospitalization for beneficiaries with an SUD.

Table 5-27 shows the primary results from the ITS analysis. Full regression results are available in Appendix A. Figure 5-44 illustrates the model-based average rate in each month (blue line) and projected rates had the baseline trend and initial implementation trend (grey dashed lines) continued. Figure 5-45 displays the average rate in the expansion population (orange) compared to the non-expansion (green) and total (blue) populations from July 2017 to June 2022.

Table 5-27—ITS Results (Measure 31, Non-Expansion and Total Population)

	Non-Expansion		Total	
Variable	Estimate	*p*-value	Estimate	*p*-value
Intercept	5.71***	<0.001	5.70***	<0.001
Baseline monthly trend	0.03**	0.037	0.03**	0.018
Level change at initial implementation	-0.51*	0.058	-0.54**	0.043
Change in monthly trend – initial implementation	-0.03*	0.081	-0.03*	0.088
Level change at full implementation	0.75*	0.097	0.73	0.142
Change in monthly trend – full implementation	-0.08*	0.055	0.01	0.873

*p< 0.1, **p < 0.05, ***p<0.001
Note: Full model results are presented in Appendix A.

Figure 5-44—Illustration of ITS Analysis (Measure 31, Non-Expansion and Total population)

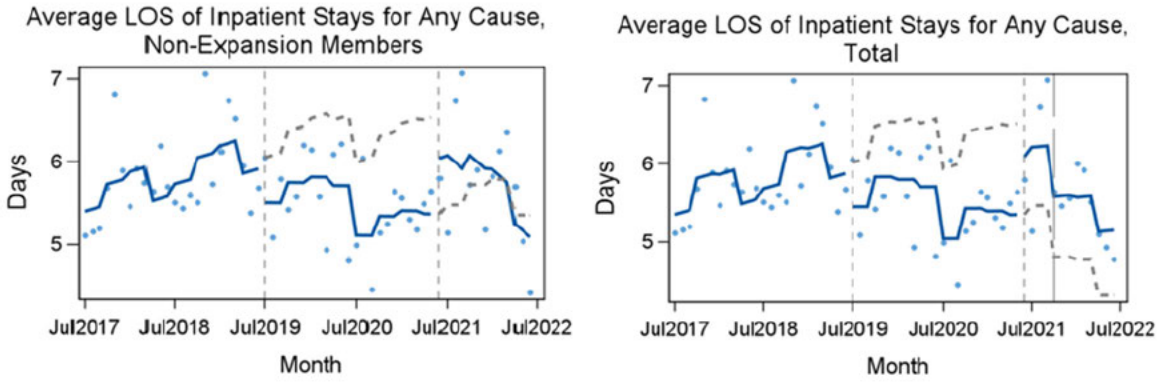
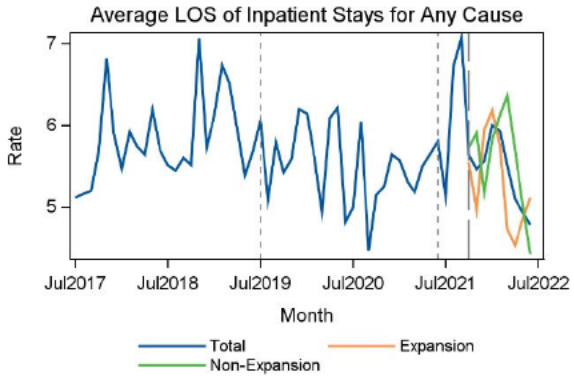


Figure 5-45—Measure 31 Trend Over Time; Non-Expansion, Total and Expansion populations



Measure 31 Conclusion: Supports the hypothesis

Average Number of ED Visits for Any Cause (Measure 32)

Measure 32 assesses ED utilization for any cause among beneficiaries with an SUD to determine whether the Waiver has reduced ED utilization of any cause for beneficiaries with an SUD. Baseline rates increased by 0.19 visits per 1,000 beneficiaries each month. After initial implementation, however, the rate decreased by 1.75 visits per 1,000 beneficiaries each month compared to the projected rates if the baseline trend continued, which was statistically significant ($p<0.001$).

Following the full implementation, which added services for MMIW and MAT/OTP, the monthly trend increased by 2.20 visits per 1,000 beneficiaries per month compared to the projected trend had the initial implementation trend continued, which was also statistically significant ($p<0.001$). The level change at full implementation decreased by 9.72 visits per 1,000 beneficiaries per month compared to the initial implementation period, which was statistically significant at the 10 percent level ($p=0.091$).

The total number of ED visits for any cause for the expansion group had consistently lower ED visits for any cause than the non-expansion group. Upon the inclusion of the expansion group, there was a larger decline in the rate following expansion among the total target population.

Due to the mixed results of the ITS analysis (i.e., a relative decrease in the trend upon initial implementation and a relative increase in the trend upon full implementation) this measure neither supports nor fails to support the hypothesis that the Waiver reduced ED utilization for SUD.

Table 5-28 illustrates the model-based average in each month (blue line) and projected rates had the baseline trend and initial implementation trend (grey dashed lines) continued. Table 5-28 shows the primary results from the ITS analysis. Full regression results are available in Appendix A. Figure 5-47 displays the average rate in the expansion population (orange line) compared to the non-expansion (blue line) and total populations (green line) from July 2017 to June 2022.

Table 5-28—ITS Results (Measure 32, Non-Expansion and Total Population)

	Non-Expansion		Total	
Variable	Estimate	*p*-value	Estimate	*p*-value
Intercept	234.01***	<0.001	234.17***	<0.001
Baseline monthly trend	0.19	0.478	0.20	0.460
Level change at initial implementation	20.89**	0.003	20.73**	0.004
Change in monthly trend – initial implementation	-1.75***	<0.001	-1.75***	<0.001
Level change at full implementation	-9.72*	0.091	-9.96*	0.087
Change in monthly trend – full implementation	2.20***	<0.001	1.55*	0.062

*$p<0.1$, **$p<0.05$, ***$p<0.001$
Note: Full model results are presented in Appendix A.

Figure 5-46—Illustration of ITS Analysis (Measure 32, Non-Expansion and Total Population)

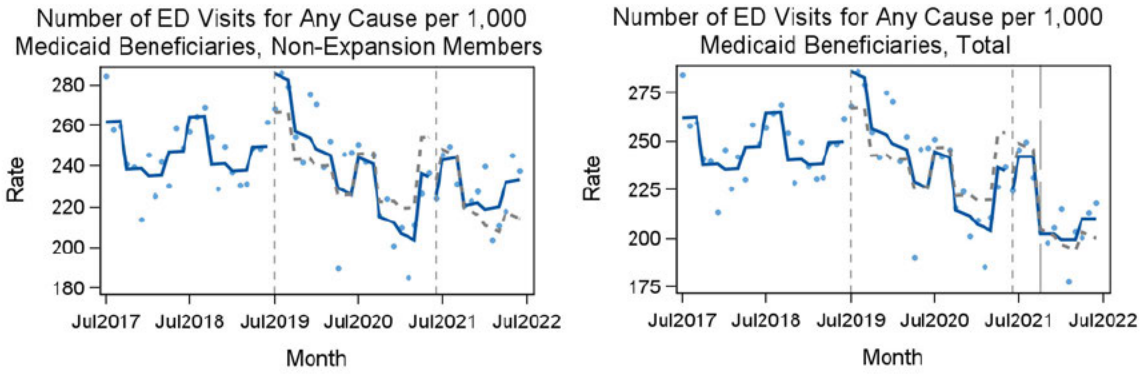
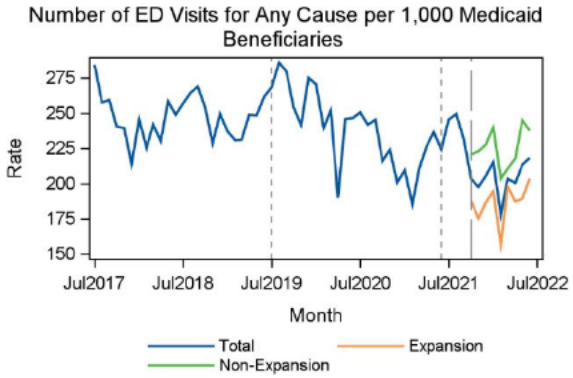


Figure 5-47—Measure 32 Trend Over Time; Non-Expansion, Total and Expansion Populations



Measure 32 Conclusion: Neither supports nor fails to support the hypothesis

To evaluate costs associated with the Waiver, HSAG followed guidance specified in CMS Appendix C: Approaches to Analyzing Costs Associated with Section 1115 Demonstrations for Beneficiaries with Serious Mental Illness/Serious Emotional Disturbance or Substance Use Disorders.[5-10] HSAG identified members with an SUD and calculated cost of care for these beneficiaries.

An ITS analysis was performed on per-member per-month (PMPM) costs. Indicator variables for each quarter were included in the model to control for seasonality. Two indicator variables to account for the effects of the COVID-19 PHE were also included: one to capture the initial lock-down period of quarter (Q) 2 2020, and another to capture gradual re-opening during Q3 2020 through Q1 2021. A generalized linear model (GLM) with log link was used because costs are positive and typically not normally distributed. Although this type of model allows for more accurate prediction of costs, interpretation is not as straightforward as a simple linear regression

5-10 Centers for Medicare & Medicaid Services. Appendix C: Approaches to Analyzing Costs Associated with Section 1115 Demonstrations for Beneficiaries with Serious Mental Illness/Serious Emotional Disturbance or Substance Use Disorders. Available at: https://www.medicaid.gov/medicaid/section-1115-demo/downloads/evaluation-reports/smi-sed-sud-cost-appendix-c.pdf. Accessed on: Mar. 13, 2023.

model, which can be interpreted in dollar amount changes. Results in this section are presented as percentage changes in costs.

To identify cost drivers associated with diagnosis and treatment of SUD, ITS models were constructed for the following populations:

- SUD-IMD
- SUD-Other
- Non-SUD

To identify treatment cost drivers for beneficiaries with an SUD, costs were split out by type of care. ED-related OP costs were further separated from other non-ED OP costs, given that ED services are particularly costly and represent an important opportunity for cost savings that could be achieved with better access to SUD treatment services.

- Total costs
- Inpatient (IP)
- OP
  - ED OP
  - Non-ED OP
- Long-term care (LTC)
- Professional
- Pharmacy

Hypothesis 3: The demonstration will reduce or maintain total cost of SUD-related care.

PMPM Cost for SUD Treatment (Measure 33)

Measure 33 assesses cost drivers among the SUD population.

A GLM with a log link was constructed to account for costs being positive and not normally distributed. This model allows for a more accurate analysis of costs; however, interpretation is not as straightforward as a simple linear regression model, which can be interpreted in dollar amount changes. Results are presented as percentage changes in costs given a unit change in the variable.

Cost information for IMD stays were taken from the claims and encounter data extract since the MCO reports lacked data on costs related to IMD stays. Due to the use of various data sources, the IMD stays represented in this cost analyses may not be consistent with the stays reported for other IMD measures. HSAG and the Nebraska Department of Health and Human Services (DHHS) will work together to align on the methodology for IMD stays identification for the Summative Evaluation Report.

SUD PMPM Costs Beneficiaries with an SUD

PMPM costs associated with an SUD diagnosis or MAT treatment in an IMD for the non-expansion population increased by 0.94 percent per month during the baseline period (p=0.035). After initial implementation of the Waiver, costs increased by 0.47 percent per month (p=0.471) compared to the projected costs had the baseline trend continued. Following full implementation of the Waiver, the monthly trend changed by 0.42 percent per

month relative to projected costs had the initial implementation period trend continued. Although these results are not statistically significant, an increasing trend is expected as the Waiver allowed Medicaid to extend coverage to IMD stays regardless of the duration. SUD-IMD costs for the expansion population were overall higher than the non-expansion population after October 2021. As additional data points become available in the Summative Evaluation Report, a more comprehensive assessment of the Waiver's impact on SUD-IMD costs will be conducted.

Table 5-29 shows the primary results from the ITS analysis. Full regression results are available in Appendix A. Figure 5-48 illustrates the model-based average rate in each month (blue line) and projected rates had the baseline trend and initial implementation trend (grey dashed lines) continued. Figure 5-49 displays the average rate in the expansion population (orange line) compared to the non-expansion (green line) and total populations (blue line) from July 2017 to June 2022.

Table 5-29—Primary ITS Results (Measure 33: SUD-IMD PMPM Cost Among Beneficiaries with an SUD)

	Non-Expansion		Total	
Variable	Change in Costs	*p*-value	Change in Costs	*p*-value
Intercept	$21.30***	<0.001	$20.99***	<0.001
Baseline monthly trend	0.94%**	0.035	0.83%*	0.089
Level change at initial implementation	-15.99%*	0.062	-13.06%	0.173
Change in monthly trend – initial implementation	0.47%	0.471	0.31%	0.656
Level change at full implementation	-22.75%*	0.057	-15.66%	0.225
Change in monthly trend – full implementation	0.42%	0.691	-2.87%**	0.036

*$p < 0.1$, **$p < 0.05$, ***$p<0.001$
Note: Full model results are presented in Appendix A.

Figure 5-48—Illustration of ITS Analysis (Measure 33: SUD-IMD PMPM Cost Among Beneficiaries with an SUD)

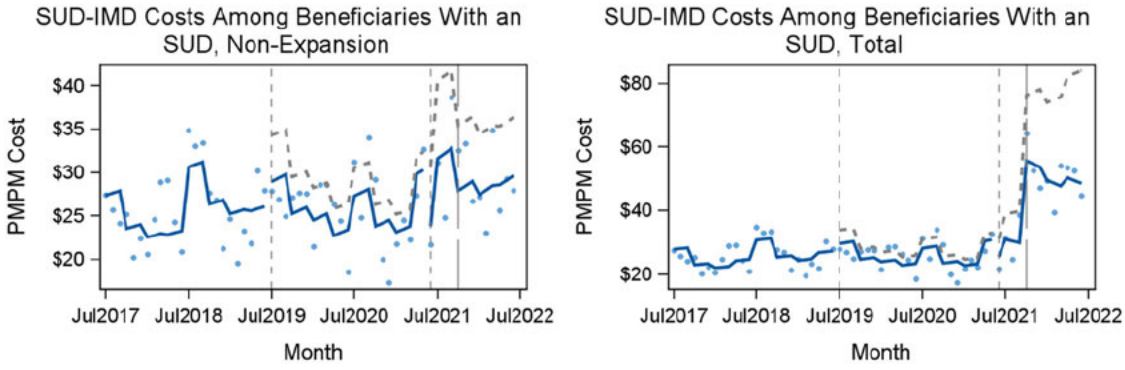
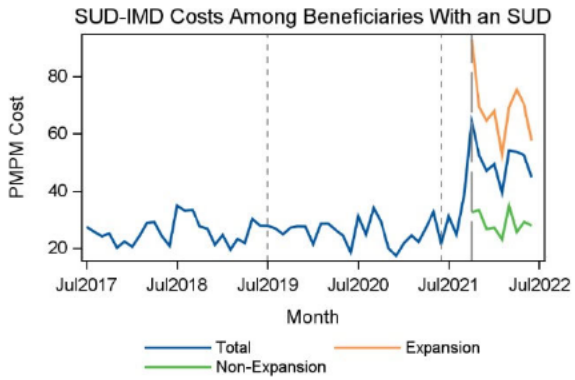


Figure 5-49—Measure 33: SUD-IMD PMPM Cost Among Beneficiaries with an SUD Trend Over Time - Non-Expansion, Total, and Expansion Populations



Other SUD PMPM Costs Among SUD Beneficiaries

PMPM costs associated with an SUD diagnosis or MAT outside of the IMD setting for the non-expansion population were decreasing by 0.72 percent per month during the baseline period (p=0.031). After initial implementation, costs increased by an average of 18.28 percent (p=0.021) followed by an increase in the trend of 0.26 percent per month compared to the projected costs had the baseline trend continued, although this increase was not statistically significant (p<0.626). However, following full implementation of the Waiver, costs began to decrease by 1.04 percent per month relative to the initial implementation trend, although this decline was not statistically significant (p=0.339). Other SUD costs for the expansion population were overall higher than the non-expansion population after October 2021. As additional data points become available, further assessment of the Waiver's impact on SUD-IMD costs will be conducted.

Table 5-30 shows the primary results from the ITS analysis. Full regression results are available in Appendix A. Figure 5-49 illustrates the model-based average rate in each month (blue line) and projected rates had the baseline trend and initial implementation trend (grey dashed lines) continued. Figure 5-51 displays the average rate in the expansion population (orange line) compared to the non-expansion (green line) and total populations (blue line) from July 2017 to June 2022

Table 5-30—Primary ITS Results (Measure 33: Other SUD PMPM Costs Among Beneficiaries with an SUD)

	Non-Expansion		Total	
Variable	Change in Costs	p-value	Change in Costs	p-value
Intercept	$475.66***	<0.001	$476.94***	<0.001
Baseline monthly trend	-0.72%**	0.031	-0.71%**	0.027
Level change at initial implementation	18.28%**	0.021	17.74%**	0.019
Change in monthly trend – initial implementation	0.26%	0.626	0.28%	0.586
Level change at full implementation	-12.26%	0.275	-12.93%	0.223
Change in monthly trend – full implementation	-1.04%	0.339	-1.18%	0.446

*p< 0.1, **p< 0.05, ***p<0.001
Note: Full model results are presented in Appendix A.

Figure 5-50—Illustration of ITS Analysis (Measure 33: Other SUD PMPM Costs Among Beneficiaries with an SUD)

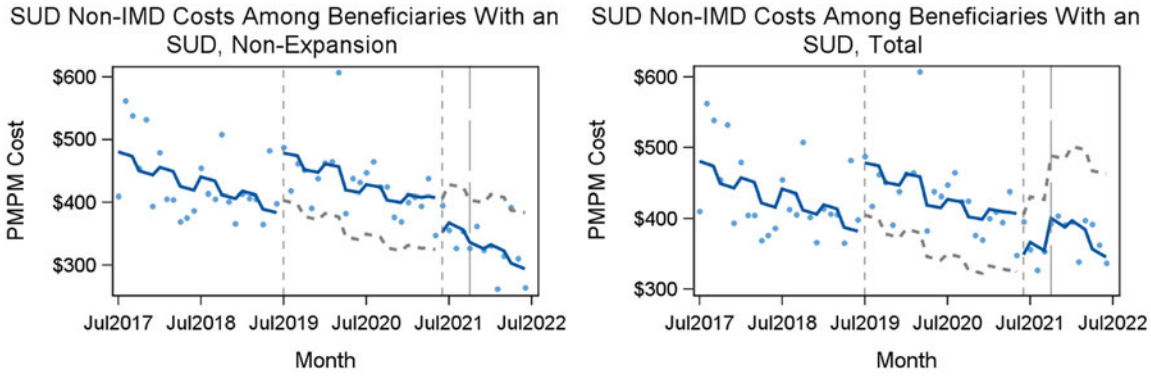
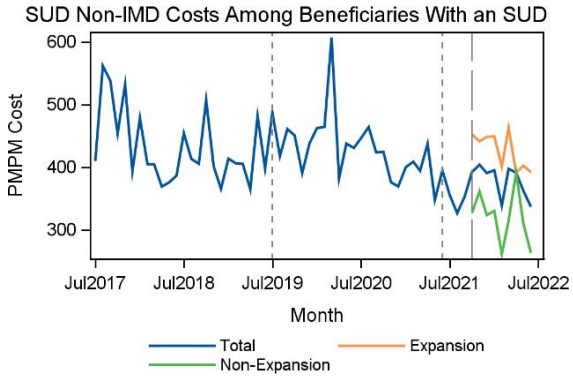


Figure 5-51—Measure 33: Other SUD PMPM Costs Among Beneficiaries with an SUD Trend Over Time; Non-Expansion, Total, and Expansion Populations



Non-SUD PMPM Costs Among Beneficiaries with an SUD

Among the non-expansion population, non-SUD PMPM costs were slightly increasing during the baseline period (p=0.484). However, after initial implementation of the Waiver, the monthly cost trend decreased significantly compared to the projected costs had the baseline trend continued, by 1.74 percent per month (p<0.001). Following full implementation of the Waiver, the trend increased slightly by 0.06 percent per month relative to the projected rates had the initial implementation period continued, although this was not statistically significant. Unlike SUD costs, non-SUD costs among the expansion population were overall lower than non-SUD costs among the non-expansion population after October 2021. As additional data points become available, further assessment of the Waiver's impact on non-SUD costs will be conducted.

Table 5-31 shows the primary results from the ITS analysis. Full regression results are available in Appendix A. Figure 5-52 illustrates the model-based average rate in each month (blue line) and projected rates had the baseline trend and initial implementation trend (grey dashed lines) continued. Figure 5-53 displays the average rate in the expansion population (orange line) compared to the non-expansion (green line) and total populations (blue line) from July 2017 to June 2022.

Table 5-31—Primary ITS Results (Measure 33: Non-SUD PMPM Cost Among Beneficiaries with an SUD)

Variable	Non-Expansion		Total	
	Change in Costs	*p*-value	Change in Costs	*p*-value
Intercept	$1,468.03***	<0.001	$1,466.18***	<0.001
Baseline monthly trend	0.17%	0.484	0.18%	0.471
Level change at initial implementation	14.35%**	0.012	14.13%**	0.015
Change in monthly trend – initial implementation	-1.74%***	<0.001	-1.73%***	<0.001
Level change at full implementation	14.04%	0.124	14.45%	0.121
Change in monthly trend – full implementation	0.06%	0.935	-0.07%	0.962

*p< 0.1, **p<0.05, ***p<0.001
Note: Full model results are presented in Appendix A.

Figure 5-52—Illustration of ITS Analysis (Measure 33: Non-SUD PMPM Cost Among Beneficiaries with an SUD)

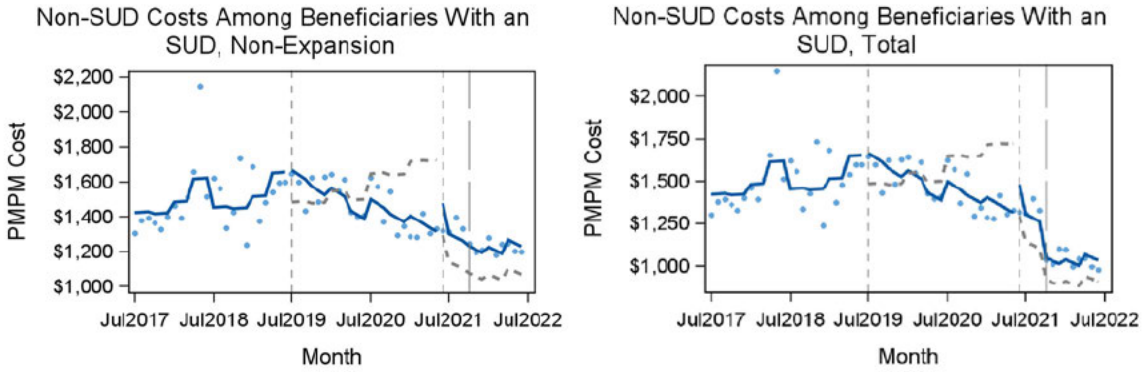
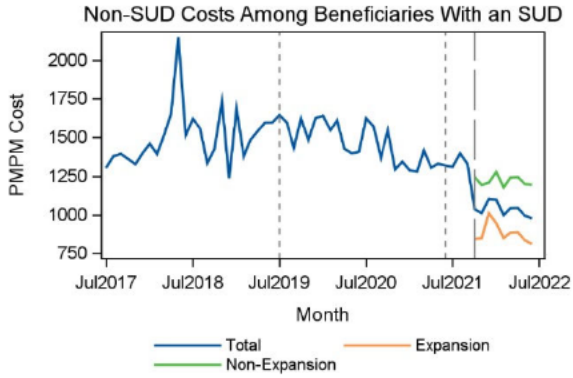


Figure 5-53—Measure 33: Non-SUD PMPM Cost Among Beneficiaries with an SUD Trend Over Time; Non-Expansion, Total, and Expansion Populations



SUD IMD costs demonstrated statistically significant one-time decreases upon initial and full implementation; they also showed an overall increasing monthly cost trend in both implementation periods relative to their respective projected averages, although these increases were not statistically significant. Other SUD costs showed evidence of an increasing monthly trend during the initial implementation period followed by a decreasing monthly trend during the full implementation period, although neither result was statistically significant. Non-SUD costs demonstrated a statistically significant decrease in the initial implementation monthly trend relative to baseline projected averages, and a small relative increase in the monthly trend during the full implementation

period. Considering both SUD and non-SUD PMPM costs, this measure neither supports nor fails to support the hypothesis that the Waiver will reduce or maintain total cost of SUD-related care.

Measure 33 Conclusion: Neither supports nor fails to support the hypothesis

Hypothesis 4: The demonstration will reduce or maintain total cost of care.

PMPM Cost (Measure 34)

Measure 34 assesses cost drivers for beneficiaries with an SUD.

A GLM with a log link was constructed to account for costs being positive and not normally distributed. This model allows for a more accurate analysis of costs; however, interpretation is not as straightforward as a simple linear regression model, which can be interpreted in dollar amount changes. Results are presented as percentage changes in costs given a unit change in the variable.

Total PMPM Costs Among Beneficiaries with an SUD

Total PMPM costs among SUD non-expansion beneficiaries were variable but followed a flat trend during the baseline period (p=0.995). After initial implementation, costs decreased by 1.30 percent per month (p<0.001) compared to the projected costs had the baseline trend continued. Following full implementation of the Waiver, costs decreased by 0.18 percent per month compared to projected costs had the initial implementation trend continued (p=0.770). The impact of the COVID-19 PHE is evidenced by a slight dip in total costs in early 2020, possibly due to disruptions in the healthcare system that were prevalent during this time period. Total costs were overall higher in the non-expansion population compared to the expansion population after October 2021.

Table 5-32 shows the primary results from the ITS analysis. Full regression results are available in Appendix A. Figure 5-54 illustrates the model-based average rate in each month (blue line) and projected rates had the baseline trend and initial implementation trend (grey dashed lines) continued. Figure 5-55 displays the average rate in the expansion population (orange) compared to the non-expansion (green) and total (blue) populations from July 2017 to June 2022.

Table 5-32—Primary ITS Results (Measure 34: Total PMPM Costs Among Beneficiaries with an SUD)

	Non-Expansion		Total	
Variable	Estimate	*p*-value	Estimate	*p*-value
Intercept	$1,957.76***	<0.001	$1,957.74***	<0.001
Baseline monthly trend	0.00%	0.995	0.01%	0.950
Level change at initial implementation	14.53%**	0.002	14.14%**	0.003
Change in monthly trend – initial implementation	-1.30%***	<0.001	-1.29%***	<0.001
Level change at full implementation	7.48%	0.310	8.07%	0.279
Change in monthly trend – full implementation	-0.18%	0.770	-0.52%	0.636

*p< 0.1, **p<0.05, ***p<0.001
Note: Full model results are presented in Appendix A.

Figure 5-54—Illustration of ITS Analysis (Measure 34: Total PMPM Costs Among Beneficiaries with an SUD)

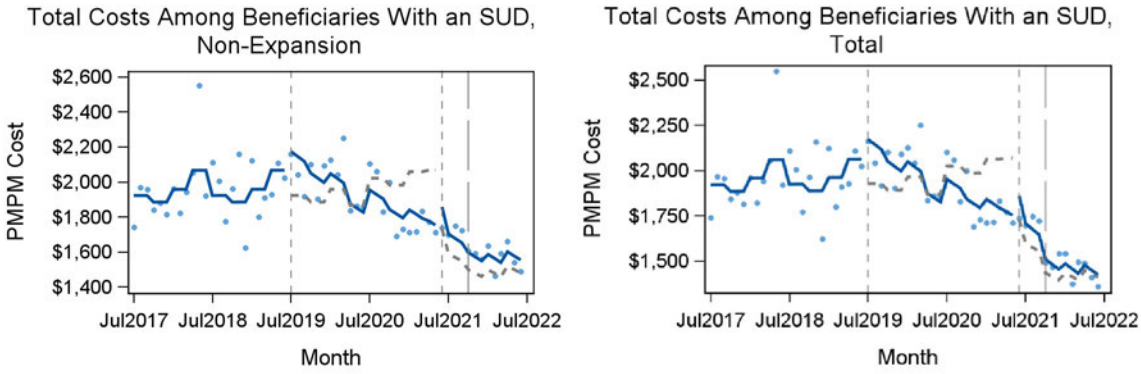
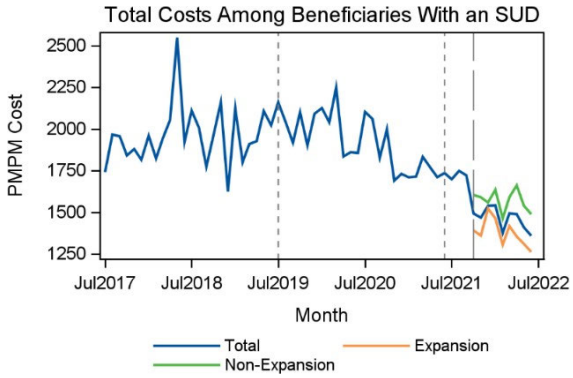


Figure 5-55—Measure 34: Total PMPM Costs Among Beneficiaries with an SUD Trend Over Time – Non-Expansion, Total and Expansion Populations



IP PMPM Costs Among Beneficiaries with an SUD

During the baseline period, IP costs for SUD non-expansion beneficiaries were declining by 2.06 percent per month and continued to decline during initial implementation of the Waiver by 0.92 percent per month compared to the projected rates had the baseline continued, though this decline was not statistically significant (p=0.338). Following full implementation with the addition of MAT/OTP services, IP costs further declined by 1.34 percent per month compared to the projected costs had the initial implementation trend continued; however, this change was not statistically significant (p=0.486). ITS analysis also shows large increases in average costs at initial implementation of 49.99 percent and at full implementation of 35.07 percent, though only the increase in average cost during the initial implementation was statistically significant (p=0.002).

Table 5-33 shows the primary results from the ITS analysis. Full regression results are available in Appendix A. Figure 5-56 illustrates the model-based average rate in each month (blue line) and projected rates had the baseline trend and initial implementation trend (grey dashed lines) continued. Figure 5-57 displays the average rate in the expansion population (orange) compared to the non-expansion (green) and total (blue) populations from July 2017 to June 2022.

Table 5-33—Primary ITS Results (Measure 34: IP PMPM Costs Among Beneficiaries with an SUD)

	Non-Expansion		Total	
Variable	Estimate	*p*-value	Estimate	*p*-value
Intercept	$726.90***	<0.001	$725.76***	<0.001
Baseline monthly trend	-2.06%***	<0.001	-2.04%***	<0.001
Level change at initial implementation	49.99%**	0.002	49.07%**	0.002
Change in monthly trend – initial implementation	-0.92%	0.338	-0.90%	0.348
Level change at full implementation	35.07%	0.147	37.38%	0.127
Change in monthly trend – full implementation	-1.34%	0.486	-3.82%	0.247

*p< 0.1, **p<0.05, ***p<0.001
Note: Full model results are presented in Appendix A.

Figure 5-56—Illustration of ITS Analysis (Measure 34: IP PMPM Costs Among Beneficiaries with an SUD)

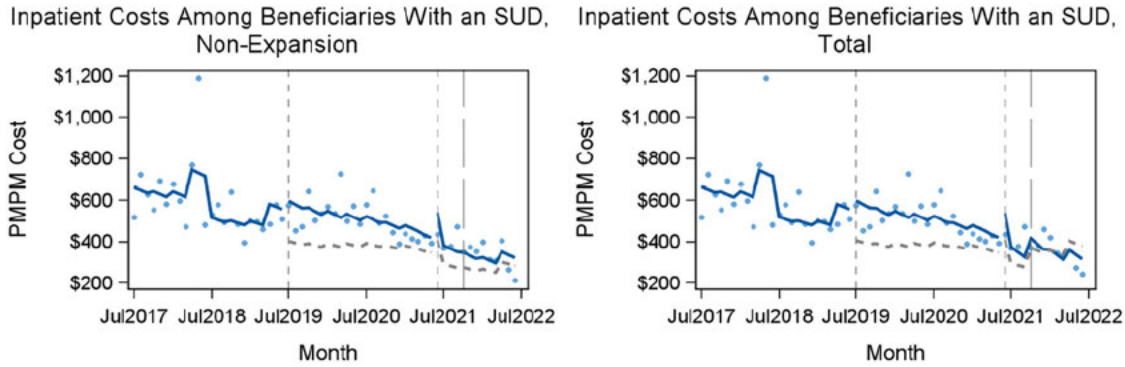
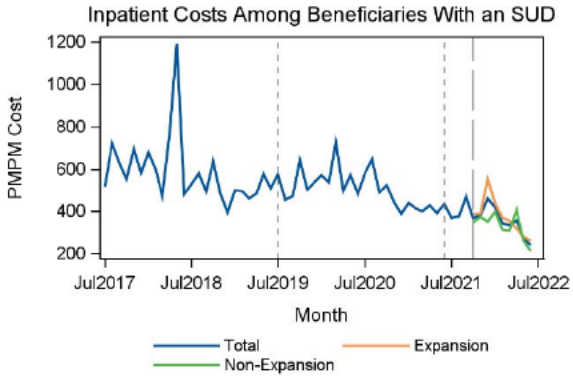


Figure 5-57—Measure 34: Total PMPM IP Costs Among Beneficiaries with an SUD Trend Over Time; Non-Expansion, Total, and Expansion Populations



Total OP, ED OP, and Non-ED OP PMPM Costs Among Beneficiaries with an SUD

Prior to the initial implementation, overall OP costs increased by 0.49 percent per month during the baseline period among non-expansion beneficiaries with an SUD (p=0.055). ED costs increased by 0.55 percent per month during the baseline period (p=0.017) and non-ED costs increased by 0.46 percent per month (p=0.266).

Upon initial implementation, there was a statistically significant increase in the average total OP costs of 16.94 percent (p=0.002); this shift was also statistically significant when stratifying OP costs by ED and non-ED OP

costs, with ED costs increasing by 10.94 percent (p=0.027) and non-ED costs increasing by 22.10 percent (p=0.015).

After initial implementation of the Waiver, there was a statistically significant decrease in the trend of total OP costs of 1.23 percent per month (p=0.001) compared to projected rates had the baseline trend continued. The trend in ED costs decreased by an average of 1.39 percent per month (p<0.001), and non-ED costs decreased by 1.18 percent per month (p=0.053) compared to projected rates had the baseline trend continued.

After full implementation with the addition of MAT/OTP services, there was a slight decrease in the trend of overall OP costs by 0.57 percent per month compared to the projected initial implementation trend, though this change was not statistically significant (p=0.389). This observed decrease is a combination of a decline in non-ED OP costs by 1.51 percent per month compared to projected costs had the initial implementation trend occurred (p=0.154) and an increase in ED-OP costs of 0.88 percent per month compared to projected costs had the initial implementation trend occurred (p=0.163).

Table 5-34 through Table 5-36 show the primary results from the ITS analysis. Full regression results are available in Appendix A. Figure 5-58, Figure 5-60 and Figure 5-62 illustrates the model-based average rate in each month (blue line) and projected rates had the baseline trend and initial implementation trend (grey dashed lines) continued. Figure 5-59, Figure 5-61 and Figure 5-63 display the average rate in the expansion population (orange) compared to the non-expansion (green) and total (blue) populations from July 2017 to June 2022.

Table 5-34—Primary ITS Results (Measure 34: Total OP PMPM Costs Among Beneficiaries with an SUD)

	Non-Expansion		Total	
Variable	Estimate	*p*-value	Estimate	*p*-value
Intercept	$257.84***	<0.001	$258.48***	<0.001
Baseline monthly trend	0.49%*	0.055	0.47%*	0.061
Level change at initial implementation	16.94%**	0.002	17.38%**	0.002
Change in monthly trend – initial implementation	-1.23%**	0.001	-1.25%***	<0.001
Level change at full implementation	1.01%	0.898	-1.64%	0.833
Change in monthly trend – full implementation	-0.57%	0.389	0.57%	0.614

*p< 0.1, **p<0.05, ***p<0.001
Note: Full model results are presented in Appendix A.

Figure 5-58— Illustration of ITS Analysis (Measure 34: Total OP PMPM Costs Among Beneficiaries with an SUD)

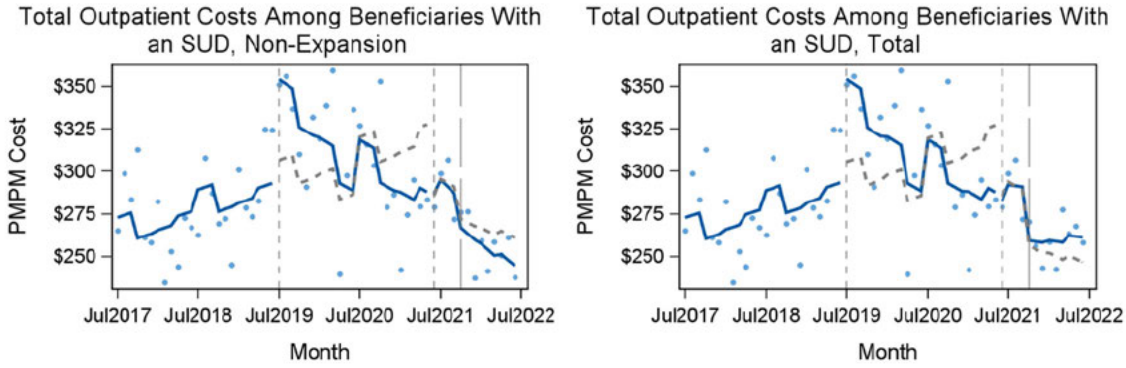


Figure 5-59—Measure 34: Total OP PMPM Costs Among Beneficiaries with an SUD Trend Over Time; Non-Expansion, Total and Expansion Populations

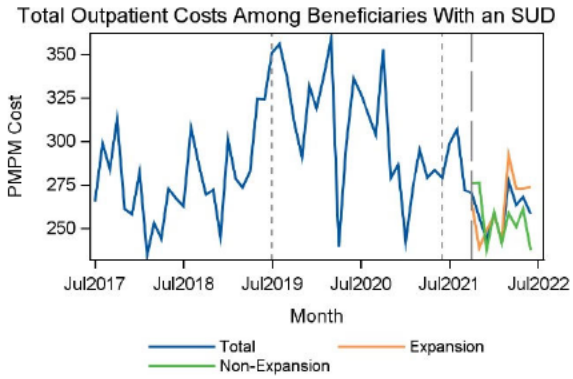


Table 5-35—Primary ITS Results (Measure 34: ED OP PMPM Costs Among Beneficiaries with an SUD)

	Non-Expansion		Total	
Variable	Estimate	*p*-value	Estimate	*p*-value
Intercept	$103.39***	<0.001	$104.03***	<0.001
Baseline monthly trend	0.55%**	0.017	0.54%**	0.017
Level change at initial implementation	10.94%**	0.027	11.07%**	0.024
Change in monthly trend – initial implementation	-1.39%***	<0.001	-1.40%***	<0.001
Level change at full implementation	-4.97%	0.503	-5.37%	0.464
Change in monthly trend – full implementation	0.88%	0.163	0.90%	0.384

*$p < 0.1$, **$p<0.05$, ***$p<0.001$
Note: Full model results are presented in Appendix A.

Figure 5-60—Illustration of ITS Analysis (Measure 34: ED OP PMPM Costs Among Beneficiaries with an SUD)

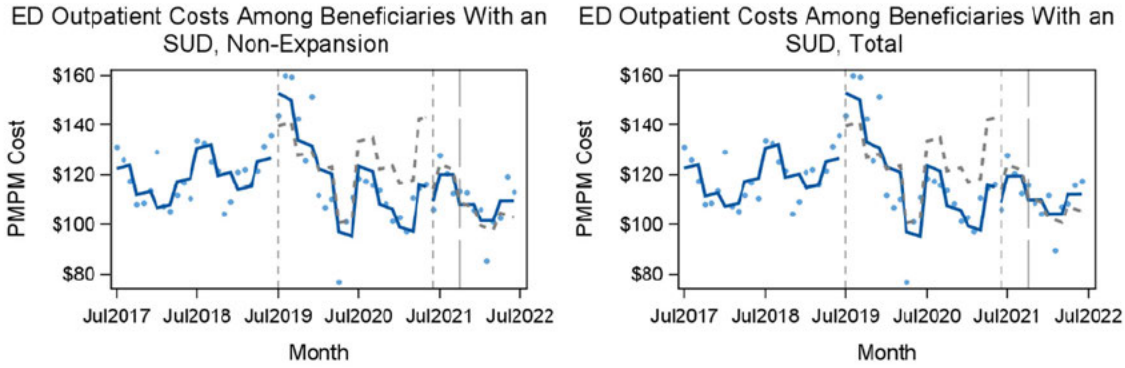


Figure 5-61—Measure 34: ED OP PMPM Costs Among Beneficiaries with an SUD Trend Over Time; Non-Expansion, Total and Expansion Populations

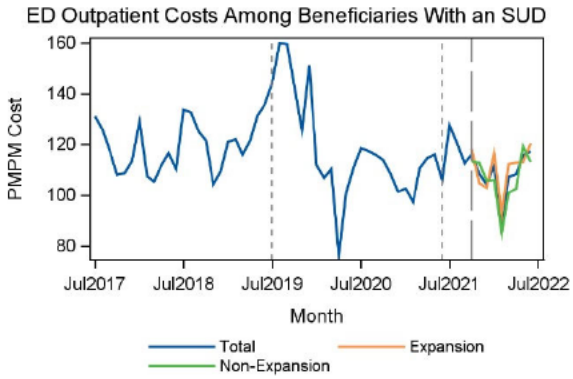


Table 5-36—Primary ITS Results (Measure 34: Non-ED OP PMPM Costs Among Beneficiaries with an SUD)

	Non-Expansion		Total	
Variable	Estimate	*p*-value	Estimate	*p*-value
Intercept	$153.33***	<0.001	$153.44***	<0.001
Baseline monthly trend	0.46%	0.266	0.44%	0.284
Level change at initial implementation	22.10%**	0.015	22.79%**	0.012
Change in monthly trend – initial implementation	-1.18%*	0.053	-1.20%**	0.048
Level change at full implementation	5.49%	0.663	1.29%	0.917
Change in monthly trend – full implementation	-1.51%	0.154	0.39%	0.828

*$p < 0.1$, **$p<0.05$, ***$p<0.001$
Note: Full model results are presented in Appendix A.

Figure 5-62—Illustration of ITS Analysis (Measure 34: Non-ED OP PMPM Costs Among Beneficiaries with an SUD)

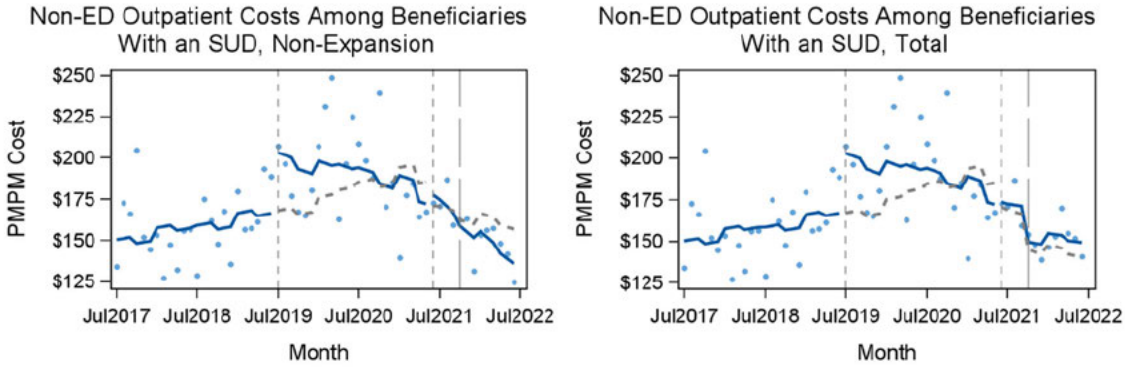
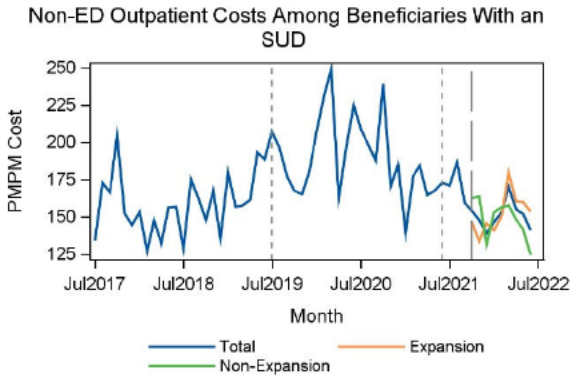


Figure 5-63—Measure 34: Non-ED OP PMPM Costs Among Beneficiaries with an SUD Trend Over Time; Non-Expansion, Total and Expansion Populations



LTC PMPM Costs Among Beneficiaries with an SUD

LTC costs for non-expansion SUD beneficiaries increased slightly by an average of 1.32 percent during the baseline period, though this was not statistically significant (p=0.345). The trend in LTC costs reversed direction after the baseline period, decreasing by 4.77 percent per month in the initial implementation period compared to projected costs had the baseline trend continued, however, this change was not statistically significant (p=0.266). Similarly, the trend decreased by 10.50 percent per month in the full implementation period compared to projected costs had the initial implementation trend continued, however, this change was not statistically significant (p=0.616).

Table 5-37 shows the primary results from ITS analysis. Full regression results are available in Appendix A. Figure 5-64 illustrates the model-based average rate in each month (blue line) and projected rates had the baseline trend and initial implementation trend (grey dashed lines) continued. Figure 5-65 displays the average rate in the expansion population (orange) compared to the non-expansion (green) and total (blue) populations from July 2017 to June 2022.

Table 5-37—Primary ITS Results (Measure 34: LTC PMPM Costs Among Beneficiaries with an SUD)

	Non-Expansion		Total	
Variable	Estimate	*p*-value	Estimate	*p*-value
Intercept	$158.73***	<0.001	$158.91***	<0.001
Baseline monthly trend	1.32%	0.345	1.32%	0.347
Level change at initial implementation	-20.38%	0.546	-20.26%	0.550
Change in monthly trend – initial implementation	-4.77%	0.266	-4.78%	0.266
Level change at full implementation	-1.97%	0.988	-8.08%	0.954
Change in monthly trend – full implementation	-10.50%	0.616	-6.95%	0.869

*p< 0.1, **p<0.05, ***p<0.001
Note: Full model results are presented in Appendix A.

Figure 5-64—Illustration of ITS Analysis (Measure 34: LTC PMPM Costs Among Beneficiaries with an SUD)

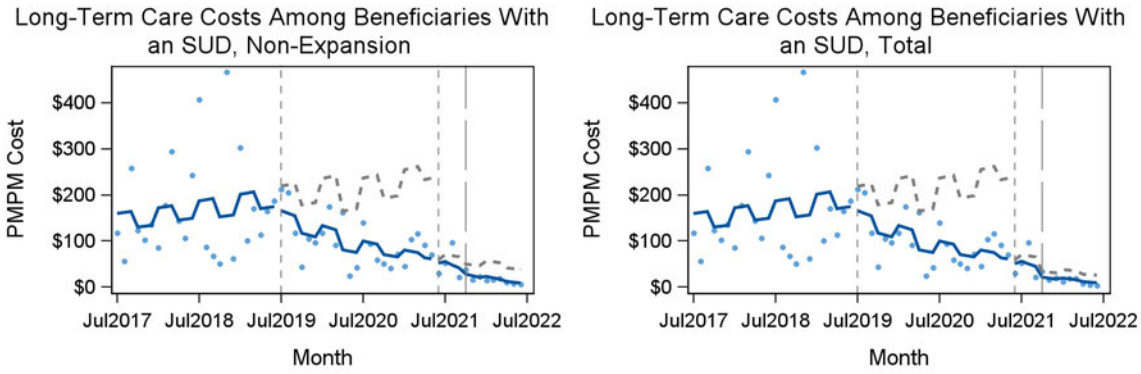
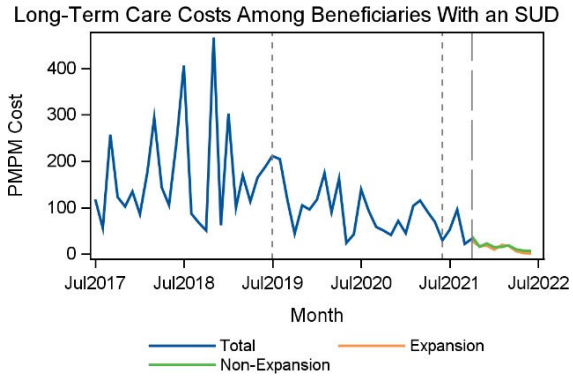


Figure 5-65—Measure 34: LTC PMPM Costs Among Beneficiaries with an SUD Trend Over Time; Non-Expansion, Total and Expansion Populations



Professional PMPM Costs Among Beneficiaries with an SUD

During the baseline period, professional costs among non-expansion SUD beneficiaries increased by an average of 0.46 percent per month ($p<0.001$). Following initial implementation, however, this trend reversed, with a decrease in costs of 0.92 percent per month compared to the projected costs had the baseline trend continued, a statistically significant difference ($p<0.001$). After full implementation, the trend in professional costs increased by 0.47 percent per month compared to projected costs had the initial implementation trend continued, though this was not statistically significant ($p=0.182$).

Table 5-38 shows the primary results from the ITS analysis. Full regression results are available in Appendix A. Figure 5-66 illustrates the model-based average rate in each month (blue line) and projected rates had the baseline trend and initial implementation trend (grey dashed lines) continued. Figure 5-67 displays the average rate in the expansion population (orange) compared to the non-expansion (green) and total (blue) populations from July 2017 to June 2022.

Table 5-38—Primary ITS Results (Measure 34: Professional PMPM Costs Among Beneficiaries with an SUD)

	Non-Expansion		Total	
Variable	Estimate	*p*-value	Estimate	*p*-value
Intercept	$602.26***	<0.001	$602.97***	<0.001
Baseline monthly trend	0.46%***	<0.001	0.46%***	<0.001
Level change at initial implementation	2.67%	0.362	2.59%	0.380
Change in monthly trend – initial implementation	-0.92%***	<0.001	-0.92%***	<0.001
Level change at full implementation	2.74%	0.537	3.55%	0.431
Change in monthly trend – full implementation	0.47%	0.182	0.13%	0.838

*p< 0.1, **p<0.05, ***p<0.001
Note: Full model results are presented in Appendix A.

Figure 5-66—Illustration of ITS Analysis (Measure 34: Professional PMPM Costs Among Beneficiaries with an SUD)

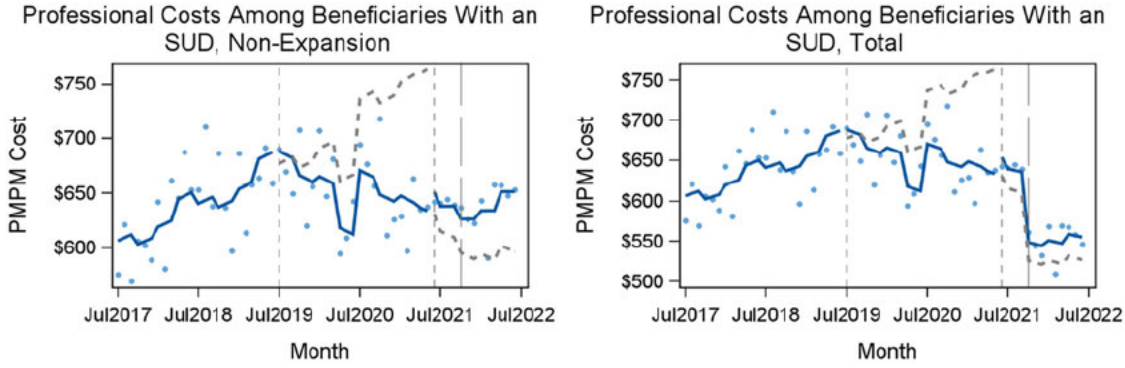
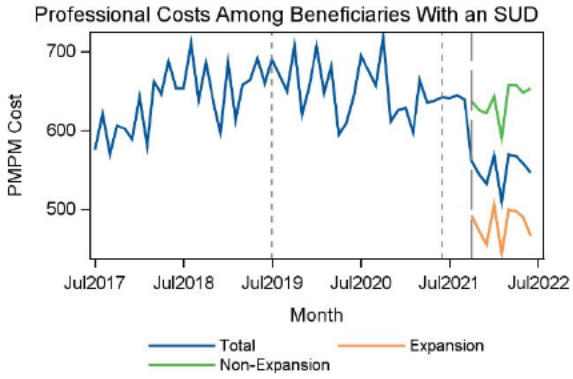


Figure 5-67—Measure 34: Professional PMPM Costs Among Beneficiaries with an SUD Trend Over Time; Non-Expansion, Total and Expansion Populations



Pharmacy PMPM Costs Among Beneficiaries with an SUD

Pharmacy costs for non-expansion SUD beneficiaries increased by an average of 1.79 percent per month during the baseline period (p<0.001). Following initial implementation, the trend in pharmacy costs declined by an average of 2.45 percent per month compared to projected costs had the baseline trend continued, which was a statistically significant change (p<0.001). Following the full implementation period, the trend in pharmacy costs increased by an average of 1.07 percent per month compared to projected costs had the initial implementation trend continued, which was statistically significant at the 10 percent level (p=0.080). These results are consistent

with expectations, given that the full implementation of the Waiver expanded MAT/OTP coverage which would be reflected in higher pharmacy costs.

Table 5-39 shows the primary results from the ITS analysis. Full regression results are available in Appendix A. Figure 5-68 illustrates the model-based average rate in each month (blue line) and projected rates had the baseline trend and initial implementation trend (grey dashed lines) continued. Figure 5-69 displays the average rate in the expansion population (orange) compared to the non-expansion (green) and total (blue) populations from July 2017 to June 2022.

Table 5-39—Primary ITS Results (Measure 34: Pharmacy PMPM Costs Among Beneficiaries with an SUD)

	Non-Expansion		Total	
Variable	Estimate	*p*-value	Estimate	*p*-value
Intercept	$234.45***	<0.001	$234.91***	<0.001
Baseline monthly trend	1.79%***	<0.001	1.83%***	<0.001
Level change at initial implementation	12.72%**	0.017	11.63%**	0.017
Change in monthly trend – initial implementation	-2.45%***	<0.001	-2.45%***	<0.001
Level change at full implementation	-4.14%	0.575	-2.64%	0.701
Change in monthly trend – full implementation	1.07%*	0.080	2.52%**	0.015

*$p < 0.1$, **$p<0.05$, ***$p<0.001$
Note: Full model results are presented in Appendix A.

Figure 5-68—Illustration of ITS Analysis (Measure 34: Pharmacy PMPM Costs Among Beneficiaries with an SUD)

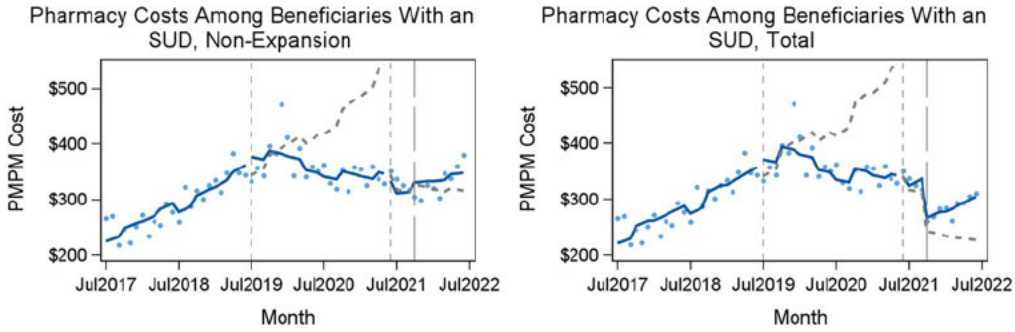
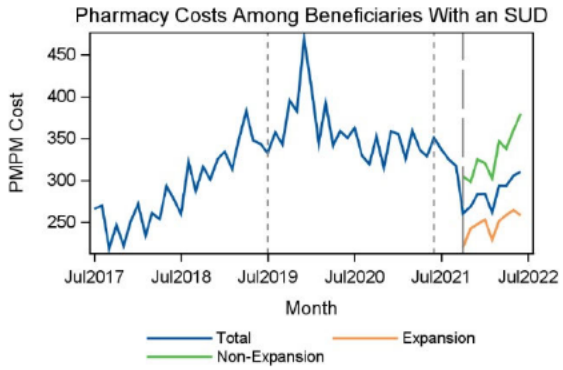


Figure 5-69—Measure 34: Pharmacy PMPM Costs Among Beneficiaries with an SUD Trend Over Time; Non-Expansion, Total and Expansion Populations



The monthly trends in total costs and costs separated by category of service all decreased following initial implementation of the Waiver, and these decreases were significant for total, OP, ED OP, non-ED OP, professional, and pharmacy costs. However, after full implementation of the Waiver, there were no significant decreases in the monthly trend in total costs or in any costs separated by category of service compared to projected costs had the initial implementation trend continued. Furthermore, ED OP, professional, and pharmacy costs increased following full implementation, with the increase in pharmacy costs found to be statistically significant. Overall, though the monthly trend in costs significantly decreased during the initial implementation period, there was no significant decrease in the monthly trend in costs during the full implementation period. Taking together the results from the analyses of costs stratified by category of service, this measure neither supports nor fails to support the hypothesis that the Waiver will reduce or maintain total cost of SUD-related care.

Measure 34 Conclusion: Neither supports nor fails to support the hypothesis

6. Conclusions

The Nebraska Section 1115 Substance Use Disorder (SUD) Demonstration Waiver (the Waiver) allowed Nebraska to make capitated payments for stays in Institutions for Mental Disease (IMD) regardless of the average length of stay (ALOS) and provide coverage for medically monitored inpatient withdrawal (MMIW), medication-assisted treatment (MAT), and opioid treatment program (OTP) services. Table 6-1 presents the criteria used to determine whether results supported the hypothesis for each measure. Table 6-2 summarizes the conclusions across all measures, organized by aim, evaluation question, and hypothesis.

Table 6-1—Measure Conclusion Criteria

Conclusion	Criteria
Supports	• Statistical testing results were significant in a favorable direction. • For measures without statistical testing, there was conclusive evidence of moderate to large, sustained improvements in the results.
Neither supports nor fails to support (NS/FS)	• Statistical testing results were not significant for both implementation periods or there were apparent ambiguous results in each implementation period. • For measures without statistical testing, there was no conclusive evidence of moderate to large, sustained increases or decreases in the results.
Does not support	• Statistical testing results were significant in an unfavorable direction. • For measures without statistical testing, there was conclusive evidence of moderate to large, sustained worsening in the results.
Insufficient data	• There were no pre-implementation data or insufficient data points during the Waiver implementation period to make a determination of increases/decreases in rates directly attributable to the Waiver.

Table 6-2—Summary of Results by Aim, Evaluation Question, Hypothesis, and Measure

Measure Number	Measure Name	Results Support Hypothesis
Aim One: Improve Access to Health Care for Beneficiaries with an SUD		
Evaluation Question 1: Did the demonstration improve access to healthcare for beneficiaries with an SUD?		
Hypothesis 1: The demonstration will increase access to evidence-based SUD treatment reflected in increased utilization.		
1	Percentage of Beneficiaries Receiving Any SUD Treatment Service	Yes
2	Percentage of Beneficiaries Who Use Residential Services for SUD	Yes
3	Percentage of Beneficiaries Who Use Withdrawal Management Services	No
4	Percentage of Beneficiaries Who Have a Claim for MAT for SUD	Yes
5	Average Number of IMD Stays for SUD	Insufficient Data
6	Average Number of Days of IMD Treatment for SUD	Insufficient Data
7	Average Length of Stay of IMD Stays for SUD	Insufficient Data
Hypothesis 2: The demonstration will increase access to evidence-based SUD treatment, reflected in increased capacity.		
8	Number of Providers Enrolled in Medicaid and Who Deliver SUD Services	Yes
9	Number of Providers Enrolled in Medicaid and Who Deliver MAT for SUD Services	Insufficient Data

Measure Number	Measure Name	Results Support Hypothesis
10	Number of Beds Available in IMD Facilities Providing SUD Services	Insufficient Data
11	Number of Outpatient Facilities Offering Detoxification	Insufficient Data
12	Number of Facilities Offering Opioid-Specific Detoxification	Insufficient Data
13	Opioid Treatment Programs	Insufficient Data
14	Outpatient Facilities Offering OTPs	Insufficient Data
15	Residential (Non-Hospital) Facilities Offering OTPs	Insufficient Data
16	Medication-Assisted Opioid Therapy Provided at Facilities With OTPs	Insufficient Data
17	Any Type of MAT	Insufficient Data
18	Needing But Not Receiving Treatment at a Specialty Facility for Illicit Drug/SUD in the Past Year	Insufficient Data
Hypothesis 3: The demonstration will increase access to care for physical health conditions among beneficiaries with an SUD.		
19	Percentage of Medicaid Beneficiaries with an SUD Who Had an Ambulatory or Preventive Care Visit	No
Aim Two: Improve Quality of Care for Beneficiaries with an SUD		
Evaluation Question 1: Did the demonstration improve the quality of SUD treatment?		
Hypothesis 1: The demonstration will improve rates of identification, initiation, and engagement in treatment for SUD.		
20	Percentage of Beneficiaries Who Initiated Treatment Within 14 Days of a New SUD Diagnosis	No
21	Percentage of Beneficiaries Who Initiated Treatment and Who Had Two or More Additional Services for SUD Within 34 Days of the Initiation Visit	NS/FS
Hypothesis 2: The demonstration will improve rates of adherence to and retention in treatment for SUD.		
22	Continuity of Pharmacotherapy for OUD	Yes
Hypothesis 3: The demonstration will reduce ED use for SUD.		
23	Average Number of ED Visits for SUD	Yes
Hypothesis 4: The demonstration will reduce readmissions for SUD.		
24	30-Day Readmission	No
Hypothesis 5: The demonstration will reduce overdose deaths, particularly those due to opioids.		
25	Rate of Overdose Deaths, Overall and Due to Opioids	No
Aim Three: Maintain or Reduce Costs		
Evaluation Question 1: Did the demonstration maintain or reduce total cost of care?		
Hypothesis 1: The demonstration will reduce inpatient hospitalization and ED use for SUD.		
26	Average Number of Inpatient Stays for SUD	Yes
27	Average Number of Days of Inpatient Hospitalization for SUD	Yes
28	Average Length of Stay of Inpatient Hospitalization for SUD	NS/FS
Hypothesis 2: The demonstration will reduce inpatient hospitalization and ED use for beneficiaries with an SUD.		
29	Average Number of Inpatient Stays for Any Cause	Yes
30	Average Number of Days of Inpatient for Any Cause	Yes
31	Average Length of Stay of Inpatient Hospitalization for Any Cause	Yes

Measure Number	Measure Name	Results Support Hypothesis
32	Average Number of ED Visits for Any Cause	NS/FS
Hypothesis 3: The demonstration will reduce or maintain total cost of SUD-related care.		
33	PMPM Cost for SUD Treatment	NS/FS
Hypothesis 4: The demonstration will reduce or maintain total cost of care.		
34	PMPM Cost	NS/FS

Note: ED: emergency department; IMD: institution for mental diseases; MAT: medication assisted treatment; NS/FS: neither supports nor fails to support the hypothesis; OTP: opioid treatment program; OUD: opioid use disorder; PMPM: per member per month; SUD: substance use disorder

Aim One

Aim One, Evaluation Question 1 assesses whether the Waiver improved access to healthcare for beneficiaries with an SUD. Evaluation of this question was complicated by the coronavirus disease 2019 (COVID-19) public health emergency (PHE) and Medicaid expansion, two events that coincided with the initial implementation period of the Waiver, and close enough in time to the full implementation to preclude disentangling the effects of all events. The COVID-19 PHE impacted healthcare utilization as social distancing guidelines, mandated shut-downs, and stay-at-home orders were in effect. Medicaid expansion made it possible for people under the age of 65 who earn up to 138 percent of the federal poverty level (FPL) to receive Medicaid health insurance coverage. Expansion confounds assessment of the Waiver impact as increases in utilization could be a result of the large influx of members needing SUD services.

Successes

Several measures indicated support for hypotheses that the Waiver would increase access to evidence-based SUD treatment reflected in increased utilization (Hypothesis 1) and increased capacity (Hypothesis 2):

- An increased percentage of beneficiaries with an SUD who received any SUD treatment service
- Improved rates of residential service utilization for an SUD
- An increased percentage of beneficiaries with an SUD who had a MAT claim for an SUD
- An increasing number of Medicaid providers delivering SUD services

Following initial implementation of the Waiver that extended coverage to IMD stays of any duration, there were potential improvements in the average number of IMD stays for an SUD and average number of days of IMD treatment for an SUD among beneficiaries with an SUD. Additionally, the ALOS of IMD stays for an SUD also stabilized around the statewide goal of 30 days. The number of beds available in IMD facilities providing SUD services also trended upward. However, due to the lack of pre-implementation data or a viable comparison group, these improvements cannot be attributed directly to the Waiver.

Several survey measures using data from the Substance Abuse and Mental Health Services Administration (SAMHSA), the National Survey on Drug Use and Health (NSDUH), and the National Survey of Substance Abuse Treatment Services (N-SSATS) also showed promise as rates trended in a desired direction. The treatment gap for beneficiaries with an illicit drug or substance use disorder is decreasing in Nebraska, although only pre-implementation data were available. There were slight improvements in the number of facilities providing any type of MAT per 100,000 adult Nebraskans. While the rate of facilities with OTPs per 100,000 adults in Nebraska

remains lower than the national average, all Nebraska OTPs are being offered in outpatient (OP) facilities, and all OTPs are providing medication-assisted opioid treatment. However, no statistical testing was conducted as data for these measures were only available prior to the full implementation of the MAT/OTP component of the Waiver. As additional data points become available, Health Services Advisory Group, Inc. (HSAG) will continue its assessment of these measures for the Summative Evaluation Report.

Challenges

There were some notable challenges to achieving Aim One:

- Reduced percentages of beneficiaries who use withdrawal management services following the full implementation of the Waiver and MMIW service category.
- Lower rates of beneficiaries with an SUD who had an ambulatory or preventive care visit
- Zero residential (non-hospital) facilities offering OTPs

Evidence of decreasing percentages of beneficiaries who use withdrawal management services following full Waiver implementation in which coverage for MMIW became available may be indicative of a substitution effect; it is possible that the current measure does not capture treatment codes for the new services, and that members are switching from existing withdrawal management services to more clinically appropriate MMIW services. Alternatively, challenges that providers noted in providing these services (American Society of Addiction Medicine [ASAM] Level 3.7) may have temporarily impacted the provision of existing withdrawal management services.

The hypothesis that the Waiver will increase access to care for physical health conditions among beneficiaries with an SUD was not supported by increased utilization of ambulatory and preventive care; however lower rates of preventive and primary care may be largely influenced by COVID-19 PHE impacts during 2020 and 2021.

The number of OP facilities offering detoxification per 100,000 adults in Nebraska and the number of facilities offering opioid-specific detoxification per 100,000 adults in Nebraska continue to fall below the national average.

Aim Two

Successes

Aim Two, Evaluation Question One assesses whether the Waiver improved the quality of SUD treatment. Through activities promoting evidence-based assessment and referral, standardizing assessment and placement criteria for patients, establishing qualifications for residential providers, and assuring compliance with treatment standards, the Waiver is hypothesized to improve the appropriateness and continuity of care for SUD beneficiaries. Several measures support the hypotheses:

- Increased rates of adherence to and retention in treatment for an SUD
- Reduction in the average number of emergency department (ED) visits for an SUD among beneficiaries with an SUD

Challenges

Key challenges were also present:

- An increasing trend in the rate of overall overdose deaths and opioid-specific overdose deaths in Nebraska from 2017 to 2020
- Increased rates of 30-day readmission for an SUD
- Decline in the percentage of beneficiaries initiating treatment within 14 days of a new SUD diagnosis

The increased rate of overdose deaths was exacerbated by the COVID-19 PHE, as was seen across the country during this time.[6-1] Compared to national rates, Nebraska experienced a greater increase in overdose deaths between 2019 and 2020; this may be explained by studies that show a disproportionate impact of the pandemic on drug use patterns among people living in rural areas.[6-2]

Although initiation of treatment for an SUD declined during this period, results on engagement in SUD treatment were mixed. The percentage of beneficiaries who initiated treatment and who had two or more additional services for an SUD within 34 days of the initiation visit improved during the initial implementation period, before worsening during the full implementation period.

Aim Three

Aim Three focuses on cost maintenance as an intended outcome of treating patients in the most appropriate settings and asks whether the Waiver maintained or reduced total cost of care. It is hypothesized that the increased cost of SUD treatment as a result of higher utilization (increase in claims for treatment, longer IMD stays, etc.) will be balanced out by reduced acute care utilization. Thus, the Waiver is hypothesized to reduce inpatient (IP) hospitalization and ED use specifically for an SUD (Hypothesis 1) as well as overall hospital admissions and ED visits for beneficiaries with an SUD (Hypothesis 2) and ultimately result in maintained or reduced total cost of SUD-related care (Hypothesis 3) and overall total cost of care (Hypothesis 4).

Successes

There was strong evidence of a decrease in IP hospitalizations following implementation of the Waiver, as evidenced by:

- Reductions in the average number of IP hospitalizations and average number of days of IP hospitalization among all beneficiaries ages 19–64, for an SUD specifically.
- Reductions in the average number, average number of days and ALOS of IP hospitalization for any cause among beneficiaries with an SUD diagnosis.

Challenges

Several measures demonstrated mixed results and neither supports nor fails to support the associated hypotheses. The ALOS of IP hospitalization for an SUD did not demonstrate any statistically significant results but was trending in the desired direction. The average number of ED visits for any cause among beneficiaries with an

---

6-1 Centers for Disease Control and Prevention. Overdose Deaths Accelerating During COVID-19. Available at: https://www.cdc.gov/media/releases/2020/p1218-overdose-deaths-covid-19 html. Accessed on: Mar. 7, 2023.

6-2 Walters SM, Bolinski RS, Almirol E, et al. (2022) "Structural and community changes during COVID-19 and their effects on overdose precursors among rural people who use drugs: a mixed-methods analysis," *Addiction Science & Clinical Practice* 17(24); Available at: https://ascpjournal.biomedcentral.com/articles/10.1186/s13722-022-00303-8. Accessed on: Mar 24, 2023

SUD diagnosis demonstrated a relative decrease in the trend upon initial implementation and a relative increase in the trend upon full implementation. Therefore, this measure neither supported nor failed to support the hypothesis that the Waiver would reduce IP hospitalization and ED use or beneficiaries with an SUD.

In general, the results of the analysis on cost for SUD treatment neither supported nor failed to support the hypothesis that the Waiver would reduce or maintain total cost of SUD-related care (Hypothesis 3). A decrease in the average SUD-IMD cost at the start of each implementation period suggests trending of SUD-IMD costs in the desired direction, but the change in monthly trend during both implementation periods was not statistically significant. Although there was a decreasing trend for other SUD costs, these costs increased significantly upon initial implementation, and non-SUD costs also followed a similar pattern of mixed results.

Similarly, analysis of the total cost of care and costs stratified by category of service also neither supported nor failed to support the hypothesis that the Waiver would reduce or maintain total cost of care overall (Hypothesis 4). There are some indications of improvements. ED and IP costs demonstrated continued cost reductions through the Waiver period; in particular, statistically significant decreasing monthly trends during the initial implementation period compared to projected costs had the baseline period continued suggest support for Hypothesis 4. Pharmacy and professional costs also demonstrated evidence of an increase following full implementation of the MAT/OTP component of the Waiver.

7. Interpretations, Policy Implications, and Interactions with Other State Initiatives

Interpretations

The findings of the evaluation demonstrate that beneficiaries increased utilization of substance use disorder (SUD) treatment services, particularly residential services, and medication-assisted treatment (MAT) throughout the Nebraska Section 1115 SUD Demonstration Waiver (the Waiver) period. This increase may reflect the Waiver's emphasis on expanding residential providers' treatment methods and increasing the number of practitioners trained on MAT. Analysis of the number of Medicaid providers delivering SUD services showed an approximately 21 percent increase from the baseline years to 2022 and may reflect provider capacity building efforts.

The number of Institutions for Mental Disease (IMD) stays and number of days of IMD treatment increased between the start of the initial implementation period and the start of the full implementation period in alignment with the Waiver's goals. There were also improvements in meeting the statewide target for average length of stay (ALOS) in an IMD of 30 days; six out of the last eight months of the Waiver period were below 30 days and two months were only slightly above 30 days, indicating that the ALOS stabilized around the statewide goal of 30 days at the time of evaluation.

The evaluation showed a significant decrease in both the level and trend of emergency department (ED) visits for an SUD at the time of full implementation, suggesting evidence of the Waiver's impact on reducing ED utilization among beneficiaries with an SUD. As the full implementation of the Waiver effected increased availability of opioid treatment programs (OTPs) and more facilities providing MAT statewide, this decline may be representative of a shift away from reliance on EDs for SUD treatment. Decreasing ED costs during the initial implementation period lends additional support for reduced ED utilization by beneficiaries with an SUD.

The Waiver was also associated with improvements in inpatient (IP) stays for an SUD and IP stays for any cause. The average number of stays, average number of days, and ALOS for SUD-specific and any-cause IP stays declined during the study period. Furthermore, examination of inpatient costs demonstrated a continued reduction in costs throughout the Waiver period.

Finally, pharmacy costs were increasing during the baseline period but began to decrease during the initial implementation period. Upon full implementation of the MAT/OTP services, pharmacy costs increased again as would be expected with wider accessibility of MAT treatment.

Policy Implications

COVID-19 PHE

The coronavirus disease 2019 (COVID-19) public health emergency (PHE) added layers of complexity to program evaluations, with only a few elements not impacted by the pandemic. Even with the most significant impacts confined mainly to 2020, lingering COVID-19 PHE impacts were identified through 2021. Due to the unprecedented nature of the PHE, very little research is available to reliably predict the trajectory of PHE impacts beyond those accompanying the shutdown and restrictions in 2020. Separating the impacts of the Waiver from

those of the PHE will be facilitated by the availability of additional data to identify and control for the trajectory of the PHE and its impacts on the demonstration.

There are likely COVID-19 PHE impacts that have not yet been fully realized, particularly around service needs that were postponed during the PHE and any resurgences of the virus. These impacts will likely continue to impact Section 1115 Demonstration Waivers for several years.

The COVID-19 PHE impacted two primary dimensions of the evaluation:

1. Overdose deaths
2. Provision of telehealth

The rate of overdose deaths, including those related to opioids, increased nationally and in Nebraska due to the COVID-19 PHE. Although Nebraska's rate of overdose deaths, including those due to opioids, was significantly lower than the national rate, findings from this evaluation may assist the State in addressing rates of overdose deaths. While the data on detoxification facilities, OTPs, and MAT were only available for the period prior to full implementation, the number of OTPs per 100,000 adult residents was less than half that of the rate nationwide. Moreover, at the time of evaluation, the State did not have any residential facilities offering OTP. Forthcoming data that will be used in the Summative Evaluation Report should provide additional evidence as to the number of OTPs in the State after the full implementation of the Waiver. In the meantime, however, the State could diversify and reduce barriers to bringing additional OTPs operational as necessary. Additionally, the number of facilities per 100,000 adult residents offering detoxification, including detoxification specific to opioids, fell below the national rate with a widening gap between 2017 and 2020.

The COVID-19 PHE also impacted the provision of care by shifting delivery from in-person to telehealth, which may have affected the quality of care received. Some providers reported that patient care was negatively impacted, for example through lack of patient accountability. Providers also described technological costs associated with using telehealth platforms. Because providers also noted that telehealth improved the experience of care, the State and managed care organizations (MCOs) could assist providers to maximize the potential of telehealth services by facilitating technology infrastructure where possible and/or consider temporary revisions to reimbursement rates for telehealth services to cover fixed costs of this transition.

Provision of Waiver Services

One key component of the Waiver was to expand the continuum of services available to treat SUD among Medicaid beneficiaries, including American Society of Addiction Medicine (ASAM) Level 3.7 withdrawal management (medically monitored inpatient withdrawal [MMIW] management). Findings from the Interim Evaluation Report showed a significant decrease in the rate of withdrawal management upon implementation of these services in June 2021. This could be reflective of a change in billing for services, or this may reflect challenges that some providers noted during interviews. Some providers noted difficulties in understanding and obtaining proper credentialing for these new services, which may have temporarily discouraged providers from billing other withdrawal management services that had previously been covered under the Waiver if they did not fully understand the changes. The State may consider working with MCOs or providers to identify barriers in credentialing and clarify the distinction between new and existing withdrawal management services, if necessary. Although providers indicated the Waiver did not impact existing services, this could assure providers who are having difficulties obtaining credentials for MMIW that they could continue serving members under the status quo. Additional data in the Summative Evaluation Report will assist in identifying the impact of the Waiver on provision of MMIW services.

Interactions with Other State Initiatives

The Waiver is not the only tool that the Nebraska Department of Health and Human Services (DHHS) is using to address SUD in the State. The Waiver can augment other State initiatives through leveraging resources provided under the demonstration. For example, providers offering new Waiver services such as MAT and OTP can encourage patients to leverage OpiRescue, if they are not already using it, to increase knowledge of overdoses and treatment options for themselves or others. The following section outlines other State initiatives that interact with the goals of the Waiver.

Background on Other State Initiatives

Department of Health and Human Services Programs

The State of Nebraska, including DHHS, operates SUD and opioid use disorder (OUD) treatment and prevention initiatives outside of the Waiver. Since January 1, 2018, dispensed prescriptions in Nebraska have been reported to the Nebraska Prescription Drug Monitoring Program (PDMP).[7-1] The PDMP securely stores prescription information on the health information exchange (HIE) where it is made publicly available to healthcare professionals across the State. As of 2020, 12,371 Drug Enforcement Agency (DEA)-registered prescribers and 454 DEA-registered dispensers were users of the PDMP.[7-2] DHHS offers free clinician continuing education (CE) videos and assessments to support the use of the PDMP and discuss clinician roles around naloxone and pain management.[7-3]

DHHS, along with the Nebraska Medical Association (NMA), provides education to healthcare providers about opioid prescribing and treatment needs through SafePrescribe.[7-4] Physicians and pharmacists trained on the subject provide other prescribers with brief, one-on-one educational sessions. SafePrescribe topics include co-prescribing naloxone with opioid prescriptions; using the Nebraska PDMP; avoiding and reducing co-prescribing benzodiazepines and opioids together; and medications used for addiction treatment, including OUD and alcohol use disorder (AUD).

DHHS, alongside other community and State partners, is a member of the Nebraska Medication Education for Disposal Strategies (MEDS) Coalition.[7-5] The Nebraska MEDS Coalition focuses on educating patients about the safe disposal of prescription and over-the-counter medications. The Nebraska MEDS Coalition implements educational initiatives and supports a medication disposal program through an extensive network of pharmacies, allowing patients to turn in expired or unused medications at participating locations. The pharmacies are located

---

7-1 Nebraska Department of Health and Human Services. Drug Overdose Prevention – PDMP Access. Available at: https://dhhs ne.gov/Pages/Drug-Overdose-Prevention-PDMP-Access.aspx. Accessed on: Mar. 16, 2023.

7-2 United States Department of Justice. Prescription Drug Monitoring Program: Nebraska State Profile (2021). Available at: https://www.ojp.gov/library/publications/prescription-drug-monitoring-program-nebraska-state-profile-2021. Accessed on: Mar. 16, 2023.

7-3 Nebraska Department of Health and Human Services. Clinician Continuing Education. Available at: https://dhhs ne.gov/Pages/Drug-Overdose-Prevention-Clinician-Continuing-Education.aspx. Accessed on: Mar. 16, 2023.

7-4 Nebraska Medial Association. SafePrescribe. Available at: https://www.nebmed.org/resources/safeprescribe. Accessed on: Mar. 16, 2023.

7-5 Nebraska MEDS Coalition. Who We Are. Available at: https://www nebraskameds.org/whoweare. Accessed on: Mar. 16, 2023.

across the State, from Scottsbluff in western Nebraska to the eastern city of Omaha. In 2020, the Nebraska MEDS Coalition collected 27,506 pounds of medication.[7-6]

The DHHS Naloxone Distribution Program distributes naloxone to individuals at risk of opioid overdose or who know someone at risk of an opioid overdose.[7-7] Nebraskans can visit participating pharmacies to receive naloxone at no cost. As of February 2022, 52 pharmacies across the State were active participants in the DHHS Naloxone Distribution Program, with locations coming soon in 10 additional cities.

The DHHS Choose You campaign advocates for individuals to lead a substance-free life by featuring fellow Nebraskans telling their personal success stories living substance-free. The individuals in the campaign come from across the State, with histories of substance use including binge drinking, using illegal drugs, and misusing prescription drugs. Choose You materials, including posters and videos, are published on the DHHS website and social media channels to spread messaging about becoming or remaining substance-free.[7-8]

Division of Behavioral Health Programs

The DHHS Division of Behavioral Health (DBH) offers additional behavioral health trainings in partnership with the University of Nebraska Public Policy Center.[7-9] Topics covered include peer support services, cognitive behavioral therapy for SUD treatment, and maximizing telehealth in a clinical setting. Nebraska is host to Project ECHO (Extension for Community Healthcare Outcomes) courses. Project ECHO provides an opportunity for healthcare providers across the State to obtain clinical advice, recommendations, and knowledge from specialists and subject matter experts. The University of Nebraska Medical Center (UNMC) hosts the free Pain and Substance Use Disorder ECHO twice a month.[7-10] The Pain and Substance Use Disorder ECHO targets healthcare providers who treat patients with pain or SUD, teaching them about substance use and pain management cases, trends, and treatments. The Pain and Substance Use Disorder ECHO aims to develop providers who can identify evidence-based medications available to treat patients with an SUD, discuss which patients are appropriate for medication management for the treatment of SUD, and describe how pairing psychotherapeutic and psychosocial interventions with medications can impact patient outcomes.

DBH hosts advisory groups focused on SUD prevention. The Prevention Advisory Council convenes three times per year to promote mental health and SUD prevention.[7-11] The Prevention Advisory Council aims to accomplish DBH's five-year strategic plan, promote mental health; encourage partnerships and collaboration among providers; grow the workforce; and train leadership to implement effective policies, practices, and programs. The

---

7-6 Nebraska Department of Health and Human Services. Every Day Can Be A Drug Take-Back Day In Nebraska. Available at: https://dhhs ne.gov/Pages/Every-Day-Can-Be-a-Drug-Take-Back-Day-in-Nebraska-2021.aspx. Accessed on: Mar. 16, 2023.

7-7 Nebraska Department of Health and Human Services. Naloxone Distribution Program. Available at: https://dhhs ne.gov/Behavioral%20Health%20Documents/NaloxoneMap.pdf. Accessed on: Mar. 16, 2023.

7-8 Nebraska Department of Health and Human Services. Choose You Campaign. Available at: https://dhhs.ne.gov/Pages/Choose-You-Campaign.aspx. Accessed on: Mar. 16, 2023.

7-9 Nebraska Department of Health and Human Services. Behavioral Health Trainings. Available at: https://dhhs-dbhtraining.unl.edu/. Accessed on: Mar. 16, 2023.

7-10 University of Nebraska Medical Center. Project ECHO. Available at: https://www.unmc.edu/psychiatry/outreach/project-echo.html. Accessed on: Mar. 16, 2023.

7-11 Nebraska Department of Health and Human Services. Prevention Advisory Council. Available at: https://dhhs ne.gov/Pages/Prevention-Advisory-Council.aspx. Accessed on: Mar. 16, 2023.

State Advisory Committee on Substance Abuse Services convenes three times per year and was established in law to advise DBH on substance abuse service system strengths and opportunities.

Other State Initiatives

Additionally, Nebraska promotes OpiRescue, a free smartphone application that aids Nebraskans in stopping and preventing opioid overdoes.[7-12] OpiRescue guides users through steps to be taken if they encounter an opioid overdose, provides locations distributing naloxone and treatment, and publishes educational videos about MAT.

The Drug Utilization Review (DUR) Board, made up of a minimum of 16 active pharmacists, pharmacy students, pharmacy consultants and physicians, aims to improve the quality of pharmacy services and ensure cost-effective medication therapy for recipients of Nebraska Medicaid.[7-13] The DUR Board evaluates claims data in order to assess the utilization, quality, appropriateness, and cost of prescribed medications.

On October 14, 2016, nearly 300 leaders in medicine, public health, social services, governmental policy, and law enforcement gathered for the Charting the Road to Recovery: Nebraska's Response to Opioid Abuse summit.[7-14] The summit, a collaboration between the United States Attorney's Office for the District of Nebraska, UNMC, DHHS, and the Nebraska Attorney General's Office, aimed to address the misuse of prescription opioids in Nebraska and reduce illicit opioid abuse. The summit partners maintained close collaboration following the summit, forming the Nebraska Coalition to Prevent Opioid Abuse. The Nebraska Coalition to Prevent Opioid Abuse most recently released a Strategic Initiatives Update in 2020, which described the recent steps taken by Nebraska to accomplish the strategic purpose of reducing the incidence of the misuse of prescription and illicit opioids within the State. One such step was the development of the Addiction Medicine Fellowship in August 2019, a UNMC and DHHS partnership.[7-15] The program provides fellows with a yearlong comprehensive training in addiction medicine, rotating through an intensive outpatient (IOP) program and a clinic for patients with co-occurring SUD and psychiatric illness. The Addiction Medicine Fellowship emphasizes comprehensive and evidence-based care in order to develop fellows efficient in areas such as the treatment of patients with SUDs along a continuum of care; collaboration with other professionals who work with SUD patients; and matching patient treatment needs with the appropriate levels of intervention, including crisis services, hospitalization, and SUD treatment programs.

7-12 Nebraska Department of Health and Human Services. Drug Overdose Prevention – Naloxone. Available at: https://dhhs ne.gov/Pages/Drug-Overdose-Prevention-Naloxone.aspx#:~:text=Drug%20Overdose%20Prevention-Naloxone%20The%20Nebraska%20Department%20of%20Health,access%20it%2C%20and%20how%20to%20administer%20the%20drug. Accessed on: Mar. 16, 2023.

7-13 Nebraska Department of Health and Human Services. Drug Utilization Review. Available at: https://dhhs.ne.gov/Pages/Drug-Utilization-Review.aspx#:~:text=The%20Nebraska%20Drug%20Utilization%20Review%20%28DUR%29%20Board%20consists,pharmacist%20consultants%20from%20the%20Nebraska%20Medicaid%20Drug%20Program. Mar. 16, 2023.

7-14 Nebraska Coalition to Prevent Opioid Abuse. Strategic Initiatives Update 2020. Available at: https://ago nebraska.gov/sites/ago nebraska.gov/files/doc/Strategic%20Initiatives%20Update%202020.pdf. Accessed on: Mar. 16, 2023.

7-15 University of Nebraska Medical Center. Addiction Medicine Fellowship. Available at: https://www.unmc.edu/familymed/fellowship/addiction-med/index html. Accessed on: Mar. 16,2023.

Grants and Funding

In April 2020, the Nebraska Legislature passed Legislative Bill (LB) 1124, the Opioid Prevention and Treatment Act.[7-16] The Opioid Treatment and Prevention Act provides for the use of dedicated revenue for opioid-disorder-related treatment and prevention through establishing the Nebraska Opioid Recovery Fund, into which all settlement funds received on behalf of the State must be deposited. Nebraska formed the Nebraska Opioid Settlement Remediation Advisory Committee because of the 2020 national opioid-related settlement agreements with pharmaceutical distributors. The committee was tasked with establishing criteria for identifying needs and prioritizing effective responses using the settlement funds placed into the Opioid Recovery Fund.

From fiscal year (FY) 2019 through FY 2022, Nebraska received over $70 million in substance abuse funding from the Substance Abuse and Mental Health Services Administration (SAMHSA).[7-17] One grant awarded by SAMHSA was the State Opioid Response Grant (SOR). Nebraska uses SOR funds to: publish training videos for chapters in the Nebraska Pain Management Guidance Document, a resource to providers treating chronic and acute pain; train providers and stakeholders through Project ECHO; and fund three outreach workers to aid in connecting the OUD population with Oxford House recovery homes, which are self-run, self-supporting addiction recovery homes.[7-18] SOR was used to fund Stop Overdose Nebraska, a website that provides public education on naloxone to save lives in situations of an opioid overdose.[7-19]

The Overdose Data to Action (OD2A) Grant, funded by the Centers for Disease Control and Prevention (CDC), supports funded jurisdictions, including DHHS, in collecting high-quality, comprehensive, and timely data on nonfatal and fatal overdoses.[7-20] OD2A focuses on using those data to inform prevention and response efforts. DHHS used OD2A funds to implement the Nebraska State Unintentional Drug Overdose Reporting System (SUDORS).[7-21] SUDORS functions include the collection and dissemination of descriptions of drug overdose death circumstances. Data are collected from death certificates, medical examiner and coroner reports, and forensic toxicology reports entered into the system.[7-22] OD2A funding was also used for the Post-Mortem Toxicology Testing Program, which aids county attorneys in Nebraska with toxicology testing.[7-23] The program

---

7-16 Nebraska Attorney General Office. Nebraska Opioid Settlement Remediation Advisory Committee. Available at: https://ago nebraska.gov/nebraska-opioid-settlement-remediation-advisory-committee#:~:text=Nebraska%E2%80%99s%20Opioid%20Prevention%20and%20Treatment%20Act%20In%202020%2C,of%20dedicated%20revenue%20for%20opioid-disorder-related%20treatment%20and%20prevention.%E2%80%9D. Accessed on: Mar. 16, 2023.

7-17 Substance Abuse and Mental Health Services Administration. SAMHSA Grant Awards By State. Available at: https://www.samhsa.gov/grants-awards-by-state. Accessed on: Mar. 16, 2023.

7-18 Substance Abuse and Mental Health Services Administration. 2021 Report to Congress on the State Opioid Response Grants (SOR). Available at: https://www.samhsa.gov/sites/default/files/2021-state-opioid-response-grants-report.pdf. Accessed on: Mar. 16,2023.

7-19 Stop Overdose Nebraska. Home. Available at: https://stopodne.com/. Accessed on: Jan. 5, 2023.

7-20 Centers for Disease Control and Prevention. OD2A. Available at: https://www.cdc.gov/drugoverdose/od2a/funded-states html. Accessed on: Mar. 16, 2023.

7-21 Nebraska Coalition to Prevent Opioid Abuse. Strategic Initiatives Update 2020. Available at: https://ago nebraska.gov/sites/ago nebraska.gov/files/doc/Strategic%20Initiatives%20Update%202020.pdf. Accessed on: Mar. 16, 2023.

7-22 Nebraska Department of Health and Human Services. CDC SUDORS Summary of Unintentional and Undetermined Intent Drug Overdose Deaths in Nebraska – 2020. Available at: https://dhhs ne.gov/Documents/2020%20SUDORS_Summary_NE.pdf. Accessed on: Mar. 16, 2023.

7-23 Nebraska Department of Health and Human Services. Post-Mortem Toxicology Testing Program. Available at: https://dhhs ne.gov/Documents/Toxicology-Pamphlet.pdf#:~:text=Funded%20by%20the%20Opioid%20Overdose%20Data%20to%20Action,to%20assist%20Nebraska%20county%20attorneys%20with%20toxicology%20testing. Accessed on: Mar. 16, 2023.

covers the cost of supplies, education, and toxicology testing for any death that is suspected to be due to substance use.

COVID-19 Initiatives

Effective March 15, 2020, two days after the President of the United States declared COVID-19 a national emergency, states were able to request the use of Section 1135 waivers. Section 1135 waivers were granted to states through the authority of Section 1135 of the Social Security Act, which permits the United States Health and Human Services Secretary to temporarily waive or modify certain Medicare, Medicaid, and Children's Health Insurance Program (CHIP) requirements to ensure sufficient care and services are provided during a PHE.[7-24] On March 30, 2020, Nebraska submitted a Section 1135 waiver request, which was approved by the Centers for Medicare & Medicaid Services (CMS) on April 2, 2020.[7-25] Nebraska's application included the request to waive:

- Site visits to temporarily enroll a provider.
- Requirements that physicians and healthcare providers must be licensed in the state in which they are providing services.
- Conditions of participation or conditions for coverage for existing providers for facilities for providing services in an alternative setting if the provider's licensed facility has been evacuated.

In addition to the Section 1135 waiver, the Governor of Nebraska declared a series of Executive Orders (EOs) to add healthcare workforce capacity. EO No. 21–12 suspended regulations around credentialing to permit healthcare workers in good standing to practice in Nebraska.[7-26] EO No. 21–15 allowed individuals who are properly and lawfully licensed to engage in practices including SUD and mental health support.[7-27] EO No. 20-27 authorizes DHHS to waive continuing competency requirements for credential holders under the Uniform Credentialing Act (UCA). Notably, EO No. 20-27 deferred client-contact hours for those seeking credentials under the Mental Health Practice Act until December 31, 2020.[7-28] Lastly, EO No 21-18 extended EO No. 21-12 and No. 21-15 to March 31, 2022.[7-29]

As part of the State's response to the ongoing COVID-19 PHE, the American Rescue Plan Act (ARPA) awarded approximately $1.8 billion to grantees under the following three major funds on March 11, 2021:[7-30]

[7-24] Centers for Medicare & Medicaid Services. 1135 Waivers. Available at: https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/SurveyCertEmergPrep/1135-Waivers. Accessed on: Mar. 16, 2023.

[7-25] Centers for Medicare & Medicaid Services. Section 1135 Waiver Flexibilities – Nebraska Coronavirus Disease 2019. Available at: https://www medicaid.gov/state-resource-center/disaster-response-toolkit/federal-disaster-resources/89161. Accessed on: Mar. 16, 2023.

[7-26] State of Nebraska Office of the Governor. Executive Order No. 21-12. Available at: http://govdocs nebraska.gov/docs/pilot/pubs/eofiles/21-12.pdf. Accessed on: Mar. 16, 2023.

[7-27] State of Nebraska Office of the Governor. Gov. Ricketts Takes Further Action to Add Capacity to Healthcare Workforce. Available at: https://dhhs ne.gov/Pages/Gov-Ricketts-Takes-Further-Action-to-Add-Capacity-to-Healthcare-Workforce.aspx. Accessed on: Mar. 16, 2023.

[7-28] State of Nebraska Office of the Governor. Executive Order No. 20-27. Available at: http://govdocs nebraska.gov/docs/pilot/pubs/eofiles/20-27.pdf. Accessed on: Mar. 16, 2023.

[7-29] State of Nebraska Office of the Governor. Executive Order No. 21-18. Available at: http://govdocs nebraska.gov/docs/pilot/pubs/eofiles/21-18.pdf. Accessed on: Mar. 16, 2023.

[7-30] Nebraska Legislative Fiscal Office. LB 1014 Distribution of the Coronavirus State Fiscal Recovery Fund (CSFRF). Available at: https://nebraskalegislature.gov/pdf/reports/fiscal/2022arpa-csfrf.pdf. Accessed on: Mar. 16, 2023.

- Coronavirus State Fiscal Recovery Fund (CSFRF)—The fund responds to the negative economic impacts created by the COVID-19 PHE, to fiscally support workers performing essential work, and support mental healthcare and SUD needs from March 2021 through March 2024.
- Coronavirus Local Fiscal Recovery Fund—This fund supports mental health and SUD allocated by local cities and counties.[7-31]
- Coronavirus Capital Projects Fund—This fund creates multi-purpose community facilities and infrastructural projects to alleviate the challenges from COVID-19 PHE.[7-32]

7-31 United States Department of Treasury. State and Local Fiscal Recovery. Available at: https://home.treasury.gov/system/files/136/Nebraska_2021-Recovery-Plan_SLT-2222.pdf. Accessed on: Mar. 16, 2023.

7-32 Nebraska Department of Economic Development. Nebraska Capital Projects Fund. Available at: https://opportunity nebraska.gov/programs/recovery/nebraska-capital-projects-fund/. Accessed on: Mar. 16, 2023.

8. Lessons Learned and Recommendations

Previous sections in this Interim Evaluation Report provide background on the Nebraska Section 1115 Substance Use Disorder (SUD) Demonstration Waiver (the Waiver); a description of the evaluation questions, hypotheses, measures, data sources, and methodology; results; conclusions; and interpretations. This section of the Interim Evaluation Report presents lessons learned from the evaluation and recommendations for future improvements.

As discussed above, the Waiver expanded the treatment of SUD through three primary mechanisms:

1. Removal of the Institutions for Mental Disease (IMD) exclusion, allowing Medicaid to reimburse IMDs for stays greater than 15 days.
2. Expanding services to cover American Society of Addiction Medicine (ASAM) Level 3.7 medically monitored inpatient withdrawal (MMIW) management, including methadone.
3. Expanding services to cover opioid treatment programs (OTPs) meeting ASAM criteria.

While the Waiver shows promise across several dimensions of care and improvements, there are some lessons learned and recommendations related to the provision of new services stemming from key informant interviews.

ISSUE	Some providers noted difficulties in providing ASAM Level 3.7 medically supervised withdrawal management services.
RECOMMENDATION	The State should continue working with managed care organizations (MCOs) and providers to streamline or expedite the credentialling process. The State could also reiterate to providers that there are no changes to the provision or billing of existing services to reduce any confusion or uncertainty providers may have regarding billing State plan services.

ISSUE	Some providers felt uncomfortable prescribing methadone treatment.
RECOMMENDATION	The State and/or MCOs could assist providers in prescribing methadone treatment, including providing clinical guidelines and recommendations. MCOs could facilitate collaboration among providers and existing methadone treatment facilities to address providers' concerns about lack of experience providing methadone treatment.

Appendix 2 – Health Information Technology (HIT) Plan

NEBRASKA

Good Life. Great Mission.

DEPT. OF HEALTH AND HUMAN SERVICES

State Medicaid Health Information Technology Plan

March 14, 2022

Contents

Summary 4

1 Section A As-Is HIT Landscape 5

Overview 5

Health Care Provider Environmental Scan 5

1.1.1 Provider EHR Adoption 6

1.1.2 Hospital EHR Adoption and Health Information Exchange Survey 13

1.1.3 Federally Qualified Health Centers (FQHCs)/ Rural Health Centers (RHCs) 16

1.1.4 HIT Regional Extension Center (REC) Status 17

1.1.5 Indian Health Service (IHS) 17

1.1.6 Department of Defense/Veterans Administration 18

1.1.7 CyncHealth 18

1.1.8 Electronic Behavioral Health Information Network (eBHIN) / Heartland Community Health Network (HCHN) 23

1.1.9 eHealth Council 23

1.1.10 DHHS – Division of Public Health (DPH) 25

1.1.11 DHHS –Division of Medicaid & Long-Term Care (MLTC) 28

1.1.12 DHHS – Division of Behavioral Health (DBH) 28

1.1.13 DHHS Application Environment 29

1.1.14 Medicaid Management Information Systems (MMIS) 29

1.1.15 Nebraska Family Online Client User System (N-FOCUS) 31

1.1.16 DHHS Information Systems and Technology (IS&T) 32

1.1.17 Broadband Internet Access 32

1.1.18 Consumer View 33

2 Section B To-Be HIT Landscape 35

Future Vision for DHHS 35

Future Vision for Providers 35

Technical Vision 36

2.1.1 Statewide Health Information Exchange 37

2.1.2 MMIS Modernization 39

2.1.3 Broadband Initiatives 41

3 Section C Activities Necessary to Administer and Oversee the EHR Program 43

4 Section D The State's HIT Audit Strategy 55

5 Section E The State's HIT Roadmap 57
Measures 60
Acronyms 61
Glossary 64

Change Control Log

Previous Submission Section	Current Submission Update Description
Section A	Updated *Section A As Is HIT Landscape*- updated based upon 2021 Environmental Scan. Additional minor changes to ensure accuracy and updated project information
Section B	Updated *Section B To Be HIT Landscape*- minor changes to ensure accuracy and updated project information
Section C	Updated *Section C Activities Necessary to Administer and Oversee the EHR Program*- minor changes to ensure accuracy
Section D	Updated *Section D The State's HIT Audit Strategy*- minor changes to ensure accuracy
Section E	Updated Section E *The State's HIT Roadmap*- updated to reflect post-HITECH

Summary

The State of Nebraska's Department of Health and Human Services (DHHS) recognizes that the future vision for Health Information Technology (HIT) involves the effective exchange and use of information to track and improve health outcomes while reducing long-term spending on healthcare. Specifically, this vision includes the sharing of necessary patient information at the point of care through standardized health information exchanges between providers to offer enhanced information for diagnosis and treatment decisions. Achieving this long-term goal requires a cultural change within the healthcare community. This change requires the participation of various stakeholders including providers, health insurers, public health, and other government agencies.

The Centers for Medicare and Medicaid Services' (CMS) Medicaid Promoting Interoperability Program, formerly known as, and herein known as the Electronic Health Record (EHR) Incentive Program, was implemented to more rapidly increase the adoption rate by providers for the meaningful use of Health Information Technology (HIT) as required by the American Recovery and Reinvestment Act of 2009 (ARRA). DHHS, in furtherance of these goals, views its role as supporting the following activities:

- Administer the Medicaid EHR Incentive Program for Nebraska, hereafter referred to as MIP, pursuant to the program rules;
- Provide MIP oversight;
- Promote meaningful use of HIT and exchange of health information.

During the inception of MIP, DHHS undertook a rigorous planning process designed to consider and incorporate all of the requirements for a successful implementation of its HIT initiatives that included payment of the incentives for adopting, implementing, or upgrading to certified EHR systems and Meaningful Use (MU) of EHR technology for Nebraska Medicaid providers. Since that time, DHHS has continued to carefully consider the current technology, business and operational environment, and continued planning for the necessary changes to administer MIP, conduct oversight activities, and promote adoption within Nebraska. DHHS implemented an electronic system to help support the administration and oversight of MIP in October 2014.

Throughout this document, Eligible Professionals and Eligible Hospitals will be called 'providers' collectively, unless otherwise noted.

1 Section A As-Is HIT Landscape

Overview

DHHS first conducted an environmental assessment to evaluate Nebraska's Health Information Technology (HIT) landscape between October 2010 and March 2011. An environmental assessment was conducted between August and November 2017 in order to evaluate Nebraska's current HIT/Health Information Exchange (HIE) landscape. With the submission of the 2021 SMHP, an updated environmental assessment was conducted between May and October 2021. Some updates to the 2017 environmental assessment have been made to reflect changes since that assessment and ensure accuracy. The 2017 and 2021 assessment included the following sections:

- Health Care Provider Environmental Scan;
- EHR/HIE Adoption;
    - Eligible Professional (EP) EHR Adoption
    - Eligible Hospital (EH) EHR Adoption
- Stakeholder Assessment (providers, health insurance exchange, state, etc.);
- Legal and Regulatory Support for EHR Adoption;
- State Borders;
- State of Nebraska Systems; and
- Consumer View and Acceptance.

The Statewide Health IT Coordinator for Nebraska, Lieutenant Governor Mike Foley, coordinates HIE efforts within the State of Nebraska, fostering an environment of joint participation and collaboration among HIT stakeholders. The Lieutenant Governor works with the eHealth Council to facilitate HIE efforts across the state. The eHealth Council assists in developing and updating the statewide technology plan and healthcare information technology adoption through the healthcare delivery system in Nebraska. The council also evaluates the cost of interoperable healthcare information technology and identifies resources to fund those efforts. The status and activities related to the various stakeholders are contained within this section.

Health Care Provider Environmental Scan

A health care provider environmental scan helps DHHS better understand the landscape, critical issues, and emerging trends that the State and providers will likely face in the

foreseeable future. Assessing the level of adoption of an EHR for each provider, the participation with a state designated HIE organization and level of interoperability of that health information is paramount in knowing the providers' coordination of care capability at the point of care for patients. The most recent Environmental Scan was completed in 2021.

1.1.1 Provider EHR Adoption

Prior to the initial environmental assessment in 2011, DHHS worked with provider associations and Wide River TEC, Nebraska's Regional Extension Center (REC), to understand the status of EHR provider readiness and adoption. DHHS reviewed results of existing surveys conducted by HIT stakeholders. The dates of these surveys ranged between 2007 and 2011 and provided historical context on EHR adoption.

EPs who attested to Adopt, Implement, Upgrade (AIU) and had not yet attested to MU showed barriers, including a lack of availability of vendors and systems that were not yet certified. In 2011, Nebraska had anticipated 600 providers would qualify during the life of the program. In the first program year, 484 EPs qualified for a Medicaid incentive payment.

2011 Eligible Professional (EP) Survey

The survey was distributed on February 16, 2011 with a follow-up email sent on March 1, 2011. The survey consisted of 33 multi-part questions, both in multiple choice and text entry format, concerning the present and planned use of HIT among EPs in the State of Nebraska. The follow-up email included a letter from the Director of Medicaid requesting participation in the survey. The survey included a web link which was sent to 3,652 EPs in Nebraska, of which 406 emails bounced back. The maximum number of respondents to an individual question in the survey was 478.

DHHS designed the survey to collect information regarding the level of EHR adoption, provider education/training needs, and barriers to adoption. In the survey from 2011, 63% of enrolled Medicaid EPs utilized an EHR system and more than half of those EPs stated their EHR was certified in MU.

When comparing EHR adoption, HIE participation, and MIP participation, minimum variances across provider types existed. Physicians appeared to have a lower 'unsure' response when asked about these topics. About 65% of EPs were unsure about future EHR purchases.

Half of all respondents had an EHR system in place. EP's practicing in an urban setting had an adoption rate of 52%, which was slightly higher than the adoption rate of providers with rural practices (42%). About half of the providers with an EHR system, 18% of 553 respondents, indicated their EHR was certified. Thirty-seven percent of all EPs that responded anticipated having a certified EHR system in place by 2015.

2011 Survey EHR Certification Results

EHR Certification Status	Total #	Total %
Certified EHR in Place Currently	100	18.0%
Certified EHR in 2011	47	8.5%
Certified EHR in 2012	46	8.3%
Certified EHR in 2013	7	1.3%
Certified EHR in 2014	2	.4%
Certified EHR in 2015	1	.2%
Do Not Plan	31	5.6%
Unsure	85	15.4%
Skipped Question	234	42.3%
Total	553	100%

The top barriers to EHR adoption, as indicated by 111 respondents in the 2011 survey, were related to cost, lack of knowledge, and satisfaction with current paper medical record systems.

2017 Provider Survey

This provider survey opened on September 12, 2017 and was completed September 29, 2017. The survey consisted of 26 questions in several categories including EHR usage, MU, MIP, and HIE. Eight questions were identical on both the 2011 and 2017 surveys and provided a baseline trend. A total of 3,822 email survey invitations were sent with 1,849 opened, 1,622 unopened, 267 bounced, and 84 opted out. The maximum number of respondents to an individual question in this survey was 578.

In this survey, the majority (94%) of survey respondents were Medicaid enrolled providers. The largest group responding to the survey was mental health providers at 26%. Provider respondents primarily specialized in general family practice and worked in a group or partnership medical or dental practice facility.

2021 Provider and Hospital Survey

The provider and hospital survey invitation was emailed to providers on May 24, 2021, and the survey was closed October 14, 2021. There were 32 questions with the survey being the same for both providers and hospitals. The survey results stayed consistent with past survey trends, which included categories of EHR usage, MU, MIP, and HIE. There were 4,221 total survey invitations emailed, 1,532 were opened, 1,671 unopened, 906 bounced, and 112 opted out. There were 221 total responses.

In this survey, 79% of survey respondents were Medicaid providers. The largest group responding to the survey was behavioral health providers at 23%, followed by long-term care providers at 18.5%. Provider respondents primarily specialized in mental health and long-term care, with the other top categories being chiropractors, general practice, and family practice.

Outside of a hospital setting, respondents were largely solo practitioners, followed by group or partnership practice, and long-term care facilities.

Survey Participant Description

- In the 2011 survey, most responding participants were physicians or dentists. In the 2017 and 2021 surveys, the findings were more mixed. The 2017 survey was sent to all Medicaid providers whether the provider participated in MIP or not. This allowed Medicaid providers such as behavioral health, long-term care, and pharmacists to respond to the survey. This was repeated for the 2021 survey. In the below analysis, the comparison of responses is as follows: 2011 vs 2017 vs 2021 comparisons
    - The comparison of the 2011 responses to the 2017 and then compared to the 2021 responses on identical questions in both surveys allow for a review of the changes that occurred during the years between the three surveys.
- 2017 and 2021 urban vs rural
    - The comparison between urban and rural responses allows for a comparison of HIE and HIT activities between two distinct demographic areas. The zip code of the provider was used to distinguish between urban and rural.
- 2017 and 2021 behavioral health providers vs all providers
    - The comparison between behavioral health providers versus all non-behavioral health providers helps determine the differences between the providers who did not participate in the EHR incentives program and those that did.
- 2017 and 2021 long term care providers vs all providers
    - The comparison between long term care providers versus all non-long term care providers helps determine the differences between the providers who did not participate in the EHR incentives program and those that did.

The majority (66.5%) of providers who responded to the 2017 survey were located in an urban setting. The largest professional category of the respondents were behavioral health providers (26%), physicians (15%), chiropractors (13%), and dentists (12%). This is a change from the 2011 survey where physicians and dentists had the largest representation. This is likely due to a larger email survey request that included all eligible Medicaid providers regardless of their participation in MIP.

In 2021, the majority (72.2%) of providers were located in an urban setting. The largest professional categories of respondents were behavioral health providers (23%), long-term care (19%), chiropractors (11%), dentists (8%), and physicians (8%).

EHR Adoption

A strong increase, from 48% to 63%, in EHR adoption was seen between the 2011 and 2017 surveys, with an additional increase of 10% between 2017 and 2021. This increase may benefit future HIT initiatives that require an EHR system. There was a 15% growth of EHRs

certified in MU from 2011 to 2017. By 2021, the EHR vendors being utilized was not dominated by any one EHR and a large variety of EHR systems were being used. Additionally, of the providers who responded to participating in the MIP program, 52% of providers responded to achieving MU stage 3.

Adoption of EHR System	2011		2017		% Change from 2011-2017	2021		% Change from 2017-2021
Yes	220	48%	362	63%	15%	153	73%	10%
No	206	45%	214	37%	-8%	56	27%	-10%
Unsure	35	8%	NA		NA			
Respondents	461		576			209		

In 2017, of the responding providers with an EHR system, almost half did not share clinical data electronically with other providers or agencies outside of their EHR system. The most used EHR functions were shown to be clinical documentation, medical history, and clinical/quality reporting measures.

In 2021, 72% of providers with an EHR system shared clinical data electronically with other providers or agencies outside of their EHR system. However, almost half of these providers still used paper records to augment their EHR. The most used EHR functions were shown to be clinical documentation, billing, and medical history. 39% of responding providers access/update Nebraska registries via their EHR, with 31% of responding providers utilizing their EHR to access/update the Nebraska Immunization Registry. Additionally, of the responding providers with an EHR system, half of them offer an online patient portal.

With increased EHR adoption between 2011 and 2017, many of the barriers to purchasing an EHR were reduced between 2011 and 2017. The 2021 survey posed this question not in terms of barriers of purchasing and EHR, but rather barriers to utilizing an EHR system. The answer options were mostly the same and those who answered "other" mentioned the size of their practice or not being medical providers, such as working in a school district or a pharmacy. Many of the barriers present in 2011 were still prevalent in 2021; however, there were significantly fewer providers who had not adopted EHR and had barriers to doing so.

Barriers in purchasing a certified EHR	2011		2017		% Change	2021		% Change 2017-2021
Cost of implementation & staff training	64	58%	82	42%	-16%	31	55%	13%
Cost of maintenance & upkeep	61	55%	83	43%	-12%	N/A	N/A	N/A
Time for staff training & education	51	46%	71	36%	-10%	21	38%	2%

Lack of knowledge/understanding of EHR	35	32%	48	25%	-7%	16	29%	4%
Staff lacks expertise in EHR technology	23	21%	30	15%	-4%	19	34%	19%
Security/privacy concerns	17	15%	26	13%	-2%	10	18%	5%
Limited broadband availability	7	6%	10	5%	-1%	7	13%	8%
Insufficient staff resources	N/A	N/A	N/A	N/A	N/A	19	34%	N/A
Other	N/A	N/A	N/A	N/A	N/A	13	23%	N/A
Respondents	111		195			56		

HIE Adoption

In 2017, more than two thirds (68.7%) of providers who responded either did not plan or were unsure if they would join an HIE and 38% of the respondents stated that they found no value to services provided by an HIE. Many of the barriers to joining an HIE were as prevalent in 2021 as in 2017 and 2011. The chart below lists some of the barriers in joining an HIE in 2011, 2017, and 2021.

Barriers in joining an HIE	2011		2017		% Change	2021		% Change 2017-2021
Lack of knowledge	43	45%	44	37%	-8%	76	42%	5%
Cost associated with fees	39	41%	60	51%	10%	88	49%	-2%
Cost of implementation & staff training	37	39%	56	47%	8%	80	44%	-3%
Satisfied with process to obtain data	33	35%	26	22%	-13%	34	19%	-3%
Security/Privacy concerns	31	33%	29	25%	-8%	40	22%	-3%
Insufficient staff resources	30	32%	41	35%	3%	69	38%	3%
Current product does not support HIE	20	21%	23	19%	-2%	35	19%	0%
Lack of technical staff	20	21%	38	32%	11%	54	30%	-2%
Limited broadband availability	10	11%	9	8%	-3%	9	5%	-3%
Unsure	N/A	N/A	N/A	N/A	N/A	41	23%	N/A
Other	N/A	N/A	N/A	N/A	N/A	26	14%	N/A
Respondents	95		118			180		

There was a relatively small increase in responding providers who accessed an HIE between 2011 and 2017, a decrease of responding providers who planned to access an HIE in the future, and a small increase of responding providers who have no plans to join an HIE. By

2021, only 19% of providers who responded were participating with an HIE with the majority of respondents indicating a neutral level of importance for their organization to participate in an HIE. However, just under 10% of providers anticipated their organization investing further in HIE due to the COVID-19 pandemic. Additionally, in 2021 a Nebraska Legislative Bill 411 was passed and signed into law requiring a majority of providers to become connected to the statewide HIE.

Participate in HIE	2011		2017		% Change	2021		% Change 2017-2021
Yes, CyncHealth	47	11%	50	17%	6%	34	19%	2%
No, but plan to join one later	67	16%	40	14%	-2%	N/A	N/A	N/A
No, do not plan to join one	91	21%	73	25%	4%	N/A	N/A	N/A
No	N/A	N/A	N/A	N/A	N/A	147	81%	N/A
Unsure	222	51%	126	44%	-8%	N/A	N/A	N/A
Other	6	1%	0	0%	-1%	N/A	N/A	N/A
Respondents	433		289			181		

For those responding providers who participated in HIE, half found discharge summaries to be the most valuable service provided by the HIE. Other valuable services included order/lab results, active care coordination, and longitudinal medical records. Additionally, 41.18% of providers were neither satisfied nor unsatisfied with the electronic data exchange via the HIE, with 41.17% of providers who were either satisfied or very satisfied.

Urban vs Rural

In the 2017 survey, rural provider respondents updated Nebraska's registries more frequently and had greater participation in MIP than urban provider respondents. These providers found admissions, discharge and transfers (ADT) alerts and Medication History from HIEs more valuable than their urban counterparts. Rural provider respondents found limited broadband availability was a barrier in joining an HIE and purchasing a certified EHR system. Telemedicine was reported more with rural provider respondents; however, more urban provider respondents intend to use telemedicine in the next 5 years

Similar to the 2017 survey, the 2021 survey found that rural providers and hospitals updated registries more frequently; however, participation in MIP was found to be equal for rural and urban providers and hospitals in this survey. Rural respondents were slightly higher in utilization of discharge summaries, patient portal, and historical lists. Rural respondents found broadband availability was a barrier in joining an HIE in 2021; however, less than half of the respondents found it a barrier when purchasing a certified EHR system. Additionally, the results of this survey found rural respondents were less interested in telemedicine than urban

providers and hospitals, though because of the COVID-19 pandemic, 44% of all respondents anticipated that their organization will invest further in, Telemedicine.

2017 Survey

Use Telemedicine	Rural(132)		Urban(315)		Total	
No, but plan to do so in future (0-5 years)	7	5.3%	35	11.1%	42	9.4%
Yes	21	15.9%	22	7.0%	43	9.6%

2021 Survey

Telemedicine of interest or on the future roadmap for your organization	Rural (15)		Urban (54)		Total	
No	11	78.57%	45	84.90%	56	81.16%
Yes	4	6 %	9	16.67%	13	18.84 %

Behavioral Health (BH) Providers

Responding BH providers utilized an EHR about half as much as all other responding providers combined in the 2017 survey. In 2021, BH providers utilized an EHR more than half of the time with non-BH providers more than three quarters of the time.

2017 Survey

Utilizing EHR's	Non-BH		BH		Total	
	n	*% N_B*	*n*	*% N_0*	*n*	*%*
Yes	230	67.8%	34	37.8%	264	61.5%
No	109	32.2%	56	62.2%	165	38.5%
Total	339	100%	90	100%	429	100%

2021 Survey

Utilizing EHR's	Non-BH		BH		Total	
	n	*% N_B*	*n*	*% N_0*	*n*	*%*
Yes	124	78.48%	29	56.86%	153	73.21%
No	34	21.52%	22	43.14%	56	26.79%
Total	158	100%	51	100%	209	100%

In 2017, barriers to purchasing certified EHR systems by BH providers were insufficient staff resources and security/privacy concerns. Forty-six percent of BH providers found it was important or very important to participate in an HIE which was higher than non-BH providers are. In 2021, barriers to utilizing an EHR system were implementation cost, time to learn, lack of knowledge, and lack of technology staff. Two percent of BH providers found it important to participate in an HIE which is lower than non-BH providers.

Long Term Care (LTC) Facilities

In 2017, only 30% of responding LTC facilities utilized an EHR system. More than half, 56% of LTC facilities used a discharge planning function in their EHR while only 35% of non-LTC respondents used that same function. Only seven LTC facilities that responded participated in an HIE. These seven facilities find discharge summaries, ADT alerts, continuity of care documents, medication history, and downloadable clinical summaries valuable at a greater rate than all other responding providers. Additionally, responding LTC facilities have a strong interest in the use of telemedicine in the future.

In 2021, 77% of responding LTC facilities utilized an EHR system. EHR systems were utilized by 72% of LTC facilities for discharge planning function while only 41% of non-LTC respondents used that same function. Additionally, 9 out of the 35 responding LTC facilities participated in an HIE and three facilities responded to interest in telemedicine for the future. However, 17 facilities anticipated investing in telemedicine as a result of the COVID-19 pandemic.

2017 Survey

Use Telemedicine	LTC(36)		Non-LTC(380)		Total	
No, but plan to do so in future (0-5 years)	9	25.0%	32	8.4%	41	9.9%
Yes	6	16.7%	30	7.9%	36	8.7%

2021 Survey

Use Telemedicine	LTC(36)		Non-LTC(380)		Total	
No	9	25.7%	60	28.3%	69	25.8%
No, but plan on future roadmap	3	8.5%	10	4.7%	13	4.9%
Anticipate due to COVID-19	17	48.6%	61	28.8%	78	29.2%
Yes	26	74.2%	81	38.2%	107	40.1%

1.1.2 Hospital EHR Adoption and Health Information Exchange Survey

2011 Eligible Hospital Survey

DHHS conducted a survey to determine eligible hospital readiness as part of the environmental assessment in 2011. Sixty-six out of the 90 hospitals in the State at the time of the survey completed most of the questions. Ninety-five and a half percent of the hospitals that responded to the survey were enrolled in Medicaid. Critical Access Hospitals (CAHs) accounted for the majority of the respondents (67.2%), with the second largest being

noncritical access hospitals (non-CAHs) (22.4%). Approximately 74% of the hospitals that participated in the survey were located in rural areas and 26% were urban.

Sixty percent of all hospitals that participated in the survey had an EHR system in place. Significant differences were noted between urban and rural adoption. The majority of urban hospital survey respondents (88%) had an EHR system in place compared to about half of the rural hospital respondents (47%). Thirty-three percent of respondents indicated that their EHR systems were certified, but nearly 90% of responding hospitals indicated that they expected to have a certified EHR by 2013.

EHR Certification Status	Total #	Total %
Certified EHR in currently	22	33%
Certified EHR in 2011	18	27%
Certified EHR in 2012	14	21%
Certified EHR in 2013	6	9%
Unsure	3	5%
Skipped question	3	5%
Total	66	100%

Effective September 30, 2015, 189 EH payments had been made and 80 unique EHs had participated in MIP with a total of $46,336,094.56 paid.

As of 2015, EHR adoption was increasing within the state of Nebraska. Of the 91 hospitals in Nebraska at the time, 79 were participating in MIP, 6 in Medicare's EHR Incentive Program only, and 6 were not participating in either program. About 89% of the hospitals that received a MIP payment in 2013 returned for a 2014 payment.

2017 Hospital Survey

The hospital survey was opened on September 12, 2017, the same day as the provider survey and with the same 3-week availability. This survey consisted of 29 questions with categories including EHR usage, MU, MIP, and the exchange of health information. Seven questions were identical on both the 2011 and 2017 surveys and provide a baseline trend. Of the 98 hospitals in Nebraska, 55 responded to the survey. The survey email contact list was provided by the Nebraska Hospital Association and consisted of CEOs, CIOs, and CFOs of individual hospitals.

In this analysis, the comparison of responses is as follows:

- 2017 responses
- 2011 vs 2017 comparisons

- The comparison of the 2011 responses to the 2017 responses on identical questions in both surveys allows for a review of the changes that occurred during the 6 years between the two surveys.

- 2017 urban vs rural
    - The comparison between rural and urban responses allows for a comparison of HIE and HIT activities between two distinct demographic areas. The zip code of the provider was used to distinguish between rural and urban.

The majority (78%) of the hospital survey respondents were Acute Care/Critical Access hospitals with more than 50% Medicare patients.

2021 Hospital Survey

The hospital survey was combined with the provider survey in 2021, asking both groups the same questions on EHR usage, MU, MIP, and HIE. Of the 32 questions in the survey, one was specific to hospitals, which asked for hospital type. The majority (71%) of hospitals were Critical Access Hospitals (CAHs). Of the 111 hospitals in Nebraska, 365 emails were sent, with 12 hospitals or hospital systems responding to the survey.

There was a significant adoption and utilization of EHRs by hospital respondents between 2011 and 2017. As of 2017, almost all (98%) of the hospital respondents utilized an EHR system. In 2021, of the 12 hospital respondents, all utilized an EHR. Of the 12 respondents, one is a health system that had multiple hospital locations.

Response	2011		2017		% Change	2021		% Change
Yes	38	58%	50	98%	40%	12	100%	2%
No	26	39%	0	0%	-39%	0	0%	-39%
Unsure	2	3%	1	2%	-1%	N/A	N/A	N/A
Respondents	66		51			12		

In 2017, the majority of EHR vendors used by hospital respondents were Heartland (13), Cerner (8), Meditech (6), Epic (4), Evident (4), McKesson (4), Medhost (3), Allscripts (2), and NextGen (2). In 2021, the breakdown of EHR vendors by hospital respondents was as follows: Cerner (3), Meditech (1), Epic (1), Allscripts (1), CSPI (3), Healthland/Centriq (2), and NextGen (1). In 2017, the majority (70%) of the hospital respondents were rural, whereas in 2021, 63.6% of the hospital respondents were rural.

In 2017, most (88%) of the hospital respondents updated the Nebraska Immunization registry. To a slightly lesser degree, these hospitals updated the Syndromic Surveillance and Electronic Lab Reporting registries. By 2021, all 12 responding hospitals accessed/updated via their

EHR the Nebraska Immunization registry, seven accessed/updated the ELR, and five accessed/updated the Syndromic Surveillance registry.

EHR Registry Access				
	2017		2021	
Immunization	42	87.50%	12	100%
Syndromic Surveillance	34	70.83%	5	41.7%
Electronic Lab Reporting	36	75.00%	7	58.3%
Cancer	8	16.67%	2	16.6%
Vital Records	5	10.42%	1	8.3%

In 2017, more than two thirds of the hospital respondents found that HIEs are important and more than half had access to an HIE. In 2021, of the 12 responding hospitals, seven participated with an HIE and 41% indicated that participating in a HIE was important. In 2017 about one quarter of the hospital respondents did not plan to join an HIE in the future and found the cost of the associated fees to be a major barrier to joining. In 2021, the costs associated with joining an HIE remained a significant barrier.

In 2017, rural hospital respondents found accessing a provider directory from their HIE more valuable than urban hospital respondents. Only half of the hospital respondents had access to a provider directory that allowed for secure messaging. Of the 12 responding hospitals in 2021, 10 utilized a provider directory.

HIE Importance				
		2017	2021	
Very Unimportant	7	13.46%	N/A	N/A
Unimportant	4	7.69%	3	25%
No Opinion	6	11.54%	4	33.33%
Important	25	48.08%	3	25%
Very Important	10	19.23%	2	16.67%

Stakeholder Assessment

1.1.3 Federally Qualified Health Centers (FQHCs)/ Rural Health Centers (RHCs)

There are 59 FQHCs and 188 RHCs in Nebraska enrolled with Nebraska Medicaid. FQHCs and RHCs are working together and exchanging health care information. On June 3, 2010, the

United States Department of Health and Human Services' Health Resources and Services Administration (HRSA) announced that $83.9 million in grant funds were available to assist health center networks to adopt and implement HIT. These funds were part of the $2 billion that were assigned to HRSA under ARRA. One World Health Centers, acting as the fiscal agent for the Heartland Community Health Network, and as a member of this network, was awarded $1,511,083 from the ARRA Health Information Technology Implementation grant. Heartland Community Health Network is a collaborative network of the following five FQHCs:

- One World Health Centers, NE;
- Charles Drew Health Center, NE;
- Bluestem Health, formerly known as People's Health Center, NE;
- Norfolk Community Health Clinic, NE;
- Council Bluffs Community Health Center, IA.

Health Center Computer Network (HCCN) served as a HIT team mentor. Heartland used this funding for staffing and technical support in the adoption of HIT and HIE for its five participating members.

1.1.4 HIT Regional Extension Center (REC) Status

As of August 24, 2012, 806 of the 1,065 primary care providers who worked with Wide River TEC, installed an EHR and used it to report quality measures and e-prescribing. Twenty-seven of the 54 CAHs working with Wide River TEC implemented an EHR. The REC grant funding ended in February 2014.

1.1.5 Indian Health Service (IHS)

Indian Health Service (IHS) is an agency within the United States Department of Health and Human Services and has responsibility to provide federal health services to American Indians. IHS is the health advocate for Indian people and a federal health care provider. Health care services are available to Nebraska Native Americans at IHS and tribal facilities. The tribal based facilities in Nebraska are: Carl T. Health Center, Fred LeRoy Health and Wellness Center/Ponca Hills Health and Wellness, Santee Sioux Tribal Health Clinic, and Winnebago Tribal Health Department. The IHS facility in Nebraska is Twelve Clans Unity Hospital (formerly known as Winnebago Indian Hospital). In addition, the Nebraska Urban Indian Coalition, which has implemented an EHR system, provides medical services to this tribal population. Locations can be found in Lincoln and Omaha, Nebraska and Sioux City, Iowa. These locations provide services to Native Americans that do not reside on a reservation.

IHS has implemented a suite of applications that provide management of health information and the Aberdeen Indian Health Service Area office provides HIT oversight. The Resource and Patient Management System (RPMS) is the IHS decentralized system for clinical and administrative health information. IHS provides a comprehensive health service delivery system for approximately 2.2 million American Indians and Alaska Natives who belong to 567 federally recognized tribes in 36 states. Both the Nebraska IHS and the tribal health facilities subscribe to the Aberdeen Indian Health Service Area Office and the national IHS RPMS.

1.1.6 Department of Defense/Veterans Administration

The only active military installation in Nebraska is Offutt Air Force Base. The 55th Medical Group, based at Offutt, has the ability to administer mass quantities of medicine in the event of a health emergency. In October 2017, they deployed a test medical group response to a health emergency to rapidly administer medicine to the base populous in the event of a pandemic or health emergency.

The Ehrling Bergquist Clinic is a small internal and family medicine office at Offutt. The Virtual Lifetime Electronic Record (VLER) Health Initiative and eHealth Exchange allows some of the information in a patient's military electronic health record to be securely shared between the Department of Defense, Department of Veterans Affairs, and participating federal and civilian health care partners. This clinic provides comprehensive outpatient care, as well as pharmacy, lab, and radiology services. Military personnel requiring services beyond the capability of this clinic are referred to the Bellevue Medical Center.

There are approximately 150,000 veterans in the State of Nebraska who receive health care services from the Veterans Administration Nebraska-Western Iowa Health Care System (VA NWIHCS). Provider members of the VA NWIHCS include the VA Medical Center in Omaha, the Community Living Center in Grand Island, and seven community-based outpatient clinics.

The VA NWIHCS uses the Veterans Health Information Systems and Technology Architecture (VistA) EHR system. This technology is used to share patient information among VA facilities only. VistA is a Web-based tool that allows providers to securely sign in and access patient health records from remote locations. While patient information is typically not electronically shared outside of the Nebraska VA system, there is the capability for patient information exchanges on a case-by-case basis with a signed Interconnection Security Agreement.

1.1.7 CyncHealth

Nebraska Health Information Initiative (NeHII) DBA CyncHealth is a 501c3 non-profit health information exchange organization that has a public/private governance model and includes health care providers, payers, and the State of Nebraska. CyncHealth began as a public/private collaborative between the Nebraska Chamber of Commerce and University of Nebraska in

2005. The goal of this joint effort was to create a common health record. In November 2008, CyncHealth contracted with Axolotl to provide the technology needed to establish an HIE and offer EHR functionality to physicians. CyncHealth was piloted March through June of 2009 and then was designated as the statewide integrator by the Governor.

Since 2010, funds have been available through the Health Information Technology for Economic and Clinical Health (HITECH) Act for the purpose of improving patient outcomes and reducing healthcare costs through the expansion of secure HIEs. CyncHealth is the designated statewide integrator for Nebraska. CyncHealth, the eHealth Council, and the State HIT Coordinator work together to facilitate HIE exchange initiatives throughout the State.

In 2021, NEHII completed a rebranding effort and is now doing business as CyncHealth. CyncHealth's board of 18 members is made up of a broad representation of Nebraska HIE stakeholders representing the healthcare spectrum including health systems, payers, critical access hospitals, local public health departments and state government. CyncHealth is operating the exchange with 65 full-time employees and a range of 7-21 contracted resources in 2021. Staff includes Executive and Senior Leadership, Population Health and Quality Advisors, Project Management Office, Interface Analysts, Policy Analyst, Computer and Data Science Analysts, Network Engineers, Developers, Data Architect, Prescription Drug Monitoring Program (PDMP) Director, Informatics Pharmacist and Staff, Marketing, Accounting, Legal and HR staff. CyncHealth corporate offices are located in La Vista, Nebraska.

During 2016, CyncHealth migrated to a new platform that provided cloud-based services. This platform provided enhanced patient lists, printing capabilities, patient summaries via secure electronic messaging, and ADT notification. Starting in 2019, CyncHealth began the process of transitioning from the Optum platform to the Intersystems platform which now provides more compliance capability for sensitive data display, as well as enhanced functionality not possible with Optum. In 2019 CyncHealth also migrated to a new PDMP platform allowing greater functionality. Capability now exists for enhanced workflow alerting and workflow integration into EMR and pharmacy systems through enablement of Application Programming Interfaces (APIs).

Also, LB411 was introduced on 1/14/2021 and passed and signed by Governor Ricketts on 05/24/2021. This legislation requires providers to onboard with CyncHealth, who is the designated Health Information Exchange.

The HITECH Act was part of the American Recovery and Reinvestment Act of 2009 (AARA). This Act was created to motivate the implementation of electronic health records (EHR) and supporting technology. This funding ended FFY 2021 (09-30-2021). Found below are projects that CyncHealth implemented through HITECH funding:

HIE Infrastructure, Interoperability and Onboarding

1. **Immunization Gateway:** CyncHealth sends the immunization information electronically through the Immunization Gateway allowing for the remaining vaccine count to be accurate and available in real time. Without CyncHealth, the tracking system for decreasing inventory at NESIIS for the Vaccines for Children program must manually be entered into NESIIS.
2. **Syndromic Surveillance:** CyncHealth collects syndromic surveillance data from hospitals and submits the information through an interface to DPH. DPH utilizes NEDSS to track disease patterns and coordinate responses to outbreaks in the State of Nebraska. Submission through CyncHealth streamlines the interface process, which results in an increase of data submission. Currently, only two provider groups in Nebraska interface this data directly to Public Health.
3. **Electronic Lab Reporting:** DPH connects to CyncHealth to collect lab data. DPH does not currently have the ability to accept electronic lab reporting directly from providers outside Critical access hospitals and hospitals. Once implemented, CyncHealth will have the ability to collect lab data and submit it through an interface to DPH.
4. **Medication History Data/PDMP Specialized Registry Support:** CyncHealth, in partnership with DPH, collects data on prescription drugs prescribed from pharmacies across the state of Nebraska. The goal is to reduce over-prescribing and enable safer prescribing of opioid medications, and enhance the medication reconciliation process.
5. **Facility and provider connectivity to** CyncHealth: CyncHealth enables hospitals to submit demographic data, lab results, radiology reports, and transcription reports to the HIE for exchange with care providers in the state. Providers have access to the patient data. Additionally, a LMS was implemented for providers to enable better access to HIE onboarding. The project also enables LTPACs to connect to the HIE and submit and view data available in the HIE. The inclusion of LTPACs broadens the scope of interoperability for better connectivity across the continuum of care. There will also be an effort to enhance clinician workflows by developing HIE platform enhancements, including event notification services and a unified landing page.
6. **Nebraska Parkinson's Disease Registry:** A database is being created to detect the incidence of and possible risk factors concerning Parkinson's Disease, plan health care requirements, educate health care providers, and provide the opportunity to collect data that could lead to a cure. Through a partnership between Public Health and CyncHealth more providers and pharmacies will be onboarded to report to and access the registry.

7. **Emergency Preparedness (PULSE):** Project focuses on developing a health IT disaster response platform know as PULSE (Patient Unified Lookup System for Emergencies). This platform, which will be integrated into the HIE, allows for disaster healthcare volunteer providers to be authenticated and access critical health information during disaster situation.
8. **Patient and Family Engagement (Platform for Patient/Consumer Access):** CyncHealth will develop a patient engagement platform aligned with MyHealthEdata that creates a singular place of information for patients and their representatives to view personal health information and to share with providers.
9. **Specialized Registries for Enhanced Care Coordination:** CyncHealth and DPH will develop specialized registries that providers will submit and have access to for care coordination and information sharing. This project will focus on the Electronic Case Reporting, Electronic Reporting for Cancer Registry, and Electronic Reporting for Traumatic Brain Injury Registry.
10. **Health Information Service Provider (HISP) Services:** Project develops an HIE service that allows for direct messaging of clinical information amongst HISP connected providers. Additionally, project will allow for direct messaging from providers to patients.
11. **Behavioral Health Integration:** Project focuses on inclusion of behavioral and mental health data and access to providers.
12. **Interstate Data Sharing:** Develops interstate data sharing agreements with the states that are contiguous to Nebraska, in accordance to state law and policy, in order to meet the requirements of a qualified PDMP under the SUPPORT Act. Interstate data sharing will support HIE enhancements for patient matching, ease of use, and interoperability between state hubs.
13. **Workflow Integration:** Supports the integration of the PDMP into the workflow of providers. This will be done through the development of programming, interfaces, APIs, and other means to integrate the PDMP into EHRs, EMS systems, and pharmacy dispensing software systems throughout Nebraska. Supports the development of a patient matching solution and the integration of this into the HIE and EHRs.
14. **Electronic Prescribing:** Supports the development of an electronic prescribing solution to be offered to prescribers at no cost. This will allow for prescriptions to be prescribed through the most recent industry standards, along with providing greater information to providers and making the process more efficient and timely. Additionally, the project supports the continuation of PDMP data integration into prescribing systems and connection of prescribers to the PDMP.

15. **Real-time PDMP Reporting:** Supports the reduction of barriers to timely reporting of dispensed prescription to the PDMP with the goal of getting reporting to as near to real-time as possible.

Analytics, Clinical Quality Measures and Population Health

16. **CQM and Population Health Support:** CyncHealth will be a hub for CQM data, and support CQM analysis, as well as support the electronic export of CQM data from providers to multiple programs. Data will be aggregated, normalized, and validated to be shared with providers. Additionally, HIE services will support the dual eligible critical access hospitals' (CAHs) participation in the Medicare Beneficiary Quality Improvement Project (MBQIP).
17. **Data Analytics:** Supports the development of a data analytics system in order to provide information on controlled substances prescribed to and filled for a covered individual. This system also supports the analysis of trends across states. There is significant reuse ability of a data analytic system outside of the PDMP as well.
18. **Neonatal Abstinence Syndrome (NAS) Identification and Notification:** Supports the utilization of the HIE and data analytics infrastructure to create a NAS registry for identification, notification, and predictive analysis. Information gathered through this project will then be available to be utilized for prevention and treatment programs.

HIE Governance, HIE Sustainability and EPMO

19. **HIE Maturity Assessment:** Project supports an assessment of the HIE landscape and maturity in accordance to CMS' standards of the HIE maturity Model and MITA.
20. **Infrastructure:** Provides for the necessary enhancement of the existing HIE infrastructure to support each project. This includes operationalizing the ability to provide limited access of PDMP data to Nebraska Medicaid and the managed care entities for Medicaid beneficiaries.
21. **Administrative Considerations:** Supports the other seven projects through the addition of personnel and related equipment. Additionally supports the coordination and planning efforts of all SUPPORT Act activities.

DHHS will continue to oversee this work done by CyncHealth through interdepartmental collaboration and steering meetings.

CyncHealth and Utah Health Information Network (UHIN) were collaborating to allow ADT broadcasts to cross state lines for care coordination. CyncHealth collaborated with border states such as: Iowa, Kansas, Colorado, South Dakota, and Wyoming for HIE activities. While CyncHealth encouraged participation from border state providers, participation was by choice. In addition to providing HIE services across state borders, CyncHealth provided business plan

development, helpdesk functions, and training services to out-of-state providers or state HIEs that can use CyncHealth's expertise.

Collaboration with border states regarding the PDMP was occurring along with other services relating to the PDMP under the SUPPORT Act. The SUPPORT Act was established in 2018 to provide federal funding to states to enhance their PDMP's and other services that work to eliminate the opioid crisis. This funding ended FFY 2020 (09-30-2020). The projects (12, 13, 14, 15, 17, 18, 20, 21), as seen above, that CyncHealth implemented through the Support Act funding were continued with the HITECH funding.

1.1.8 Electronic Behavioral Health Information Network (eBHIN) / Heartland Community Health Network (HCHN)

Electronic Behavioral Health Information Network (eBHIN) was a behavioral health specific HIE. eBHIN's goal was to provide HIE services, as well as EHR, billing, and practice management modules to contracted providers. eBHIN started in the State of Nebraska Division of Behavioral Health (DBH) Region V and was dissolved due to financial unsustainability. Effective September 1, 2014 eBHIN transitioned management of services to HCHN. HCHN is a HRSA funded HCCN entity for Nebraska FQHCs.

1.1.9 eHealth Council

In 2007, former Lieutenant Governor Rick Sheehy and the Nebraska Information Technology Committee (NITC) established the eHealth Council. NITC partnered with CyncHealth and the University of Nebraska Medical Center (UNMC) to seek funding in support of health information interoperability and the facilitation of health information into providers' workflows. In October 2015, this partnership received $2.7 million from the U.S. Department of Health and Human Services Office of the National Coordinator for Health Information Technology (ONC) for this purpose. NITC has developed a Nebraska Statewide Technology Plan which focuses on five goals:

- Support the development of a robust statewide telecommunications infrastructure that is scalable, reliable, and efficient;
- Support the use of information technology to enhance community and economic development;
- Promote the use of information technology to improve the efficiency and delivery of governmental and educational services, including homeland security;
- Ensure the security of the state's data and network resources and the continuity of business operations;

- Promote effective planning, management, and accountability regarding the State's investments in information technology.

In accordance with the Nebraska Revised Statute 86-516 requirement to annually update a statewide technology plan, NITC has created seven strategic initiatives:

- State Government IT Strategy;
- IT Security;
- Nebraska Spatial Data Infrastructure (NESDI);
- Network Nebraska;
- Digital Education;
- Rural Broadband and Community IT Development;
- eHealth.

Regarding this last initiative, the eHealth Council completed in 2017 a $2.7 million grant to increase CAHs, LTC facilities, and other providers' participation with CyncHealth. Grant activities included:

- Adopting of health information exchange through CyncHealth for 47 facilities and health systems;
- Adding 2 ambulatory clinics and a provider network to CyncHealth through C-CDA data sharing;
- Implementing direct secure messaging for 15 LTC and other facilities;
- Implementing a gateway with Missouri Health Exchange to enable the exchange of data across HIEs;
- Connecting 2 CAHs to the State's Syndromic Surveillance system through CyncHealth;
- Implementing population health analytics for 6 facilities;
- Providing assistance in workflow analysis and integration to facilities participating in integrated communities;
- Developing use-case based training modules;
- Developing demonstration projects that integrate HIE data for comparative research.

NITC completed a four year $6.8 million State Health Information Exchange project through a grant from the ONC (2010 - 2014). A 2014 report covering this four year time frame stated the number of CyncHealth users grew from 464 to 3,590 and Nebraska ranked 13th in the country in e-prescribing adoption, with 89% of physicians in Nebraska e-prescribing.

1.1.10 DHHS – Division of Public Health (DPH)

DPH is made up of 23 local health departments. They provide oversight of preventive and community health programs and services, and also maintain multiple health information registries including:

State Immunization Registry – The Nebraska State Immunization Information System (NESIIS)

NESIIS is a secure, statewide, web-based system developed to connect and share immunization information among public clinics, provider offices, local health departments, schools, hospitals, and other health care facilities that administer and track immunizations in the State of Nebraska. The primary function of NESIIS is to collect data so that providers may track and identify required immunizations. For facilities without an EHR system, NESIIS offers a user-friendly manual interface that allows a facility to enter, view, and track administered immunizations, manage vaccine inventory, forecast vaccinations needed and run reports and reminder-recall notices. For facilities with an EHR, NESIIS is capable of uni-directional and bi-directional electronic data exchange using the HL7 2.5.1 format to minimize the amount of manual data entry. This bi-directional exchange allows patient immunization data to be viewed in an EHR. Hospitals and providers are also able to submit Immunization registry data from the HIE. Currently six facilities submit immunization registry data and an additional 23 are in process of developing this connection.

The reporting of immunization data using a standardized HL7 v2 Center for Disease Control (CDC) approved format was a MU objective for EHs and EPs. NESIIS receives HL7 v2 data from EHR hospital systems, vital records, local health departments, private providers, clinics, and other health care facilities.

Immunization data can be sent electronically via the Public Health Information Network Messaging System (PHINMS). Data can be accepted in HL7 v2.4 or HL7 v2.5.2 format. DHHS also allows school medical staff to view and have print-only access to immunization data for their students. This access provides verification of student compliance to school required immunizations.

State Public Health Surveillance

DPH utilizes the National Electronic Disease Surveillance System (NEDSS) to track disease patterns and coordinate responses to outbreaks in the State of Nebraska. The

goal of this surveillance program is to identify trends in reportable diseases and support local health departments' outreach efforts. Data in the program has been retained since 2005. NEDSS, maintained by the CDC, is a secure web-based program that allows healthcare professionals and government agencies to communicate, plan, and respond to such events in a timely manner.

Data in the program consists of laboratory reports of reportable diseases for ongoing surveillance. Physicians and laboratories are required to report any patient reportable conditions to this registry. Data includes name, address, age, date of birth, laboratory performing the lab test, physician information, and lab test results for each patient. Data submission is required to be in both HL7 v2.3.1 and v2.5.1 formats. The State of Nebraska currently requires labs to report on approximately 70 diseases. In addition, seven facilities use CyncHealth to send Electronic Lab Reporting information through the HIE to Public Health and an additional 14 are in process of developing this data connection.

Syndromic Surveillance Event Detection of Nebraska (SSEDON)

SSEDON was created to expand the scope of syndromic surveillance, strengthen current surveillance capabilities, and improve the effective practice of public health in Nebraska. The objective of the syndromic surveillance program is to detect, track, and analyze disease events to establish at-risk populations, develop effective prevention plans, monitor trends in morbidity, and ultimately improve population health through better, timelier, disease surveillance. SSEDON accepts HL7 v2.5.1 formatted health information electronically through PHINMS. With the continued partnership with CyncHealth, providers and hospitals are able to submit syndromic surveillance data to the SSEDON system through CyncHealth. Currently eight facilities submit syndromic surveillance data and an additional 14 are in process of developing this data connection.

Reporting syndromic surveillance information was a public health objective for EHs and a Stage 2 and Stage 3 MU objective for EPs. The SSEDON system is used to collect and analyze syndromic data from healthcare facilities in Nebraska and uses de-identified patient information.

Other Public Health Data Inventory

The Nebraska Behavioral Risk Factor Surveillance System (BRFSS) has been conducting surveys annually since 1986. This system targets health education and risk reduction activities to lower rates of premature death and disability. The data is collected through landline and cell phones with randomly selected Nebraskans.

Cancer Registry Data

Cancer Registry data is required to be collected monthly from hospitals, clinics, and physicians. Data has been collected since 1986 and includes personal identifiable information. Currently, there are no electronic interoperability capabilities with this database.

Emergency Medical Services (EMS)

The Nebraska EMS provides the data standard for the data elements contained in the Nebraska EMS database and are maintained by DHHS. All basic and life support services provided require collection of a patient care record for every emergency response. EMS services are required to report data to DHHS quarterly. This data, collected since 2000, helps to determine how services can be improved when a quality improvement process is utilized.

Parkinson's Disease Registry

Data on Parkinson's Disease has been collected since 1997, with a short period where the registry was terminated. To enhance the registry, a web based registry as a separate application within the WIR-based NESIIS platform was developed recently. Supporting and building this web based system, a data exchange that collects prescription information and expands use of the registry to authorized physicians will continue to occur. Additionally, better analysis tools will support coverage and simplification.

PDMP

Data on drug prescriptions is collected to identify and monitor opioid prescriptions in alignment with the national goal of reducing the effects of the opioid crisis. This registry exists through a partnership between DPH and CyncHealth, with CyncHealth supporting the functionality of the PDMP. Through data sharing and an integrated workflow solution that connects to EHRs, the medication reconciliation process will be enhanced and provider burden will be limited.

In April of 2019, the Nebraska State Legislature passed a bill to improve the state's PDMP. This legislation allowed for the Nebraska PDMP to share data with other states' PDMPs, regulated data sharing for research purposes, gave flexibility to DHHS to alter data collection provisions, and provided access to the PDMP for the Nebraska Medicaid officials and managed care organizations. The changes associated with this bill will support increased functionality of the PDMP into the future.

Additionally, in August of 2020, the Nebraska State Legislature passed a bill to improve the data governance coordination between DHHS, the Legislature, CyncHealth, and providers.

1.1.11 DHHS –Division of Medicaid & Long-Term Care (MLTC)

The Division of Medicaid and Long Term Care (MLTC) encompasses the Medicaid Program which provides health care services. Nebraska's State HIT Coordinator is the Lieutenant Governor. The eHealth Council facilitates eHealth initiative discussions in the state. The HIT Coordinator works closely with the eHealth Council in facilitating HIE activities across the State. Participation by both the State HIT Coordinator and DHHS promotes statewide meaningful use of EHRs, ensuring ongoing coordination of State resources.

Participation in the EHR Incentives Program since the last SMHP submission has seen 30 eligible providers achieve meaningful use and receive an incentive payment for Program Year 2020 and 7 eligible providers do the same in Program Year 2021.

Since the last full SMHP submission in November 2020, MLTC, DPH, and CyncHealth have worked to implement or plan more projects that will increase interoperability and the functionality of CyncHealth. Please refer to subsections 1.1.7 and 1.1.10 for more information related to CyncHealth and Public Health.

The Medicaid Information Technology Architecture (MITA) 3.0 State Self-Assessment (SS-A) was performed in March 2015. An update to the Roadmap was submitted December 2020. The SS-A and the Roadmap provide direction for Medicaid transformation for a 5 year time period. An updated SS-A will be completed this year, with a fully revised SS-A being completed at a later date in alignment with future updated federal rules. This assessment is meant to align business and information technology processes to improve the administration of the Medicaid program.

1.1.12 DHHS – Division of Behavioral Health (DBH)

DBH consists of Community-Based Services and the Regional System.

Community-Based Services is organized into six local behavioral health regions that receive funding, oversight, and technical support from DBH. The regions contract with local providers to provide the public inpatient, outpatient, emergency, and community mental health and substance abuse services. These contracted providers maintain their own medical records, whether they are in paper or electronic format.

The DBH Regional System is comprised of three Regional Centers, located in Lincoln, Norfolk, and Hastings. The Regional Centers are responsible for providing services to patients committed by mental health boards or court systems. All three Regional Centers currently use Netsmart's Avatar EHR system. Each Regional Center has its own server, and therefore, does not share patient data across entities. There is no external exchange of patient information or immediate plans to join CyncHealth.

1.1.13 DHHS Application Environment

Applications that support Medicaid programs include the following:

- Medicaid Management Information Systems (MMIS) – Eligibility and claims system (described below).
- N-FOCUS – Nebraska's integrated eligibility and case management system (described below).
- Nebraska Medicaid Case Mix System –Nursing home resident level of care assessment information that uses information from the Minimum Data Set database that supports the federally-required interdisciplinary assessments for nursing facility residents.
- Coordinating Options in Nebraska's Network through Effective Communications & Technology (CONNECT) – Application that assists Service Coordinators in work with children and adults. The Early Development Network, Aged & Disabled Waiver, Early Intervention Waiver, Medically Handicapped Children's Program, Respite Subsidy, and the Disabled Persons and Family Support programs are included in the system. CONNECT tracks referrals, verifications, diagnoses, and services being provided and services needed but unavailable. CONNECT collects data and gives service coordinators access to information on other services the child, or individual is receiving enabling easier coordination. This application supports service authorizations for assisted living services.
- Nebraska Aging Management Information System (NAMIS II) –Application supports activities for the State Unit on Aging and developed to enter, edit, monitor, and report services provided by Area Agencies on Aging in Nebraska. It tracks services required by the U.S. Administration on Aging (AoA) and compiles information required by the AoA for the National Aging Program Information System. It is also used to manage programs, track costs of certain services and program usage, and analyze client demographics.

1.1.14 Medicaid Management Information Systems (MMIS)

MMIS has been operational since 1977 and became HIPAA compliant in 2003. MMIS currently consists of the following subsystems:

Data Management –The DMA project implemented Deloitte's HealthInteractive Analytics (HIA) which is a Data Warehouse (IDS) and analytics/reporting tool (ADS). The Medicaid Enterprise data warehouse has several subsystems for reporting: Management and Reporting Subsystem (MARS), Decision Support System (DSS), Ad-hoc queries and reporting and Federal reporting (CMS 64, 37, ect.); MCO quality and MCO encounter data processing

including MCO data (e.g. claims, authorizations, ect.). Also, the Program Integrity system has several subsystems such as Surveillance, Utilization and Review Systems (SURS); and Fraud and Abuse Detection System (FADS). CMS certified this project on January 3, 2022.

Drug Claims Processing – DHHS contracts with Magellan Health for point of sale (POS) payment of claims via MMIS. Magellan is also responsible for all drug claims and rebate processing, prospective drug utilization review (Pro-DUR) and support of the retrospective DUR (Retro-DUR), which is currently being managed internally while we procure a new contractor. The POS system supports National Council for Prescription Drug Programs (NCPDP) standards.

Medicaid Drug Rebate (MDR) – DHHS uses a PC-based extract from MMIS claims history to prepare quarterly invoices for drug rebates from manufacturers. Magellan is responsible for the preparation and distribution of these invoices.

Medical Claims Processing (MCP) – The MCP subsystem edits and calculates reimbursement amounts for medical goods and services provided to Medicaid clients by approved providers.

Medical Non-Federal (MNF) – This subsystem ensures that Medicaid Federal matching funds are not used to pay for health care services payable by Medicare.

Medical Provider Subsystem (MPS) – The MPS maintains demographic, eligibility, and licensing data for all enrolled Medicaid providers. MMIS houses provider files utilized for claims processing. DHHS contracts with Maximus for provider screening and enrollment. The Maximus system interfaces with the provider subsystem within MMIS.

Nebraska Disability Program (NDP) – This subsystem accounts for the separate funding of health care services for disabled persons who do not meet the Supplemental Security Income (SSI) disability duration requirements, but are eligible for the same medical services as Medicaid.

Nebraska Medicaid Eligibility System (NMES) – NMES is an automated voice response system used to verify Medicaid or managed care eligibility for Nebraska Medicaid clients.

Recipient File Subsystem (RFS) – RFS uses and maintains data obtained from N-FOCUS that pertains to the medical eligibility of each person enrolled in one or more DHHS programs.

Reference File Subsystem (RSS) – This is a database of reference information, including but not limited to procedure, diagnosis, drug codes, and fee schedules.

Screening Eligible Children (SEC) – This subsystem facilitates comprehensive, preventive health care, and the early detection and treatment of health problems in Medicaid eligible children by producing Early and Periodic Screening Diagnostic and Treatment (EPSDT) program screening, treatment tracking, and client outreach reports.

SURS – DHHS included the capability for SURS in the Data Management module, the DMA. The DMA provides reports and tools to support the investigation of potential fraud, waste, or abuse (FWA), by Medicaid providers and clients, by analyzing historical data and developing profiles of health care delivery and service utilization patterns.

Third Party Liability (TPL) – This subsystem stores private insurance information for Medicaid clients and their family members, to prevent payment of claims that should be the responsibility of another insurer or to recover payments that were another insurer's responsibility.

1.1.15 Nebraska Family Online Client User System (N-FOCUS)

N-F OCUS is an integrated client/server system used to automate benefit-server delivery and case management for DHHS. N-FOCUS supports the majority of social service programs in Nebraska and has held data since 1998. N-FOCUS processes include:

- Client/case intake;
- Eligibility determination;
- Case Management;
- Service authorization;
- Benefit payment;
- Claims processing and payment;
- Provider contract management;
- Government and management reporting.

The data in N-FOCUS is specific to children and families who have applied for assistance such as Supplemental Nutrition Assistance Program (SNAP), Temporary Assistance for Needy Families (TANF), and Medicaid. The system is the Statewide Automated Child Welfare Information System for DHHS. N-FOCUS and other MMIS eligibility modules will be updated to accommodate Nebraska Medicaid Expansion populations by October 2020.

N-FOCUS Web applications consist of public applications, dashboards, and applications launched directly from N-FOCUS. Eclipse is the integrated development environment (IDE) used to generate the Java Server Faces and Facelets code. These Java applications run on Tomcat application servers on the Linux Operating System. The Java applications call on stored procedures to access DB2 data and Sequential Query Language (SQL) to access SQL Server data.

1.1.16 DHHS Information Systems and Technology (IS&T)

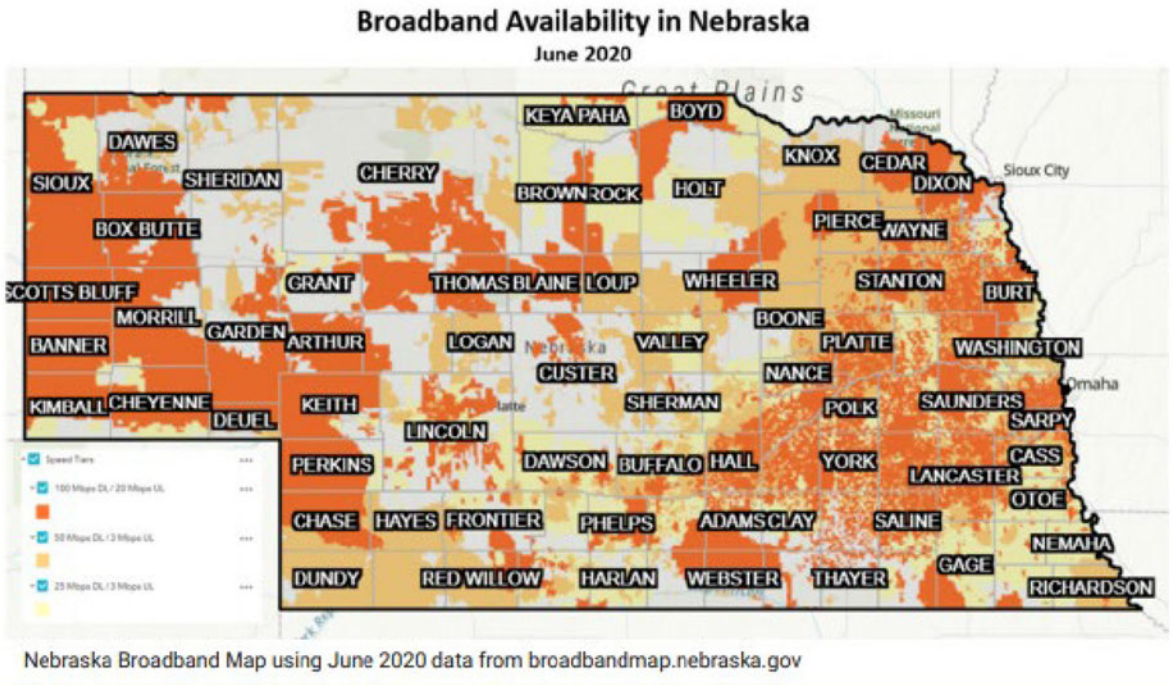
IS&T is the technology agency within DHHS that supports the majority of the critical solutions supporting DHHS. The two systems predominantly supporting the majority of functions are N-FOCUS and MMIS. N-FOCUS supports eligibility and intake for Nebraska Medicaid as well as other programs. MMIS supports claim payments along with the required ancillary functions. While the systems internally exchange necessary administrative information, neither of these systems is connected to a health information exchange at this time. There is significant planning and work taking place to modernize Nebraska Medicaid's technology footprint, such as modernizing MMIS (described in section 2.1.2).

1.1.17 Broadband Internet Access

As found in many states, Nebraska has greater broadband penetration in urban areas than in rural areas. According to the 2017 survey results, broadband connectivity was not an issue for providers. The 2021 survey results continued to show that broadband connectivity is not a significant issue for providers, with only 12% of respondents stating broadband availability as a barrier to EHR utilization.

Response	2011		2017		% Change
Cable	165	38%	199	42%	**5%**
Digital Subscriber Line	131	30%	159	34%	**4%**
Unsure	96	22%	67	14%	**-8%**
T1	53	12%	33	7%	**-5%**
Other	13	3%	18	4%	**1%**
None	6	1%	7	1%	**0%**
Satellite	1	0%	8	2%	**2%**
Dial-up	1	0%	1	0%	**0%**
Respondents	437		469		

The following map details the current status of broadband availability in Nebraska.



Nebraska Broadband Map using June 2020 data from broadbandmap.nebraska.gov

There have been no further broadband grants since what is detailed in section 1.1.9 eHealth Council. There however has been an initiative at the state legislative level to examine broadband connectivity across Nebraska. This initiative is the Rural Broadband Taskforce, which works to research broadband availability, adoption, and affordability and present these findings to the state legislature for their consideration.

1.1.18 Consumer View

In November 2008, the University of Nebraska Public Policy Center conducted a project titled "Sharing Electronic Health Records: The Views of Nebraskans" to research the views of the State of Nebraska's citizens on HIT and electronic sharing of health information. The findings suggest that consumers are generally receptive toward HIT and the exchange of patient health information. While perceptions of health technology were positive, some consumers expressed concerns regarding privacy and security.

The results of this research indicate that all participants believed that State government should play a role in ensuring the privacy and security of health information and provide information to consumers about health information security and privacy. The results of this research also indicated that the State government should regulate health information networks (91%), and facilitate public-private partnerships to exchange health information (88%). Findings also revealed that consumers would like to see State government play a role in consumer education and 72% of the participants said it was "very important" for State government to educate Nebraskans about electronic HIE.

Additionally, Nebraska residents reported that they regularly use the Internet to access health or insurance information. At the time of this survey, consumers were not using the internet to communicate directly with their providers through email.

2 Section B To-Be HIT Landscape

A public/private stakeholder model is essential for driving and executing Nebraska's future vision, especially where the private sector is propelling the advancement and sustainability of HIE. This vision involves widespread effective exchange and use of information to improve the quality of health outcomes while reducing long-term spending on healthcare. However, achieving the long-term vision requires an investment for sustainability and a renewed persistence in the governance of initiative projects. DHHS' reasonable expectation is to progress steadily toward the long-term vision.

Future Vision for DHHS

DHHS is made up of five divisions. This section addresses the efforts of the Division of Medicaid and Long Term Care and Division of Public Health. Both divisions under DHHS have been and will continue to work in a collaborative manner regarding the advancement of HIT-HIE. The long-term vision for DHHS includes electronic submission of necessary information utilizing standardized interfaces to better enable the ability to:

- Monitor the quality of care being provided;
- Provide actionable relevant information to DHHS and managed care entities to enable the identification of at-risk patients who would benefit from care management;
- Monitor adherence to plans of care developed by care management entities;
- Inform public health officials as expediently as possible of potential health out-breaks impacting specific demographic regions or populations in the state.

DHHS participates with partners such as the NITC eHealth Council's Public Health Work Group to identify ways to utilize HIE to enhance disease surveillance and other public health efforts. DHHS' focus for the next five years is primarily on HIT adoption, improved HIE capabilities, and improved Medicaid Enterprise Systems as these are all necessary to enable DHHS to fulfill its long-term vision.

Future Vision for Providers

DHHS' long-term vision is to work with CyncHealth, the designated statewide integrator and PDMP to foster increased interoperability and data standardization ensuring the coordination of care for all patients in Nebraska and neighboring states. While some of the rural counties in Nebraska are designated as frontier areas, broadband internet access is generally available throughout the state. Nebraska's relatively small population is spread over 77,358 square miles, giving Nebraska an average population density of 24 persons per square mile. Delivering information exchange capabilities necessary to support this vision in an affordable

manner in rural areas has required a strategic approach. Nebraskans have responded to the challenges of providing services to a relatively small population over a large geographic area by leveraging existing resources, facilitating cooperation among various entities in the state, and carefully allocating financial resources. As DHHS and its providers move forward with the future vision, DHHS will continue to incorporate clinical quality data elements as part of program initiatives and evaluations.

While Nebraska has chosen a public/private sector model for HIE, DHHS recognizes that Medicaid needs to support its allocated share of the responsibility to ensure functionality is available to providers. These capabilities are central to DHHS' long-term vision. Therefore, DHHS has submitted Advanced Planning Documents (APD) to secure federal funding to offset the Medicaid portion of these capabilities.

Technical Vision

Currently, the individual systems being used by providers must connect to a HIE to promote interoperability. Nebraska has chosen CyncHealth as the statewide integrator to support these capabilities. The partnership with CyncHealth and DHHS has and will continue to gain and expand connectivity and the ability to exchange health information for the purposes of treatment, payment, and health plan operations. Interoperability of health information for individual providers will be more attainable and accelerated by providing continuity of care information through CyncHealth. This also provides secure HIE messaging for clinical information between health care providers, and, in turn, provides information to facilitate more efficient care coordination and point of care decision making.

Interoperability of managed care data as part of the Medicaid Enterprise provides Nebraska the opportunity to better understand statewide Medicaid service delivery. New CMS initiatives will provide better health outcomes and better cost management through the state's ability to analyze managed care data.

There are also many public health opportunities associated with a statewide HIE. In a partnership between the State and CyncHealth, activities are being implemented to enable hospitals to submit immunization, syndromic surveillance, and Parkinson's disease data. Clinicians will query this data to obtain updates. Additional public health opportunities to leverage HIE activities can provide more complete and accurate information, improve coordination of care, and improve readiness for communicable disease outbreaks. Modernization of existing public health registries by use of connectivity to a statewide HIE can help reduce the cost of storage and maintenance for each of the registries while introducing new efficiencies

2.1.1 Statewide Health Information Exchange and PDMP Systems

The ability to connect different provider systems throughout the State is key to accomplishing the long-term vision. Nebraska's strategic vision identifies an information exchange between DHHS and State-based programs using CyncHealth as a central point of integration. The vision for the Statewide Health Information Exchange (HIE) and integrated Prescription Drug Monitoring Program (PDMP) systems are to enable Event Notification services for improved care coordination. Nebraska has contracted with CyncHealth for the HIE and PDMP systems which were developed and implemented with HITECH and SUPPORT Act funds in prior fiscal years. These systems are operational and used by Nebraska Medicaid providers with the aim to improve care for beneficiaries.

DHHS has worked toward the advancement of interoperability by contracting with CyncHealth through Health Information Technology for Economic and Clinical Health (HITECH) funding for HIE activities that were completed on 09-30-2021. With the end of HITECH funding, DHHS submitted an HIE-PDMP OAPD that was approved by CMS on 3/8/2022.

The functionality and services included in the pending OAPD will assist with meeting the goals of Healthy People 2030, advance interoperability, provide access and meaningful information to aid in the improvement of priority areas including child and adolescent health, maternal health, preventive care needs for adults with disabilities, and other human service priorities. This functionality directly benefits the Medicaid program providers and participants through the transmission of clinical information between providers with the aim to improve health outcomes.

The HIE-PDMP OAPD will ensure sustainability of the operations and related costs for these systems. This OAPD also includes a request for new functionality related to API workflow integrations and enhanced master patient index capabilities. This sustainability and new functionality are described in the four projects below:

1. Event Notification Services (ENS)

   CyncHealth provides real-time event notification service across a variety of healthcare delivery facilities to improve care coordination and transitions of care that will assist Medicaid providers in improving the health outcomes of Medicaid beneficiaries. The CyncHealth event notification services can systematically generate notifications based on a variety of data sources, including ADTs, CCDs, claims data, care plans, visit history, risk scores, PDMP data, POLST/MOLST/Advanced Directives, etc. This service allows users to define rules to dynamically determine what data should be provided in each type

of notification and provides a comprehensive, synthesized history of patient utilization, including augmented data with out-of-state content. This not only allows providers to improve clinical care after hospitalization through effective and efficient transfer of information, but also provides insight into patients with patterns of high or medically unnecessary utilization; patients who travel between emergency departments; patients with security or safety events; prescription history; encounter/admission with behavioral health diagnosis; post-acute activity; population health targets; COVID-19 Positive Lab Result, etc.

2. Direct Care/Care Coordination Services

CyncHealth enables providers to leverage matched and enriched individual medical records and community-wide public health data to support healthier patients and healthier communities. CyncHealth is the designated statewide health information exchange and is legislatively authorized to collect and report public health data. CyncHealth can bi-directionally exchange, report and support registry reporting for an array of data feeds that include but are not limited to ADTs, laboratory results, medications, immunizations, imaging, clinical documents, demographics, social determinants of health and ED report feeds from all providers connected to the HIE that may have information related to a patient's care.

3. Enhanced Master Patient Index

The ability to locate and link patient records across disparate data sources is a foundational function of CyncHealth. Since HIEs consist of multiple data sources and high volumes of patient records, and since the U.S. does not yet have standard unique patient identifier, master patient indexes (MPIs) are one of the key components or services necessary for data exchange within an HIE infrastructure. CyncHealth partners with NextGate to provide a unified mechanism to check if data from different sources belong to the same patient, in order to craft a complete and accurate longitudinal record of the patient's medical history or care summary.

4. API Workflow Integrations

CyncHealth will support the existing application programming interfaces (APIs) and adopt additional APIs. APIs allow HIE and PDMP information to be embedded directly into the EHRs or Pharmacy systems which greatly increases utilization volume and reliance on the cross-community data by reducing

barriers to accessing the information. CycnHealth will provide technical assistance with the CyncHealth API/FHIR-based infrastructure through which PDMP and HIE data are accessed by the CyncHealth Portals and external systems.

CyncHealth staff will also manage the basic support, troubleshooting, issue resolution, bug fixes, and technical specifications of the underlying API/FHIR-based infrastructure leveraged by the CyncHealth Portals and external systems accessing data for integrations.

2.1.2 MMIS Modernization

DHHS will be modernizing MMIS to meet the future business needs of the Medicaid program.

The current DHHS MMIS system is approaching the end of its useful life. The foundation for the structure of the current MMIS technical architecture was developed in 1973 and became fully operational and certified in 1977. DHHS is currently working towards implementing a modern system that will meet the goals below:

- Provide timely and accurate adjudication of Medicaid claims;
- Improve the efficiency and cost effectiveness of the Medicaid program;
- Improve communication between information systems including interoperability of data extending to health information exchanges;
- Improve the quality of, and access to, information leading to improved and informed decision making;
- Raise the MITA Maturity Level and align with MITA standards and conditions;
- Improve information technology systems for increased flexibility and adaptability and increase responsiveness to needs within the DHHS business workflow.

DHHS is working to modernize the MMIS system through the implementation of different modular systems. The most recent MMIS Replacement Project System Integration IAPDU was approved by CMS on August 20th of 2020. This System Integration APD is currently focused on developing integration points with legacy systems using APIs for projects like iServe and EVV. It is also focused on leveraging Integration Services Hub (API Gateway and ESB) to support modern integration approaches. System Integration continues to maintain the

Life Cycle Management, MITA State Self-Assessment, EA Practice and Enterprise Shared Services and Data Governance.

The Pharmacy and Drug Rebate Services (PDRS) continues to be implemented. This project includes the procurement and implementation of a modular solution to replace Nebraska's existing legacy Medicaid Drug Rebate (MDR) system and contracted pharmacy point-of-sale (POS) and preferred drug list (PDL) solution and services. DHHS is working to complete a Request for Proposal for a Medicaid Drug Rebate (MDR) processor, pharmacy business operations, and a Point of Sale (POS) pharmacy prescription drug claims processor. The estimated implementation date will be at the end of 2022.

The DMA project implemented Deloitte's HealthInteractive Analytics (HIA) which is a Data Warehouse (IDS) and analytics/reporting tool (ADS). With the certification of this project by CMS on January 3, 2022, DHHS will continue to meet reporting requirements as required by certification and an OAPD to support the operations and maintenance of the implemented DMA project will be submitted.

The Electronic Visit Verification (EVV) module was mandated through Section 12006 of the 21st Century CURES Act for personal care services and home health services. The personal care services component was implemented in December of 2020, while the home health services implementation deadline is January 1, 2023. The most current IAPD addresses the additional funding for state staff and contractor resources necessary to mitigate implementation defects and prepare for the CR event, which was delayed, from FFY2021 to FFY2022.

The HHA Expansion project moved Nebraska's adult expansion group from a multi-tiered alternative benefit plan (ABP) program to a single ABP program 10/1/2021. The proposed NFOCUS enhancement system activities such as User-Acceptance Testing and Pre-Production Activities are projected to be completed by 03-31-2022. The Go-Live date is estimated to take place on 04-01-2022.

The Interoperability and Patient Access (IPA) module will provide beneficiaries access to their claims data, in-network providers and the FFS formulary through a third-party application of their choosing. This will be done by leveraging Application Programming Interfaces (APIs) and Fast Healthcare Interoperability Resources (FHIR) technology. The contract with Edifecs, Inc. for work on the IPA module was fully signed and executed 11-18-2021. Nebraska is working internally to prepare for the vendor engagement in mid-March of 2022.

DHHS is also working to continue the Eligibility and Enrollment Solution that had been on hold. This solution will be a part of a larger DHHS initiative for Integrated Health and Human Services (IHHS), also known as iServe. The goal is to acquire an Integrated Eligibility & Enrollment / Benefits Management (IE&E/BM) System based on a framework of shared components (aka, "IHHS Platform"). Currently the iServe portal is being implemented with a CR event occurring in March 2022. Continued implementation of iServe modules will occur

in the future, with the next module implementation being the enrollment and benefits manager, known as iBEEM.

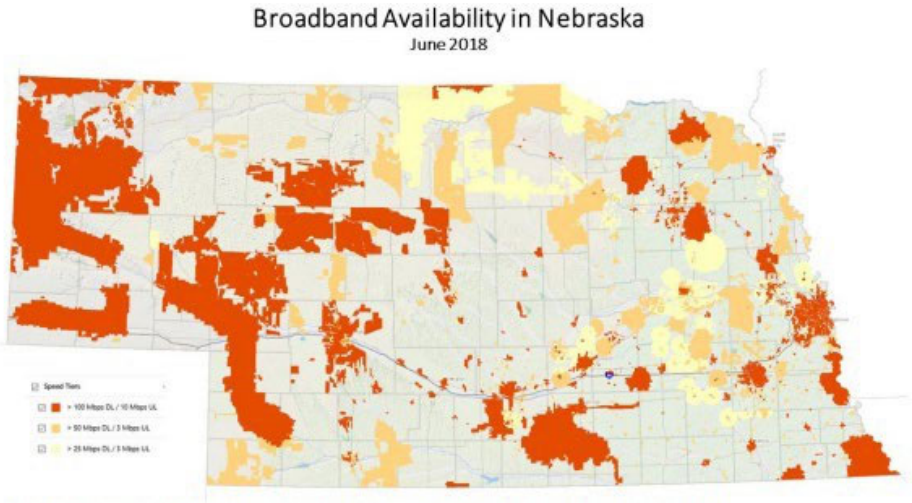
2.1.3 Broadband Initiatives

In the State of Nebraska, broadband internet access is generally available across the State, but coverage is lacking in some rural areas. The vision for Nebraska is that broadband access will be readily available to providers regardless of geographic location. DHHS is not actively involved in the governance or funding of these initiatives, but in the 2017 survey less than 10% of providers felt that limited broadband availability was a barrier in HIE participation or in purchasing an EHR. In 2018, a Rural Broadband Task Force was formed to review issues related to broadband services in rural areas and make recommendations to the State Legislature.

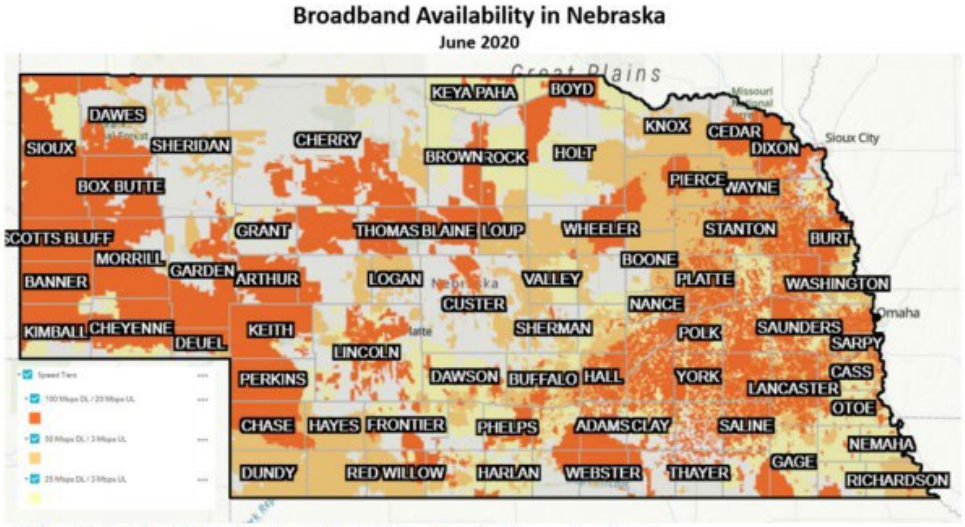
The Rural Broadband Task Force presented their most recent findings and recommendations on November 1, 2021.Some of the key findings from this report are as follows: (1) *Broadband Data and Mapping*: The State of Nebraska can no longer wait for the FCC to provide more accurate broadband availability data and mapping; (2) *Alternative Technologies and Providers*: SpaceX (Starlink) is a company that can provide broadband via low Earth satellites and is now offering its beta service to users at some locations in NE; (3) *Nebraska Universal Service Fund and Reverse Action (NUSF)*: NUSF provides support to price cap, rate of return, and mobile wireless carriers in Nebraska. A total of $36,545,562 is available for broadband projects in high cost areas through the NUSF in 2021. Since 2019, 19,583 households have been connected through broadband projects funded through the Nebraska Universal Fund. The Nebraska Public Service Commission is establishing rules and procedures for a reverse auction and is expected to move through the process of redirecting $3 million of support in 2022.; (4) *Public-Private Partnerships and Broadband Planning*: Grant programs such as the Remote Access Rural Broadband Grant Program and the Nebraska Broadband Bridge program which provide funding for broadband deployment projects in unserved and underserved areas are essentially a form of public-private partnerships. Governor Ricketts and the Legislature are expected to allocate any additional federal funding for broadband deployment projects in 2022; (5) *Agriculture*: Farmers and ranchers need upload speeds of at least 30 Mbps to transfer large amounts of generated data to the cloud. In the future, even greater upload speeds may be required. Rural areas of most Nebraska counties—including many of Nebraska's top-producing agricultural counties— lack broadband with upload speeds of greater than 25 Mbps or fiber connectivity; (6) *Digital Inclusion, Homework Gap and Leveraging E-Rate Funding*: Those without broadband connectivity at home struggled to learn, access health care and work remotely during the COVID-19 pandemic. Approximately 12% of Nebraskans or 215,000 individuals do not have a broadband subscription at home. This includes 32,000 Nebraskans under 18 years old. Just over half of Nebraska libraries serving communities with populations of less than 2,500 have internet access below 25 Mbps down and 3 Mbps up; (7) *Broadband Technician Workforce*: Nebraska, like the rest of the country, currently faces a shortfall of skilled workers needed to

deploy broadband. Additional investments in broadband will likely increase the demand for skilled workers.

The maps below show improvements in the availability of broadband of at least 25 Mbps down and 3 Mbps up in Nebraska from June 2018 to June 2020.



Nebraska Broadband Map using June 2018 FCC Form 477 data, broadbandmap.nebraska.gov



Nebraska Broadband Map using June 2020 data from broadbandmap.nebraska.gov

3 Section C Activities Necessary to Administer and Oversee the EHR Program

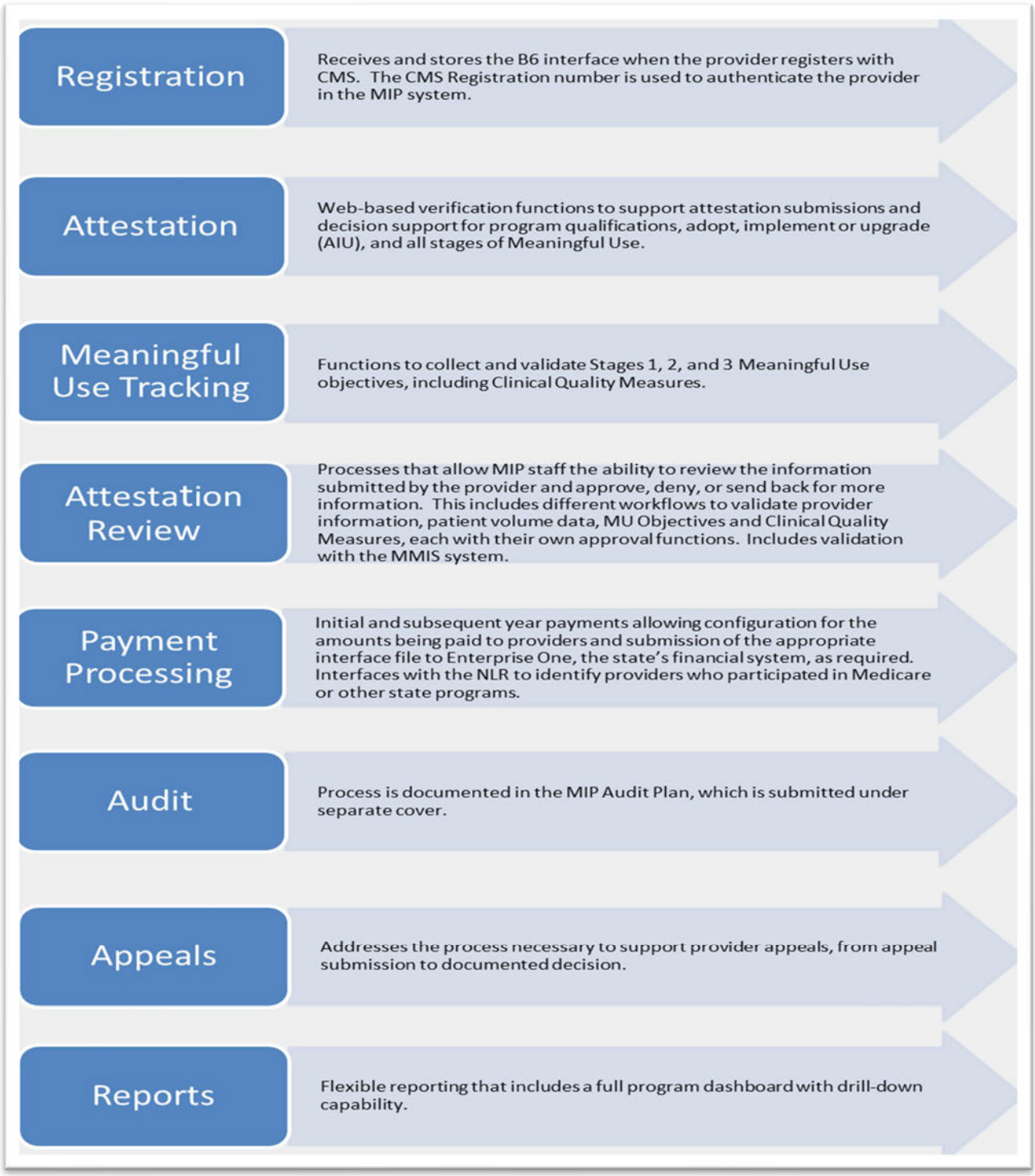
This section of the SMHP addresses how Nebraska administers the MIP (Medicaid Incentive Program). The goal of Nebraska's MIP is to provide incentive payments to eligible professionals and hospitals to advance the national goal of using EHR (Electronic Health Record) technology in a meaningful way to increase interoperability, provide better care, and decrease healthcare costs. Throughout this section of the SMHP, Eligible Professionals and Eligible Hospitals will be referred to collectively as 'providers' unless otherwise noted.

The Nebraska Medicaid EHR Incentive Program launched in 2012. A manual attestation review and payment system was utilized to support the MIP until October 2014. At that time, upon approval from CMS, Nebraska implemented an automated system. All paper attestation data received prior to October 2014 has been electronically converted to the MIP system.

MLTC (Medicaid and Long-Term Care) contracts with MAXIMUS Human Services, Inc. to implement and manage their custom-off-the-shelf (COTS) solution to support Nebraska's MIP system, which acts as the State Level Repository (SLR). The system is hosted by MAXIMUS Human Services, Inc., and the program is administered by Nebraska state staff (MIP staff).

MAXIMUS Human Services, Inc. supplies ongoing support of the MIP system to MIP staff through the Maintenance and Support Plan. This plan contains the details required to support the system, including making system changes, correcting defects, supporting the hosting environment, detailing aspects of the operational environment, and addressing how enhancements are handled. Functionality of the MIP system supports program implementation, including Stages 1 through 3 of Meaningful Use. MAXIMUS Human Services, Inc. ensures the MIP system receives any updates required to meet attestation needs for future stages of Meaningful Use or other changes required by CMS. Nebraska's MIP does not have a contractual relationship with a fiscal agent, a managed care contractor, Medicaid Management Information System (MMIS), or a Pharmacy Benefit Manager (PBM).

The MIP system is a web-based application that supports all functions necessary to administer the MIP. The graphic below illustrates the MIP system's process.



When a MIP system modification is needed, Nebraska's timeframe for making changes depends on a variety of factors including: the urgency of the need, the complexity of the changes, the amount of testing required, and if approval from CMS is needed before system

modifications can be done. If there is a Final Rule, Flexibility Rule, or any Meaningful Use (MU) change issued by CMS, the required adjustments are made to the MIP system. There have been no significant system changes to the MIP. The only changes have been changes to MU Objective and MU CQM language to ensure the language in the MIP is consistent with CMS language. Additionally, the timing of attestation submissions depends on CMS Final Rule releases and if CMS approval of MIP system changes is required. Nebraska's tail period (the ending of the time frame for when providers can attest to a Program Year) may change from year to year depending on a variety of factors such as a new CMS Final Rule requiring changes to the MIP system. Therefore, Nebraska requests annual CMS approval of the tail period. The previous tail period was February 28, 2021 allowing providers as much time as possible to attest to Program Year 2020. The tail period for Program Year 2021 was October 31, 2021, with a start date of July 1, 2021.

There is no current or planned interoperability between the MIP system, the Transformed Medical Statistical Information System (T-MSIS) or Children's Health Insurance Program (CHIP). The interoperability between the MIP system and the National Level Repository (NLR) is described in the table below. Nebraska accepts registration data for its Medicaid providers from mainframe to mainframe (NLR to Nebraska's SLR).

NLR File	Frequency	Description
B6	Daily	The purpose of this interface is to inform the States of new, updated, and inactivated Medicaid or Dually-Eligible registrations. The NLR will send the States a daily batch file containing zero (0) or more records of new EPs and EHs that signed up for the EHR Incentive Program and selected to participate in the Medicaid Incentive Program. Also included in the data are any updates/changes to the EP or hospital entries. This could include updated data or a switch from one State to another. Additionally, these could include registration inactivation events where a previously registered provider updates their information and is now determined ineligible by the NLR, cancels the registration at the NLR, or informs the NLR that they are switching their registration from Medicaid to Medicare.

NLR File	Frequency	Description
B7	Daily	The purpose of this interface is to update the NLR regarding the initial eligibility of Eligible Professionals (EPs) and Eligible Hospitals (EHs) that selected Medicaid. States will send the NLR the eligibility of new and updated registrations. There is no response expected back by NLR for inactive registrations.
C5	Daily	The purpose of this interface is to send States attestation information submitted by dually-eligible Hospitals via the CMS Registration and Attestation System. This will occur each time a dually-eligible hospital attests or updates their attestations for a specific payment year. Multiple C-5 datasets for a provider are possible for the same payment year. Each C-5 should overlay the previous C-5 for the same payment year.
D16 Request/Response	Daily	The purpose of this interface is to prevent duplicate payments for providers potentially switching between Medicare and Medicaid, prevent duplicate payments for providers from more than one State, and to recheck Federal exclusion data prior to payment. The D-16 is a two-way exchange with a file from the State to the NLR, and a response from NLR to the State. The D-16 request is sent by the State to the NLR each time a State is ready to make the initial payment to the provider for a given payment year. When the D-16 is received by the NLR, if the provider has no Federal exclusions and has not been paid previously for the payment year, the NLR "locks" the provider's NLR record and responds to the State with a D-16 response authorizing the State to pay the provider.
D17	Monthly	The purpose of this interface is to send States the cost report data elements utilized by CMS to determine Medicare hospital payments for dually-eligible hospitals. Multiple D-17 datasets for a provider are possible for the same payment year. Each D-17 should overlay the previous D-17 for the same payment year.

NLR File	Frequency	Description
D18	Daily	The purpose of this interface is to update NLR records indicating successful initial and adjustment incentive payments for Medicaid EPs and Medicaid or dually-eligible hospitals.

Providers attest to the Nebraska Medicaid EHR Incentive Program by entering required information (discussed below) into the MIP system. If the provider enters data that is not acceptable (such as patient volume dates that are outside of the required time frame or Meaningful Use numbers that do not reach a required threshold) the MIP system will not allow the attestation to be completed until the data is revised. Once the provider has completed the attestation questions correctly, a series of legal statements are provided. The provider agrees they are completing the attestation according to applicable state and federal regulations. Upon the provider's agreement with the legal statements, the MIP system allows for submission of the electronic attestation.

Once attestations are submitted for review, the MIP system displays each attestation as a work queue item. Upon MIP staff's selection of an attestation to review, the MIP system displays a review screen that identifies the provider and gives pertinent demographic information from the B6 interface file, along with links to review each of the attestation pages. There are two separate and complete pre-payment audit reviews performed on each attestation by different MIP staff so that one MIP staff does not process an attestation completely through to payment. This helps to ensure payment accuracy.

Nebraska verifies the adoption, implementation, upgrade, and meaningful use of Certified Electronic Health Record Technology (CEHRT) by providers. Providers are required to enter their CEHRT number into the MIP system when attesting. The MIP system checks the number entered against the Certified Health IT Product List (CHPL) website (https://chpl.healthit.gov/#/search) to ensure the number is active. Active numbers have been approved by the Office of National Coordinator (ONC). If a provider is attesting for the first time in Nebraska or has changed their CEHRT from the last time they attested with the Nebraska Medicaid EHR Incentive Program, they are required to upload supporting documentation of their CEHRT with their attestation. Examples of supporting documentation include vendor contracts, vendor letters, and receipts. MIP staff reviews the documentation validating the attestation.

The MIP system is interfaced with MMIS Provider Enrollment ensuring MIP system updates occur with MMIS updates. This MMIS interface validates:

- The provider is enrolled in Medicaid as an eligible provider type (physician, nurse practitioner, certified nurse midwife, physician assistant, or dentist) or as an eligible hospital type (acute, critical access, or children's);
- The provider is actively enrolled with Nebraska Medicaid and not sanctioned or deceased;
- The provider's license number from the attestation matches the one validated by provider enrollment;
- If the attestation indicates the provider is a pediatrician, the provider's specialty and taxonomy are checked to confirm the provider is a pediatrician;
- If the provider has voluntarily reassigned their payment to a payee, the payee relationship will be validated by MMIS;
- If a provider claimed group or individual reporting, all members within that group used the same methodology.

The MIP system will identify any information the MMIS interface was not able to validate. Anything not validated by the MMIS interface will require MIP staff's manual confirmation.

While significant functionality is automated, manual processes also exist. MIP staff review attestations and validate the following information manually:

- Staff generate state claims data warehouse reports to validate allowable Medicaid encounter percentages were submitted (within 10% of what the state claims data warehouse shows) and to confirm that the provider meets the required Medicaid volume percentage thresholds (30% for Eligible Professionals, 20% for pediatricians, 10% for Eligible Hospitals). If the provider's Medicaid volume is outside of a 10% difference from what the state claims data warehouse shows, the provider is required to supply a detailed list of their Medicaid encounters that MIP staff can manually validate against MMIS. If the provider claims Medicaid patient encounters from another state, MIP staff obtains verification from the appropriate state's Medicaid agency. MIP staff work with providers to reconcile any matters concerning patient volume prior to final eligibility determination.

- The state claims data warehouse is also used to validate that providers working at a FQHC/RHC meet the requirements for practicing predominately if they are claiming needy (non-pay or sliding scale) patients. Practicing predominantly is defined in Nebraska as a provider having over 50% of their Medicaid encounters occurring at a FQHC/RHC during a six month period within the previous 12 months from attestation. When providers attest in the MIP system, they are asked if they practice

predominately, and if so, to indicate their six month timeframe. Staff generates a Medicaid paid claims report from the state claims data warehouse to validate the provider had more than 50% of their Medicaid encounters occurring at a FQHC/RHC during their attested timeframe. Once verified that a provider practiced predominantly, they can use their needy encounters to reach the required threshold for Medicaid patient volume. Providers also do not have to meet hospital based requirements if they practice predominately. Staff generates state claims data warehouse reports to ensure less than 90% of a provider's encounters were at a place of service 21 or 23 (to ensure the provider is not considered hospital based). If the 90% threshold is exceeded, MIP staff will require the provider to submit information supporting non-reimbursement from a hospital for the acquisition, implementation, and maintenance of the provider's CEHRT, including supporting hardware and interfaces necessary to meet Meaningful Use. The provider must use their own CEHRT in the inpatient or emergency department of a hospital (instead of the hospital's CEHRT).

- The average length of stay for patients at an EH must be 25 days or less and this is validated by MIP staff determining the total inpatient bed days divided by the total number of discharges. The CMS Certification Number (CCN) for EHs must be between 0001-0879 (acute care), 1300-1399 (critical access), and 3300-3399 (children's). Both children's hospitals in Nebraska have CCNs.

- If the provider is a Physician Assistant (PA), the MIP system requires the provider upload supporting documentation to verify that they or another PA 'lead' a FQHC/RHC. MIP staff validate the FQHC/RHC is 'led' by the PA by asking the following questions.
    - Is the PA's name on the relevant licenses, leases, etc.?
    - Does the PA sign off on the practice's policies and procedures?
    - Does the PA do performance reviews for the other employees?
    - Does the PA set quality goals for the practice?

  MIP staff asks for additional information from the provider as needed to support answers to these questions.

- Beginning with their second participation year, providers are required to submit confirmation from their CEHRT of Meaningful Use and Clinical Quality Measure (CQM) data with their attestation. MIP staff review and compare this documentation to the attestation. If there are any discrepancies, MIP staff obtains additional substantiation from the provider. Eligible Providers and children's hospitals are required to enter MU data and CQMs into the MIP system at the time of attestation. System edits prevent an attestation from being submitted unless it has the required number of CQMs. Acute care and critical access hospitals' MU data and CQMs

interface to the MIP system from the NLR. The attestation data and supporting documentation is stored in the MIP system.

The MIP system can run reports based off of stored data in the SLR. These reports use drill down capabilities to show payment information, MU and CQM data, and demographic information. Nebraska is not currently discussing different approaches for short term and long term changes to collecting this data. Nebraska has not proposed any changes to the MU definitions, as permissible per CMS rule-making, nor does Nebraska plan on making any proposed changes. Nebraska does not collect electronic submissions of Clinical Quality Measures (eCQMs) and at this time does not plan on collecting eCQMs via electronic submission in the future.
When there is a MU stage change, MIP staff works with MAXIMUS to ensure that the appropriate changes are made to the SLR. Significant testing of changes occurs in the MIP system's testing environment by both MAXIMUS and MIP staff. Once the system has been tested and corrections made, Nebraska obtains permission from CMS, if needed, to make the final modifications to the SLR. Meaningful Use stage changes can increase flexibility within the Medicaid EHR Incentive Program, therefore allowing more providers to be eligible. This can increase attestations and thus, the workload for MIP staff. However, adequate staffing hours are approved in the current Implementation Advanced Planning Document (IAPD) to handle an increase in workload. Since Nebraska's SLR interfaces with Nebraska's Enterprise One statewide financial system to issue payments to providers, this is not generally affected by an increase in provider attestation and works the same regardless of workload size.

The MIP system requires that providers report their payee NPI when attesting (this information interfaces from CMS's Registration site at https://ehrincentives.cms.gov/hitech/login.action). If the payee is new to the Nebraska Medicaid EHR Incentive Program, the provider is asked for required financial information (a completed payment enrollment form and W-9). An internal agency number is then assigned.

Once MIP staff approves a provider's attestation for payment, the MIP system automatically calculates the payment amount, based on federal requirements, so payment can be made to the provider without deduction or rebate. Eligible Professionals receive $21,250 for the first year and $8,500 for subsequent years up to a maximum of six years. Pediatrician payments are reduced to 2/3 of the payment if the Medicaid patient volume is between 20-29%. Nebraska makes the Eligible Hospital payments over a three year period at the following percentages: Year 1 = 50%, Year 2 = 40%, Year 3 = 10%. Hospitals that began participation in 2013 and later use the most recent continuous 12 month period for which data is available prior to the payment year. Hospitals that began participation prior to the Stage 2 rule did not have to adjust previous calculations. Previously, hospital payment calculations done by MIP staff were based on a 12 month period. This period needed to be in the FFY prior to the hospital fiscal year and was also the first payment year.

Program Year 2016 was the final year that providers could start to participate in the Nebraska Medicaid EHR Incentive program. Since Program Year 2016 is completed, first year payments are no longer being issued. An Eligible Hospital must have received a payment in 2016 in order to receive future payments, with Program Year 2019 being the last year hospitals could receive payment. The MIP system tracks providers in the appropriate program year and payment year, as well as the correct EHR stage. This ensures Eligible Professionals do not receive more than six payments and Eligible Hospitals do not receive more than three payments throughout the course of the program. The MIP system transmits the payment information to the NLR via the D16 Request interface, which checks for duplicate payments and federal sanctions before allowing a payment to be made. A D16 Response interface from the NLR identifies any processed or pending payments from other states, as well as any federal sanctions. Federal sanctions are noted on the payment record and the provider is notified if there is a problem with the payment. When a provider has been approved for payment, the MIP system sends an automated email to the provider's contact, notifying of the approval. Likewise, if a provider is denied payment, the MIP system sends an automated email to the provider's contact regarding the denial. Once a provider has been approved for payment, processing within the MIP system initiates payment to the Enterprise One statewide financial system. Payments can be processed daily if needed.

After the payment process has been initiated, the MIP system records the date the D16 interface was received. MIP staff monitors to ensure payments are processed timely. A response file is sent from the Enterprise One state financial system to the MIP system when the payment has been created. The MIP system generates the D18 interface to the NLR when the payment has been made. The majority of payments are made during the 6 month time frame following the attestation tail period. Nebraska does not disburse payments through Medicaid managed care plans.

Nebraska has a process to ensure all Federal funding, both for the 100% incentive payments, as well as the 90% HIT administrative match, are accounted for separately and not reported in a commingled manner with enhanced MMIS FFP. Each type of payment uses internal business units that indicate the match rate (90/10 or 100%) and each set of internal business units are reported separately to CMS. The Nebraska Medicaid EHR Incentive Program is not tied to MMIS federal funding.

Per CMS guidelines, providers have the right to appeal the State's decisions regarding incentive payments, incentive payment amounts, eligibility determination, and the demonstration of efforts to adopt, implement, upgrade, and meaningfully use CEHRT. Providers who are denied during the pre-payment review process have 90 days to appeal. Prior to invoking the formal EHR Incentive Program denial process, MIP staff work closely with the provider to determine simple data corrections, policy clarifications, incentive calculation clarifications, etc. Providers are notified of the right to file an appeal and provided an explanation of the appeal process on the denial notice they receive. The provider can file an

appeal through the online portal if the attestation is denied or there is a dispute over the amount of the EHR Incentive payment made.

The following is required to file an appeal:

• A written statement that he/she is appealing the state's action;

• Identification of the exact basis for the appeal;

• A written statement as to why the provider believes the State has made an error;

• Providers may optionally submit any additional documentation that supports the appeal for review by MIP staff.

The system will automatically send a confirmation email to the provider acknowledging receipt of the appeal. All communications will be logged in the provider's contact/note log. An internal email will be generated to alert the appropriate MIP staff that an appeal has been filed. The appeal will follow the formal process outlined in Nebraska Statute Title 471 Chapter 2 Section 2-003 and Nebraska Statute Title 465 Chapter 6. Upon receiving a request for an appeal, an E8 interface (an electronic transaction) is created by MIP staff to notify CMS of the appeal request. An E8 interface will also be created to inform CMS of the appeal results. Providers who have an adverse action taken due to a post payment audit will be requested to refund any overpayment and have 30 days to appeal.

Payment adjustment processing is a function included in the MIP system. This functionality allows payment adjustments to providers based on changing information, such as a negative post-pay audit or the result of a successful provider appeal. Nebraska Medicaid will recoup any payments made in error via Program Integrity sending appropriate notice to the provider regarding the overpayment. The recoupment/adjustment will be completed by Medicaid EHR Incentive Program Staff, which generates a negative D18 file (an electronic transaction) to CMS as well as coordinating with MLTC's finance department to record the overpayment. Providers can self-disclose if they want to refund an incentive payment that was issued in error as long as it was not the result of an adverse audit finding. Providers who self-disclose are considered as 'voluntarily' repaying the funds issued in error. The year for which payment was refunded will not count against their total years in the program. Providers having an adverse audit finding will be required to refund any overpaid amount and the overpaid year will count toward their total years in the program.

From the Nebraska Medicaid EHR Incentive Program's inception in 2012 through December 31, 2021, payments have been issued for 2,747 attestations. During this same time frame, 1,721 post payment audits have been completed (Note: each attestation can have multiple post payment audits done). Of those audits, negative findings have been discovered on 6 attestations. Regarding these 6 attestations, Nebraska's Medicaid Program Integrity unit asked the providers (all 6 were from the same group) to supply documentation supporting a

Meaningful Use measure from their attestation. The providers were unable to produce the required documentation, thus the incentive payments were recouped. As a result of these audit findings, Nebraska Medicaid EHR Incentive Program's Audit Plan was revised and approved by CMS, allowing MIP staff to require supporting documentation of Meaningful Use measures at the time of attestation. This supporting documentation is reviewed in pre-payment, assisting in the prevention of incorrect payments.

MIP staff regularly engages with providers and stakeholders regarding the Nebraska Medicaid EHR Incentive Program. This communication is done through the following methods:

- Provider bulletins
- Email blasts
- Twitter messages
- Phone calls
- Webinars
- Providing a dedicated email address for provider questions and correspondence (dhhs.ehrincentives@nebraska.gov)
- Managing a current website dedicated to the Nebraska Medicaid EHR Incentive Program (http://dhhs.ne.gov/Pages/Medicaid-Provider-Electronic-Health-Record-Incentive-Program.aspx)

The Nebraska Medicaid EHR Incentive Program website contains a multitude of information for providers, including a history of the program, any recent changes to the program, frequently asked questions, links to relevant material, a library of useful documents (such as recordings and slides of previously held webinars), as well as contact information to reach MIP staff. In addition, the website details how to attest to the Nebraska Medicaid EHR Incentive Program and provides a direct link to the MIP system's online portal (https://www.nebraskaehrincentives.com/Default.aspx). Providers can view the status of their attestations anytime through the online portal. Questions and communication from providers are handled by MIP staff through phone calls and emails.

3.1.1 Appeals

Providers have the right to appeal the State's decisions regarding incentive payments, incentive payment amounts, eligibility determination, and demonstration of AIU and/or MU.

The provider can file an appeal through the online portal if the attestation is denied or there is a dispute of the amount of the EHR Incentive payment made. The following is required to file an appeal:

- A statement that he/she is appealing the state's action;
- Identification of the exact basis for the appeal;
- A statement as to why the provider believes the State has made an error; and
- Providers may optionally submit any additional documentation that supports the appeal for review by MIP staff.

The system will automatically send a confirmation email to the provider acknowledging the receipt of the appeal. All communications will be logged in the provider's contact/note log. The system will place any appeal received into the Appeals work queue. An internal email will be generated to alert the appropriate MIP staff that an appeal has been filed so the appeal can be review and resolved, if possible.

The appeal will follow the formal process outlined in Nebraska Statute Title 471 Chapter 2 Section 2-003 and Nebraska Statute Title 465 Chapter 6. An E8 interface will be generated to the NLR for appeals.

4 Section D The State's HIT Audit Strategy

The Nebraska Medicaid EHR Incentive Program follows the Audit Plan for the Nebraska Medicaid Electronic Health Records Incentive Program (referred to in this section as the Audit Plan) to provide program oversight. The last update to the plan was approved by CMS on October 10, 2020. The Audit Plan details the methods used to avoid making improper payments and recover erroneous payments. This section of the SMHP provides a high level overview of Nebraska's audit strategy, as the Audit Plan is not a public document and is submitted to CMS under separate cover. Throughout this section, the term 'providers' refers to both Eligible Providers and Eligible Hospitals, unless otherwise noted.

Contractors are not used for pre or post-payment audit functions. MIP staff performs pre-payment audits and MLTC's Program Integrity staff performs post-payment audits.

As detailed in Section C of this document, *Activities Necessary to Administer and Oversee the EHR Program*, MIP staff conducts extensive pre-payment attestation reviews, which assists in reducing fraud/abuse and prevents incorrect payments. If potential fraud or abuse is discovered during the pre-payment attestation review, MLTC's Program Integrity department is notified. There are two separate and complete reviews done on each attestation by different MLTC staff during the pre-payment audit. Both reviewers assign audit flags based on identified risk factors and formal risk assessments. The risk assessment tools are reviewed by MIP staff on an annual basis so that appropriate risk categories are being used as program needs evolve.

Nebraska leverages existing data sources to verify providers meet MU objectives and measures. For example, MIP staff and Public Health have collaborated in creating a Public Health Reporting form. This is a verification sheet requested from and completed by Public Health validating a provider's submission of information to Public Health.

MLTC's Program Integrity staff is responsible for conducting post-payment audits on provider attestations, including investigating potential fraud and abuse. Post-payment audits are completed based on various risk factors (as detailed in the Audit Plan) and through random selection. Provider attestations receive a post-payment audit if the provider has been investigated by Program Integrity for fraud, waste, or abuse in the previous five years. Provider attestations that are flagged as either medium or high risk during the pre-payment audit and 10% of all low risk attestations also receive a post-payment audit. Program Integrity performs an eligibility and financial audit on each attestation selected, in addition to either an AIU or MU audit depending on the provider's attestation.

During post-payment desk audits, Program Integrity reviews all documentation associated with an attestation, requests additional documentation from the provider as needed, reviews additional documents to substantiate compliance with all program requirements, including high risk categories, and works with the provider to resolve any outstanding discrepancies.

Nebraska uses sampling as part of the post-payment audit strategy. For example, Program Integrity may review a random sampling of patient records for various MU objectives and measures. Findings from post payment audits can influence changes to sampling. Changes to sampling methods go into updates to the Audit Plan, with approval from CMS.

Field audits are conducted by Program Integrity as needed. For example, when further information is required from the provider, such as Program Integrity staff needing to view the CEHRT at the provider's place of business, or needing to view practice management systems that cannot be obtained with a desk audit, a field audit is performed. In addition, site visits will be conducted in cases of suspected fraud. Fraud allegations are also reported to the appropriate law enforcement entities. When a case has reached the threshold of fraud, it is referred to the Medicaid Fraud Control Unit (MFCU).

Post-payment audit results are stored in the MIP system and information is submitted to CMS via the MIP system. The audit report includes number of audits conducted, audit outcomes, instances of fraud/waste/abuse, and the number and amount of incentive payments recovered. Program Integrity also sends all post-payment audit findings to MIP staff so that post-payment audit statistics can be submitted to CMS. Nebraska tracks the amount of EHR Incentive Program overpayments through CMS reporting, reconciling of MIP system and CMS reports (such as the Quarterly Reporting Data Tool), and reviewing state general ledgers with MLTC's finance department on a quarterly basis.

Nebraska uses findings from pre and post-payment audits to improve program processes. For example, the Audit Plan was revised and approved by CMS in 2016, allowing MIP staff to require supporting documentation of MU objectives at the time of attestation. This came about as a result of negative audit findings where providers could not produce documentation supporting their attestations. Nebraska reduces provider burden by requesting documentation as part of the pre-payment audit and retaining it in the MIP system. This reduces the amount of documentation requests needed in post-payment audits.

MIP and Program Integrity staff meets on a monthly basis to go over audit findings and discuss areas for program improvement. Program Integrity and MIP staff review adverse findings together prior to finalization. MIP staff use audit findings to review potential changes to the program, determine areas that may require improvement, and make necessary updates to the SMHP, Audit Plan, and procedure manuals.

5 Section E The State's HIT Roadmap

This HIT Roadmap indicates Nebraska Medicaid's anticipated activities involving health IT systems and initiatives in Nebraska, including collaborative activities with CyncHealth. The successful implementation of the EHR Incentives Program and the support of HIE under HITECH funding has led to increased provider EHR adoption and HIE connectivity. This adoption and connectivity is critical to the ability of DHHS to utilize the information for quality measures and care management. The future roadmap for HIT/HIE will largely focus on the utilization of data to meet outcomes and objectives in order to improve healthcare across Nebraska.

With the end of HITECH funding at the end of 2021, Nebraska submitted an MES OAPD for HIE/PDMP that seeks to support the continued operation and maintenance of the HIE and PDMP. This OAPD is described in more detail in section 2.1.1. In addition to the continued operation and maintenance of the HIE and PDMP, Nebraska is actively engaged in working with CyncHealth to determine future capabilities of HIE that would be beneficial to Nebraska Medicaid.

Initiatives

Outlined in the table below are activities that can be performed to progress toward the long-term vision. The table lists initiatives with supporting goals as listed below and in section B. Several of the initiatives are dependent upon available funding. The goals are to:

- Promote MU of HIT, health care quality, and the exchange of health information;
- Support the operations and maintenance of health information exchange capabilities;
- Utilize the HIE to support efforts undertaken by other MES module projects that are integrated to support the goals and objectives of Nebraska Medicaid and Nebraska DHHS.

Supported Goal(s)	Initiative	Calendar Year(s)
• Support the operations and maintenance of health information exchange capabilities. • Promote MU of HIT, health care quality, and the exchange of health information.	Maintain and support Event Notification Services (ENS).	2021-2023
• Support the operations and maintenance of health information exchange capabilities. • Promote MU of HIT, health care quality, and the exchange of health information.	Maintain and support Direct Care/Care Coordination, including the continued development and implementation of an Enhanced Master Patient Index (EMPI) and API workflow integrations.	2021-2023
• Support the operations and maintenance of health information exchange capabilities. • Promote MU of HIT, health care quality, and the exchange of health information.	Maintain and support the HIE and PDMP infrastructure	2021-2023
• Support the operations and maintenance of health information exchange capabilities. • Promote MU of HIT, health care quality, and the exchange of health information.	Certify the HIE and PDMP according to CMS requirements	2022

Supported Goal(s)	Initiative	Calendar Year(s)
• Support the operations and maintenance of health information exchange capabilities. • Promote MU of HIT, health care quality, and the exchange of health information. • Utilize the HIE to support efforts undertaken by other MES module projects that are integrated to support the goals and objectives of Nebraska Medicaid and Nebraska DHHS.	Determine capabilities of HIE, such as SDoH, that would be beneficial to Nebraska Medicaid. Implement these capabilities when appropriate and beneficial to Nebraska Medicaid.	2022-2027

Measures

DHHS has established measures for progress that are also critical to the long-term plan. DHHS' established objectives and metrics, found below, are in place to monitorprogress towards the ultimate goal of utilizing the statewide exchange to support and benefit Nebraska DHHS, and specifically Nebraska Medicaid.

Medicaid Program Goal	Outcome	Metric
Improve care coordination and health outcomes.	Event notifications and alerts are sent to providers to determine prevalent health issues, ED overuse, identify and reduce duplication of services.	Total monthly count of event notifications and alerts sent to providers via ISC DSM, Collective Medical, and EHR integration.
Improve care coordination and health outcomes.	CCDs, ADTs, Labs, Radiology Reports, and notes are shared in the HIE to provide access to real-time clinical and medication data.	Total monthly count of CCDs, ADTs, Labs, Radiology Reports, and notes.
Improve care coordination and health outcomes.	Providers can query the clinical and medication platforms and receive information.	Total monthly count of manual and API based provider queries to the HIE and PDMP platforms.
Improve care coordination and health outcomes.	Providers can exchange secure messages on the HIE platform.	Total monthly count of secure messages sent via the HIE platform.

These metrics will be drawn from CyncHealth, who currently has 7,150 users provisioned to CyncHealth's HIE clinical viewer, six hospitals and their associated provisioned users are live with single sign-on (SSO) functionality and 2 remain in progress of SSO connection, and 9117 users are provisioned to the PDMP which includes Medicaid providers. 30 of 212 LTPACs are live and 24 of 212 are in progress, 24 of 31 acute care hospitals with 5 in process, 37 of 64 Critical Access Hospitals are live and 21 of 64 remain in progress and 7 of 9 FQHCs are in progress to connecting.

Acronyms

Acronym	Phrase
AIU	Adoption, Implementation, or Upgrade
AHRQ	United States Department of Health and Human Services Agency for Healthcare Research and Quality
ARRA	American Recovery and Reinvestment Act of 2009
CAH	Critical Access Hospital
CCN	CMS Certification Number
CCD	Continuity of Care Document
CDC	Centers for Disease Control and Prevention
CEHRT	Certified Electronic Health Record Technology
CHPL	Certified Health IT Product List
CMS	Centers for Medicare and Medicaid Services
CQM	Clinical Quality Measures
DBH	State of Nebraska Division of Behavioral Health
DHHS	State of Nebraska Department of Health and Human Services
DPH	State of Nebraska Division of Public Health
eBHIN	Nebraska Electronic Behavioral Health Information Network
EDI	Electronic Data Interchange
EH	Eligible Hospital
EHR	Electronic Health Record
EMR	Electronic Medical Record
EP	Eligible Professional
FQHC	Federally Qualified Health Center
FY	Fiscal Year
HIE	Health Information Exchange
HIPAA	Health Information Portability and Accountability Act
HIT	Health Information Technology

Acronym	Phrase
HITECH	Health Information Technology for Economic and Clinical Health
HRSA	United States Department of Health and Human Services' Health Resources and Services Administration
IAPD	Implementation Advance Planning Document
IHS	Indian Health Service
MIP	Medicaid EHR Incentive Program
MITA	Medicaid Information Technology Architecture
MLTC	Nebraska DHHS Division of Medicaid & Long-Term Care
MMIS	Medicaid Management Information System
MU	Meaningful Use
NEDSS	Nebraska Electronic Disease Surveillance System
NeHII	Nebraska Health Information Initiative
NESIIS	Nebraska State Immunization Information System
N-FOCUS	Nebraska Family Online Client User System
NITC	Nebraska Information Technology Commission
NLR	CMS National Level Repository
NPI	National Provider Identification
ONC	Office of the National Coordinator for Health Information Technology
PHINMS	Public Health Information Network Messaging System
REC	Regional Extension Center
RHC	Rural Health Clinic
SENHIE	South East Nebraska Health Information Exchange
SLR	Nebraska State Level Repository
SMHP	State Medicaid Health Information Technology Plan
SSEDON	Syndromic Surveillance Event Detection of Nebraska
TCHS	Thayer County Health Services

Acronym	Phrase
TIN	Taxpayer Identification Number
UAT	User Acceptance Testing
VA	Veterans Administration
VA NWIHCS	Veterans Administration Nebraska-Western Iowa Health Care System
VistA	Veterans Health Information Systems and Technology Architecture
Wide River TEC	Wide River Technology Extension Center

Glossary

Term	Definition
Adoption, Implementation, or Upgrade (AIU)	These terms are used by CMS as part of the eligibility criteria for EHR incentives. These terms reference the provider's adoption, implementation or upgrade of a certified EHR system.
American Recovery and Reinvestment Act (ARRA)	An economic stimulus package enacted by the 111th Congress in February 2009, commonly referred to as the Stimulus or The Recovery Act.
Children's Health Insurance Program (CHIP)	CHIP program administered by the United States Department of Health and Human Services that provides matching funds to states for health insurance to families with children. The program was designed with the intent to cover uninsured children in families with incomes that are modest but too high to qualify for Medicaid.
Critical Access Hospital (CAH)	A hospital that is certified to receive cost-based reimbursement from Medicare. The reimbursement that CAHs receive is intended to improve their financial performance and thereby reduce hospital closures.
Electronic Health Record (EHR)	An electronic record of health-related information on an individual that conforms to nationally recognized interoperability standards that can be created, managed, and consulted by authorized clinicians and staff across more than one health care organization.
Electronic Medical Record (EMR)	An electronic record of health-related information for an individual that can be created, gathered, managed, and consulted by authorized clinicians and staff within one health care organization.
Enterprise One	Nebraska's accounting and payment system which is used to make all payments issued by the State, including MMIS claims payments. The system utilizes Oracle's JD Edwards application.
e-prescribing	Practice in which drug prescriptions are entered into an automated data entry system (handheld, PC, or other), rather than handwriting them on paper. The prescriptions can then be printed for the patient or sent to a pharmacy via the Internet or other electronic means.
Health Information Exchange (HIE)	The electronic movement of health-related information among organizations according to nationally recognized standards.
Health Information Technology (HIT)	The application of information processing involving both computer hardware and software that deals with the storage, retrieval, sharing, and use of health care information, data, and knowledge for communication and decision-making.

Term	Definition
Indian Health Service	A part of the U.S. Public Health Service within the US Department of Health and Human Services, the Indian Health Service is responsible for providing federal health services to American Indians and Alaska Natives.
Interoperability	HIMSS' definition of interoperability is "ability of health information systems to work together within and across organizational boundaries in order to advance the effective delivery of healthcare for individuals and communities."
Meaningful Use	As defined by CMS in 42 CFR Part 495.
Medicaid Information Technology Architecture (MITA)	A federal, business-driven initiative that affects the Medicaid enterprise in all states by improving Medicaid program administration, via the establishment of national guidelines for processes and technologies. MITA is a common business and technology vision for state Medicaid organizations that supports the unique needs of each state.
Medicaid Management Information System (MMIS)	The MMIS is one of the primary repositories of provider information. MMIS capabilities will be leveraged to fulfill a range of functions, including the provision of data necessary to enable payment administration.
National Level Repository (NLR)	The NLR is the federal database that stores Medicaid and Medicare EHR Incentive Program data. This database supports MEIPRAS.
Nebraska Information Technology Commission (NITC)	The NITC is a nine-member, governor-appointed commission. Its mission is The mission of the Nebraska Information Technology Commission is to make the State of Nebraska's information technology infrastructure more accessible and responsive to the needs of its citizens, regardless of location, while making investments in government, education, health care and other services more efficient and cost effective.
Office of the National Coordinator for Health Information Technology (ONC)	ONC provides leadership for the development and nationwide implementation of an interoperable health information technology infrastructure to improve the quality and efficiency of health care and the ability of consumers to manage their care and safety.
Portal	A website that offers a range of resources, such as email, chat boards, search engines, and content.

Term	Definition
Provider	A provider is an individual or group of individuals who directly (primary care physicians, psychiatrists, nurses, surgeons, etc.) or indirectly (laboratories, radiology clinics, etc.) provide health care to patients. In the case of this SMHP and the EHR Incentive Program, Provider refers to both eligible professionals (EPs) and eligible hospitals (EHs).
Regional Extension Center (REC)	An organization that has received funding under the Health Information Technology for Economic and Clinical Health Act to assist primary care health care providers with the selection and implementation of electronic health record technology.
Stakeholder	A stakeholder is any organization or individual that has a stake in the exchange of health information, including health care providers, health plans, health care clearinghouses, regulatory agencies, associations, consumers, and technology vendors.
State Level Repository (SLR)	The SLR is the database supporting the Medicaid EHR Incentive Program administration. The SLR will capture state-collected data elements as part of the intake. The SLR will contain basic data elements that have been transferred from the NLR (e.g., National Provider Identifier (NPI); CMS Certification Number (CCN) for an EH; EP type; affiliation, etc.). The SLR will capture other relevant information from the EP/EH (e.g., email address; EP affiliation with a managed care organization) to establish eligibility for the EHR incentive program, including patient volume and attestation information.
Telehealth	The remote care delivery or monitoring between a healthcare provider and patient. There are two types of telehealth: phone monitoring (scheduled encounters via the telephone) and telemonitoring (collection and transmission of clinical data through electronic information processing technologies.
Telemedicine	A rapidly developing application of clinical medicine where medical information is transferred through interactive audiovisual media for the purpose of consulting, and sometimes remote medical procedures or examinations.

Appendix 3 – Budget Neutrality Workbook

PRA Disclosure Statement

PRA Disclosure Statement - The 1115 PMDA application offers a source of high qual ty and timely data to improve the Center for Medicaid & CHIP Services (CMCS) ability to mon tor demonstrations for the achievement of desired outcomes and projected cost savings. The states will upload and submit their budget neutrality workbook to CMCS via PMDA. Eventually PMDA wi l also be integrated into the Medicaid and CHIP Program (MACPro) System, which currently allows CMS and states to collaborate online to process State Plan Amendments (SPA), 1915 waivers, Quality Measures reports, advance planning documents, and other initiatives. The goal of the PMDA app ication is to Collect programmatic qual ty and other performance metrics, related reports and other information associated with selected 1115 demonstrations; Validate and track performance-based incentive payments for 1115 demonstrations that include them; Provide electronic reports that support CMCS oversight, monitoring and evaluation of 1115 demonstration performance, particularly on quality and other performance metrics, and on related incentive payments (if any); Produce analytic files to support demonstration evaluation. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid Office of Management and Budget (OMB) control number. The OMB control number for this project is 0938-1148 CMS-10398 #56. Public burden for all of the collection of information requirements under this control number is estimated to take about 7.5 hours per response. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to CMS, 7500 Security Boulevard, Attn Paperwork Reduction Act Reports Clearance Officer, Mail Stop C4-26-05, Baltimore, Maryland 21244-1850.

Budget neutral ty is a Federal policy that governs the Federal expend tures for1115 demonstrations. It is assured by placing an upper limit on the amount of Federal Financial Participation (FFP) the state can receive during the demonstration. The upper limit represents what the state could have received in the absence of the 1115 demonstration.

The Budget Neutral ty workbook will assist in co lecting standardized data in order to determine financial performance for the demonstration in terms of budget neutrality.

The workbook has two major groups of tabs the first group collects and calculates Without Waiver (WOW) numbers, and the second group calculates With Waiver (WW) numbers. Data is collected per each demonstration Medicaid E ig bi ity Group (MEG), by demonstration year (DY). A Medicaid section 1115 demonstration is considered budget neutral if the Federal title XIX match, or funding received by the state (i.e., "with waiver" expenditures) do not exceed what the state would have (or could have) received without the demonstration (i.e., "without waiver" expenditures). The workbook provides the ability to evaluate any variance between WW and WOW calculations.

The workbook consists of 15 tabs which contain d fferent types of data and calculations. The following color schema is applied to the tabs

Blue	Information populated in the Budget Neutrality workbook template based on the demonstration's approved STC
Red	Information populated by states on a quarterly basis or per the reporting requirements defined in the STC
Green	Information automatically populated based on the input from other worksheets

Note Overview and Dropdowns tabs are read-only, no data entry is required. The Dropdowns tab displays the values used to build the dropdowns menus thoroughout the workbook, including the list of active waivers for the demonstration.

Data Entry Within the tabs where a State User populates information (C Report, Total Adjustments, WW Spending Projected, MemMon Actual, MemMon Projected, and Summary tabs), yellow highlighted ce ls denote where data entry may be needed (depending on DY being updated).

Pre populated values in the downloaded Budget Neutrality workbook template

The original workbook entries are based on the STCs and other demonstration approval documentation. These entries are made on the DY Def, MEG Def, WOW PMPM & Agg, Program Spending Limits, and Summary TC tab (Phase-Down Percentage and Cumulative Target Percentage fields).

The MEG Def tab defines MEGs as Medicaid populations (core demonstration populations), Hypothetical populations (when a demonstration has separate budget neutrality agreements) and Tracking Only populations (for example, "pass-through" populations). The MEG Def tab also defines how expenditure numbers are calculated for a MEG (Per Cap ta vs. Aggregate) and the applicable scenarios (WOW, WW, or both). Also, the tab contains indicators defining MEG characteristics such as expenditure caps or applicability of savings phase-down calculations.

Calculating With Waiver (WW) numbers

WW numbers for each active DY of a demonstration are calculated based on a combination of actual WW expend tures, projected future expend tures, and any adjustments entered by a State User. The actual WW expend tures are copied from the Schedule C of the MBES CMS-64 report to the workbook (C Report tab). These numbers are automatically transferred to the C Report Grouper tab, where waiver expenditures are grouped by MEGs. The numbers are also transferred to the WW Spending Actual tab, which factors in adjustments entered on the Total Adjustments tab to calculate total actual WW expenditures. The WW Spending Total tab displays the actual WW expenditures plus future projected expenditures (transferred from the WW Spending Projected tab). Finally, the total WW actual and projected numbers are transferred to the Summary TC (Total Computable) tab (into the With-Waiver Total Expenditures section).

Calculating Without Waiver (WOW) numbers

WOW numbers can be obtained either one of two ways using Aggregate or Per Cap ta calculations. If total projected expenditures for a MEG is known and the expenditure calculation type is defined as 'Aggregate' on the MEG Def tab, the total projected expenditure amount is entered for each active DY. However, if the expenditure calculation type is defined as 'Per Capita', total projected expenditures are derived by multiplying per member per month (PMPM) costs by the actual number of member months.

Both Aggregate and PMPM numbers are populated on the WOW PMPM & Agg tab. The number of actual member months (number of beneficiaries times the number of months enrolled) are entered by a State User on the MemMon Actual tab for each DY. On the MemMon Projected tab, State User enters projected numbers. The totals for actual and projected member months are calculated on the MemMon Total tab. WOW aggregate, PMPM and member month data is then moved to the the Without-Waiver Total Expenditures section of the Summary TC tab, where final calculations are performed.

Based on information from all tabs, the WW and WOW numbers are compared to determine the budget neutrality status of the demonstration.

Below are the definitions for the tabs of the workbook which require data entries from State User.

On top of the C Report tab, enter data in the following highlighted cells:

Data Pulled On ' - enter the date the source file used to enter data on this tab was pu led
For the Time Period Through ' - enter the date through which the source file data was pu led
Reporting DY' - enter the Demonstration Year (DY) for which data is being reported. Entered DY value must align with DYs from the DY Def tab.
Reporting Quarter' - enter a number of the quarter (values 1 through 4) for which data is being reported.

Notes:
- Dates must be entered in the following format mm/dd/yyyy
- Reporting DY and Reporting Quarter entries affect which portion of the 'Medicaid Aggregate' and Medicaid Aggregate - WOW only' amounts for a DY will be calculated as Actuals, and which will be calculated as Projected
- Entry for each of these four fields is required for the workbook submission. If any field is not populated, you will receive an error and the document will not be uploaded to the system.

State User enters information on the following tabs:

C Report Tab

Open Schedule C of the CMS 64 Expenditure Report. Under your state, locate expenditure data for the specific demonstration.
From this location on the CMS 64 Expenditure Report, copy expenditure data cells for all DYs (active and non-active). On the C Report tab, paste the data into the correct cell/row. Repeat the copy and paste process for MAP Waivers section (Total Computable and Federal Share) and ADM Waivers section (if applicable). Verify that the pasted numbers are correctly aligned with the Waiver Name values.

Total Adjustments tab

When adjustments are relevant for a demonstration, enter the actual numbers of total contributions to the reported expenditures, per each MEG, for the reportin quarter. Add new reported adjustments to any existing numbers for previous quarters for the reported DY.
Note Any adjustments that reduce expenditures must be entered as negative numbers (for example, -$10,000).

WW Spending Projected tab

Enter projected annual expenditures for each MEG for the active DYs of a demonstration
For each reporting quarter, update the projected numbers so they reflect only future quarter projections. Please see the example for the MemMon Projected tab.

MemMonth Actual tab

For each MEG, calculate the actual number of member months for the reported quarter and add this number to the previously entered number for the same DY. Fo example, for Q3 reporting period, add Q3 member months to the existing number for the same MEG and DY and enter the result into the same ce

MemMonth Projected tab

For each MEG, enter projected (future) annual member months for all active DYs of the demonstration. Adjust future DY numbers as need
For the current DY, enter only the number that reflects future quarters. For example, for Q3 reporting, only enter the projected number for Q4. There should be no projected numbers for completed (actual) DYs.

Summary TC tab

In the Net Variance section, for each DY, enter estimated numbers in row '1115A Dual Demonstration Savings (state preliminary estima
In the next row, '1115A Dual Demonstration Savings (OACT certified)' enter certified numbers.
Both estimated and certified numbers must be negative, as dual demonstration savings numbers reduce the Net Variance amo

Demonstration Years Definitions

DY	1	2	3	4	5
Start Date	7/1/2019	7/1/2020	7/1/2021	7/1/2022	7/1/2023
End Date	6/30/2020	6/30/2021	6/30/2022	6/30/2023	6/30/2024

Enter any general comments / notes

MEG Definitions

	MEG Name	MEG Description	Savings Phase-Down	Expenditures Subject to Cap?	Hypothetical Populations Included in Calculations?	Start DY	Start Date	End DY	End Date
	Hypothetical 1 Per Capita				Hypothetical Test 1				
1	ABD	Aged, Blind and Disabled	N/A	No	Yes	1	7/1/2019	5	6/30/2024
2	DUAL	Dual Eligibles	N/A	No	Yes	1	7/1/2019	5	6/30/2024
3	FAM	Families	N/A	No	Yes	1	7/1/2019	5	6/30/2024
4	EXP eff. 10/1/2021	All medical assistance expenditures during an IMD stay month for Expansion population	N/A	No	Yes	3	10/1/2021	5	6/30/2024
5	EXP Medically Frail eff. 10/1/20	All medical assistance expenditures during an IMD stay month for Expansion population medically frail beneficiaries	N/A	No	Yes	2	10/1/2020	3	9/30/2021
6	EXP Non-Medically Frail eff. 10/1/20	All medical assistance expenditures during an IMD stay month for Expansion population non-medically frail beneficiaries	N/A	No	Yes	3	10/2/2020	4	10/1/2021

WOW PMPMs and Aggregates

		DEMONSTRATION YEARS (DY) 1	2	3	4	5
Hypothetical 1 Per Capita						
ABD	1	$2,008.00	$2,080.00	$2,155.00	$2,232.00	$2,313.00
DUAL	2	$332.00	$344.00	$356.00	$369.00	$382.00
FAM	3	$589.00	$611.00	$634.00	$657.00	$681.00
EXP eff. 10/1/2021	4			$1,086.00	$1,148.00	$1,213.00
EXP Medically Frail eff. 10/1/20	5		$2,062.00	$2,180.00		
EXP Non-Medically Frail eff. 10/1/20	6		$818.00	$865.00		

Program Spending Limits

	Cap Amounts per Demonstration Year					TOTAL
Program Name and Associated MEGs	**1**	**2**	**3**	**4**	**5**	
Spending Cap						
						$ -
Expenditures Subject to Cap						
Variance						$ -
Over or Under	-	-	-	-	-	-

Data Pulled On:		Reporting DY	
For the Time Period Through:		Reporting Quarter	

Paste all information related to the demonstration from Schedule C of the CMS 64 Waiver Expenditure Report.

1. On the Schedule C Report, locate rows relevant to all expenditures for a specific demonstration.
2. Complete two rounds of copy/paste starting from the cell in column A (Waiver Name).
   - MAP Waivers/ Total Computable section – into cell A100
   - MAP Waivers/ Federal Share section – into cell A200
3. If ADM waivers are applicable to the demonstration, complete two more rounds of copy/paste starting from the cell in column A (Waiver Name).
   - ADM Waivers/ Total Computable section – cell A300
   - ADM Waivers/ Federal Share section – cell A400

MAP Waivers

Total Computable

Waiver Name	A	1	2	3	4	5	6	7	8	9	10	11	12	13	14
SUD 1115 Demonstration	0	203 755	169 388	229 918	0	0	0	0	0	0	0	0	0	0	0
SUD 1115 Demonstration – EXP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUD 1115 Demonstration – EXP Medically Frail	0	0	353 325	0	0	0	0	0	0	0	0	0	0	0	0
SUD 1115 Demonstration – EXP Non-Medically Frail	0	0	172 465	490	0	0	0	0	0	0	0	0	0	0	0
SUD Waiver Demonstration - ABD	0	0	0	140 897	0	0	0	0	0	0	0	0	0	0	0
SUD Waiver Demonstration - DUAL	0	0	0	22 697	0	0	0	0	0	0	0	0	0	0	0
SUD Waiver Demonstration - FAM	0	0	751	69 669	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**203,755**	**695,929**	**463,671**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Federal Share

Waiver Name	A	1	2	3	4	5	6	7	8	9	10	11	12	13	14
SUD 1115 Demonstration	0	115 328	106 453	206 693	0	0	0	0	0	0	0	0	0	0	0
SUD 1115 Demonstration – EXP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUD 1115 Demonstration – EXP Medically Frail	0	0	317 992	0	0	0	0	0	0	0	0	0	0	0	0
SUD 1115 Demonstration – EXP Non-Medically Frail	0	0	155 218	307	0	0	0	0	0	0	0	0	0	0	0
SUD Waiver Demonstration - ABD	0	0	0	89 594	0	0	0	0	0	0	0	0	0	0	0
SUD Waiver Demonstration - DUAL	0	0	0	14 394	0	0	0	0	0	0	0	0	0	0	0
SUD Waiver Demonstration - FAM	0	0	471	44 284	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**115,328**	**580,134**	**355,272**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

C Report Grouper

MAP Waivers Only

Total Computable

MEG Names		C Report Waiver Names	DEMONSTRATION YEARS (DY) 1	2	3	4	5
Hypothetical 1 Per Capita							
ABD	1	SUD Waiver Demonstration - ABD			$140,897		
DUAL	2	SUD Waiver Demonstration - DUAL			$22,697		
FAM	3	SUD Waiver Demonstration - FAM		$751	$69,669		
EXP eff. 10/1/2021	4	SUD 1115 Demonstration – EXP					
EXP Medically Frail eff. 10/1/20	5	SUD 1115 Demonstration – EXP Medically Frail		$353,325			
EXP Non-Medically Frail eff. 10/1/20	6	SUD 1115 Demonstration – EXP Non-Medically Frail		$172,465	$490		
TOTAL			$ -	$ 526,541	$ 233,753	$ -	$ -

Adjustments made to the reported expenditures

Enter total adjustments made to the expenditure numbers, including adjustments to the previous reporting periods.
Positive adjustments increase expenditures, and negative adjustments decrease expenditures.
Enter adjustments for every MEG for which adjustments were made or are planned.
Helpful Hint: Remember to enter total adjustments as positive or negative (for example, -$10,000 reflects a decrease in expenditures).

		DEMONSTRATION YEARS (DY) 1	2	3	4	5	Description (type of collection, time period, CMS-64 reporting line, etc.)
Hypothetical 1 Per Capita							
ABD	1						
DUAL	2						
FAM	3						
EXP eff. 10/1/2021	4						
EXP Medically Frail eff. 10/1/20	5						
EXP Non-Medically Frail eff. 10/1/20	6						

WW Spending - Actual

Total Computable

		DEMONSTRATION YEARS (DY) 1	2	3	4	5
Hypothetical 1 Per Capita						
ABD	1			$140,897		
DUAL	2			$22,697		
FAM	3		$751	$69,669		
EXP eff. 10/1/2021	4					
EXP Medically Frail eff. 10/1/20	5		$353,325			
EXP Non-Medically Frail eff. 10/1/20	6		$172,465	$490		
TOTAL		**$ -**	**$ 526,541**	**$ 233,753**	**$ -**	**$ -**

$285,696	$601,380
$44,649	$93,208
$184,617	$388,851
$1,462,552	$3,136,818

WW Spending - Projected

Enter projected spending for the demonstration which includes the remaining quarters of the current DY and all future DYs.
Enter the projected annual expenditures for each DY per MEG for the active DYs.
For the current DY, only future quarters should have projected spending information. Do not include expenditures that were reported as actuals.

Total Computable

		DEMONSTRATION YEARS (DY)				
		1	2	3	4	5
Hypothetical 1 Per Capita						
ABD	1				$285,696	$601,380
DUAL	2				$44,649	$93,208
FAM	3				$184,617	$388,851
EXP eff. 10/1/2021	4				$1,462,552	$3,136,818
EXP Medically Frail eff. 10/1/20	5					
EXP Non-Medically Frail eff. 10/1/20	6					

WW Spending - Total

Total Computable

		DEMONSTRATION YEARS (DY) 1	2	3	4	5
Hypothetical 1 Per Capita						
ABD	1			$140,897	$285,696	$601,380
DUAL	2			$22,697	$44,649	$93,208
FAM	3		$751	$69,669	$184,617	$388,851
EXP eff. 10/1/2021	4				$1,462,552	$3,136,818
EXP Medically Frail eff. 10/1/20	5		$353,325			
EXP Non-Medically Frail eff. 10/1/20	6		$172,465	$490		
TOTAL		**$ -**	**$ 526,541**	**$ 233,753**	**$ 1,977,514**	**$ 4,220,257**

Member Months - Actual

Enter actual member months (number of beneficiaries times the number of enrolled months) for quarters to date for each active DY.
For the reported quarter, add the actual number of member months per each MEG to the previous actual number. The number should equal the total of
Note: Depending of the specifics of the state, you can use Total member months or Average monthly unduplicated counts. Whichever definition is used,
Helpful Hint: When updating a DY, remember to enter actual member months for the reported quarter along with actuals for prior quarter(s). Retroactiv

		DEMONSTRATION YEARS (DY)				
		1	2	3	4	5
Hypothetical 1 Per Capita						
ABD	1					
DUAL	2					
FAM	3					
EXP eff. 10/1/2021	4					
EXP Medically Frail eff. 10/1/20	5					
EXP Non-Medically Frail eff. 10/1/20	6					

Member Months - Projected

Enter/adjust projected member months based on reported actuals.
Enter projected number of member months for each active DY per MEG for the demonstration.
For the current DY, enter only the number that reflects projections for future quarters of the DY.
Do not include member months for either the current reporting quarter or past quarters.

		DEMONSTRATION YEARS (DY)				
		1	2	3	4	5
Hypothetical 1 Per Capita						
ABD	1				128	260
DUAL	2				121	244
FAM	3				281	571
EXP eff. 10/1/2021	4				1274	2586
EXP Medically Frail eff. 10/1/20	5					
EXP Non-Medically Frail eff. 10/1/20	6					

Member Months - Total

		DEMONSTRATION YEARS (DY)				
		1	2	3	4	5
Hypothetical 1 Per Capita						
ABD	1				128	260
DUAL	2				121	244
FAM	3				281	571
EXP eff. 10/1/2021	4				1,274	2,586
EXP Medically Frail eff. 10/1/20	5					
EXP Non-Medically Frail eff. 10/1/20	6					

Budget Neutrality Summary

The Budget Neutrality Reporting Period dropdown menu allows for selection of a specific reporting period, by Demonstration Year.
By changing these settings, you change the view for which Demonstration Years will be used in calculating Budget Neutrality.
Selecting the 'Reset to Defaults' button will reset the Reporting DY values back to the demonstration's current Period of Performance.

Budget Neutrality Reporting Start DY	1
Budget Neutrality Reporting End DY	5

Actuals + Projected

BASE VARIANCE			$ -	$ -	$ -	$ -	$ -	$ -
Excess Spending from Hypotheticals								$ (760,294)
1115A Dual Demonstration Savings (state preliminary estimate)								$ -
1115A Dual Demonstration Savings (OACT certified)								$ -
Carry-Forward Savings From Prior Period								
NET VARIANCE								**$ (760,294)**

HYPOTHETICALS TEST 1

Without-Waiver Total Expenditures

			DEMONSTRATION YEARS (DY) 1	2	3	4	5	TOTAL
Hypothetical 1 Per Capita								
ABD	1	**Total**	$ -	$ -	$ -	$ 285,696	$ 601,380	
		PMPM	$2,008.00	$2,080.00	$2,155.00	$2,232.00	$2,313.00	
		Mem-Mon				128	260	
DUAL	2	**Total**	$ -	$ -	$ -	$ 44,649	$ 93,208	
		PMPM	$332.00	$344.00	$356.00	$369.00	$382.00	
		Mem-Mon				121	244	
FAM	3	**Total**	$ -	$ -	$ -	$ 184,617	$ 388,851	
		PMPM	$589.00	$611.00	$634.00	$657.00	$681.00	
		Mem-Mon				281	571	
EXP eff. 10/1/2021	4	**Total**	$ -	$ -	$ -	$ 1,462,552	$ 3,136,818	
		PMPM			$1,086.00	$1,148.00	$1,213.00	
		Mem-Mon				1,274	2,586	
EXP Medically Frail eff. 10/1/20	5	**Total**	$ -	$ -	$ -	$ -	$ -	
		PMPM		$2,062.00	$2,180.00			
		Mem-Mon						
EXP Non-Medically Frail eff. 10/1/20	6	**Total**	$ -	$ -	$ -	$ -	$ -	
		PMPM		$818.00	$865.00			
		Mem-Mon						
TOTAL						**$1,977,514**	**$4,220,257**	**$6,197,771**

With-Waiver Total Expenditures

		DEMONSTRATION YEARS (DY) 1	2	3	4	5	TOTAL
Hypothetical 1 Per Capita							
ABD	1	$ -	$ -	$ 140,897	$ 285,696	$ 601,380	
DUAL	2	$ -	$ -	$ 22,697	$ 44,649	$ 93,208	
FAM	3	$ -	$ 751	$ 69,669	$ 184,617	$ 388,851	
EXP eff. 10/1/2021	4	$ -	$ -	$ -	$ 1,462,552	$ 3,136,818	
EXP Medically Frail eff. 10/1/20	5	$ -	$ 353,325	$ -	$ -	$ -	
EXP Non-Medically Frail eff. 10/1/20	6	$ -	$ 172,465	$ 490	$ -	$ -	
TOTAL		**$ -**	**$ 526,541**	**$ 233,753**	**$ 1,977,514**	**$ 4,220,257**	**$ 6,958,065**

HYPOTHETICALS VARIANCE 1			**$ -**	**$ (526,541)**	**$ (233,753)**	**$ -**	**$ -**	**$ (760,294)**

HYPOTHETICALS TEST 1 Cumulative Target Limit

		DEMONSTRATION YEARS (DY) 1	2	3	4	5	
Cumulative Target Percentage (CTP)		2.0%	1.5%	1.0%	0.5%		
Cumulative Budget Neutrality Limit (CBNL)		$ -	$ -	$ -	$ 1,977,514	$ 6,197,771	
Allowed Cumulative Variance (= CTP X CBNL)		$ -	$ -	$ -	$ 9,888	$ -	
Actual Cumulative Variance (Positive = Overspending)		$ -	$ 526,541	$ 760,294	$ 760,294	$ 760,294	
Is a Corrective Action Plan needed?			CAP Needed	CAP Needed	CAP Needed	CAP Needed	

Yes No
Yes
No

Per Capita or Aggregate
Per Capita
Aggregate

Phase-Down
No Phase-Down
Savings Phase-Down

Actuals and Projected
Actuals Only
Actuals + Projected

MAP_ADM
MAP+ADM Waivers
MAP Waivers Only

Waiver List
MAP WAIVERS
Not Applicable
SUD 1115 Demonstration
SUD 1115 Demonstration – EXP
SUD 1115 Demonstration – EXP Medically Frail
SUD 1115 Demonstration – EXP Non-Medically Frail
SUD Waiver Demonstration - ABD
SUD Waiver Demonstration - DUAL
SUD Waiver Demonstration - FAM
ADM WAIVERS

Demonstration Reporting Start DY 1
Demonstration Reporting End DY 5

Reporting Net Variance
$ (760,294)

Appendix 4 – Public Notice (including Tribal Public Notice)

May 2, 2023

In accordance with 42 CFR 431.408, the Nebraska Department of Health and Human Services (DHHS), Division of Medicaid and Long-Term Care (MLTC) hereby provides notice of the Nebraska Section 1115 Substance Use Disorder (SUD) Demonstration Waiver Renewal application. The 1115 SUD demonstration waiver, effective July 1, 2019, provides DHHS with the authority to receive federal Medicaid financial participation (FFP) for the coverage of SUD treatment-related stays in Institutions for Mental Diseases (IMDs) for adults ages 21-64. More specifically, the authority allows the state the flexibility to include in managed care capitation rate development IMD stays that exceed the 15-day limit found in 42 CFR 438.6(e). DHHS is requesting renewal of the waiver for an additional five (5) year period, July 1, 2024, through June 30, 2029.

The public hearings will be held Friday, May 12th, at 11 AM - 12 PM CST and Thursday, May 18th 12:30 PM - 1:30 PM CST in the Lower-level Public Hearing Room located at the Nebraska State Office Building (301 Centennial Mall S, Lincoln, NE 68509).

Public Hearing Date	Time	Webinar	Webinar Password
Friday May 12, 2023	11:00 AM – 12:00 PM Central Standard Time	Link to the Webinar	asEJpC9MG23
Thursday May 18, 2023	12:30PM – 1:30 PM Central Standard Time	Link to the Webinar	AEazmJ42NJ4

DHHS is allowing 30 calendar days for public review and comment on the demonstration amendment. Please respond no later than June 1, 2023.

Comments may be submitted to:

Nebraska Department of Health and Human Services Division of Medicaid and Long-Term Care
301 Centennial Mall S
PO Box # 95026
Attn. Milla Jones
Lincoln, Nebraska 68509-5026

Fax (402) 471-9103 or e-mail to DHHS.DemonstrationWaivers@nebraska.gov

For more information on the Section 1115 SUD Demonstration Waiver or to view the renewal application for feedback, visit the Substance Use Disorder Demonstration Program website.

From:	DHHS Medicaid SPA
Bcc:	Audrey Parker; Beth Wewel; Crystal Appleton; Dr. Rob Rhodes; Janelle Ali-Dinar; Karen Hatcher - CMS; Kathaleen Bad Moccasin; Kenneth Boryca; Kevin Killer; Kim Friloux; LaVonne Jones; Leander Merrick; Lisa Miller CTC; Mike Henry; Mona Zuffante; Nancy Mackey; Rebecca Crase, Director of Business Services Ponca; Rebecca Sullivan; Rebecca Tamayo; Rhiannon Pitzl; Roger Trudell; Sarah Rowland; Schenk, Stacy; Sharon Frenchman; Sophia Hinojosa - CMS; Tashina Provost; Taylor Housman; Tyson Christensen - CMS; Victoria Kitcheyan; Vietta Swalley; Yolanda Faausuusu CTC Admin. Of.
Subject:	Tribal Notice for NE 1115 SUD Renewal
Date:	Tuesday, May 2, 2023 1:02:00 PM
Attachments:	NE 1115 SUD Renewal_Tribal Summary.pdf NE 1115 SUD Renewal_Tribal Cover Letter.pdf NE 1115 SUD Renewal_Attachment 1 - Interim Evaluation Report.pdf NE 1115 SUD Renewal_Attachment 2 - HIT Plan.pdf NE 1115 SUD Renewal_Attachment 3 - Budget Neutrality Workbook.pdf

---

Attached for your review is a summary of a proposed 1115 SUD waiver renewal regarding a provider rate increase for Substance Use Disorder Services. The proposed amendment will have an impact on Indians and/or Indian health programs. Also attached is the draft waiver submission for your review.

Catherine Gekas Steeby |
MEDICAID & LONG-TERM CARE

Nebraska Department of Health and Human Services

CELL: 402-429-7884

DHHS.ne.gov | **Facebook** | **Twitter** | **LinkedIn**

NEBRASKA

Good Life. Great Mission.

DEPT. OF HEALTH AND HUMAN SERVICES

Jim Pillen, Governor

May 2, 2023

To: Omaha Tribe of Nebraska, Ponca Tribe of Nebraska, Santee Sioux Nation, Winnebago Tribe of Nebraska, Carl T. Curtis Health Center, Fred LeRoy Health & Wellness Center, Santee Sioux Clinic, Winnebago Comprehensive Healthcare System, Nebraska Urban Indian Health Coalition, Aberdeen Area Indian Health Service, Great Plains Tribal Chairmen's Health Board, Oglala Sioux Tribe, Oglala Sioux Lakota Nursing Home

Attached for your review is a summary of a proposed Section 1115 Demonstration Waiver Renewal Application for Substance Use Disorder Services. This proposed state plan amendment could potentially have an impact on Indians and/or Indian health programs. The anticipated effective date of the renewal is July 1, 2024. The renewal application will be posted to the DHHS website and may be accessed by visiting: https://dhhs.ne.gov/Pages/Substance-Use-Disorder-Demonstration.aspx

We welcome any comments or suggestions you may have. Please forward any comments or suggestions to DHHS.DemonstrationWaivers@Nebraska.gov or via mail to:

Nebraska Department of Health and Human Services Division of Medicaid and Long-Term Care
301 Centennial Mall S
PO Box # 95026
Attn. Milla Jones
Lincoln, Nebraska 68509-5026

Thank you in advance for your cooperation. **Please respond no later than June 1, 2023.**

Respectfully,

[redacted]

Jacob Kawamoto
Program Specialist
Nebraska Department of Health and Human Services

Tribal Summary for
Section 1115 Substance Use Disorder Demonstration Renewal Application

In accordance with 42 CFR 431.408, the Nebraska Department of Health and Human Services (DHHS), Division of Medicaid and Long-Term Care (MLTC) hereby provides notice of MLTC's intent to submit to the Centers for Medicare and Medicaid Services (CMS) an application to renew a Section 1115 Medicaid Demonstration Waiver for Substance Use Disorder Services. This proposed waiver renewal will have an impact on Indians and/or Indian health programs.

The demonstration waiver renewal allows the Nebraska Medicaid program to cover residential substance use disorder treatment provided to Medicaid-enrolled adults ages 21-64 residing in inpatient facilities that meet the federal regulatory definition of an Institution for Mental Diseases (IMD). IMDs are generally defined inpatient facilities with more than 16 beds that provide behavioral health services to a majority of its patients.