DEPARTMENT OF HEALTH & HUMAN SERVICES
Centers for Medicare & Medicaid Services
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State Demonstrations Group

September 27, 2023

Emily Ricci
Deputy Commissioner
Department of Health
3601 C Street, Suite 902
Anchorage, Alaska 99503-5923

Dear Deputy Commissioner Ricci:

The Centers for Medicare & Medicaid Services (CMS) completed its review of the Alaska Interim Evaluation Report, which is required by the Special Terms and Conditions (STCs), specifically STC #44 "Interim Evaluation Report" of the section 1115 demonstration, "Alaska Substance Use Disorder and Behavioral Health Program" (Project No: 11-W-00318/0). The demonstration was approved on November 21, 2018 and is effective through December 31, 2023. This Interim Evaluation Report covers the period from January 2018 through December 2021. CMS determined that the Evaluation Report, submitted on December 29, 2022 and revised on April 18, 2023, is in alignment with the CMS-approved Evaluation Design and the requirements set forth in the STCs, and therefore, approves the state's Interim Evaluation Report.

The findings of the Interim Evaluation Report provide evidence that Alaska made progress toward its demonstration goals. For example, the report suggests that substance use disorder (SUD) beneficiaries were transitioning away from emergency department utilization to outpatient care with the demonstration's implementation. The state used a variety of methods to evaluate the demonstration, including descriptive statistics, pre-post comparisons, interrupted time series, as well as qualitative analyses leveraging key informant interviews with demonstration administrators, providers, and other stakeholders. The findings suggest that there was an increase in SUD and behavioral health provider capacity and in the availability of new services. Interrupted time series analyses show that the odds for opioid use disorder or behavioral health-related emergency department visits declined and the odds for intensive outpatient or inpatient care increased during the evaluation period. There was also timelier initiation of SUD treatment, and the average length of stay in institutions for mental diseases (IMDs) declined significantly. The COVID-19 Public Health Emergency likely impacted utilization rates, and service expansion was impacted by workforce shortages in the state. Additionally, the state was unable to use national data sources for a comparison population, as initially proposed. The state will continue to assess the demonstration's progress toward its goals, especially regarding beneficiary outcomes and provider availability in rural and frontier

regions. We look forward to the state's Summative Evaluation Report to provide further evidence in these areas, including potentially using national data sources for comparison purposes.

In accordance with STC #47 "Public Access," the approved Interim Evaluation Report may now be posted to the state's Medicaid website within 30 days. CMS will also post the Interim Evaluation Report on Medicaid.gov.

We look forward to our continued partnership on the Alaska Substance Use Disorder and Behavioral Health Program section 1115 demonstration. If you have any questions, please contact your CMS demonstration team.

Sincerely,

Paula M. Kazi -S

Digitally signed by Paula M. Kazi -S
Date: 2023.09.28 07:52:17 -04'00'

Paula M. Kazi
Acting Director
Division of Demonstration Monitoring and Evaluation

cc: Maria Garza, State Monitoring Lead, CMS Medicaid and CHIP Operations Group

State of Alaska Department of Health, Division of Behavioral Health

Alaska Substance Use Disorder and Behavioral Health Program Section 1115 Waiver Evaluation

Interim Evaluation Report

April 2023

HSAG HEALTH SERVICES ADVISORY GROUP

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Executive Summary

The Alaska Department of Health (DOH) Section 1115 Demonstration Waiver renewal application, Substance Use Disorder and Behavioral Health (SUD-BH) Program, was approved by the Centers for Medicare & Medicaid Services (CMS) on November 21, 2018, effective January 1, 2019, through December 31, 2023.[1] The waiver allowed DOH to develop a data-driven, integrated BH system of care for children and youth with, or at risk of, severe emotional disturbance (SED) and/or SUD, and adults with serious mental illness (SMI) and/or SUD. The SUD-BH Program was designed to support three goals:

- **Goal 1**: Rebalance the current BH system of care to reduce Alaska's over-reliance on acute, institutional care and shift to more community- or regionally based care.
- **Goal 2**: Intervene as early as possible in the lives of Alaskans to address BH symptoms before symptoms cascade into functional impairments.
- **Goal 3**: Improve the overall BH system accountability by reforming the existing system of care.

Pursuant to the special terms and conditions (STCs) of the Section 1115 Demonstration Waiver, DOH contracted with Health Services Advisory Group, Inc. (HSAG), as an independent evaluator to conduct a comprehensive evaluation of the SUD-BH Program. The goal of this evaluation is to provide CMS and DOH with an independent evaluation that ensures compliance with the Section 1115 Demonstration Waiver requirements; assist in both State and federal decision making about the efficacy of the Demonstration; and enable DOH to further develop clinically appropriate, fiscally responsible, and effective Medicaid demonstration programs. This is the Interim Evaluation Report for the SUD-BH Program Section 1115 Demonstration Waiver. This report evaluated the first three years of the demonstration waiver, January 1, 2019, through December 31, 2021. After the conclusion of the demonstration waiver in 2023, a Summative Evaluation Report will include an analysis of the full five-year demonstration period.

Conclusions

Goal 1

Evaluation of this goal was complicated by the coronavirus disease 2019 (COVID-19) public health emergency (PHE), which began one year after the start of the demonstration approval period and coincided with many implementation milestones. As a result, measures that assess utilization of services were adversely impacted by the PHE as lock-down orders were in effect.

Successes and challenges associated with Research Question 1 include the following.

Successes

- Increased number of practitioners providing SUD and BH services.
- Reduced emergency department (ED) visits specifically for opioid use disorder (OUD) and BH disorders.
- Improved rates of service utilization for SUD treatment.

[1] Centers for Medicare & Medicaid Services. Demonstration Approval. Available at: https://www.medicaid.gov/medicaid/section-1115-demonstrations/downloads/ak-behavioral-health-demo-benefits-amend-appvl-09032019.pdf. (medicaid.gov). Accessed on Nov 4, 2022.

- Timelier initiation of treatment for SUD.

In addition, there were potential successes in a shift of the type of services that beneficiaries utilized. Specifically, among beneficiaries with a SUD, there appeared to be a shift from the outpatient (OP) setting to residential, inpatient (IP), and intensive outpatient/partial hospitalization (IOP/PH) settings. Because OP services were originally covered under the State plan but IP and IOP/PH were new services provided under the waiver, this may indicate that beneficiaries were not getting an appropriate level of care prior to the demonstration.

Challenges

Notable challenges include:

- Reduced percentage of beneficiaries screened for SUD or BH disorders.
- Lower rates of follow-up after discharge from an ED visit for SUD or BH disorder.

Lower rates of screening for SUD and BH disorders, chronic conditions, and SUD/BH comorbidities were likely driven by the COVID-19 PHE, as screening rates in 2019 were higher than in 2020 and 2021 and generally similar to 2018 rates; however, screening rates did not increase in 2021 following the reopening and the consequent delays in any routine, nonessential care.

Rates of follow-up visits after discharge from an ED for SUD or BH disorders also declined following approval of the demonstration in 2019, with seven-day follow-up rates declining by nearly 9 percentage points, a 20 percent relative decline, and 30-day follow-up rates declining by 8.4 percentage points, or a 14 percent relative decline. This represents a notable shift that is likely not attributable to the COVID-19 PHE, as rates began to decline in 2019 prior to the PHE.

Goal 2

This goal was measured using administrative claims data, beneficiary surveys, the Alaska Childhood Understanding Behaviors Survey (CUBS) instrument, and overdose data to address this research question. Because beneficiary surveys were conducted at a single point in time, no causal conclusions can be drawn, and results are interpreted in a descriptive manner.

Successes

Due in part to data limitations, there were no successes that could be attributed to the demonstration. However, there was a reduction in non-fatal overdoses among Alaska residents statewide (Medicaid and non-Medicaid recipients). Although analysis of the CUBS data indicates a reduction in frequency of maternal marijuana usage after the waiver approval, this decline was observed in 2020 and could be attributable to revisions in the survey instrument that year.

Among survey measures of Medicaid recipients, there were promising signs regarding the number of treatment services that were known to beneficiaries. No statistical testing was conducted because these surveys were conducted at a single point in time after approval of the demonstration and no viable comparison group could be used, but over half of beneficiaries indicated they knew where to receive SUD treatment (for both adults and children), while over two-thirds knew where to receive BH treatment. Among those who did know where to find treatment, every setting for adult treatment was known to over two-thirds of beneficiaries, and every setting for child treatment was known to at least 70 percent of beneficiaries.

Challenges

Notable challenges include:

- Reduced rates of access to preventive and primary care.
- Reduced screening for chronic conditions and SUD/BH comorbidities.
- Higher rates of statewide (including non-Medicaid) overdose deaths, including those from opioids.

Lower rates of access to preventive and primary care are likely attributable to the COVID-19 PHE because rates did not begin to decline until 2020 and 2021; however, there was no rebound in rates in 2021 following the reopening.

Similar to screening for SUD and BH disorders, lower rates of screening for chronic conditions and SUD/BH comorbidities were likely driven by the COVID-19 PHE, as screening rates in 2019 were higher than in 2020 and 2021 and generally similar to 2018 rates; however, screening rates did not increase in 2021 as the healthcare system reopened.

The increased rate of overdose deaths was exacerbated by the COVID-19 PHE, as was seen across the country during this time.[2] Data on Medicaid recipients specifically were not available, and all-cause overdose death rates did not increase substantially until state fiscal year (SFY) 2021. Opioid overdose deaths increased slightly in SFY 2020 and increased substantially in SFY 2021. Studies have shown that COVID-19 had a disproportionate impact on overdoses in rural areas.[3]

Goal 3

Costs for the waiver beneficiaries did not demonstrably change following implementation of the demonstration.[4] Total costs among beneficiaries with a SUD diagnosis increased by 0.20 percent per month both before and after approval of the demonstration. Costs among beneficiaries with a BH diagnosis declined by 0.08 percent per month.

There were two notable increases in costs among the SUD population when examining costs by setting. Unsurprisingly, average institutions for mental disease (IMD) costs increased significantly following approval of the demonstration, which allowed Medicaid to reimburse a greater proportion of IMD stays. Long-term care (LTC) costs also increased significantly among the SUD population after approval of the demonstration.

Similar to the SUD population, IMD and LTC costs among the BH population also increased following the approval of the demonstration. It is important to note that because the SUD and BH populations are not mutually exclusive, it is possible that members in the BH population who were treated in an IMD were primarily there for SUD-related treatment. Additionally, pharmacy costs saw an increase in costs following approval of the waiver, which may signify that beneficiaries are receiving needed treatment that they had not been receiving prior to the waiver.

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2 Centers for Disease Control and Prevention. "Overdose Deaths Accelerating During COVID-19,"Press Release, December 17, 2020. Available at: https://www.cdc.gov/media/releases/2020/p1218-overdose-deaths-covid-19.html; Accessed on: Nov 3, 2022.

3 Walters SM, *et al* "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(2022) Available at: https://ascpjournal.biomedcentral.com/articles/10.1186/s13722-022-00303-8. Accessed on: Nov 8, 2022.

4 Note that the cost analyses do not refer to nor attempt to replicate the formal Budget Neutrality test required under the Section 1115 Demonstration Waiver program, which sets a fixed target under which waiver expenditures must fall that was set at the time the waiver was approved.

Overall Results

Results suggest that Alaska beneficiaries with a SUD or BH disorder were receiving more appropriate care after approval of the waiver than before approval. Beneficiaries with a SUD began reducing their utilization of OP services following the approval of the waiver and there were noticeable increases among new settings of care for treatment, such as IO/PH and residential IP. Similarly, beneficiaries with a BH disorder appeared to transition away from the OP and ED settings more permanently following the COVID-19 PHE in favor of telehealth. Beneficiaries with a BH disorder also exhibited a significant upward trend in pharmacy costs following the approval of the PHE, potentially indicating that these beneficiaries were receiving needed treatment.

There were also improvements in meeting the statewide target for average length of stay in an IMD of 30 days. The average length of stay in an IMD decreased significantly following approval of the demonstration, declining from over 76 days in 2018 to just under 27 days.

Finally, the number of providers billing for SUD services increased substantially following approval of the waiver. In 2018, only 17 providers billed for SUD services, who were located in two regions (Anchorage and Fairbanks). By 2021, 134 providers were billing for SUD services across five regions. The number of providers billing for BH services also increased following the demonstration, but at a lesser extent than SUD providers.

The COVID-19 PHE greatly impacted access to care in 2020 and 2021, which is evidenced by lower rates of SUD and BH screening and access to physical care in both 2020 and 2021. The decline in access to care measures is consistent with what has been seen nationally across Medicaid health plans. Improvements could be made, however, in follow-up visits after discharge from the ED for a SUD or BH disorder. Because follow-up visits after discharge from the ED specifically for OUD increased while they decreased for SUD generally, this suggests disproportionate handling of ED visits for OUD compared to alcohol or other drug abuse. Moreover, rates of follow-up visits are not as susceptible to the effects of the COVID-19 PHE as access to care measures, as national rates for Medicaid health plans did not decline substantially in 2020 or 2021.

Costs

It is too early in the demonstration to determine whether the demonstration will result in cost savings. The slight increase in costs among the SUD population was primarily driven by costs directly associated with a SUD diagnosis. Increases in cost trends were seen among the non-ED OP, LTC, and professional settings. Cost trends among the SUD population in the OP, ED OP, dental, and pharmacy settings.

The slight decline in the cost trend among the BH population was primarily driven by a decline in OP (both ED and non-ED), LTC, and dental costs. The trend in costs increased significantly for pharmacy and increased slightly among professional and IP settings.

The cost analysis thus far centered on overall costs to Medicaid. Additional research is needed as more post-implementation data points are gathered to assess the impact at the individual level. It is possible that as the demonstration matures, the impact on overall costs may not result in a reduction, given various stages in SUD or BH treatment among the population. That is, at the individual level, the trajectory of costs increases initially as members receive treatment before beginning to decline as the lower cost of treatment leads to lower costs over the longer run. In aggregate however, because at any given point in time there are individuals in all stages of treatment, this individual effect is unlikely to translate to an overall reduction in costs (unless the proportion of beneficiaries with a SUD fundamentally decreases). HSAG expects that with additional data points being available to assess beneficiary-level costs in the Summative Evaluation Report, a more robust panel analysis can be conducted to evaluate the trajectory of costs at the member level following waiver implementation.

Lessons Learned and Recommendations

Provider Billing Procedures

- **Issue**: Providers noted some frustration regarding the changes made to and differences between State plan codes and waiver codes
  - **Recommendation**: The State should assess the State plan codes that were replaced or duplicated by waiver codes to ensure there is not a disincentive for billing waiver codes. For example, one provider noted that the waiver code for peer support services had fewer hours associated with it than the State plan code, which provides a disincentive to bill the waiver code.

Expanding Services

- **Issue**: Several providers expressed difficulties in obtaining clearance through a background check for peers to provide peer support services.
  - **Recommendation**: The State should continue working with the Division of Health Care Services to streamline or expedite the approval process or provide financial incentives for peers so they are encouraged to remain in the program while their paperwork is being approved.
- **Issue**: From the evaluation, gaps were found in the number of providers billing for SUD services, particularly in rural/frontier regions.
  - **Recommendation**: The State should ensure that the certification process for becoming a Qualified Addiction Professional (QAP) who provides SUD services is simplified to the extent appropriate and that providers are educated on the process to encourage providers to expand the types of services offered.

1. Background

Section 1115 of the Social Security Act allows states the ability to design and test their own methods for providing and funding healthcare services that differ from services required by federal statute but meet the objectives of the federal Medicaid program and Children's Health Insurance Program (CHIP). Thus, Section 1115 waiver demonstrations allow states flexibility in how to operate and fund their healthcare. The Centers for Medicare & Medicaid Services (CMS) designed a national evaluation strategy to ensure demonstrations meet program objectives while also comparing to other states' Section 1115 Medicaid waivers.

CMS approved the substance use disorder (SUD) portion of Alaska Department of Health (DOH) Department of Behavioral Health's (DBH's) Section 1115 Waiver Demonstration application, Substance Use Disorder and Behavioral Health (SUD-BH) Program, on November 21, 2018. The SUD portion of the waiver demonstration took effect January 1, 2019, and the entirety of the waiver application, which included the behavioral health (BH) portion of the waiver, started on September 3, 2019, with an overall demonstration period of January 1, 2019, through December 31, 2023. The following section outlines the history, guidance, and application of the SUD-BH Program including the goals of the demonstration, timelines for evaluation, and demographics of the beneficiaries, both in total and program specific in accordance with CMS' special terms and conditions (STCs) of the waiver. [1-1]

Alaska's Substance Use Disorder Landscape

In line with national trends, opioid use and overdose in Alaska became significantly more prevalent over the last decade. Since 2008, deaths involving opioids have been at historical highs and, while small improvements were made at the turn of the last decade, the most recently available data showed that Alaskan opioid death counts continued to rise from 2013 to 2018.[1-2] By 2021, opioid-related overdose deaths nearly quadrupled from 2010, averaging 27.3 per 100,000 deaths.[1-3] From 2017 to 2021, 546 of Alaska's 778 overdose deaths involved opioids, slightly over 70 percent.[1-4] While opioid misuse was not exclusive to the State of Alaska, self-reported opioid misuse in the last year was higher in Alaska compared to national trends, with 3.8 percent of Alaskans reporting misuse of any opioids and 6.2 percent of Alaskans reporting illicit drug use, compared to national rates of 3.5 percent and 4.9 percent, respectively, in 2020.[1-5] According to the 2019–2020 National Survey on Drug Use and Health (NSDUH), 18.0 percent of Alaskan adults reported binge alcohol use in the past month, compared to a national rate of 15.7 percent; 10.2 percent of Alaskans had a SUD, compared to a national rate of 7.4 percent;[1-6] and 6.7 percent of Alaskans reported needing but not receiving treatment for illicit drug use in the past year,

1-1 Centers for Medicare & Medicaid Services. Demonstration Approval. Available at: https://www.medicaid.gov/medicaid/section-1115-demonstrations/downloads/ak-behavioral-health-demo-benefits-amend-appvl-09032019.pdf. (medicaid.gov). Accessed on: Aug 9, 2022.

1-2 Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2020 on CDC WONDER Online Database released in 2021. Data are from the Multiple Cause of Death Files, 1999-2020, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. 2020. Available at: http://wonder.cdc.gov/mcd-icd10.html. Accessed on: Aug 5, 2022.

1-3 Alaska Department of Health. 2021 Drug Overdose Mortality Update. Available at: https://health.alaska.gov/dph/VitalStats/Documents/PDFs/DrugOverdoseMortalityUpdate_2021.pdf. Accessed on: Aug 9, 2022

1-4 Ibid.

1-5 Kaiser Family Foundation. State Health Facts: Mental Health & Substance Use. Available at: https://www.kff.org/state-category/mental-health/alcohol-drug-dependence-and-abuse/. Accessed on: Aug 10, 2022.

1-6 Substance Abuse and Mental Health Services Administration. Behavioral Health Barometer, Alaska, Volume 6. Available at: https://www.samhsa.gov/data/sites/default/files/reports/rpt32818/Alaska-BH-Barometer_Volume6.pdf. Accessed on: Aug 8, 2022.

compared with a national rate of 4.8 percent.[1-7] Self-reported opioid use was also higher among Alaskans, with 4.8 percent reporting pain reliever use disorder in the past year, compared to 3.7 percent nationwide, and 0.7 percent reported heroin use in the past year, compared to 0.3 percent nationally.[1-8] Notably, alcohol misuse was prominent in Alaska, which ranked eighth in the nation for highest prevalence rate of adult binge drinking in 2021.[1-9]

The need for BH services, which often coincided with the need for SUD treatment, was more prominent among Alaskans than the nation as a whole. Data from the 2020 Behavioral Risk Factor Surveillance System (BRFSS) showed that 9.9 percent of Alaskans and 11.8 percent of Alaska Natives reported frequent mental distress, defined as 14 or more days per month of poor mental health.[1-10] In addition, Alaska's 2020 suicide rate of 28.0 per 100,000 Alaskans was more than twice the 2015 national rate of 12.32 per 100,000 Alaskans, and the Alaska Native population was over two times as likely to complete suicide than non-Alaska Natives.[1-11] With rates of mental illness, suicide, illicit and opioid drug use, overdose deaths, and binge drinking stable or on the rise, and in line with or surpassing national trends, Alaskans continued to need services for SUD and BH as well as intervention to address downstream effects that further perpetuate the need for these services.

For example, with the rising rates of adult SUD between 2007 and 2016, the percentage of Medicaid-covered infants diagnosed with neonatal abstinence syndrome increased nearly fourfold, from 4.4 percent to 16.9 percent.[1-12] In addition, children living with adults with SUD and other BH ailments were known to have experienced adverse childhood experiences (ACEs) that placed them at a significantly higher likelihood of risky behaviors such as substance misuse, alcoholism, smoking, and unsafe sex practices and subsequent sexually transmitted infections (STIs). Children with a high prevalence of ACEs were more likely to experience physical and mental morbidities including certain cancers, obesity, depression, or premature mortality including suicide, in adulthood.[1-13] In 2019, the prevalence of children living with an adult with SUD in Alaska was 13.0 percent, and the prevalence of living with an adult with mental illness was 11.3 percent, compared to 8.5 percent and 7.4 percent nationally, respectively.[1-14] The higher rates of ACEs in Alaska not only coincided with higher rates of adult SUD and BH ailment, they also perpetuated a cycle of high rates of SUD and BH ailment as ACE-affected children aged into adulthood with an increased aptitude to partake in risky behaviors. As a result, there was a clear need for intervention across all age groups in Alaska.

Further exacerbating the challenges of providing SUD and BH interventions in Alaska was the unique infrastructure of the State. While Alaska is the largest state in terms of land mass, the comparative population

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1-7 Kaiser Family Foundation. State Health Facts: Mental Health & Substance Use. Available at: https://www.kff.org/state-category/mental-health/alcohol-drug-dependence-and-abuse/. Accessed on: Aug 10, 2022.

1-8 Substance Abuse and Mental Health Services Administration. Behavioral Health Barometer, Alaska, Volume 6. Available at: https://www.samhsa.gov/data/sites/default/files/reports/rpt32818/Alaska-BH-Barometer_Volume6.pdf. Accessed on: Aug 8, 2022.

1-9 The Drinks Business. These are the drunkest states in America, ranked. Available at: https://www.thedrinksbusiness.com/2021/08/these-are-the-drunkest-states-in-america-ranked/. Accessed on: Aug 10, 2022.

1-10 Centers for Disease Control and Prevention. BRFSS Prevalence & Trends Data. Available at: https://www.cdc.gov/brfss/index.html. Accessed on: Aug 9, 2022.

1-11 Alaska Department of Health and Social Services. Alaska Vital Statistics 2020 Annual Report. Available at: https://health.alaska.gov/dph/VitalStats/Documents/PDFs/VitalStatistics_AnnualReport_2020.pdf. Accessed on: Aug 9, 2022.

1-12 Department of Health and Human Services. Centers for Medicare & Medicaid Services. State Demonstrations Group [letter].March 21, 2019. Available at: https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/ak/behavioral-health/ak-behavioral-health-demo-appvd-implementation-20190321.pdf. Accessed on: Aug 9, 2022.

1-13 Felitti VJ, Anda RF, Nordenberg D, et al. Am. J Prev Med. Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults. 1998;14(4). Available at: https://www.ajpmonline.org/action/showPdf?pii=S0749-3797%2898%2900017-8. Accessed on: Aug 9, 2022.

1-14 United Health Foundation. America's Health Rankings. Adverse Childhood Experiences, Alaska. 2019. Available at: https://www.americashealthrankings.org/explore/health-of-women-and-children/measure/overall_mch/state/AK?edition-year=2019. Accessed on: Aug 10, 2022.

density of Alaskan cities was far less than average cities in the lower 48 states. For example, Alaska's largest city, Anchorage, had an estimated population of 288,121 in 2021, much smaller than many cities in the lower 48 states that had populations upwards of one million.[1-15] In addition, Alaskan communities are widely distanced, often inaccessible by road, and are medically underserved as a result. Due to the large geographic size and small population size of Alaska, SUD and BH support in many communities is less accessible and healthcare professionals are less numerous than in communities in the contiguous United States. Additionally, weather conditions constantly pose a challenge for accessibility, given Alaska's northern and unforgiving climate.

Lastly, Alaska consists of a diverse population with 229 Federally recognized tribes, 20 different native languages, and a growing immigrant population throughout the State. To serve the tribal population, Alaska is home to 37 tribal health organizations, many of which were grant recipients from DBH. The diversity of the population presents challenges for providing culturally and regionally appropriate care

Historical Background of Alaska's Section 1115 Waiver

Alaska's Medicaid system, run through DOH, provides healthcare to the State's eligible population. Alaska's Medicaid is operated on a fee-for-service (FFS) model through DenaliCare and Denali KidCare, Alaska's CHIP.[1-16] The program has operated since September 1972 when it was established under Title XIX of the Social Security Act.[1-17]

In September 2015, Alaska expanded Medicaid under the Patient Protection and Affordable Care Act (ACA), providing coverage to all adults ages 19–64 with an income of 138 percent or less, or under the federal poverty level (FPL). The expansion decreased the rate of uninsured Alaskans by 39 percent between 2010 and 2019. A total of 247,581 Alaskans were covered under Medicaid or CHIP as of May 2021.[1-18]

Due to the need to address the mental health of its population, the Alaska State Legislature passed two reform bills during the 29th Legislature in 2016. The first, Senate Bill (SB) 74, was a Medicaid reform packaged aimed at reducing fraud, waste, operational barriers, and administrative burden while also building a comprehensive and integrated BH system. The bill encouraged telehealth service expansion, encouraged the integration of social services into mental healthcare, and mandated payment reform. SB 74 gave direction to DOH to submit a State plan amendment or apply for waivers, including Section 1115 waiver demonstrations of the Social Security Act, to achieve the goals listed.[1-19]

The second bill, SB 91, was a criminal justice reform effort that reduced sentencing guidelines for nonviolent offenders. Money saved from reducing the population of correctional facilities was reinvested into programs that would encourage potential reoffenders from reoffending. The bill was expected to increase the demand of community-based treatment and community-based recovery supports. However, the BH system was already

1-15 United States Census Bureau. Quick Facts. Available at: https://www.census.gov/quickfacts/fact/table/anchoragemunicipalityalaska,US/PST045221. Accessed on: Aug 9, 2022.
1-16 Alaska Department of Health. Division of Public Assistance. Available at: https://health.alaska.gov/dpa/Pages/default.aspx. Accessed on: Aug 9, 2022.
1-17 HealthInsurance.org. Alaska and the ACA's Medicaid Expansion. Available at: https://www.healthinsurance.org/medicaid/alaska/. Accessed on: Aug 9, 2022.
1-18 Ibid.
1-19 State of Reform. Unpacking Alaska's Medicaid reform bill SB 74. Available at: https://stateofreform.com/news/alaska/2016/03/unpacking-alaskas-medicaid-reform-bill-sb-74/. Accessed on: Aug 9, 2022.

strained prior to SB 91, creating a need to reform the system.[1-20] SB 91 was eventually repealed in 2019 by House Bill (HB) 49 and HB 14.[1-21]

A 2016 concept paper was released in response to key reform mandates as a prelude to the Section 1115 waiver demonstration. The concept paper outlined the high-level goals, key target populations, and the overall vision with which the waiver needed to comply. These goals included:

1. Expansion of treatment capacity and improved access to services.
2. Integration of care.
3. Cost and outcomes reform.
4. Provider payment and accountability reform.
5. Delivery system reform.[1-22]

DBH submitted an application for a Section 1115 waiver demonstration with a SUD and BH focus on January 31, 2018, with principles of the concept paper included.[1-23]

The Alaska Department of Health and Social Services (DHSS) began reorganization on March 19, 2022, into two departments including DOH and the Department of Family Community Services (DFCS).[1-24] DBH was subsequently included in DOH and performed the same roles and responsibilities as prior to the reorganization. DHSS was officially split into DOH and DFCS on July 1, 2022.

Demonstration Background

On January 31, 2018, DOH submitted an application for a Medicaid Section 1115 Demonstration Project from CMS to develop a data-driven, integrated behavioral healthcare system for children and adults with serious mental illness (SMI), severe emotional disturbance (SED), and/or SUD. In addition, the demonstration aimed to increase services for at-risk families to support the healthy development of children and adults through various BH interventions. On November 21, 2018, CMS approved the SUD component of the SUD-BH Program while the BH component was under review, allowing the SUD component to take effect January 1, 2019. On September 3, 2019, CMS approved the SUD-BH in its entirety, with an overall demonstration period of January 1, 2019, through December 31, 2023. In brief, the purpose and goal of the SUD-BH Program was to increase access to SUD and BH services for Alaskans to anticipate or eliminate crises and strengthen a continuum of care, including early intervention services and community support. Specific goals, with their unique objectives of the SUD-BH Program, are illustrated in Figure 1-1.

1-20 Alaska Legislature. Senate Bill No. 91. Available at: https://www.akleg.gov/PDF/29/Bills/SB0091A.PDF. Accessed on: Aug 9, 2022.

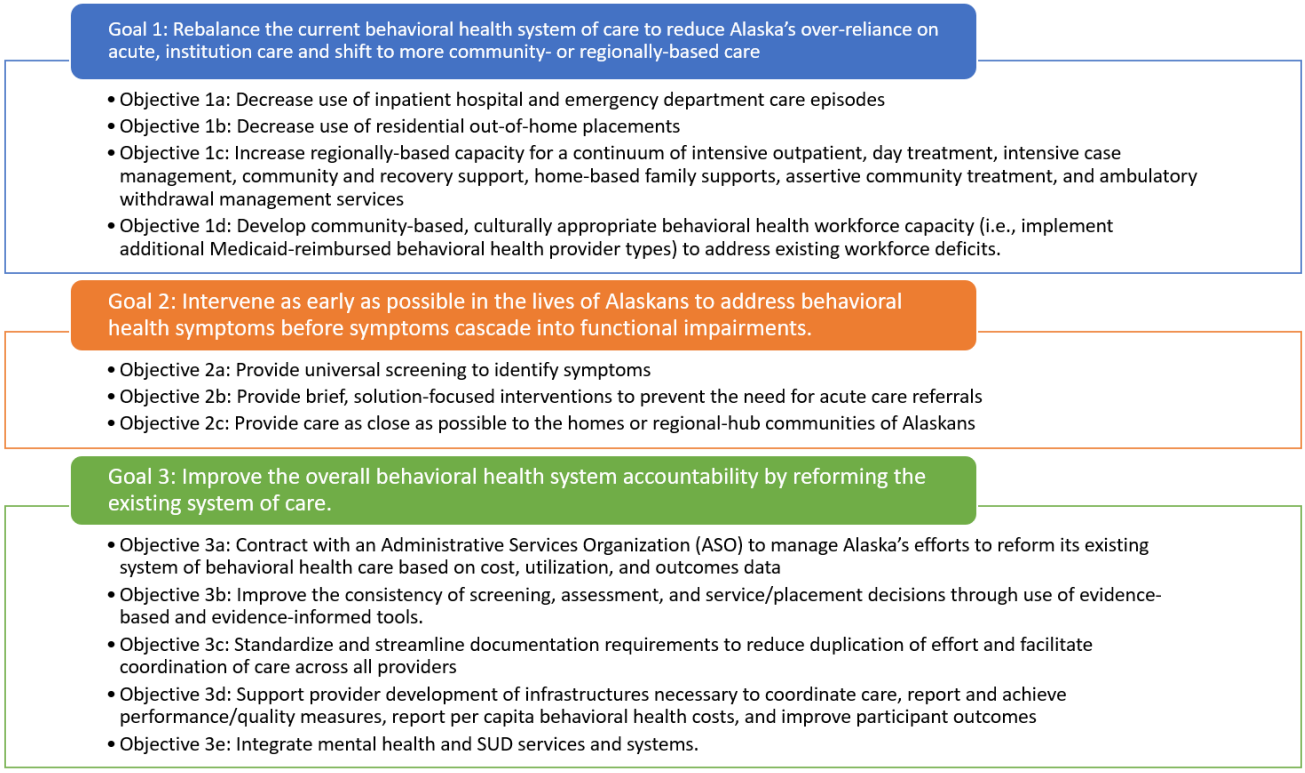
1-21 Anchorage Daily News. Alaska Senate votes to repeal and replaces most of SB 91. Available at: https://www.adn.com/politics/alaska-legislature/2019/05/29/alaska-senate-votes-to-repeal-and-replace-most-of-sb-91-sending-crime-bill-to-governors-desk/. Accessed on: Aug 9, 2022.

1-22 Alaska Department of Behavioral Health. Alaska Behavioral health Reform 1115 Waiver Concept Paper. Available at: https://health.alaska.gov/dbh/Documents/1115/1115_ConceptPaper1-5-17wAppendix.pdf. Accessed on: Aug 9, 2022.

1-23 Alaska Department of Health and Social Services. Medicaid Section 1115 Behavioral Health Demonstration Application. Available at: https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/ak/behavioral-health/ak-behavioral-health-demo-pa.pdf. Accessed on: Aug 3, 2022.

1-24 Alaska Department of Health and Social Services, DHSS Reorganization. Available at: https://dhss.alaska.gov/pages/default.aspx Accessed on Dec. 5, 2022.

Figure 1-1—SUD-BH Goals and Objectives [1-25]



Implementation of SUD-BH Program

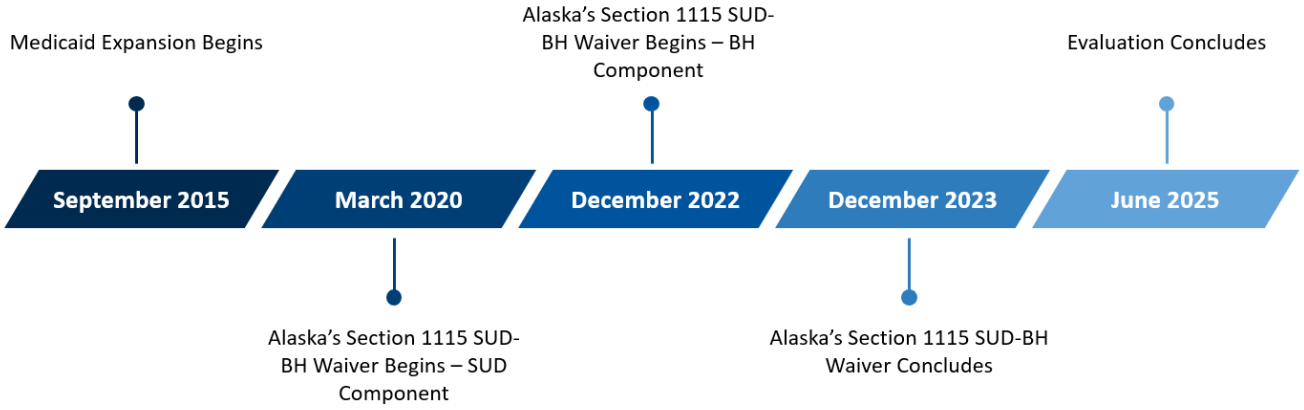
While the demonstration consists of a SUD and a BH component, the implementation plan included only elements of the SUD portion of the waiver. The Implementation Plan was approved by CMS on March 21, 2019, and outlined the State's strategies to implement each of the six milestones of the SUD portion of the waiver. During the five-year demonstration period, Alaska intends to have a particular emphasis on the first two years and aims to cover approximately one half of the State population under the SUD portion of the waiver in Demonstration Year 1 and the other half by the end of Demonstration Year 2. The implementation was organized by key milestones identified by CMS and used nine Alaskan geographic regions to phase-in the waiver implementation in segments.[1-26] However, the implementation of the SUD-BH waiver was instead completed by the readiness of providers to transition. Providers that were deemed more "sophisticated" and had the resources to implement the waiver did so in the first year while all other providers waited until the second year to complete implementation.

Figure 1-2 displays a timeline of the key demonstration milestones for the SUD-BH Program.

[1-25] Ibid.

[1-26] Centers for Medicare & Medicaid Services. Alaska 1115 Substance Use Disorder Waiver Implementation Plan–Final, March 13, 2019. Available at: https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/ak/behavioral-health/ak-behavioral-health-demo-appvd-implementation-20190321.pdf. Accessed on: Aug 11, 2022.

Figure 1-2—Timeline of the SUD-BH Demonstration



Program Population

The waiver impacted three Alaskan Medicaid beneficiary population groups. Medicaid eligibility standards were not altered as a result of the Section 1115 waiver demonstration.

- **Group 1**: Children, adolescents, and their parents or caretakers with or at risk of mental health disorders and SUDs
- **Group 2**: Transitional age youth and adults with acute mental health needs
- **Group 3**: Adults, adolescents, and children with SUDs

Group 1: Given that a significant proportion of Alaska's children and adolescents encounter the child welfare system or juvenile justice system at some point in their upbringing, the waiver intended to strengthen the support system for this group in hopes of preventing crises and reducing the need for out-of-home placements. Beneficiaries in Group 1 were under the supervision or in the custody of the Alaska DOH Office of Children's Services, the Division of Juvenile Justice, or in tribal custody; formerly in kinship care, foster care, or residential care; or at risk of an out-of-home placement. Waiver services for this population included home-based family treatment, intensive case management (ICM), partial hospitalization program (PHP) services, intensive outpatient (IOP) services, children's residential treatment (CRT) level 1, and therapeutic treatment homes.

Group 2: Group 2 comprised transitional age youth and adults who experienced mental health disorders and had comorbidities or dual diagnoses of intellectual, developmental, or sensory disabilities making their care needs more complex. For Group 2, waiver services included assertive community treatment services, ICM, PHP services, adult mental health residential services, and peer-based crisis services.

Group 3: Group 3 consisted of adults, adolescents, and children between 12 and 64 years of age who had at least one diagnosis for substance-related and addictive disorders from the Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (DSM-5), or the most current version.

Waiver services for this group were aimed at enhancing the availability of and providing a more comprehensive continuum of SUD treatment and included:

- Opioid treatment services
- IO services
- PHP services
- Residential treatment
- Medically monitored intensive inpatient (IP) services
- Medically managed intensive IP services
- Ambulatory withdrawal management
- Clinically managed residential withdrawal management
- Medically monitored IP withdrawal management
- Medically managed intensive IP withdrawal management

Select waiver services replaced State plan services while others were added as new services. Waiver services complied with American Society of Addiction Medicine (ASAM) level-of-care criteria to place patients in the right setting at the right time.[1-27]

Administrative Services Organization

DOH contracted with an administrative services organization (ASO) to provide service delivery reform and was determined to be necessary after completing readiness assessments. The ASO, Optum, was onboarded to help provide the capacity needed to support an enhanced BH system envisioned by the waiver demonstration. DOH provided several goals for Optum to achieve:

1. Increase regional access to appropriate BH services;
2. Improve health outcomes for all publicly funded beneficiaries of BH services (i.e., Medicaid and non-Medicaid State and federal grant funded BH programs); and
3. More efficiently and effectively manage the cost of BH service delivery in Alaska.[1-28]

Optum worked with the State to provide additional capacity to assist the State with providing SUD and BH services. Key responsibilities of Optum included but were not limited to:

- Developing a database to track BH screenings.
- Developing a monitoring protocol.
- Providing prior and service authorizations when needed (e.g., all services above ASAM Level 2.5).
- Reducing barriers to patients' intake process.
- Establishing a 1-800 call center.
- Conducting on-site reviews.

[1-27] Alaska Department of Health and Social Services. Medicaid Section 1115 Behavioral Health Demonstration Application. Available at: https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/ak/behavioral-health/ak-behavioral-health-demo-pa.pdf. Accessed on: Aug 9, 2022.

[1-28] Ibid.

- Providing ASAM trainings.
- Monitoring providers' performance and report results to DBH.
- Creating evidence-based system for clinical guidelines.

Optum worked closely with tribal health organizations (THOs) and honored the government-to-government relationship required between tribes and the State of Alaska.[1-29]

Workforce Development and Training Requirements

Alaska routinely encounters difficulties recruiting and retaining qualified SUD and BH providers due to the unique landscape of the State. Different from other states, Alaska has an entity called the Alaska Mental Health Trust Authority (the Trust) which facilitates a comprehensive and integrated mental health program instead of the federal government facilitating this type of program. The Trust helped to facilitate the recruiting and retaining of providers and provided access to training resources, however, many initiatives fell outside the scope of the waiver.

The Alaska Training Cooperative (AKTC) was developed by the Trust, University of Alaska, and providers across the State prior to the waiver demonstration implementation. However, in response to the readiness assessments conducted in preparation of the waiver demonstration by DBH, the AKTC was made responsible for providing the education and training needed. Continuing education (CE) was offered on a web-based platform and integrated evidence-based practices with traditional practices. [1-30]

Demographics

The SUD-BH Program waiver is intended to target three groups of Medicaid recipients:

- **Group 1**: Children, adolescents, and their parents or caretakers with or at risk of mental health disorders and SUDs
- **Group 2**: Transitional age youth and adults with acute mental health needs
- **Group 3**: Adults, adolescents, and children with SUDs

Individuals in Group 1 are under 21 years of age and currently in the custody or under the supervision of the Alaska Department of Health and Social Services' Office of Children's Services, the Division of Juvenile Justice, or in tribal custody; formerly in kinship care, foster care, or residential care; or at risk of an out-of-home placement. Group 2 is composed of transitional age youth and adults (16–24 years of age) who experience mental health disorders with complex co-morbidities or dual diagnoses of intellectual, developmental, or sensory disabilities. Group 3 includes adults, adolescents, and children between 12 and 64 years of age who have at least one diagnosis from the Diagnostic and Statistical Manual of Mental Disorders for substance-related and addictive disorders.

1-29 Department of Health and Human Services. Centers for Medicare & Medicaid Services. State Demonstrations Group [letter].March 21, 2019. Available at: https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/ak/behavioral-health/ak-behavioral-health-demo-appvd-implementation-20190321.pdf. Accessed on: Aug 9, 2022.

1-30 Alaska Department of Health and Social Services. Medicaid Section 1115 Behavioral Health Demonstration Application. Available at: https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/ak/behavioral-health/ak-behavioral-health-demo-pa.pdf. Accessed on: Aug 9, 2022.

Figure 1-3 illustrates monthly population count by waiver group from 2018 through 2021. Group 1 and Group 3 population counts increased from 2018 through the start of the SUD-BH Program and into the beginning of 2020. Both groups demonstrated a similar drop in counts following the coronavirus disease 2019 (COVID-19) public health emergency (PHE). Group 2 exhibited the opposite trend; population counts decreased after the start of the SUD-BH Program and increased in the period after the COVID-19 PHE began.

Figure 1-3—Monthly Population Count by Waiver Group, 2018–2021

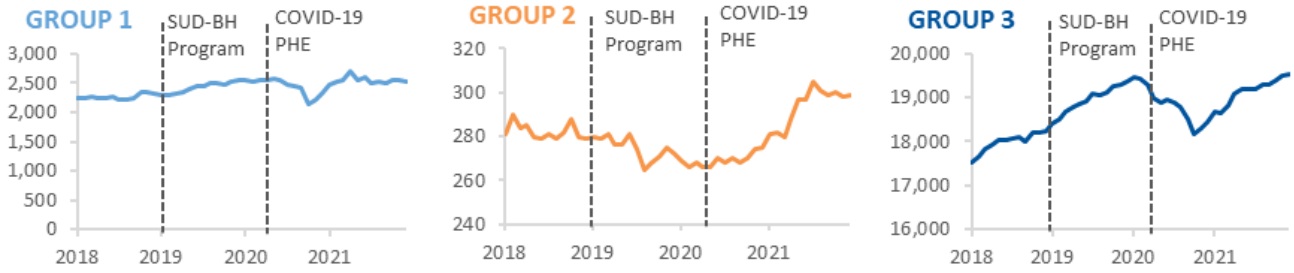


Figure 1-4 shows that 38 percent of Group 1 and Group 3 beneficiaries and over half of Group 2 beneficiaries were enrolled in Medicaid for a full 12 months in 2021. Nearly one-third of Group 1 beneficiaries had fewer than six months of Medicaid enrollment in 2021, compared to 18 percent and 25 percent of Group 2 and Group 3 beneficiaries, respectively.

Figure 1-4—Duration of Medicaid Enrollment by Waiver Group, 2021

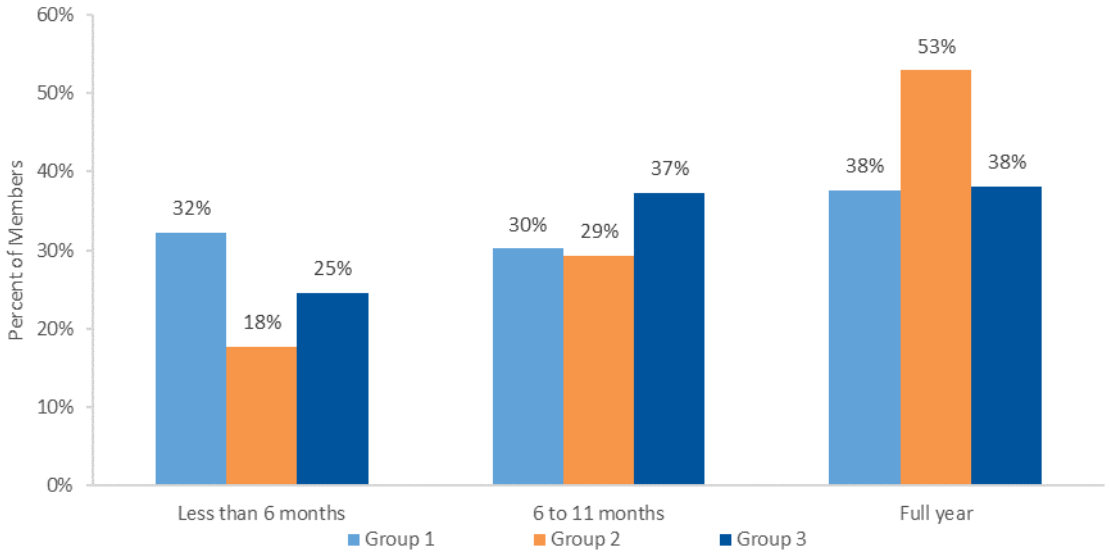
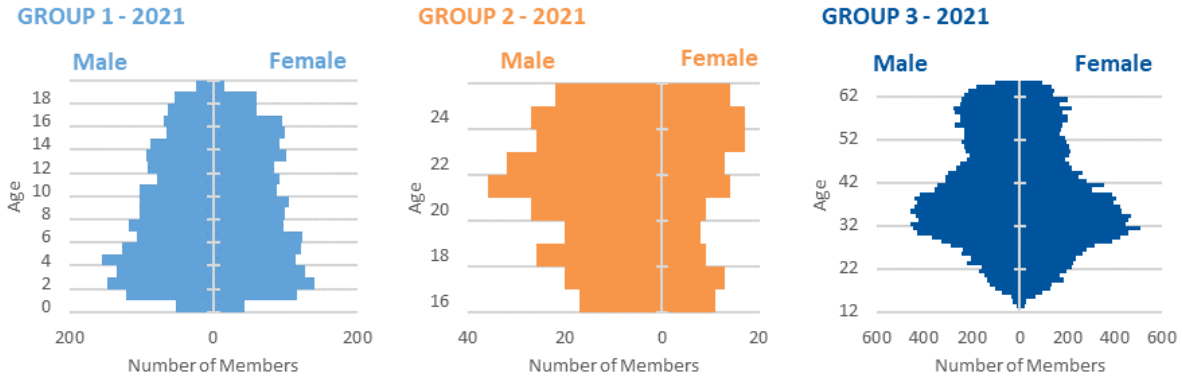


Figure 1-5 illustrates the age and gender distribution of waiver beneficiaries in 2021. The Group 2 population is skewed toward having more males than females, accounting for two-thirds of the group's total population counts. Additionally, the Group 3 population has relatively more older males enrolled compared to older females.

Figure 1-5—Age and Gender Distribution by Waiver Group, 2021



Evaluation Activities

In response to the STCs, DBH contracted with an independent evaluator, Health Services Advisory Group, Inc. (HSAG), to conduct comprehensive evaluations (i.e., interim and summative) of the SUD-BH Program, Alaska's Medicaid Section 1115 waiver demonstration.[1-31] The purpose of this evaluation is to provide CMS and DBH with an independent evaluation of the SUD-BH Program, ensure compliance with Medicaid Section 1115 requirements and provide recommendations to improve program efficacy along the way.

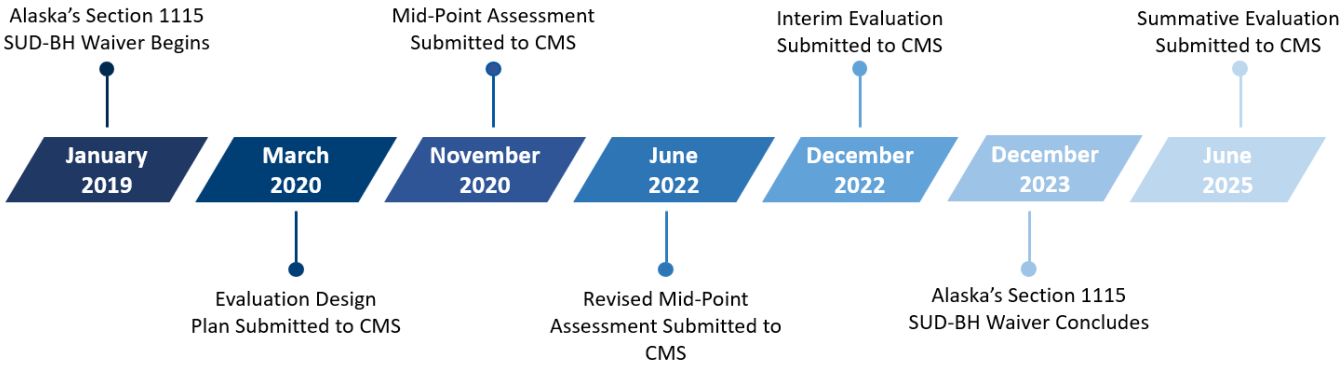
- Evaluation Design Plan—The plan for how to accomplish the evaluation explaining how it is expected to achieve the goals of the waiver along with specifying hypotheses, evaluation questions, associated measures, and analytic methods. The evaluation design plan for the SUD-BH Program was developed by DBH, revised by HSAG, and approved by CMS on April 5, 2021.[1-32]
- Mid-Point Assessment (MPA)—The report on the status of the implementation process of the SUD-BH Program including monitoring metric results on six milestones from CMS. The report was developed by HSAG and submitted to CMS on November 27, 2020. The MPA was revised to comply with updated CMS standards and resubmitted June 30, 2022.
- Interim Evaluation Report—The report will include the goals of the evaluation, the hypotheses related to the demonstration, and the methodology of the evaluation. The report will provide interpretations of the findings; assessments of the outcomes; explanations on the limitations of the design, data, and analyses; and recommendations to the State from January 1, 2019, to December 31, 2021.
- Summative Evaluation Report—The report will follow the same structure as the interim report for the entirety of the demonstration period (January 1, 2019, to December 31, 2023).

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

1-31 Centers for Medicare & Medicaid Services. CMS Initial Approval - No Implementation Plan. Available at: https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/ak/behavioral-health/ak-behavioral-health-demo-appvd-implementation-20190321.pdf. Accessed on: Aug 9, 2022.

1-32 Centers for Medicare & Medicaid Services. CMS Approved SUD Evaluation Design. Available at: https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/ak/ak-behavioral-health-demo-ca.pdf. Accessed on: Aug 9, 2022.

Figure 1-6—Timeline of Evaluation Activities



2. Evaluation Questions and Hypotheses

The primary purpose of the interim evaluation is to determine whether the Substance Use Disorder and Behavioral Health (SUD-BH) Program is achieving the three 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 these goals.

Demonstration Goals

The SUD-BH Program supports improvements to achieve three primary goals (cited earlier in this report):

1. Rebalance the current BH system of care to reduce Alaska's over-reliance on acute, institutional care and shift to more community- or regionally based care.
2. Intervene as early as possible in the lives of Alaskans to address BH symptoms before symptoms cascade into functional impairments.
3. Improve the overall BH system accountability by reforming the existing system of care.

These goals are consistent with the six goals for the SUD-BH Program provided by the Centers for Medicaid & Medicare Services (CMS):[2-1]

CMS Goal 1: Increased rates of identification, initiation, and engagement in treatment for substance use and BH issues by the end of fiscal year (FY) 2024.

CMS Goal 2: Increased adherence to and retention in substance use and BH treatment by the end of FY2024.

CMS Goal 3: Reduced overdose deaths, particularly those due to opioids by the end of FY2024.

CMS Goal 4: Reduced utilization of emergency departments (EDs) and inpatient (IP) hospital settings for substance use and BH treatment where the utilization is preventable or medically inappropriate through improved access to other more appropriate and focused services by the end of FY2024.

CMS Goal 5: Reduced readmissions to the same or higher level of care where readmission is preventable or medically inappropriate by the end of FY2024.

CMS Goal 6: Improved access to care for physical health conditions among beneficiaries by the end of FY2024.

To accomplish these goals, the SUD-BH Program includes key activities and interventions to develop a data-driven, integrated BH system for children and adults with serious mental illness (SMI), severe emotional disturbance (SED), and/or SUD.

Hypotheses and Research Questions

Three research questions led to the development of six hypotheses, each of which were identified to comprehensively evaluate the goals of the SUD-BH Program. Hypotheses were developed based on the potential

2-1 Centers for Medicare & Medicaid Services. CMS Approval SUD Evaluation Design. Available at: https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/ak/ak-behavioral-health-demo-ca.pdf. Accessed on: Oct 25, 2022.

for improvement, the ability to measure performance, and the use of comparison groups to isolate the effects of the SUD-BH Program and the interventions. The research questions and hypotheses are presented in Table 2-1.

Table 2-1—SUD-BH Program Research Questions and Hypotheses

Research Questions	Hypotheses
1—Does the SUD-BH Program increase access to and utilization of SUD and BH disorder treatment services by increasing access to community-based care?	1.1—The SUD-BH Program will increase the number of beneficiaries in the waiver population who are referred to and engage in treatment for SUD and BH disorders in sub-acute, community, or regionally based OP settings. 1.2—The SUD-BH Program will decrease utilization of Eds, IP, or institutional settings within the beneficiary population. 1.3—The SUD-BH Program will increase the percentage of beneficiaries who adhere to treatment for SUD and BH disorders.
2—Do enrollees receiving SUD services experience improved health outcomes?	2.1—The SUD-BH Program will increase the percentage of beneficiaries with SUD or a BH disorder who experience care for comorbid conditions. 2.2—The SUD-BH Program will decrease the rate of drug overdoses and overdose deaths due to opioids.
3—Does the SUD-BH Program reduce the cost of Medicaid for Alaska and the federal government?	3.1—The SUD-BH Program will reduce Alaska's per capita Medicaid BH costs.

Logic Model

A logic model was developed which relates the goals of CMS and the SUD-BH Program, the primary drivers that contribute to achieving the goals, and the secondary drivers that are necessary to achieve the primary drivers.

Table 2-2 illustrates the logic model for the SUD-BH Program.

Table 2-2—SUD-BH Program Logic Model

CMS Goals	Primary Drivers[1]	Secondary Drivers[2]
Goal 1: Increased rates of identification, initiation, and engagement in treatment for substance use and BH issues by the end of FY2024	1. Universally screen all Medicaid recipients, regardless of setting, using industry-recognized, evidence-based SUD screening instruments to identify symptoms for preventive measures and intervene as early as possible before use becomes dependence. 2. Implement ASAM Criteria (3rd Edition) to match individuals with SUD with the services and tools necessary for recovery. 3. Increase SUD and BH treatment options for youth (ages 12–17) and adult (ages 18 and older) Medicaid recipients, particularly non-residential, step-up, and step-down treatment options.	Milestone #1: Access to Critical Levels of Care for SUD Treatment Milestone #2: Use of Evidence-Based, SUD-Specific Patient Placement Criteria Milestone #5: Implementation of Comprehensive Treatment & Prevention Strategies to Address Opioids Milestone #6: Improved Care Coordination and Transitions Between Levels of Care

CMS Goals	Primary Drivers[1]	Secondary Drivers[2]
Goal 2: Increased adherence to and retention in substance use and BH treatment by the end of FY2024	1. Implement ASAM Criteria (3rd Edition) to match individuals with SUD with the services and tools necessary for recovery. 2. Increase SUD and BH treatment options for youth (ages 12–17) and adult (ages 18 and older) Medicaid recipients, particularly nonresidential, step-up, and step-down treatment options.	Milestone #1: Access to Critical Levels of Care for SUD Treatment Milestone #2: Use of Evidence-Based, SUD-Specific Patient Placement Criteria Milestone #5: Implementation of Comprehensive Treatment & Prevention Strategies to Address Opioids Milestone #6: Improved Care Coordination and Transitions Between Levels of Care
Goal 3: Reduced overdose deaths, particularly those due to opioids, by the end of FY2024	1. Universally screen all Medicaid recipients, regardless of setting, using industry-recognized, evidence-based SUD screening instruments to identify symptoms for preventive measures and intervene as early as possible before use becomes dependence. 2. Implement ASAM Criteria (3rd Edition) to match individuals with SUD with the services and tools necessary for recovery. 3. Increase SUD and BH treatment options for youth (ages 12–17) and adult (ages 18 and older) Medicaid recipients, particularly non-residential, step-up, and step-down treatment options. 4. Improve SUD provider infrastructures and capacity utilizing industry recognized standards for certification and ongoing accountability (with emphasis on residential providers, but across-the-board). 5. Improve SUD workforce by carefully reviewing existing certification requirements and modifying as appropriate to align with Medicaid Waiver and industry-recognized credentialing standards.	Milestone #1: Access to Critical Levels of Care for SUD Treatment Milestone #2: Use of Evidence-Based, SUD-Specific Patient Placement Criteria Milestone #3: Use of Nationally Recognized SUD-specific Program Standards for Residential Treatment Facility Provider Qualifications Milestone #4: Sufficient Provider Capacity at Critical Levels of Care Milestone #5: Implementation of Comprehensive Treatment & Prevention Strategies to Address Opioids Milestone #6: Improved Care Coordination and Transitions Between Levels of Care
Goal 4: Reduced utilization of EDs and IP hospital settings for substance use and BH treatment where the utilization is preventable or medically inappropriate through improved access to other more appropriate and focused services by the end of FY2024	1. Implement ASAM Criteria (3rd Edition) to match individuals with SUD with the services and tools necessary for recovery. 2. Increase SUD and BH treatment options for youth (ages 12–17) and adult (ages 18 and older) Medicaid recipients, particularly non-residential, step-up, and step-down treatment options. 3. Improve SUD provider infrastructures and capacity utilizing industry-recognized standards for certification and ongoing accountability (with emphasis on residential providers, but across-the-board).	Milestone #1: Access to Critical Levels of Care for SUD Treatment Milestone #2: Use of Evidence-Based, SUD-Specific Patient Placement Criteria Milestone #3: Use of Nationally Recognized SUD-specific Program Standards for Residential Treatment Facility Provider Qualifications Milestone #4: Sufficient Provider Capacity at Critical Levels of Care Milestone #5: Implementation of Comprehensive Treatment & Prevention Strategies to Address Opioids Milestone #6: Improved Care Coordination and Transitions Between Levels of Care

CMS Goals	Primary Drivers[1]	Secondary Drivers[2]
Goal 5: Fewer readmissions to the same or higher level of care where readmission is preventable or medically inappropriate by the end of FY2024	1. Implement ASAM Criteria (3rd Edition) to match individuals with SUD with the services and tools necessary for recovery. 2. Increase SUD and BH treatment options for youth (ages 12–17) and adult (ages 18 and older) Medicaid recipients, particularly non-residential, step-up, and step-down treatment options. 3. Improve SUD provider infrastructures and capacity utilizing industry-recognized standards for certification and ongoing accountability (with emphasis on residential providers, but across-the-board).	Milestone #1: Access to Critical Levels of Care for SUD Treatment Milestone #2: Use of Evidence-Based, SUD-Specific Patient Placement Criteria Milestone #3: Use of Nationally Recognized SUD-specific Program Standards for Residential Treatment Facility Provider Qualifications Milestone #4: Sufficient Provider Capacity at Critical Levels of Care Milestone #5: Implementation of Comprehensive Treatment & Prevention Strategies to Address Opioids Milestone #6: Improved Care Coordination and Transitions Between Levels of Care
Goal 6: Improved access to care for physical health conditions among beneficiaries by the end of FY2024	1. Increase SUD and BH treatment options for youth (ages 12–17) and adult (ages 18 and older) Medicaid recipients, particularly non-residential, step-up, and step-down treatment options. 2. Improve SUD provider infrastructures and capacity utilizing industry recognized standards for certification and ongoing accountability (with emphasis on residential providers, but across-the-board). 3. Improve SUD workforce by carefully reviewing existing certification requirements and modifying as appropriate to align with Medicaid Waiver and industry-recognized credentialing standards.	Milestone #1: Access to Critical Levels of Care for SUD Treatment Milestone #2: Use of Evidence-Based, SUD-Specific Patient Placement Criteria Milestone #3: Use of Nationally Recognized SUD-specific Program Standards for Residential Treatment Facility Provider Qualifications Milestone #4: Sufficient Provider Capacity at Critical Levels of Care

Causality ← **Causality** ←

[1] Primary drivers are major domains through which Alaska may accomplish the six goals adapted from CMS' special terms and conditions (STCs).
[2] Secondary drivers are from Alaska's implementation plan, utilizing key milestone identified by CMS.
Note: ASAM: American Society of Addiction Medicine; BH: behavioral health; ED: emergency department; FY: fiscal year; SUD: substance use disorder; IP: inpatient.

3. Methodology

The primary goal of an impact assessment in policy and program evaluation is to establish a 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), requires a comparison group, 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
Pre-test/post-test	✓		
Descriptive time series analysis			Relies on descriptive interpretation; does not involve statistical testing

Evaluation Design Summary

The evaluation design of the Substance Use Disorder and Behavioral Health (SUD-BH) Program 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) 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. Initially, the State had planned on implementing the waiver through a regional phased approach, which would allow for a comparison between regions that had implemented the demonstration and those that had not. However, due to delays in implementation including those caused by the coronavirus disease 2019 (COVID-19) public health emergency (PHE), this phased roll-out did not occur. Additionally, out-of-state Medicaid data through the

3-1 Centers for Medicare & Medicaid Services. CMS Approval SUD Evaluation Design. Available at: https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/ak/ak-behavioral-health-demo-ca.pdf. Accessed on: Aug 26, 2022.

Transformed Medicaid Statistical Information System (T-MSIS) Analytic Files (TAF) were not available or viable at the time of evaluation for the interim 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.

Beneficiary surveys were used to assess beneficiaries' rating of their personal doctor, health plan, and overall healthcare. A qualitative component of the waiver was also completed. Providers, provider stakeholders, tribal health organizations (THOs), and State administrators were interviewed during the first three demonstration years to share their view of the SUD-BH Program.

Target and Comparison Populations

The SUD-BH Program targeted three groups of Medicaid recipients:

- **Group 1**: Children, adolescents, and their parents or caretakers with or at risk of mental health disorders and SUDs
- **Group 2**: Transitional age youth and adults with acute mental health needs
- **Group 3**: Adults, adolescents, and children with SUDs

Analysis of measures utilizing administrative Medicaid claims and eligibility data were limited to these groups of interest. In accordance with Centers for Medicare & Medicaid Services' (CMS') guidance for analyzing costs associated with Section 1115 SUD and serious mental illness (SMI)/severe emotional disturbance (SED) demonstrations,[3-2] beneficiaries were included in the cost analyses beginning with the first month in which a relevant SMI/SED or SUD diagnosis or treatment claim was observed, and for the subsequent 11 additional months following. When beneficiaries had a period of one year without a relevant diagnosis or treatment claim, they were excluded from further analyses, unless they had another relevant diagnoses or treatment claim at a later time. A relevant SMI/SED diagnosis or treatment claim was defined as having a claim with a diagnosis code from the Healthcare Effectiveness Data and Information Set (HEDIS)®[3-3] Mental Health diagnosis value set. A relevant SUD diagnosis or treatment claim was defined as having a claim with a diagnosis code from the Alcohol Abuse and Dependence, Opioid Abuse and Dependence, or Other Drug Abuse and Dependence value sets, or a medication-assisted treatment (MAT) dispensing event.

Comparison population groups varied in keeping with best practices for such evaluation designs. For some analyses the target population served as its own comparison group, as in pre-post design analyses, and variations on pre-post analyses that utilized multiple observation points. For other analyses, additional comparison groups were identified as needed. For example, to increase the robustness of the evaluation design, and to permit analyses when in state comparison groups are not available or feasible, comparisons with national data and data from other states were utilized. Among considerations when choosing non-Alaska comparison groups, there were pragmatic issues such as the feasibility and ability to access the comparison group data within a reasonable timeframe and in a usable format, and methodological issues, such as whether a comparison group based on data from another state shared sufficient similarities to Alaska, in terms of population size and demographics, rurality, geography, size of the Native population, economic and political climate, etc. Additionally, since the SUD-BH Program utilized a phased implementation, other opportunities for analysis and comparison were presented within State data between

3-2 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 Oct 21, 2022.

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

regions and services that were phased in and those not yet phased in. Together, this broad range of comparative population possibilities provided ample opportunity and sufficient sample sizes for in-depth analysis of the effectiveness of the SUD-BH Program from multiple perspectives and approaches.

Evaluation Period

Time periods covered in this report are presented in Table 3-2.

Table 3-2—Time Periods

Baseline Period	Interim Report Evaluation Period
January 1, 2017 – December 21, 2018	January 1, 2019 – December 31, 2021

For measures utilizing administrative claims data and were thus calculated for the target waiver population, the first year of the baseline period served as an intake year for identifying members with a SUD diagnosis. Specifically, Group 3, defined as adults, adolescents, and children with a SUD diagnosis, were identified similarly to the method for identifying target beneficiaries outlined in CMS guidance for evaluating costs for SUD and SMI/SED demonstrations.[3-4] Therefore, members identified in early 2017 necessarily had a claim for SUD.[3-5] However, because all members in Group 3 had a claim, rates for this time period were biased due to the definition of "group identification". To provide an unbiased analysis, all measures using administrative claims data omitted 2017 from analysis.

Evaluation Measures

The evaluation measures were based on data sources that provided valid and reliable data which were readily available throughout the SUD-BH Program and evaluation activities. Health Services Advisory Group, Inc. (HSAG), reviewed the quality and completeness of each data source to determine if the data used were complete and accurate. The Alaska Division of Behavioral Health (DBH) used a comprehensive standardized reporting framework based on recommendations from the CMS State Toolkit for Validating Medicaid Encounter Data for Alaska Medicaid quarterly. 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 HEDIS technical specifications or SUD monitoring metrics, in order to provide the most consistent and accurate calculation of measures. Table 3-3 displays the evaluation measures.

3-4 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: Oct 21, 2022.

3-5 In the extreme example, all members identified as part of Group 3 in January 2017 had a claim for a SUD diagnosis because a SUD diagnosis is the qualification criterion for inclusion in the study. These members were then followed for a minimum of 11 months thereafter.

Table 3-3—Evaluation Measures

Evaluation Question 1—Does the SUD-BH Program increase access to and utilization of SUD and BH disorder treatment services by increasing access to community-based care?	
Evaluation Hypothesis 1.1—The SUD-BH Program will increase the number of beneficiaries in the waiver population who are referred to and engage in treatment for SUD and BH disorders in sub-acute, community, or regionally based OP settings.	
1-1	Number of beneficiaries screened for symptoms of SUD using industry recognized, evidence-based screening instruments
1-2	Number of beneficiaries screened for symptoms of BH disorders using industry recognized, evidence-based screening instruments
1-3	Number of beneficiaries in the waiver population with SUD or BH diagnosis, by setting
1-4	Initiation and engagement of AOD abuse or dependence treatment (NQF 0004)
1-5	Follow-up after discharge from ED visits for SUD, and specifically for OUD, by setting (NQF 2605)
1-6	Follow-up after discharge from ED visits for a BH disorder, by setting (NQF 2605)
1-7	Number of Medicaid qualified SUD providers (identified by provider ID numbers) who bill for SUD services
1-8	Number of Medicaid qualified professionals licensed in the State to provide BH who bill for BH disorder services
1-9	Providers' reported barriers before, during, and shortly following expansion of BH and SUD services
1-10	Providers' experience in expanding services
1-11	Administrators' reported barriers before, during, and shortly following expansion of BH and SUD services
1-12	Administrators' plan for program sustainability and anticipated challenges
1-13	Alaska tribal entities' reported changes in quality of care and access to care following expansion of BH and SUD services
Evaluation Hypothesis 1.2—The SUD-BH Program will decrease utilization of ED, IP, or institutional settings within the beneficiary population.	
1-14	IP admissions for SUD, and specifically for OUD, by setting
1-15	IP admissions for BH disorders, by setting
1-16a	ED visits for SUD, by setting
1-16b	ED visits for OUD, by setting
1-17	ED visits for BH disorders, by setting
1-18	Mean length of stay measured from admission date to discharge date, by setting
1-19	30-day readmission rate to IP facilities following hospitalization for an SUD-related diagnosis, by setting
1-20	30-day readmission rate to IP facilities following hospitalization for a BH- related diagnosis, by setting
Evaluation Hypothesis 1.3—The SUD-BH Program will increase the percentage of beneficiaries who adhere to treatment for SUD and BH disorders.	
1-21	Number of beneficiaries with a SUD diagnosis including those with OUD who used services in the last month or year, by service or benefit type
1-22	Number of beneficiaries with a BH diagnosis who used services in the last month or year, by service or benefit type
1-23	Time to treatment, by service type (National Behavioral Health Quality Framework [NBHQF] Goal 1)
Evaluation Question 2—Do enrollees receiving SUD services experience improved health outcomes?	
Evaluation Hypothesis 2.1—The SUD-BH Program will increase the percentage of beneficiaries with SUD or a BH disorder who experience care for comorbid conditions.	
2-1	Access to physical healthcare
2-2	Screening for chronic conditions relevant to state Medicaid population
2-3	Screening for co-morbidity of BH disorders and SUDs within the waiver population compared to the total Medicaid population

2-4	Percentage of beneficiaries who rate the quality of their healthcare as very good or excellent
2-5	Percentage of beneficiaries who rate their overall mental or emotional health as very good or excellent
2-6	Percentage of beneficiaries who demonstrate very good or excellent knowledge of available treatment and services
2-7	Maternal depression
2-8	Maternal domestic abuse
2-9	Percentage of beneficiaries who experienced alcoholism or mental health disorder among household members
2-10	Percentage of beneficiaries who witnessed violence or physical abuse between household members
2-11	Percentage of youth beneficiaries who have ever been physically hurt by an adult in any way
2-12	Maternal marijuana or hash use in the past two years
2-13	Frequency of maternal marijuana or hash use (days per week)
2-14	Social support— care when sick (Supplemental CUBS Measure 2-14)
2-15	Desire to obtain SUD/BH treatment options and obtainment of SUD treatment in the past three months (Supplemental CUBS Measure 2-15)
Evaluation Hypothesis 2.2—The SUD-BH Program will decrease the rate of drug overdoses and overdose deaths due to opioids.	
2-16	Rate of overdose deaths, specifically overdose deaths due to any opioid
2-17	Non-fatal overdoses (*all cause*)
2-18	Use of opioids at high dosage in persons without cancer (NQF 2940)
Evaluation Question 3—Does the SUD-BH Program reduce the cost of Medicaid for Alaska and the federal government?	
Evaluation Hypothesis 3.1—The SUD-BH Program will reduce Alaska's per capita Medicaid BH costs.	
3-1	Total costs of healthcare (sum of parts below), by State and federal share
3-2	Total cost of SUD, SUD-IMD and SUD-Other and Non-SUD, by setting, including claims data (IP, OP, RX, LTC, and capitated payments to managed care organizations)
3-3	Total cost of BH diagnosis by IMD and Other, by setting, including claims data (IP, OP, RX, LTC, and capitated payments to managed care organizations)

Note: AOD: alcohol and other drug use; BH: behavioral health; CUBS: Childhood Understanding Behaviors Survey; ED: emergency department; IMD: Institutions for Mental Disease; IP: inpatient; LTC: long term care; NBHQF: National Behavioral Health Quality Framework; NCQA: National Committee for Quality Assurance; NQF: National Quality Forum; OP: outpatient; OUD: opioid use disorder; RX: prescription; SUD: substance use disorder; SUD-BH: Substance Use Disorder-Behavioral Health.

Data Sources

Multiple data sources were used to evaluate the six hypotheses for the evaluation.

- Administrative Data
  - Medicaid claims and eligibility data
  - Provider enrollment data
  - Vital records
- National and Beneficiary Surveys
  - Survey of Alaska Medicaid members
  - National Survey on Drug Use and Health (NSDUH) data
  - Alaska Childhood Understanding Behaviors Survey (CUBS) data
- Key Informant Interviews

Data were collected from beneficiary surveys regarding beneficiaries' experiences with improvements in care coordination and integration, as well as their experiences with ease of access to healthcare, care quality, and health improvements. The beneficiary surveys utilized questions from the Consumer Assessment of Healthcare Providers and Systems (CAHPS)® [3-6] and included additional questions customized to assess beneficiary knowledge of SUD and BH services in the State. Additional data were collected from virtual stakeholder interviews with providers, non-provider stakeholders, and THOs on interviewees' perspective on the expansion of SUD and BH services, program sustainability, and anticipate challenges, and their experience with the COVID-19 PHE.

Administrative

Administrative data supplied by DBH were used to calculate most measures in this Interim Evaluation Report. These data include fee-for-service (FFS) claims, recipient eligibility and demographic data, and provider information. Due to changes in the processing of SUD Medicaid claims in 2020, multiple claims data sources were combined to provide the most complete picture of Alaska Medicaid claims possible.[3-7] In particular, three primary data sources were supplied by DBH: data used for legislative audit; quarterly data from the State's administrative services organization (ASO); Optum; and weekly financial data. Legislative audit data were the sole source of claims data through early 2020, when Optum began processing SUD claims. The quarterly Optum data and weekly financial files both contained much of the same information but with some important differences. The weekly financial claims data contained both debited and credited claims, which is necessary for a complete financial analysis, but the weekly financial claims did not contain many critical data elements used for analysis such as diagnosis code or place of service. Moreover, among all SUD claims in the quarterly Optum and weekly financial files, only 80 percent were found in both (when matched by member ID and claim number). Sixteen percent of the SUD claims came only from the weekly financial files, meaning these claims did not have any diagnosis code information, which may have limited the ability to identify members with a SUD.

Beneficiary Surveys

Customized surveys were developed for the evaluation to assess knowledge and self-assessed health status of adult and child Medicaid beneficiaries that could not be obtained through administrative claims data or other sources. These surveys asked beneficiaries about their overall health, mental and emotional health, and whether they knew where to obtain various types of treatment services for SUD or BH disorders. These data will serve as a baseline for follow-up surveys that are planned for 2023.

One round of beneficiary surveys conducted via telephone occurred in the second quarter of 2021. A stratified random sample of 2,000 beneficiaries was utilized based on region, urbanicity, and other relevant characteristics. Six hundred twenty-seven surveys were completed—267 adult surveys and 360 child surveys.

Data from the CUBS instrument were utilized to assess parenting behaviors; social supports; and child safety, experiences, and development. CUBS is a research project sponsored by the Alaska Department of Health, Division of Public Health, and serves as a three-year follow-up to the Alaska Pregnancy Risk Assessment Monitoring System (PRAMS) of mothers who completed PRAMS and are still living in Alaska. HSAG submitted a research proposal and data request to obtain anonymized beneficiary-level information for 2012 through present (survey phases 4, 5, and 6). However, due to periodic changes in the survey instrument, some survey items were

3-6 CAHPS® is a registered trademark of the Agency for Healthcare Research and Quality (AHRQ).

3-7 Alaska Medicaid Section 1115 SUD Demonstration Status Report. Available at: https://www.medicaid.gov/medicaid/section-1115-demonstrations/downloads/state-annual-report-demostration-yr2-deliverable.pdf. Accessed on: Sept 23, 2022.

added, removed, or the language was substantively revised, which limited the ability to assess these items for the full time frame.[3-8] Because CUBS is a follow-up survey among women who completed the PRAMS, the sampling strategy is based off respondents of the PRAMS and includes both Medicaid and non-Medicaid recipients. HSAG applied analytic weights supplied with the data in order to obtain representative statewide estimates. To correctly calculate standard errors for Medicaid respondents, HSAG conducted a statistical domain analysis.

Key Informant Interviews

Administrative data and surveys provide metrics capturing processes and outcomes of interest in the evaluation. These data sources, however, do not provide a clear view into the implementation of the SUD-BH Program as experienced by key stakeholders. Stakeholder interviews were performed with DBH State administrators, healthcare providers, non-provider stakeholders, and THOs to collect qualitative information regarding the impacts of the expansion of SUD and BH services. Three rounds of interviews occurred from August 2020 to June 2022.

State administrators were interviewed to obtain their perspective on the expansion of SUD and BH services, program sustainability, and anticipated challenges, and their experience with the COVID-19 PHE. Seven state administrators were interviewed in year one, followed by eight in both years two and three. Healthcare providers were interviewed about their experience with care coordination, integration, and quality of services provided with the SUD-BH Program and the impact of COVID-19. Five providers were interviewed in year one, followed by six in year two and nine in year three. Non-provider stakeholders, professional organizations representing BH providers, and Alaskans with mental health issues and SUDs were asked for their perspective on changes in access to care and the quality of care following the expansion of SUD and BH services as well as the impact of COVID-19. Two non-providers were interviewed in all three years of interviews. Similar to the other stakeholder groups, THOs were interviewed about their perspective on changes in access to and quality of care following BH and SUD service expansion and the impacts of COVID-19. Interviews with THOs began in the second year, when five THOs were interviewed. This increased to interviews with eight THOs in year three.

The key informant interviews provided context for how the demonstration implementations evolved over time, drivers of success, areas of concern, and changes to the quality of or access to care during the demonstration.

All interviews were recorded for accuracy in notetaking and transcription. Notes and transcriptions 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 concepts identified during open coding. The results of the analysis did not provide a statistically representative sample of experiences with the SUD-BH Program implementation. Rather, the responses obtained through stakeholder 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.

Publicly Available Financial/Actuarial Files

Budget neutrality workbooks downloaded from Medicaid.gov were utilized in the cost-effectiveness assessment. These workbooks consist of a standardized reporting form that consolidates financial data for each demonstration into a unified report to reduce redundancy while, simultaneously strengthening and enhancing CMS reviews.

[3-8] Current and historical survey instruments can be found on the CUBS website: https://health.alaska.gov/dph/wcfh/Pages/mchepi/cubs/default.aspx; Accessed on: Sept 20, 2022. Phase 4 surveys were administered between 2012 and 2014, phase 5 was administered between 2015 and 2019, and phase 6 began in 2020.

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 SUD-BH Program.

Interrupted Time Series

The ITS design included annual, quarterly, or monthly observations of each measure over time, beginning at least one year prior to SUD-BH Program implementation. The counterfactual for the analysis was the trend, as it would have happened, without being "interrupted" by the SUD-BH Program. Specific outcome measures were collected for multiple time periods both before and after the demonstration period and related interventions. The measurements collected after the SUD-BH Program were then compared to the projected outcome to evaluate the impact the program had on the outcome. The generic ITS model is:

$$Y_t = \beta_0 + \beta_1 time_t + \beta_2 post_t + \beta_3 time \times post_t + \mu_t$$

Where Y_t is the outcome of interest for the time period *t*, *time* represents a linear time trend, *post* is a dummy variable to indicate the time periods post-implementation, and $time \times post$ is the interaction term between *time* and *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 implementation, and β_3 is the change in the slope for the measurements after the program.

For measures calculated quarterly or monthly, 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 conducted by creating an indicator variable for quarter 2 (Q2) of 2021 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. For measures calculated annually, an indicator variable for 2020 was included in the model to adjust for the COVID-19 PHE.

Where necessary and appropriate, binomial logistic regression was used to analyze rates that are bounded by 0 and 1. Results for these analyses are presented in this report as the percentage change in odds given a δ unit increase in *X*, given by the following formula where $\delta = 1$: [3-9]

$$100[\exp(\beta_k \times \delta) - 1]$$

There are two coefficients of interest from the ITS analysis, β_2 (level change at implementation) and β_3 (change in the monthly trend). The variable "level change at implementation" indicates that, controlling for seasonality, months impacted by COVID-19, and the linear trend in the rate, the odds of the outcome of interest changed by

[3-9] Long J.S. (1997). *Regression models for categorical and limited dependent variables*. Sage Publications, Inc.

$100[\exp(\beta_k) - 1]$. The variable "change in monthly trend" indicates that, all else equal, the odds of the outcome of interest changed by $100[\exp(\beta_k \times \delta) - 1]$, where $\delta = 1$ for a one-month change.[3-10]

Similarly, the ITS analysis on costs employed a generalized linear model (GLM) with a log link to accommodate the right-skewed nature of healthcare costs and to constrain predicted costs to positive numbers only. Results are presented as percentage changes in per member per month (PMPM) costs, given by the same formula as above.

Full regression results of all parameters and unadjusted estimates are presented in Appendix A.

Descriptive Time Series

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

Pre/Post Analysis

Due to limitations of available and appropriate comparison groups, a one-group pre/post analysis was utilized for many measures. Average rates during the baseline period were compared against average rates during the evaluation period using a Chi-square test, *t*-test, or other statistical test appropriate for the given data. Specifically, comparisons were made using this model:

$$Y = \beta_0 + \beta_1 * post$$

Where Y is the rate of the outcome being measured each year, β_0 captures the average rate in the baseline years, and the coefficient β_1 for the dummy variable, post, representing the evaluation years, captures the change in average outcome between the baseline and evaluation time periods. For measures that utilized pre/post testing, a weighted average of the evaluation period is also presented and represents a pooled average of the numerator and denominator counts across all three evaluation years.

Binomial logistic regression was utilized to evaluate measures that are binary outcomes or presented as rates. Due to the lack of a comparison group, it is difficult to conclude whether the changes in rates are a direct result of the specific program, as simultaneous external factors occurring during the same time period may have also had an impact that could not be accounted for.

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 the Section 1115 Demonstration Waiver program, which sets a fixed target under which waiver expenditures must fall that was set at the time the waiver was approved.

In accordance with CMS guidance on analyzing costs associated with section 1115 demonstrations for beneficiaries with serious mental illness/serious emotional disturbance or substance use disorders, two separate cohorts of beneficiaries were identified.

[3-10] Note: To calculate a change other than one month, it is not appropriate to multiply the change in odds by the number of months. Instead, the reader is encouraged to use the Appendix tables to calculate the change based on the desired number of months using the unadjusted parameter estimates. For example, a 12-month change would be calculated using this formula: $100[\exp(\beta_3 \times 12) - 1]$ where β_3 is the parameter estimate for "change in monthly trend."

The first cohort consisted of beneficiaries enrolled in the measurement period with a SUD diagnosis. SUD diagnoses were defined as having a 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

The second cohort consisted of members with a BH diagnosis, defined as those enrolled in the measurement period and who have a claim with a diagnosis code from the HEDIS MY 2020 Mental Health Diagnosis Value Set during the measurement period.

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

Cost of care for both SUD and BH beneficiaries based on fee-for-service reimbursement amounts were calculated for each member in each month across the following categories of service:

- Total Costs
- Inpatient (IP)
- Outpatient (OP)
  - Emergency Department (ED) OP
  - Non-ED OP
- Long-term care (LTC)
- Professional
- Dental
- Pharmacy

The following were calculated for the SUD population only:

- SUD-Institutions of Mental Disease (IMD)
- SUD-Other
- Non-SUD

The following were calculated for the BH population only:

- BH-IMD
- BH-Other
- Non-BH

Data were then aggregated across all members in order to calculate per-member per-month costs for each month of the demonstration and 12 months prior.[3-11] An interrupted time series analysis was constructed for each level of cost stratifications using the framework described above. Seasonality indicators and variables indicating time periods affected by the COVID-19 PHE were included in the model to control for these factors.

3-11 Although CMS guidance describes utilizing two years of baseline data to establish a more reliable trend, HSAG found that because analysis groups were identified using diagnoses and treatment events, costs during the first baseline year (2017) were biased upwards when following the CMS guidance. In order to achieve unbiased calculations, the first baseline year was excluded from analysis. HSAG will work with DBH for the Summative Report to include data from 2016 which should allow for two unbiased years of baseline data. Additionally, 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

The following section details the methodological limitation of the Interim Evaluation Report for the Substance Use Disorder and Behavioral Health (SUD-BH) Program Demonstration Waiver.

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 demonstration 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 knowledge of services and well-being.

There are two primary limitations related to the evaluation design of the analyses used in this Interim Evaluation Report. First, no in-state comparison group exists because the demonstration waiver was implemented for all targeted beneficiaries in the State simultaneously. A comparison group of similarly situated Medicaid beneficiaries who have not received additional services provided by the demonstration 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 targeted Alaska Medicaid beneficiaries had the demonstration not been implemented. It is possible that Transformed Medicaid Statistical Information System (T-MSIS) data covering other states from the Centers for Medicare & Medicaid Services (CMS) may become available for use in forming a counterfactual comparison group by the time the Summative Evaluation Report is written. Additionally, at the time of the Interim Evaluation Report, data could not be obtained from another state with similar population characteristics and Medicaid policies and procedures in place. Therefore, the counterfactual comparison used in this report is the comparison of measure rates across the baseline and evaluation periods of the demonstration. For many measures, only a pre-post comparison of outcomes prior to the SUD-BH Program to outcomes post-demonstration implementation was possible. Where sufficient data points were available, HSAG employed an interrupted times series (ITS) analysis to make comparisons while accounting for underlying seasonal trends in the outcome. The results indicate whether the measure rates increased or decreased, and whether the results represented statistically significant changes in performance. Both methods were limited to using only one pre-demonstration year (2018) since the methodology for identifying members with a SUD diagnosis necessitated treating the first year of baseline as an intake year; the use of one baseline year may not have captured the complete picture of what Medicaid care looked like prior to the SUD-BH Program. Furthermore, it is possible that co-interventions or other events occurring at the same time as the demonstration 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 demonstration effects.

A second key limitation of the results presented in this Interim Evaluation Report is the impact of the global 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 Alaska, as in other locations, 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 on state-specific case counts, shutdowns, and stay-at-home orders was incorporated into the model to account for the effect of COVID-19 through controlling for affected quarters or years in regression analyses. For many other measures, however, the specifications for calculating rates require

lengthy look-back periods, or annual assessments of beneficiaries that would not allow such adjustments to be made. Because of this limitation, for some measures, the 2020 rates confound the impact of the COVID-19 PHE with any program impacts, and the analysis cannot disentangle the two sources of change.

Data Sources

As described in the Data Sources section of the Methodology, most measures used in this Interim Evaluation Report rely on administrative data including Medicaid claims, beneficiary eligibility, demographic, and provider data. Three data sources were provided for use in the evaluation, which had differing characteristics and layouts. The weekly financial claims data contained both debited and credited claims, which are necessary for a complete financial analysis, but the weekly financial claims did not contain many critical data elements used for analysis such as diagnosis code or place of service. Moreover, among all SUD claims in the quarterly Optum and weekly financial files, only 80 percent were found in both (when matched by member ID and claim number). Sixteen percent of the SUD claims came only from the weekly financial files, meaning these claims did not have any diagnosis code information, which may have limited the ability to identify members with an SUD.

National data sources described in the evaluation design plan were either not available or appropriate for use in this analysis. Because the target population of the demonstration is specific to (1) children, adolescents, and their parents or caretakers with or at risk of mental health disorders and SUDs, (2) transitional age youth and adults with acute mental health needs, and (3) adults, adolescents, and children with SUDs, results presented in this report are not directly comparable to national data sources described in the design plan, which generally include all Medicaid beneficiaries. NCQA percentile data for measures that necessarily limit to beneficiaries with a SUD could be used as benchmarks in the Summative Report to provide a measure of relative performance and context for interpreting the results. The appropriateness of these comparisons will be explored further for the Summative Report.

Data from the Department of Commerce, Community and Economic Development, Occupational Licensing Section Database for calculating the number of licensed behavioral health providers as described in the evaluation design plan did not sufficiently allow for objectively identifying behavioral health providers in a manner consistent with the rest of the evaluation. As a result, this data source was not used for measure 1-8 and instead relied on Medicaid administrative provider enrollment data.

Additionally, some data sources did not contain comparable metrics or did not relate to specific measures. Data from the Behavioral Risk Factor Surveillance System only contain information on respondents' general health, while the measure used in this evaluation is specific to mental or emotional health. Therefore, this data source was not used as a comparison point in the analysis. The Youth Risk Behavior Surveillance System (YRBSS) was described in the evaluation design plan but was not identified as a source for any measures. As a result, the interim report does not utilize the YRBSS as a data source.

5. Results

The following section details measure results by research question and related hypotheses for the Substance Use Disorder and Behavioral Health (SUD-BH) Program Demonstration Waiver. This interim report provides results from the baseline period and first three years of the evaluation period. *Note that some numbers presented may not tie out due to rounding.* Details on the measure definitions and specifications can be found in Appendix D.

Table 5-1 presents the criteria used to determine whether results supported the hypothesis for each measure presented in this section.

Table 5-1—Measure Conclusion Criteria

Conclusion	Criteria
Supports	• Statistical testing results are significant in favorable direction. • For measures without statistical testing, there was conclusive evidence of moderate to large, sustained improvements in the results.
Inconclusive	• Statistical testing results are not significant. • 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 are significant in unfavorable direction. • For measures without statistical testing, there was conclusive evidence of moderate to large, sustained worsening in the results.
N/A	• The measure was based on a survey that was administered at one point in time and does not provide a comparison over time or between groups to draw a conclusion.

Results Summary

Research Question 1: Does the SUD-BH Program increase access to and utilization of SUD and BH disorder treatment services by increasing access to community-based care?

Hypothesis 1.1: The SUD-BH Program will increase the number of beneficiaries in the waiver population who are referred to and engage in treatment for SUD and BH disorders in sub-acute, community or regionally based OP settings.

Number of beneficiaries screened for symptoms of SUD using industry recognized, evidence-based screening instruments (Measure 1-1)

Measure 1-1 assesses the number of waiver beneficiaries screened for symptoms of substance use disorder (SUD) using industry recognized, evidence-based screening instruments to help assess whether the demonstration is increasing the percentage of beneficiaries who are utilizing treatment services. Table 5-2 shows that the rate of waiver beneficiaries being screened for symptoms of SUD decreased steadily, from 18.2 percent in 2018 to 15.3 percent in 2021. Overall, the average rate for screening of SUD symptoms in the evaluation period was 16.2 percent—a drop of 1.9 percentage points between the rate in the baseline period and evaluation period. This decline was partially driven by the coronavirus disease 2019 (COVID-19) public health emergency (PHE), which

adversely impacted beneficiaries' typical utilization of healthcare services, including the opportunities for SUD screening. This difference was found to be statistically significant.

Table 5-2—Number of Beneficiaries Screened for Symptoms of SUD Using Industry Recognized, Evidence-Based Screening Instruments

		Baseline Period	Evaluation Period				Percentage Point Change	*p*-value
		2018	2019	2020	2021	Weighted Average		
Beneficiaries screened for symptoms of SUD using industry recognized, evidence-based screening instruments	**Rate**	18.2%	17.7%	15.7%	15.3%	**16.2%**	**-1.9pp**	**<0.001*** **
	Count	5,477	5,602	4,890	4,746			

Note: pp=percentage point
*p< 0.1, **p < 0.05, ***p<0.001

Measure 1-1 Conclusion: Does not support the hypothesis

Number of beneficiaries screened for symptoms of BH disorders using industry recognized, evidence-based screening instruments (Measure 1-2)

Measure 1-2 assesses the number of waiver beneficiaries screened for symptoms of behavioral health (BH) disorders using industry recognized, evidence-based screening instruments to help assess whether the demonstration is increasing the percentage of beneficiaries who are utilizing treatment services. As seen in Table 5-3, the rate of waiver beneficiaries being screened for symptoms of BH disorders was 21.9 percent in 2018, remained stable in 2019, but declined, in 2020 to 19.6 percent and in 2021 to 18.1 percent. Overall, the average rate of screening for BH disorder symptoms decreased by 1.9 percentage points between the baseline and evaluation periods, a statistically significant decrease (p<0.001). This decline was partially driven by the COVID-19 PHE, which adversely impacted beneficiaries' typical utilization of healthcare services, including the opportunities screening of a BH disorder.

Table 5-3—Number of Beneficiaries Screened for Symptoms of BH Disorders Using Industry Recognized, Evidence-Based Screening Instruments, 2018–2021

		Baseline Period	Evaluation Period				Percentage Point Change	*p*-value
		2018	2019	2020	2021	Weighted Average		
Beneficiaries screened for symptoms of behavioral health disorders using industry recognized, evidence-based screening instruments	**Rate**	21.9%	22.2%	19.6%	18.1%	**20.0%**	**-1.9pp**	**<0.001*** **
	Count	6,610	7,052	6,104	5,607			

Note: pp=percentage point
*p< 0.1, **p< 0.05, ***p<0.001

Measure 1-2 Conclusion: Does not support the hypothesis

Number of beneficiaries in the waiver population with SUD or BH diagnosis, by setting (Measure 1-3)

Measure 1-3 aims to determine whether the demonstration has increased utilization of SUD and BH services by assessing the percentage of Medicaid beneficiaries who were diagnosed with a SUD or BH disorder. Overall, the percentage of beneficiaries with a SUD or BH diagnosis decreased slightly from 88.1 percent in 2018 to 86.8 percent in 2021 as displayed in Table 5-4. This decline was partially driven by the coronavirus disease 2019 (COVID-19) public health emergency (PHE), which adversely impacted beneficiaries' typical utilization of healthcare services, including the opportunities for diagnosis of SUD or BH disorder. The average rate of beneficiaries being diagnosed with a SUD or BH disorder in the evaluation period was 87.3 percent; this was 0.9 percentage points lower than the rate in the baseline period, a statistically significant difference ($p<0.001$). Because this measure relates to prevalence of SUD or BH diagnosis, a higher rate does not necessarily indicate better performance nor does a lower rate. Therefore, results are provided contextually and neither supports nor fails to support the hypothesis, which relates to referral and engagement in treatment.

Table 5-4—Percentage of Beneficiaries in the Waiver Population with SUD or BH Diagnosis, 2018–2021

	Baseline Period	Evaluation Period				Percentage Point Change	*p*-value
	2018	2019	2020	2021	Weighted Average		
Percentage of beneficiaries in the waiver population with SUD or BH diagnosis	88.1%	87.5%	87.5%	86.8%	**87.3%**	**-0.9pp**	**<0.001*** **

Note: pp=percentage point
*$p<0.1$, **$p<0.05$, ***$p<0.001$

Measure 1-3 Conclusion: Inconclusive

Initiation and engagement of AOD dependence treatment (NQF 0004) (Measure 1-4)

Measure 1-4 intends to examine whether the demonstration has increased access to and utilization of SUD treatment options by assessing the percentage of beneficiaries with a new episode of alcohol or other drug (AOD) dependence who either initiated or engaged in AOD treatment. As shown in Table 5-5, the rate of initiation of AOD treatment was 33.2 percent in 2018 and trended upwards until 2020, peaking at 36.1 percent before decreasing to 33.4 percent in 2021. Overall, the rate of initiating AOD treatment among beneficiaries with a new episode of AOD was 34.4 percent in the evaluation period, 1.2 percentage points greater than the rate during the baseline period. This increase was found to be statistically significant ($p=0.020$). The rate of engagement in AOD treatment exhibited a similar pattern from 2018–2021. The rate of engagement of AOD treatment in 2018 was 12.1 percent and trended upwards until 2020, peaking at 14.0 percent before decreasing to 11.6 percent in 2021. The average rate of engagement in AOD treatment among beneficiaries with a new episode of AOD was 13.0 percent in the evaluation period. This was 0.9 percentage points greater than the rate during the baseline period, a statistically significant difference ($p=0.013$). Implementation of some components related to this measure such as community recovery support services, were not completed until June 2021. Although there was an overall increase in the average rates following the approval of the demonstration, the delay of these services could be mitigating additional increases in the rates resulting from the waiver. Further analysis once implementation is completed will allow a fuller assessment of this measure.

Table 5-5—Initiation and Engagement of AOD Dependence Treatment, 2018–2021

	Baseline Period	Evaluation Period				Percentage Point Change	*p*-value
	2018	2019	2020	2021	Weighted Average		
Initiation of AOD Dependence Treatment (NQF 0004)	33.2%	33.8%	36.1%	33.4%	**34.4%**	**1.2pp**	**0.020****
Engagement of AOD Dependence Treatment (NQF 0004)	12.1%	13.5%	14.0%	11.6%	**13.0%**	**0.9pp**	**0.013****

Note: pp=percentage point
*p< 0.1, **p < 0.05, ***p<0.001

Measure 1-4 Conclusion: Supports the hypothesis

Follow-up after discharge from ED visits for SUD, and specifically for OUD (NQF 2605) (Measure 1-5)

The goal of Measure 1-5 is to examine whether the demonstration has been effective in matching individuals with a SUD with the services necessary for recovery by assessing the percentage of waiver beneficiaries who received a follow-up visit after being discharged from an emergency department (ED) visit for SUD, and specifically for opioid use disorder (OUD). Table 5-6 and Figure 5-1 show that seven- and 30-day follow-up rates were higher for OUD visits than SUD visits.

For waiver beneficiaries discharged from ED visits for SUD, rates of follow-up within seven and 30 days decreased steadily between 2018–2021. In 2018, the follow-up rate for SUD discharges within seven days was 14.4 percent, decreasing to 11.6 percent in 2021. The average rate of follow-up within seven days after discharge among SUD waiver beneficiaries in the evaluation period was 13.1 percent, which was 1.3 percentage points less than the rate of follow-up within seven days in the baseline period. This difference was found to be statistically significant (p=0.034).

Similarly in 2018, the follow-up rate for SUD discharges within 30 days was 23.0 percent, decreasing to 19.8 percent in 2021. On average, the rate of follow-up within 30 days after discharge among SUD waiver beneficiaries in the evaluation period was 21.4 percent, 1.6 percentage points less than the rate of follow-up within 30 days in the baseline period—a statistically significant difference (p=0.021).

Among waiver beneficiaries discharged from ED visits for OUD, the rate of follow-up within seven days was 28.5 percent in 2018 and peaked at 35.7 percent in 2019 before declining to 28.7 percent in 2021. The average rate of follow-up within seven days after discharge among OUD waiver beneficiaries in the evaluation period of 32.2 percent was 3.7 percentage points higher than the follow-up during the baseline period, though this result was not statistically significant.

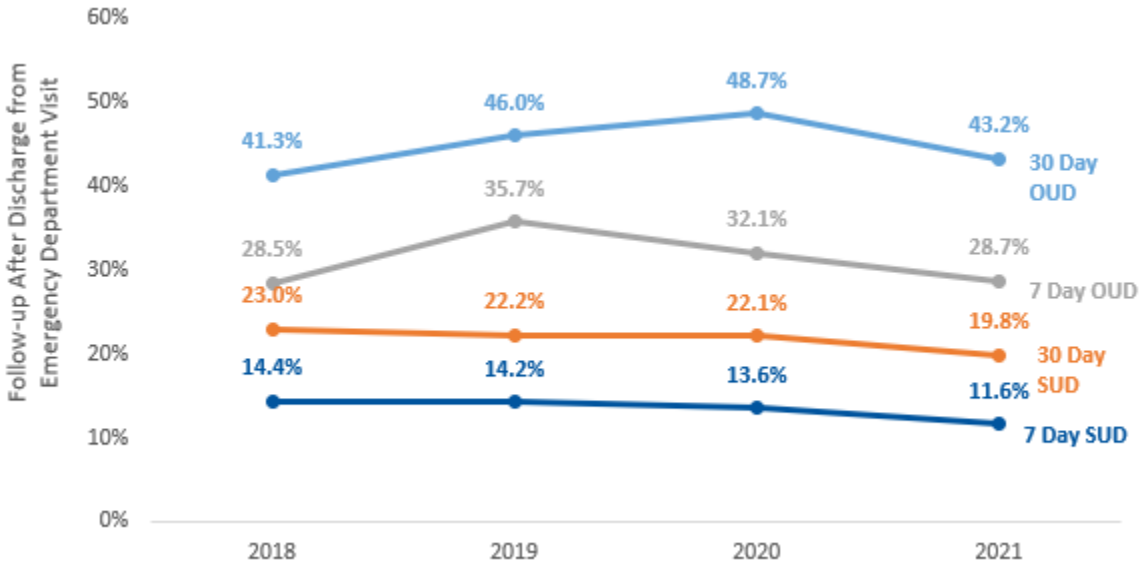
The rate of follow-up within 30 days among waiver beneficiaries discharged from ED visits for OUD in 2018 (41.3 percent) increased in both 2019 and 2020, peaking at 48.7 percent in 2020 before decreasing to 43.2 percent in 2021. The average rate of follow-up within 30 days after discharge among OUD waiver beneficiaries in the evaluation period (45.8 percent) was 4.5 percentage points higher than the rate of follow-up during the baseline period, which was also not statistically significant.

Table 5-6—Rates of Follow Up After Discharge from ED Visits for SUD/OUD, 2018–2021

	Baseline Period	Evaluation Period				Percentage Point Change	*p*-value
	2018	2019	2020	2021	Weighted Average		
Follow-Up within 7 Days After Discharge from ED Visit for SUD	14.4%	14.2%	13.6%	11.6%	**13.1%**	**-1.3pp**	**0.034****
Follow-Up within 30 Days After Discharge from ED Visit for SUD	23.0%	22.2%	22.1%	19.8%	**21.4%**	**-1.6pp**	**0.021****
Follow-Up within 7 Days After Discharge from ED Visit for OUD	28.5%	35.7%	32.1%	28.7%	**32.2%**	**3.7pp**	**0.240**
Follow-Up within 30 Days After Discharge from ED Visit for OUD	41.3%	46.0%	48.7%	43.2%	**45.8%**	**4.5pp**	**0.182**

Note: pp=percentage point
**p*< 0.1, ***p*< 0.05, ****p*<0.001

Figure 5-1—Rates of Follow Up After Discharge from ED Visits for SUD/OUD, 2018–2021



Although the rates of follow-up visits within seven- and 30-days after an ED visit for OUD increased on average during the demonstration period, this increase was not statistically significant; and rates of follow-up visits for SUD more broadly declined during the demonstration period by a statistically significant degree. Although the increase among OUD was greater than that of SUD, due to smaller size of the OUD population, statistical power among this population was lower, inhibiting the ability to find statistically significant differences of the same magnitude among the SUD population. The average denominator size among the OUD population was only 293 compared to 4,502 for the SUD population as a whole, or approximately 6 percent. Because the decline in rates among the SUD population was statistically significant, the results generally do not support the hypothesis.

Implementation of some components related to this measure such as community recovery support services, were not completed until June 2021. The delay of these services could be mitigating increases in the rates resulting

from the waiver. Further analysis once implementation is completed will allow a fuller assessment of this measure.

Measure 1-5 Conclusion: Does not support the hypothesis

Follow-up after discharge from ED visits for a BH disorder, by setting (NQF 2605) (Measure 1-6)

Measure 1-6 aims to examine whether the demonstration has been effective in providing the needed support services to individuals with a BH related diagnosis by assessing the percentage of waiver beneficiaries who received follow-up after being discharged from an ED visit for a BH-related diagnosis.

For waiver beneficiaries discharged from ED visits for a BH diagnosis, rates of follow-up within seven days after discharge and within 30 days after discharge decreased steadily between 2018–2021 as shown in Table 5-7 and Figure 5-2.

In 2018, the follow-up rate for BH related discharges within seven days was 45.0 percent and decreased to 32.5 percent by 2021. The average rate of follow-up within seven days after discharge for a BH related diagnosis in the evaluation period was 36.1 percent, 8.9 percentage points less than the rate of follow-up within seven days in the baseline period, a statistically significant difference (p<0.001).

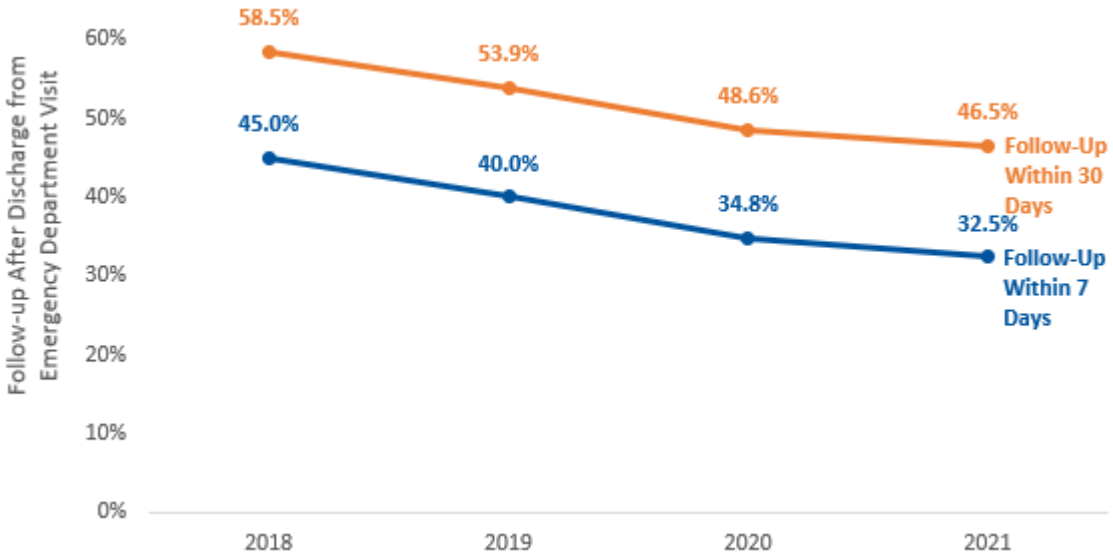
Similarly in 2018, the follow-up rate for BH discharges within 30 days was 58.5 percent, declining to 46.5 percent by 2021. On average, the rate of follow-up within 30 days after discharge among BH waiver beneficiaries in the evaluation period was 50.0 percent, 8.4 percentage points less than the rate of follow-up within 30 days in the baseline period—a statistically significant difference (p<0.001). Implementation of some components related to this measure such as community recovery support services, were not completed until June 2021. The delay of these services could be mitigating increases in the rates resulting from the waiver. Further analysis once implementation is completed will allow a fuller assessment of this measure.

Table 5-7—Rates of Follow Up After Discharge from ED Visits for a BH Related Diagnosis, 2018–2021

	Baseline Period	Evaluation Period				Percentage Point Change	*p*-value
	2018	2019	2020	2021	Weighted Average		
Follow-Up within 7 Days After Discharge from ED Visit for BH Related Diagnosis	45.0%	40.0%	34.8%	32.5%	**36.1%**	**-8.9pp**	**<0.001*** **
Follow-Up within 30 Days After Discharge from ED Visit for BH Related Diagnosis	58.5%	53.9%	48.6%	46.5%	**50.0%**	**-8.4pp**	**<0.001*** **

Note: pp=percentage point
*p< 0.1, **p < 0.05, ***p<0.001

Figure 5-2—Rates of Follow Up After Discharge from ED Visits for a BH Related Diagnosis, 2018–2021



Measure 1-6 Conclusion: Does not support the hypothesis

Number of Medicaid qualified SUD providers (identified by provider ID numbers) who bill for SUD services (Measure 1-7)

Measure 1-7 aims to determine whether the demonstration has increased access to SUD services by assessing the number of Medicaid qualified SUD providers who are billing for SUD services in each region. Overall, the number of providers increased from 17 in 2018 to 134 in 2021, a nearly eight-fold increase. Regions 1 and 2 saw the greatest increases of 59 and 27 providers, respectively, between 2018 and 2021. Region 5, with zero providers in 2018 and 2019, increased to six providers in 2020 and 23 providers in 2021. No Medicaid qualified SUD providers were found to be billing for SUD services in regions 3, 6, 7, or 9. Table 5-8 below shows the yearly counts of Medicaid qualified SUD providers who bill for SUD services, by region. The overall increase in the number of SUD providers suggests this measure supports the hypothesis.

Table 5-8—Number of Medicaid Qualified SUD Providers Who Bill for SUD Services, by Region, 2018–2021

Provider Region	Baseline Period	Evaluation Period		
	2018	2019	2020	2021
Region 1 – Anchorage Municipality (Anchorage)	12	27	53	71
Region 2 – Fairbanks North Star Borough (Fairbanks)	4	14	21	31
Region 3 – Northern and Interior Region (Fairbanks and Utqiagvik)	--	--	--	--
Region 4 – Kenai Peninsula Borough (Soldotna and Homer)	--	--	6	6
Region 5 – MatSu Borough (Wasilla)	--	--	6	23
Region 6 – Western Region (Kotzebue, Nome, and Bethel)	--	--	--	--
Region 7 – Northern Southeast Region (Juneau and Sitka)	--	--	--	--
Region 8 – Southern Southeast Region (Ketchikan)	--	--	--	3
Region 9 – Gulf Coast/Aleutian Region (Anchorage, Dillingham, and Kodiak)	--	--	--	--
No associated region	1	1	--	--
Total	**17**	**42**	**86**	**134**

Measure 1-7 Conclusion: Supports the hypothesis

Number of Medicaid qualified professionals licensed in the State to provide BH who bill for BH disorder services (Measure 1-8)

Measure 1-8 aims to determine whether the demonstration has increased access to BH services by assessing the number of Medicaid qualified BH providers who are billing for BH services in each region. From 2018 to 2021, the total number of Medicaid qualified professionals who are licensed to provide and are billing for BH services increased from 641 to 684. Region 1 increased by 53 total providers, the highest increase in overall number of providers from 2018 to 2021. Region 5 had the greatest percentage change for providers, increasing from 49 to 71, a 45 percent increase. Region 7 had a slight decrease falling from 71 to 66 providers. Table 5-9 shows the yearly counts of Medicaid qualified BH providers who bill for BH services by region. The overall increase in the number of BH providers during the evaluation period suggests this measure supports the hypothesis.

Table 5-9—Number of Medicaid Qualified Professionals Licensed in the State to Provide BH Who Bill for BH Disorder Services, by Region, 2018–2021

Provider Region	Baseline Period	Evaluation Period		
	2018	2019	2020	2021
Region 1 - Anchorage Municipality (Anchorage)	258	330	340	311
Region 2 - Fairbanks North Star Borough (Fairbanks)	57	65	58	63
Region 3 - Northern and Interior Region (Fairbanks and Utqiagvik)	4	5	6	4
Region 4 - Kenai Peninsula Borough (Soldotna and Homer)	40	45	53	40
Region 5 - MatSu Borough (Wasilla)	49	79	86	71
Region 6 - Western Region (Kotzebue, Nome, and Bethel)	37	44	47	44
Region 7 - Northern Southeast Region (Juneau and Sitka)	71	79	65	66

Provider Region	Baseline Period	Evaluation Period		
	2018	2019	2020	2021
Region 8 - Southern Southeast Region (Ketchikan)	17	20	15	21
Region 9 - Gulf Coast/Aleutian Region (Anchorage, Dillingham, and Kodiak)	23	27	30	29
No associated region	85	49	41	35
Total	**641**	**743**	**741**	**684**

Measure 1-8 Conclusion: Supports the hypothesis

Providers' reported barriers before, during, and shortly following expansion of BH and SUD services (Measure 1-9)

Providers highlighted administrative burden as a key concern throughout the three rounds of interviews. Initially, providers experienced long wait times to enroll in Medicaid. Once providers were enrolled, they expressed confusion in interpreting and complying with waiver guidelines and what they perceived as restrictions on provider's ability to provide services in a specific manner. Many struggled to comply with the certification processes associated with employing qualified addiction professionals (QAPs). The certification process was costly and lengthy with no chance for reimbursement; many providers did not feel there was enough time for certification. Providers also found it difficult to become familiar with new paperwork associated with the waiver.[5-1]

Providers noted that workforce challenges were a continued concern throughout the three years of interviews. Providers experienced extensive staffing issues and had difficulty hiring and retaining staff. One provider noted a 56 percent turnover among staff in the preceding 12 months. Another provider noted that four clinicians had left its organization in the past year. Workforce challenges shared by providers included difficulty getting workers to move to Alaska, inability to pay relocation fees, difficulty getting workers to remain in Alaska, and difficulty in offering competitive wages.

In year one of interviews, providers shared concerns about the sunsetting of State plan services before the 1115 waiver would be viable. State plan codes were discussed again in year three, when providers expressed frustration that waiver services were not always a direct replacement for State plan services, especially with regard to adult mental health residential services that were formerly provided under the state plan. One provider cited issues with the transition from home-based State plan codes to waiver codes; the provider, in anticipation of the State plan codes being sunsetted, transitioned its billing to use waiver codes. However, The Alaska Division of Behavioral Health (DBH) delayed the sunsetting a few days before State plan codes were expected to be sunsetted. The provider had already transitioned its systems away from State plan codes and was unable to reverse in time, causing the provider to stop providing school-based services, resulting in a major loss in revenue.[5-2]

There was also discussion about differences between the State plan codes and waiver codes. Specifically, peer support and community recovery support services (CRSS) had a lower limit of 200 hours on the waiver compared to 840 available hours on the State plan codes. The provider felt that in this situation it would not make sense to bill to the waiver codes. Similarly, an additional provider shared that it continued to bill State plan codes for peer support, case management, assessment, and psychotherapy. Another provider indicated that they understood why

5-1 DBH increased the certification period from three years to fours year due to the PHE.
5-2 School-based services provided by the Tribal Behavioral Health System (TBHS) remain in the Alaska state plan.

some providers are continuing to bill to State plan codes and expressed their wish that 1115 and State plan billing codes were the same. Medicaid and non-Medicaid services use different codes; one provider noted that it would like the State to make these codes match.[5-3]

Informants expressed additional concerns surrounding billing:

- Inability to bill for arranging travel for case management resulted in providers spending unpaid hours on this process.
- Lack of understanding on the documentation required to bill for peer support. The administrative burden of this billing process was too high, and a provider explained that its staff worked weekends to bill for these services. [5-4]
- Fears over the return of service authorizations after the PHE ends.
- Lack of clarity on bill codes and paybacks.
- Difficulties in providing every location and provider their own National Provider Identifier (NPI).
- Optum not itemizing payments and voids, leaving providers vulnerable in an audit.

Many providers experienced concerns specifically with the administrative services organization (ASO), Optum. In years one and two, the majority of interviewed providers highlighted the difficulty of the transition from Conduent to Optum. Issues in this transition included billing issues (e.g., denied claims, providers not in the billing system); inconsistent instructions; lack of communication; and a reduction in information technology (IT) and technical support. Providers felt that the transition to Optum being concurrent with the waiver and the COVID-19 PHE was overwhelming. Additionally, providers felt that Optum did not provide the cost reduction and support that was originally indicated. By the third year of interviews , interviewed providers did not express any concerns regarding Optum.

Providers also expressed a similar lack of support, training, and guidance from DBH regarding the billing and documentation processes in the first year of interviews. Some interviewees felt that DBH's responses were inconsistent. By the third year, similar feelings remained. Providers noted that DBH was not responsive to questions, and that different DBH representatives gave different answers to the same question. Providers who did feel that DBH was responsive maintained that answers were unclear. Informants expressed the need for more transparency from DBH. Several providers shared that they were looking forward to meeting with DBH in person to have their questions answered.

Several providers experienced difficulties providing services in 2021 due to a cybersecurity attack on the AKAIMS system. Prior to the incident, providers billed Medicaid through Alaska's Automated Information Management System (AKAIMS) and were forced to switch to Optum's provider express system online. One provider missed timely filing when AKAIMS was taken offline and were not given a grace period under the waiver or the state plan; the provider estimates a loss of approximately $40,000 over seven months. There were additional areas of concern highlighted throughout the evaluation period:

- The geography of Alaska limited providers' ability to provide services within a safe driving distance.

5-3 If the recipient is ineligible for Medicaid, then neither State plan nor 1115 billing codes should be used. For those ineligible for Medicaid, State grants are used to support provider organizations that serve non-resourced service recipients; funding for this population has continued during the demonstration period to ensure access to services via grants. Providers are only required to provide services to non-Medicaid recipients as a component of their grant requirements.

5-4 There may be confusion among providers between peer support services and peer-based crisis services. Peer support services are provided under the Alaska state plan, while peer-based crisis services have not been implemented.

- Difficulty in providing services to youth with BH needs due to the limited number of beds, especially residential psychiatric treatment beds for youth.
- Community stigma against SUD residential providers.
- Some providers felt that access to care had not changed, some felt it had increased, and others felt that access decreased. Reasons that providers believe access decreased include:
  - One provider was forced to stop providing school-based youth services due to confusion surrounding multiple sunsetting dates for State plan codes and closed an entire clinic due to waiver billing issues.
  - Patients must wait for service authorizations while in crisis. This was identified as burdensome and clinically unhealthy.
- Providers struggled to continue providing services to non-Medicaid patients.
  - Prior to the waiver, the same services were available to Medicaid and non-Medicaid patients. The waiver created a gap in services available between groups.
  - The State maintained a heavy focus on Medicaid and, according to one provider, forgot that providers must serve non-Medicaid patients to stay in business.
- The waiver's focus on early intervention and prevention was not conducive to adults with long-term serious mental illness (SMI).
- Providers had to identify the client's setting when the client received telehealth services (i.e., at home or another setting).
- Agencies had to become licensed as an assisted living facility to provide adult mental health residential services.

Barriers were present in all three years of interviews. Certain barriers persisted throughout the evaluation period while others were identified in single years. There was progress towards the hypothesis with the resolution of several barriers; however, since considerable barriers have remained, the overall findings for this measure are mixed and therefore suggest that they neither support nor fail to support the hypothesis.

Additional qualitative results are located in Appendix C.

Measure 1-9 Conclusion: Inconclusive

Providers' experience in expanding services (Measure 1-10)

Providers explained that services expanded steadily across all three years of interviews, as providers were able to offer new services and expand their capabilities to provide a broader continuum of care throughout the evaluation period including the addition or expansion of the following:

- American Society of Addiction Medicine (ASAM) Level 1.0, 2.1, 2.5, and 3.1 services[5-5]
- Broader use of screening, brief intervention, and referral to treatment (SBIRT)
- Crisis intervention
- Withdrawal management

[5-5] DBH also expanded 3.3 services along with adolescent SUD services (2.5 and 3.1) although providers did not mention expanding these services.

- Improved care planning processes
- Case management and intensive case management services
- Counseling and community support services (CCSS)[5-6]
- Peer support services[5-7]
- Adult mental health residential
- CRSS
- Support for independent living[5-8]
- Assertive community treatment-based teams working with SMIs

Most services were expanded in the first and second years of the demonstration. Several providers did not add services in the third year. Additional areas of action included pioneering the license variance for adult mental health residential, requiring parent involvement in their children's care in a concentrated nonassertive approach, receiving level of care certifications, hiring peer support specialists, and improving awareness and consistency of care through SUD care coordination. Many providers expressed excitement about expanding peer support group services.

However, providers also reported experiencing difficulties in expanding services, namely in providing peer support services. Peers had difficulties gaining clearance via a background check to perform peer support services because many peers had an issue appear on the background check. Providers had to complete a variance to allow the peer to work which could take up to eight weeks to gather all the correct paperwork. Many peers dropped out of the program because they could not wait while being unpaid.[5-9] Additionally, providers felt there was not enough funding and resources for proper implementation. One provider required grant funds to operate for the first six months of implementation.

The COVID-19 PHE was perceived as creating a backlog for higher levels of service as more patients and staff were impacted by mental health crises. Throughout the COVID-19 PHE, providers continued to expand services but at a slower rate than originally anticipated, to meet the needs of the community. Response to the pandemic led stakeholders to work together in creative ways that brought a spirit of innovation that will continue as the pandemic becomes less acute. For example, providers who normally did not work together collaborated to provide joint access to 23-hour crisis stabilization for quarantined individuals, hoping that this solution would last beyond the needs of the pandemic. Additional qualitative results are located in Appendix C.

Overall, providers experienced success in standing up services, leading to increased access for beneficiaries to engage in necessary services. Therefore, the results suggest support for the hypothesis.

Measure 1-10 Conclusion: Supports the hypothesis

5-6 CCSS has been sunsetted but was mentioned as being expanded by a provider. CCSS was replaced by Community Recovery Support Services.

5-7 Peer support services are provided under the state plan.

5-8 Independent living support services are not provided under the Alaska 1115 SUD-BH waiver but were mentioned by a provider with respect to services they have expanded related to SUD and BH care and is included as such.

5-9 Background checks and clearances are under the purview of the Division of Health Care Services (HCS). DBH is collaborating with HCS to reduce the process time to enroll peer support staff.

Administrators' reported barriers before, during, and shortly following expansion of BH and SUD services (Measure 1-11)

When asked to share their concerns about the waiver, State administrators noted several areas of concern including the bifurcation of BH and SUD services, administrative burden, and workforce challenges. State administrators acknowledged that the bifurcation of SUD and BH waiver service regulations had resulted in some unintentional complexity and inconsistencies between the handling of SUD and BH services that may have interfered with their goal of providing integrated care and may have caused confusion among other stakeholders. State administrators found that providers seemed to have had an easier time switching to SUD waiver services compared to BH services. They reported awareness that some providers experienced issues due to SUD and BH QAP certification requirements being different despite QAPs performing the same responsibilities for SUD and BH services. One State administrator also identified that the bifurcation may have resulted in a greater focus on SUD services rather than BH services, resulting perhaps in missed BH opportunities.

State administrators shared awareness of and concern for providers' experience of administrative burden as a result of the waiver, particularly related to billing for services and the fears related to potential future Medicaid audits. State administrators understood that some providers found waiver regulations difficult to understand, and that this was perhaps exacerbated by the volume of changes to regulations as well as the differences between the separately released SUD and BH components. Informants recognized that there may have been some disconnect between the administrative burden they believed they were imposing with the regulations and that experienced by providers seeking to work under the regulations.

State administrators reported an adjustment period as DBH became accustomed to working with Centers for Medicare & Medicaid Services (CMS) and its regulatory environment and noted that they had faced increased administrative burden internally as they worked through the waiver process. For example, Alaska's fee-for-service (FFS) environment added complications not-present for many states that use managed care entities to provide Medicaid services.

Several State administrators also shared the broader stakeholder community's concerns about billing under the waiver. One informant acknowledged that reimplementing service authorizations will be a challenge when the COVID-19 PHE ends and recognized the need to educate providers on the process. For example, there might be misapprehensions about how authorizations would relate to discharges.

Administrators acknowledged that they heard providers' requests for payment reforms and concerns about whether they can grow their service array on the current rate trajectory; however, the State has limited ability to change rates set or approved by CMS. Another concern was finding a middle ground between coverage of services that were borderline long-term care (LTC) and might not be able to be billed to Medicaid. Informants were aware of issues related to the sunsetting of State plan codes, particularly in how rates were impacted by the transition.

One administrator mentioned concern about DOH's internal restructure that occurred during the third year of interviews. The informant specifically noted a split of internal resources between new departments. Most State interviewees, however, believed that the restructure would have had limited impact on waiver issues.

State administrators cited lessons learned about the process of onboarding the ASO, Optum. For example, one informant indicated that Optum did not capture NPI numbers, so DBH had to pull data from other sources. The transition to Optum was described as difficult by several state administrators, who said that many providers had not successfully transitioned as of the second year of interviews; however, this was no longer reported to be an issue by the third year of interviews.

Other delays and challenges noted by State administrators included:

- Significant workforce shortages in Alaska continued to impact waiver expansion and services at the provider and State administrative levels.
  - Alaska's geography, cost of living, and access to broadband contributed to workforce challenges.
  - A volatile economy reflecting reliance on the oil industry.
- Lack of specific guidance from CMS regarding its expectations for engaging in meaningful dialogue with tribal entities.
- An increased urgency of children's mental health issues with the evolution of the COVID-19 PHE.
- The waiver renewal occurring during an election year.
  - The new administration may not have recognized the importance of the waiver.
  - Negotiations for the waiver occurred during the legislative session, increasing the pressure on the timeframe for renewal.
- Increase in opioid-related overdose deaths prior to the implementation of the waiver.

Many of the barriers brought up by state administrators described providers' experiences with the waiver implementation, which directly impacts the care that beneficiaries receive and engage in. Therefore, the results are suggestive that the measure does not support the hypothesis.

Additional qualitative results are located in Appendix C.

Measure 1-11 Conclusion: Does not support the hypothesis

Administrators' plan for program sustainability and anticipated challenges (Measure 1-12)

State administrators highlighted a variety of topics related to sustainability. COVID-19 greatly impacted the sustainability of core services during the first year due to a loss of face-to-face engagement, impact to providers' revenue, and slowed expansion growth.

The second year of interviews highlighted several new topics related to sustainability. Interviewees reiterated the need to examine improved outcomes from providing early intervention in the long term when judging sustainability. Several state administrators described difficulty obtaining the data needed to demonstrate sustainability from Optum, while acknowledging that some of these difficulties might be due to the COVID-19 PHE rather than the waiver. At that time, State administrators expressed a clear view of the waiver's financial impact which included $200 million entering Alaska to pay BH providers' Medicaid claims.

State administrators identified the waiver as generally stable in year three, although sustainability planning continued to be an ongoing process. Interviewees shared concerns about funding and that they were seeking additional grant dollars to support waiver services. One informant highlighted that grant funding, specifically COVID-19-related funding, may have caused a general decline in the Medicaid budget due to a line veto performed by the State legislature. State administrators also discussed issues regarding select reimbursement rates. Youth crisis residential services were noted as being too low and not cost effective while mobile crisis services were identified as difficult to implement without proper staffing.

Overall, several state administrators reported that there was more money available for Medicaid as a result of the SUD-BH Program. However, there were consistent concerns surrounding reimbursement rates. The SUD-BH Program allowed more beneficiaries to engage in proper treatment and State administrators are actively working to ensure the sustainability of the waiver, which suggests that this measure supports the hypothesis. Additional qualitative results are located in Appendix C.

Measure 1-12 Conclusion: Support the hypothesis

Alaska tribal entities reported changes in quality of care and access to care following expansion of BH and SUD services (Measure 1-13)

Tribal health organizations (THOs) informants were asked to share their perspective on changes in access to care following the expansion of SUD and BH services. In the second year of interviews, THOs were facing long wait lists for crucial services and a shortage of residential beds, primarily for children. THOs had not seen any growth in the number of providers, but they did see some improvement in early interventions and support for families. By the third year, THOs provided a mixed response on changes in access to care for their patients. Several were still experiencing long waitlists, others stated there had been no change, while another mentioned that access to psychiatric medication management had improved.

THOs were also asked to provide their perspective on changes in quality of care following the expansion of BH and SUD services. In year two of interviews, THOs felt it was too early to note any changes in quality and highlighted that their mission was to provide high-quality care regardless of the waiver's existence. One informant applauded the inclusion of a cultural competency continuing education unit (CEU) requirement for certification of QAPs, acknowledging the importance of including cultural sensitivity training for providers in certification standards.

In the third year of interviews, responses regarding changes in quality of care were mixed. Several THOs mentioned an increase in the quality of care due to enhanced patient engagement as peer support services began. Others reported that the bifurcation of SUD and BH services along with a lengthy paperwork process resulted in a decrease in the quality of care. One THO felt that differences were only operational, and quality of care had not changed because the THO had been an accredited organization prior to the waiver. Another THO noted that in the future, it hoped to make cultural-specific care and other similar practices more standardized to continue to improve quality.

Several THOs expressed difficulties performing their typical duties for several months in 2021 due to a statewide cyberattack that impacted AKAIMS. During the cyberattack, THOs were forced to switch to a paper-based record systems instead of an electronic version. This caused one THO to have to spend time away from patients and physically move records around the facility each day, impacting the quality of care they were able to provide. During the cyberattack, progress towards expanding services and implementing key waiver functions halted as THOs focused on providing care while using cumbersome paper methods. One THO mentioned that having to deal with the cyberattack and the COVID-19 PHE simultaneously was a challenge and there continues to be a need to provide early intervention and prevention services.

Overwhelmingly, THOs responded with mixed experiences regarding changes in the quality of care and access to care. Due to the lack of consensus, either negative or positive, findings do not suggest either support nor failure to support the hypothesis. Additional qualitative results are located in Appendix C.

Measure 1-13 Conclusion: Inconclusive

Hypothesis 1.2: The SUD-BH Program will decrease utilization of ED, IP, or institutional settings within the beneficiary population.

Inpatient admissions for SUD, and specifically for OUD (Measure 1-14)

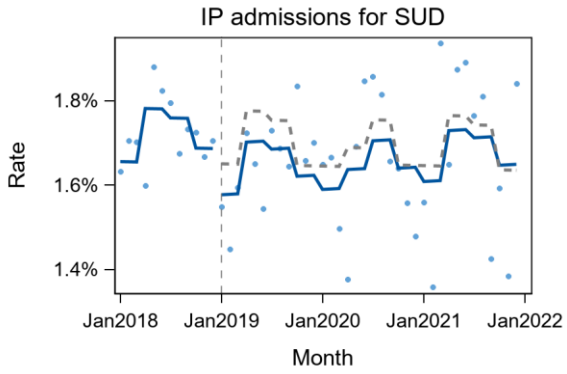
An interrupted time series (ITS) analysis was used to assess the rate of inpatient (IP) admissions for SUD in the year prior to waiver approval and the first three years of the demonstration. Table 5-10 shows the primary results from the ITS analysis, and Figure 5-3 illustrates the model-based average rate in each month (blue line) and projected rate had the baseline trend continued (gray dashed line).

Table 5-10—Primary ITS Results (Measure 1-14: Any SUD)

Variable	Change in Odds	*p*-value
Baseline monthly trend	-0.03	0.959
Level change at implementation	-4.60	0.235
Change in monthly trend	0.09	0.856

*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 1-14: Any SUD)



Analysis indicates that there was no significant change in the rates of IP admissions for SUD following the approval of the demonstration in 2019. On average, the odds of an IP admission for SUD declined by 4.6 percent upon implementation, but this decrease was not statistically significant.

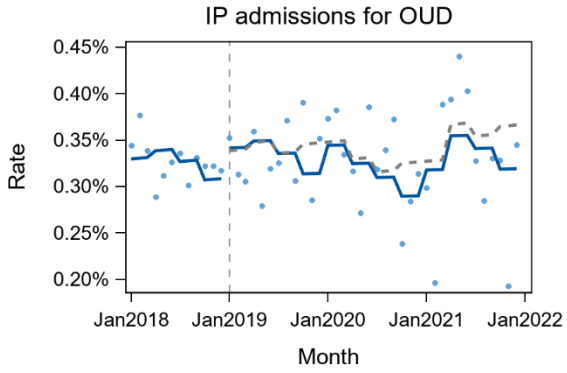
Similarly, the rates of IP admissions specifically for opioid use disorder (OUD) also did not change significantly following the implementation of the demonstration, as indicated in Table 5-11 and Figure 5-4.

Table 5-11—Primary ITS Results (Measure 1-14: OUD)

Variable	Change in Odds	*p*-value
Baseline monthly trend	0.22	0.850
Level change at implementation	1.04	0.909
Change in monthly trend	-0.16	0.893

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

Figure 5-4—Illustration of ITS Analysis (Measure 1-14: OUD)



Because statistical analysis did not detect a measurable change in the rate, results from this analysis neither support nor fail to support the hypothesis.

Measure 1-14 Conclusion: Inconclusive

Inpatient admissions for BH disorders (Measure 1-15)

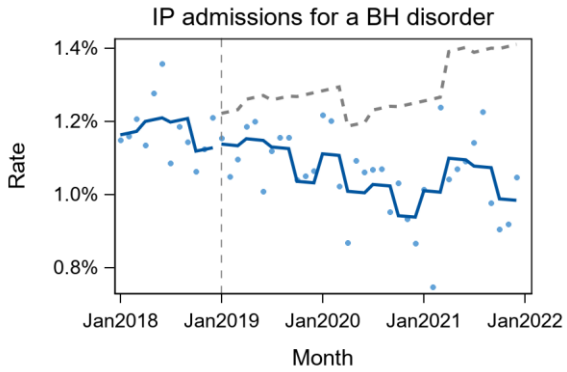
An ITS analysis was used to assess the rate of IP admissions for BH disorder in the year prior to waiver approval and the first three years of the demonstration. Table 5-12 shows the primary results from the ITS analysis, and Figure 5-5 illustrates the model-based average rate in each month (blue line) and projected rate had the baseline trend continued (gray dashed line).

Table 5-12—Primary ITS Results (Measure 1-15)

Variable	Change in Odds	*p*-value
Baseline monthly trend	0.42	0.516
Level change at implementation	-6.38	0.175
Change in monthly trend	-0.61	0.330

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

Figure 5-5—Illustration of ITS Analysis (Measure 1-15)



Although the rate of IP admissions for a BH disorder decreased relative to the projected rate had the baseline trend continued, this decrease was not statistically significant. The odds of an IP admission for a BH visit decreased by 6.38 percent upon implementation and the odds decreased by 0.61 percent per month. Because results of this analysis were not statistically significant, results to-date neither support nor fail to support the hypothesis.

Measure 1-15 Conclusion: Inconclusive

ED visits for SUD, by setting (Measure 1-16a)

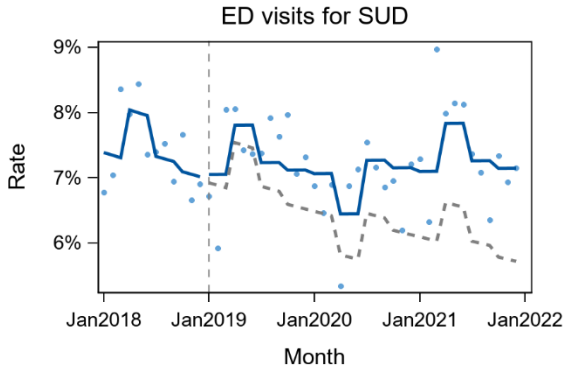
An ITS analysis was used to assess the rate of ED visits for SUD in the year prior to waiver approval and the first three years of the demonstration. Table 5-13 shows the primary results from the ITS analysis, and Figure 5-6 illustrates the model-based average rate in each month (blue line) and projected rate had the baseline trend continued (gray dashed line).

Table 5-13—Primary ITS Results (Measure 1-16a: Any SUD)

Variable	Change in Odds	*p*-value
Baseline monthly trend	-0.58	0.025**
Level change at implementation	1.38	0.488
Change in monthly trend	0.60	0.020**

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

Figure 5-6—Illustration of ITS Analysis (Measure 1-16a: Any SUD)



Analysis shows that the odds of an ED visit for SUD increased by 0.60 percent following the implementation of the demonstration compared to the projected rates had the baseline trend continued, which was statistically significant (p=0.020).

Measure 1-16a Conclusion: Fails to support the hypothesis

ED visits for OUD, by setting (Measure 1-16b)

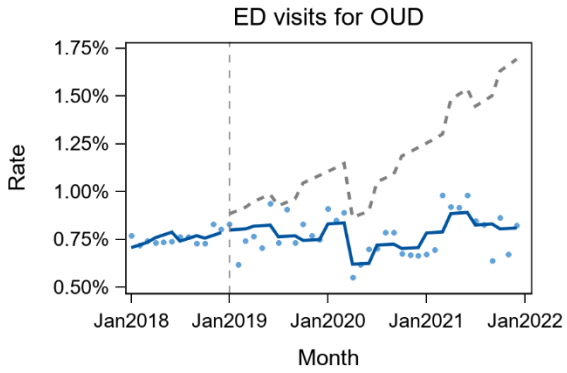
However, the rate of ED visits for OUD specifically decreased relative to the projected baseline trend, as indicated in Table 5-14 and Figure 5-7.

Table 5-14—Primary ITS Results (Measure 1-16b: OUD)

Variable	Change in Odds	*p*-value
Baseline monthly trend	1.90	0.016**
Level change at implementation	-8.26	0.139
Change in monthly trend	-1.54	0.044**

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

Figure 5-7—Illustration of ITS Analysis (Measure 1-16b: OUD)



Analysis shows that the odds of an ED visit during the baseline was increasing significantly, by 1.90 percent (p=0.016). After implementation of the demonstration, this trend essentially flattened with a relative decrease in the trend of 1.54 percent (p=0.044).

Measure 1-16b Conclusion: Supports the hypothesis

ED visits for a BH disorder, by setting (Measure 1-17)

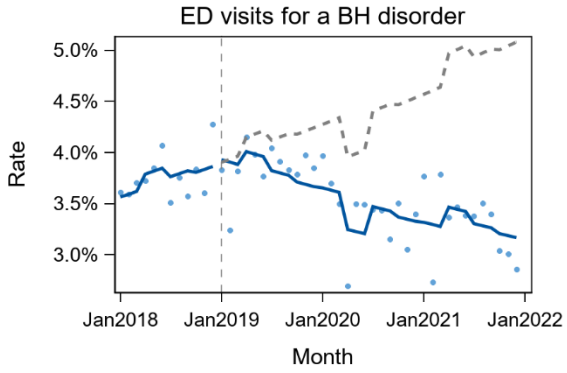
An ITS analysis was used to assess the rate of ED visits for BH disorders in the year prior to waiver approval and the first three years of the demonstration. Table 5-15 shows the primary results from the ITS analysis, and Figure 5-8 illustrates the model-based average rate in each month (blue line) and projected rate had the baseline trend continued (gray dashed line).

Table 5-15—Primary ITS Results (Measure 1-17: ED Visits)

Variable	Change in Odds	*p*-value
Baseline monthly trend	0.79	0.028**
Level change at implementation	2.13	0.433
Change in monthly trend	-1.41	<0.001***

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

Figure 5-8—Illustration of ITS Analysis (Measure 1-17: ED Visits)



Analysis shows that prior to the start of the demonstration, the rate of ED visits for BH disorders was increasing—the odds of an ED visit was increasing by 0.79 percent per month (p=0.028). After implementation, the odds of an ED visit for BH decreased significantly compared to the projected rates had the baseline trend continued, by 1.41 percent per month (p<0.001).

Measure 1-17 Conclusion: Supports the hypothesis

Mean length of stay measured from admission date to discharge date, by setting (Measure 1-18)

Measure 1-18 intends to examine whether the demonstration has decreased utilization of institutions for mental diseases (IMD) within the waiver population by assessing the mean length of stay from date of admission to date of discharge within IMDs for SUDs. As shown in Table 5-16, the mean length of stay decreased from 2018–2021. In 2018, the average length of stay in an IMD for SUD was 76.12 days. The average length of stay decreased in 2019 to 27.00 days and in 2020 to 18.48 days before increasing in 2021 to 43.92 days. The average length of stay in an IMD for SUD in the evaluation period was 26.90 days which was 49.22 days less than the average length of stay in an IMD for SUD in 2018. This was found to be a statistically significant difference (p<0.001). Although the appropriate length of stay is determined by medical necessity, the State is targeting a statewide average length of stay of 30 days.[5-10] Because the average length of stay trended closer to the targeted average, this represents an overall improvement. Length of stay declined from 76.1 days (46 days more than the targeted average) to 26.9 days (3.1 days less than the average) which represents an overall improvement.

Table 5-16—Mean Length of Stay Measured in an IMD for SUDs from Admission Date to Discharge Date, 2018–2021

	Baseline Period	Evaluation Period					
	2018	2019	2020	2021	Weighted Average	Change In Days	*p*-value
Mean length of stay measured from admission date to discharge date, in days	76.12	27.00	18.48	43.92	**26.90**	**-49.22**	**<0.001*** **

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

[5-10] Special Terms and Conditions, #21 https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/ak/ak-stcs-apprvl-ltr-05272021.pdf; Accessed on: Oct 31, 2022.

Measure 1-18 Conclusion: Supports the hypothesis

30-day readmission rate to IP facilities following hospitalization for a SUD related diagnosis, by setting (Measure 1-19)

Overall, quarterly 30-day readmission rates to IP facilities following hospitalization for SUD related diagnoses among waiver beneficiaries were inconsistent from 2018 to 2021. Rates reached their lowest point in Q3 and Q4 of 2018 at 10.5 percent before increasing to their peak at 23.0 percent in Q4 2020 as seen in Figure 5-9. The rate then fell back to 12.5 percent in Q4 2021. Table 5-17 shows a 2.3 percentage point increase in the 30-day readmission rate among waiver beneficiaries between the baseline period and evaluation period on average, though this was not a statistically significant difference (p=0.201).

Figure 5-9—30 Day Readmission Rate to IP Facilities Following Hospitalization for a SUD Related Diagnosis, 2018–2021

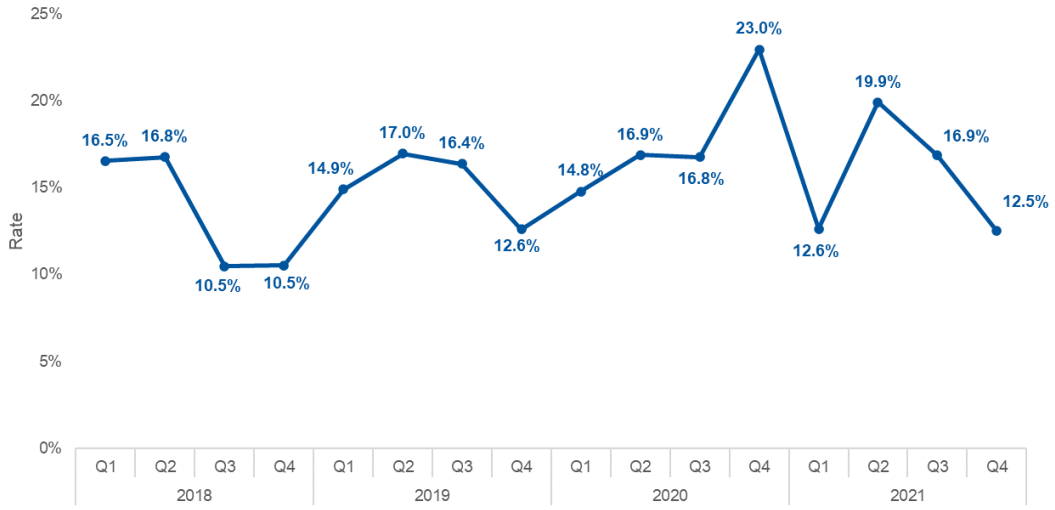


Table 5-17—30 Day Readmission Rate to IP Facilities Following Hospitalization for a SUD Related Diagnosis

	Baseline Period (2018)	Evaluation Period (2019-2021)	Percentage Point Change	*p*-value
	Weighted Average	Weighted Average		
30-day readmission rate to IP facilities following hospitalization for a SUD related diagnosis	**14.1%**	**16.4%**	**2.3pp**	**0.201**

Note: pp=percentage point
*p< 0.1, **p< 0.05, ***p<0.001

Measure 1-19 Conclusion: Inconclusive

30-Day readmission rate to IP facilities following hospitalization for a BH related diagnosis, by setting (Measure 1-20)

Similar to quarterly 30-day readmission rates to IP facilities following hospitalization for SUD, quarterly 30-day readmission rates to IP facilities following hospitalization for BH-related diagnoses among waiver beneficiaries were inconsistent from 2018 to 2021, as shown in Figure 5-10. Of note, the readmission rate reached its lowest point of 10.0 percent in Q2 2020, which could possibly be attributed to the COVID-19 PHE. The rate then

increased to 13.2 percent in Q3 2020. Table 5-18 shows a 0.2 percentage point difference between the average baseline period rate and the average evaluation period rate, which was not found to be statistically significant (*p*=0.881).

Figure 5-10—30 Day Readmission Rate to IP Facilities Following Hospitalization for a BH Related Diagnosis

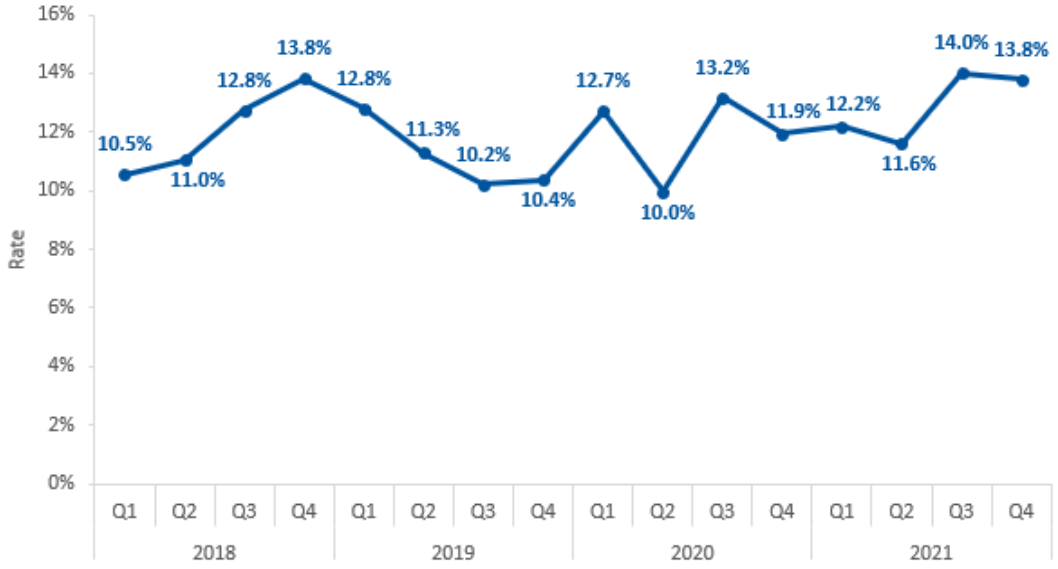


Table 5-18—30 Day Readmission Rate to IP Facilities Following Hospitalization for a BH Related Diagnosis

	Baseline Period (2018)	Evaluation Period (2019-2021)	Percentage Point Change	*p*-value
	Weighted Average	Weighted Average		
30-day readmission rate to IP facilities following hospitalization for a BH-related diagnosis, by setting	**11.8%**	**12.0%**	**0.2pp**	**0.881**

Note: pp=percentage point
*p< 0.1, **p< 0.05, ***p<0.001

Measure 1-20 Conclusion: Inconclusive

Hypothesis 1.3: The SUD-BH Program will increase the percentage of beneficiaries who adhere to treatment for SUD and BH disorders

Number of beneficiaries with a SUD diagnosis including those with OUD who used services in the last month or year, by service or benefit type (Measure 1-21)

An ITS analysis was used to assess the percentage of beneficiaries with a SUD diagnosis utilizing relevant treatment services in the year prior to waiver approval and the first three years of the demonstration. Settings included are:

- Early Intervention (CMS SUD Monitoring Metric #7)

- Outpatient (OP) (CMS SUD Monitoring Metric #8)
- Intensive Outpatient and Partial Hospitalization (IOP/PH) (CMS SUD Monitoring Metric #9)
- Residential and IP (CMS SUD Monitoring Metric #10)
- Withdrawal Management (CMS SUD Monitoring Metric #11)
- Medication-assisted Treatment (CMS SUD Monitoring Metric #12)

Due to low and highly variable rates of early intervention particularly in the baseline (average rate of 0.057 percent per month in 2018 and 0.171 percent in 2019–2021) results of statistical testing are not reliable. As of March 2023, milestones related to implementation of ASAM Level 0.5 Early Intervention were delayed from their targeted date of April/May 2019. One milestone of training hospital ED staff at 10 hospitals was partially completed and ongoing; however, the COVID-19 PHE contributed to delays in fully meeting this milestone, limiting training to two hospitals.

ITS analysis shows that the rate of beneficiaries with SUD utilizing OP services was increasing slightly but statistically significantly during the baseline period as displayed in Table 5-19 and Figure 5-11. Shortly following implementation of the waiver in 2019, the rate began to decline by a statistically significant degree compared to the baseline trend. The odds of an OP visit declined by 1.54 percent per month relative to the baseline trend.

Table 5-19—Primary ITS Results (Measure 1-21: OP Services)

Variable	Change in Odds	*p*-value
Baseline monthly trend	0.81	<0.001***
Level change at implementation	7.63	<0.001***
Change in monthly trend	-1.54	<0.001***

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

Figure 5-11—Illustration of ITS Analysis (Measure 1-21: OP Services)

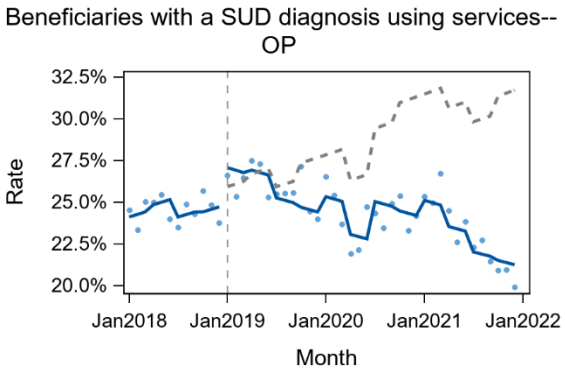


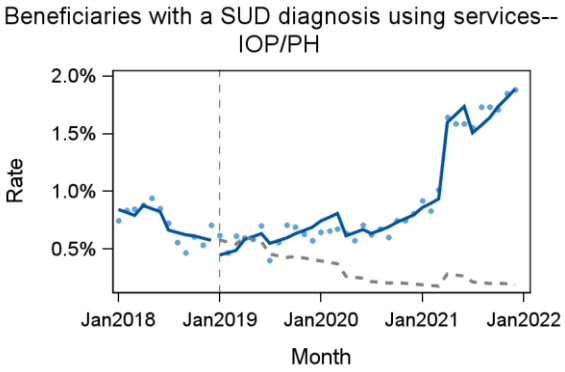
Table 5-20 and Figure 5-12 display the ITS results of IOP/PH. In contrast to OP services, the utilization of IOP/PH services declined during the baseline period, with the odds decreasing by 3.13 percent per month. Following implementation of the demonstration, however, rates began to stabilize before trending upwards and increasing significantly in 2021. In 2021, utilization of IOP/PH increased substantially for Region 1 (Anchorage Municipality) and Region 6 (Western Region [Kotzebue, Nome, and Bethel]). The odds of an IOP/PH visit increased by 7.72 percent per month relative to the baseline trend.

Table 5-20—Primary ITS Results (Measure 1-21: IOP and PH Services)

Variable	Change in Odds	*p*-value
Baseline monthly trend	-3.13	<0.001***
Level change at implementation	-28.18	<0.001***
Change in monthly trend	7.72	<0.001***

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

Figure 5-12—Illustration of ITS Analysis (Measure 1-21: IOP and PH Services)



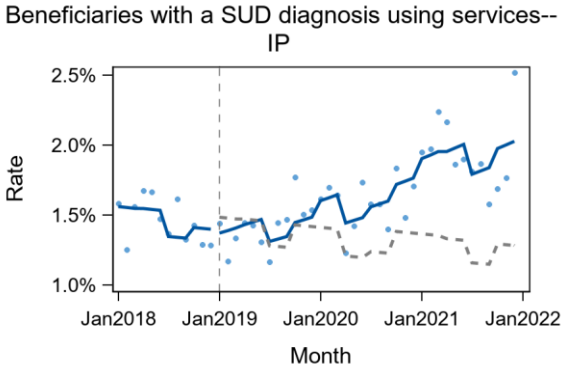
Similar to utilization of IOP/PH services, utilization of residential and IP services declined during the baseline period but began increasing significantly relative to the baseline trend as displayed in Table 5-21 and Figure 5-13. Following implementation of the demonstration, the odds of a residential or IP service increased by 1.76 percent per month relative to the baseline trend, which was a statistically significant change.

Table 5-21—Primary ITS Results (Measure 1-21: Residential and IP Services)

Variable	Change in Odds	*p*-value
Baseline monthly trend	-0.42	0.487
Level change at implementation	-9.33	0.036**
Change in monthly trend	1.76	0.004**

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

Figure 5-13—Illustration of ITS Analysis (Measure 1-21: Residential and IP Services)



ITS analysis shows that the utilization of withdrawal management services—while relatively infrequent at less than 1 percent—increased slightly during the baseline period as seen in Table 5-22 and Figure 5-14. Although ITS showed a significant decrease in the odds of withdrawal management following implementation (18.94 percent decrease in the odds), there was no significant change in the trend.

Table 5-22—Primary ITS Results (Measure 1-21: Withdrawal Management Services)

Variable	Change in Odds	*p*-value
Baseline monthly trend	1.14	0.233
Level change at implementation	-18.94	0.004**
Change in monthly trend	-0.36	0.698

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

Figure 5-14—Illustration of ITS Analysis (Measure 1-21: Withdrawal Management Services)

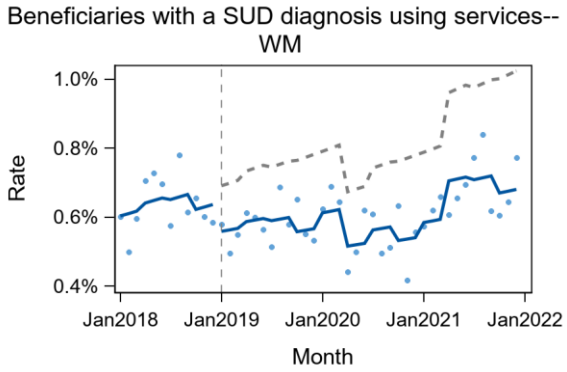


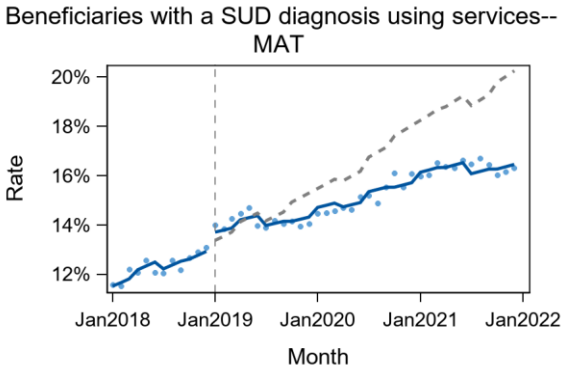
Table 5-23 and Figure 5-15 show the ITS results for medication assisted treatment (MAT). The rate of MAT increased significantly during the baseline, with the odds increasing by 1.43 percent per month. Following implementation, the odds increased by 3.65 percent (p=0.029); however, the trend increased by a lower margin, with the odds of MAT decreasing by 0.73 percent per month relative to the baseline trend (p < 0.001).

Table 5-23—Primary ITS Results (Measure 1-21: MAT)

Variable	Change in Odds	*p*-value
Baseline monthly trend	1.43	<0.001***
Level change at implementation	3.65	0.029**
Change in monthly trend	-0.73	<0.001***

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

Figure 5-15—Illustration of ITS Analysis (Measure 1-21: MAT)



Across all categories of service, the results were mixed and indicate potential substitution effects. There appears to be a shift from OP to residential, IP and IOP/PH. This could be partially because treatment for SUD in the OP setting had been covered under Alaska Medicaid State Plan, and residential, IP, and IOP/PH are new additions under the 1115 waiver.[5-11] If the opening of new services for treating SUD is the primary cause of this shift, then it is an indication that members with a SUD are receiving more appropriate care.

Measure 1-21 Conclusion: Supports the hypothesis

Number of beneficiaries with a BH diagnosis who used services in the last month or year, by service or benefit type (Measure 1-22)

An ITS analysis was used to assess the percentage of beneficiaries with a BH diagnosis utilizing relevant treatment services in the year prior to waiver approval and the first three years of the demonstration. Settings included are aligned with the Healthcare Effectiveness Data and Information Set (HEDIS®[5-12]) measure for mental health utilization:

- IP
- IOP or PH
- OP
- ED
- Telehealth
- Any service

Table 5-24 and Figure 5-16 display the ITS results for IP utilization for those with a BH diagnosis. The percentage of beneficiaries with a BH diagnosis utilizing IP services declined slightly throughout the baseline and evaluation period; however, this decline was not statistically significant, nor was there a statistically significant change following implementation in 2019.

5-11 Alaska 1115 Waiver Implementation Plan, March 13, 2019. Available at: https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/ak/behavioral-health/ak-behavioral-health-demo-appvd-implementation-20190321.pdf. Accessed on: Oct 24, 2022.

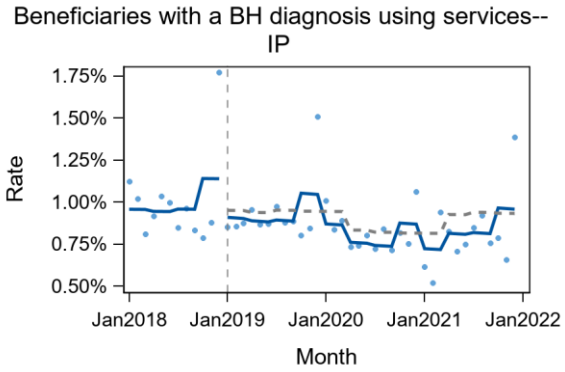
5-12 HEDIS is a registered trademark of the National Committee for Quality Assurance (NCQA).

Table 5-24—Primary ITS Results (Measure 1-22: IP)

Variable	Change in Odds	*p*-value
Baseline monthly trend	-0.06	0.953
Level change at implementation	-4.15	0.554
Change in monthly trend	-0.31	0.739

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

Figure 5-16—Illustration of ITS Analysis (Measure 1-22: IP)



ITS analysis shows a decline in the utilization of IOP/PH services upon implementation of the waiver with the odds decreasing by 20.21 percent (p = 0.001) as shown in Table 5-25 and Figure 5-17. However, the trend after implementation did not change significantly compared to the baseline trend.

Table 5-25—Primary ITS Results (Measure 1-22: IOP/PH)

Variable	Change in Odds	*p*-value
Baseline monthly trend	-1.45	0.094*
Level change at implementation	-20.21	0.001**
Change in monthly trend	0.98	0.255

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

Figure 5-17—Illustration of IT Analysis (Measure 1-22: IOP/PH)

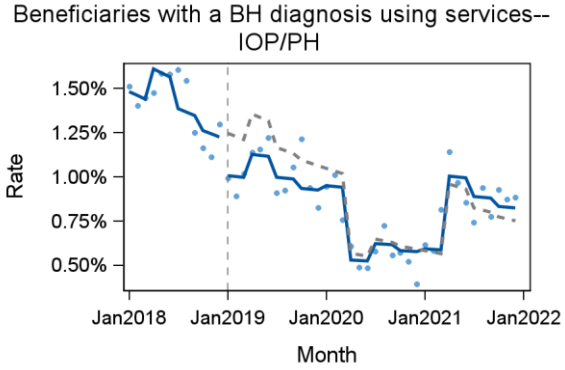


Table 5-26 and Figure 5-18 show the results of the ITS analysis for those with a BH diagnosis utilizing OP services. ITS analysis shows a significant increase in the odds of utilizing OP services at time of implementation

(odds of an OP visit increased by 26.55 percent, $p<0.001$); however, there was also a significant decrease in the trend following implementation, with the odds of an OP visit declining by 1.81 percent per month ($p<0.001$).

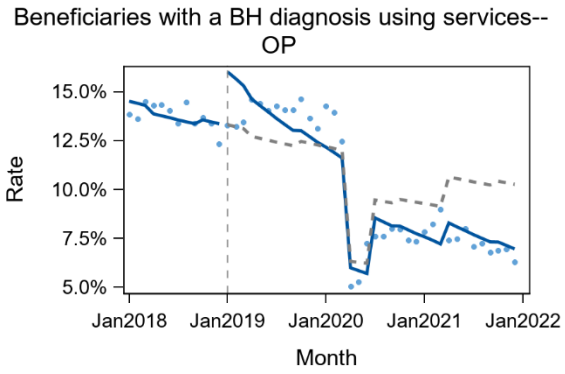
It is important to note, however, that this may primarily be driven by the COVID-19 PHE, which to date appears to have caused a sustained decrease in the utilization of this setting. Adding a COVID-19 control for the period of Q2 2021–Q4 2021 (not shown) effectively reverses the observed impact. In this model, the trend relative to baseline increased in odds of 0.78 percent per month ($p=0.012$) and a level change at implementation of 1.48 percent ($p=0.546$). Although Health Services Advisory Group, Inc.'s (HSAG's) COVID-19 controls appear to have accounted for the impact of the PHE on most other measures, the sustained decrease in this setting in the latter part of 2021 may bias the findings. HSAG shows results from this analysis for consistency with remaining measures and the uncertainty surrounding the continued impact of the COVID-19 PHE. It is possible that other settings such as telemedicine are serving as a substitute for the OP setting. HSAG anticipates the substitution effect between telemedicine and OP services will be clearer in the Summative Evaluation Report, as additional data are gathered for the remainder of the demonstration period.

Table 5-26—Primary ITS Results (Measure 1-22: OP)

Variable	Change in Odds	*p*-value
Baseline monthly trend	-0.84	0.003**
Level change at implementation	26.55	<0.001***
Change in monthly trend	-1.81	<0.001***

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

Figure 5-18—Illustration of ITS Analysis (Measure 1-22: OP)



ITS analysis shows a significant decrease in the utilization of ED among members with a BH diagnosis during the baseline period as seen in Table 5-27 and Figure 5-19. The odds of such treatment decreased by 12.26 percent per month ($p<0.001$). Rates increased following implementation (albeit with high variation) compared to projected rates, with the odds of a BH treatment in the ED setting increasing by 216.19 percent ($p<0.001$). Although rates declined substantially due to the COVID-19 PHE in 2020 and 2021, they were still higher than the near-zero rates projected had the baseline trend continued.

Table 5-27—Primary ITS Results (Measure 1-22: ED)

Variable	Change in Odds	*p*-value
Baseline monthly trend	-12.26	<0.001***
Level change at implementation	216.19	<0.001***
Change in monthly trend	8.42	0.025**

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

Figure 5-19—Illustration of ITS Analysis (Measure 1-22: ED)

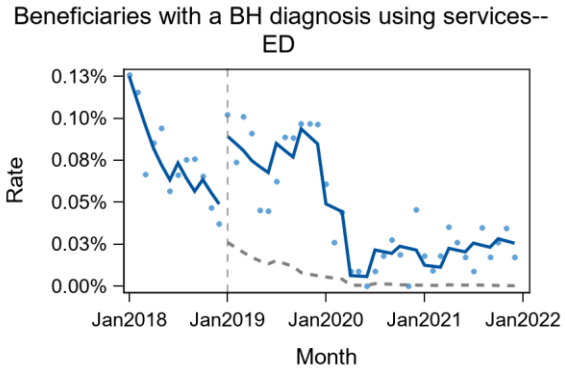


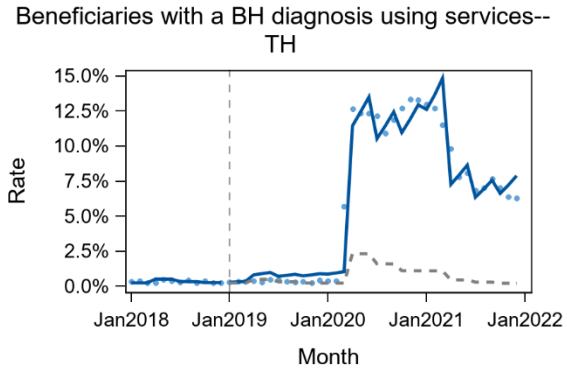
Figure 5-20 demonstrates that prior to the COVID-19 PHE, the rate of BH treatment in the telehealth setting was virtually nonexistent, with rates near zero up until March 2020. ITS analysis displayed in Table 5-28 shows that even after accounting for COVID-impacted quarters, the odds of a telehealth visit among BH members increased on average by 10.25 percent per month (p<0.001), which was driven exclusively by the COVID-19 PHE. Notably, in the year following COVID-19, telehealth visits dropped by approximately 5 percentage points, but remained well above the pre-PHE levels, suggesting a more permanent shift toward this setting following the PHE.

Table 5-28—Primary ITS Results (Measure 1-22: Telehealth)

Variable	Change in Odds	*p*-value
Baseline monthly trend	-0.33	0.837
Level change at implementation	14.01	0.230
Change in monthly trend	10.25	<0.001***

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

Figure 5-20—Illustration of ITS Analysis (Measure 1-22: Telehealth)



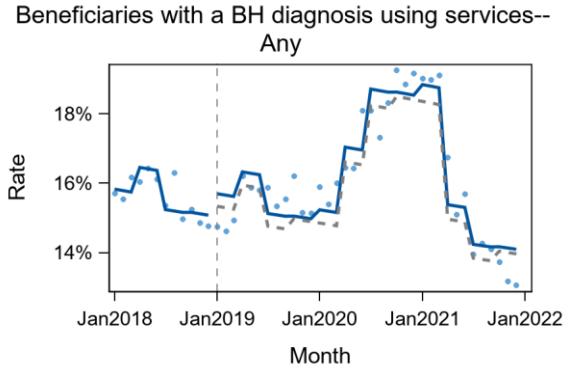
Although there were significant changes in the trends specific to certain settings, overall, there was no significant change in the trend of members with a BH diagnosis using any of the settings examined in aggregate as demonstrated in Table 5-29. Figure 5-21 shows that the rate of service utilization among members with a BH diagnosis remained between approximately 15 and 16 percent until the COVID-19 PHE began, where it increased to over 18 percent.

Table 5-29—Primary ITS Results (Measure 1-22: Any Service)

Variable	Change in Odds	*p*-value
Baseline monthly trend	-0.31	0.226
Level change at implementation	2.78	0.162
Change in monthly trend	0.02	0.945

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

Figure 5-21—Illustration of ITS Analysis (Measure 1-22: Any Service)



Across all categories, the results were mixed and indicate potential substitution effects. The trend in utilization of OP services among beneficiaries with a BH diagnosis decreased relative to the baseline period, but ED and telehealth increased significantly. The use of telehealth appears to have replaced the OP setting, with an increase to approximately 12.5 percent during the COVID-19 PHE lockdown time frame before falling to approximately 7.5 percent thereafter. Meanwhile, the OP setting decreased from approximately 14 percent prior to the PHE to 7 percent—a decline of 7 percentage points, which is commensurate with the increase in telehealth services. Additionally, utilization of IOP/PH among the BH population did not exhibit a significant increase in 2021 as was seen among the SUD population (Measure 1-21). Because of these mostly mixed results, the substitution effects

likely attributable to COVID-19, and a decline in overall services following the PHE, evidence does not conclusively support nor fail to support the hypothesis.

Measure 1-22 Conclusion: Inconclusive

Time to treatment, by service type (National Behavioral Health Quality Framework [NBHQF] Goal 1) (Measure 1-23)

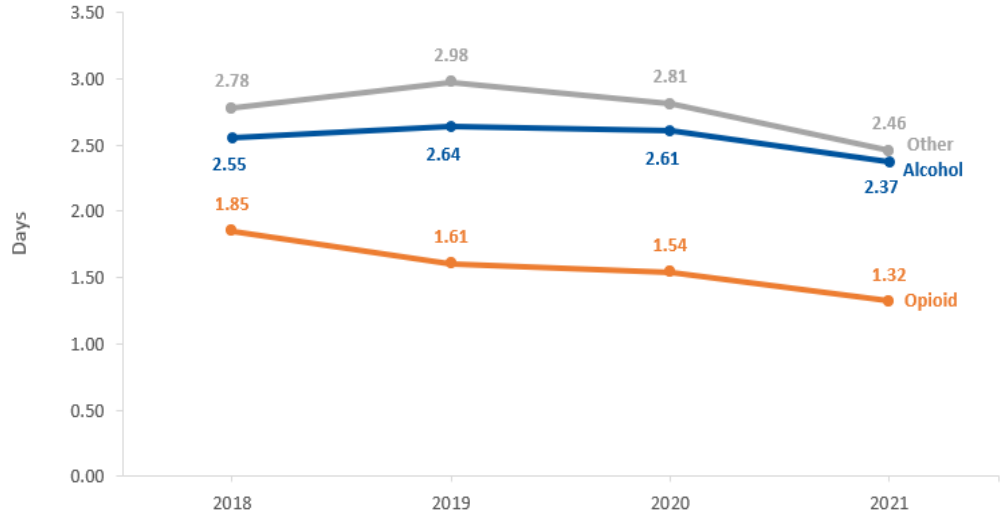
Measure 1-23 intends to measure the accessibility of alcohol, opioid, and other drug treatment services to the waiver population by evaluating the average time to treatment for members with an alcohol, opioid, or other drug related diagnosis. This measure assesses the time between index episode start date and first date of treatment in alignment with the HEDIS measurement year (MY) 2020 specifications for the In*itiation and Engagement of Alcohol and Other Drug Abuse or Dependence Treatment (IET)* measure. For members with an alcohol abuse diagnosis, the average time to treatment was 2.55 days in 2018 and remained relatively stable in 2019 at 2.64 days and in 2020 at 2.61 days before declining slightly to 2.37 days in 2021 as displayed in Table 5-30 and Figure 5-22. The differences in average time to alcohol abuse treatment in the baseline period and the evaluation period were not statistically significant (p=0.924). For members with an opioid abuse diagnosis, the average time to treatment started at 1.85 days in 2018 and steadily declined year over year to 1.32 days in 2021. There was a decrease of 0.36 days in average time to opioid abuse treatment between the evaluation period and the baseline period, which was statistically significant (p<0.001). For members with a diagnosis for abuse of other drugs, the average time to treatment was 2.78 days in 2018 and rose in 2019 to 2.98 days before falling to 2.81 days in 2020. Rates then declined further to 2.46 days in 2021. The differences in average time to treatment for diagnoses of other drug abuse in the baseline period and the evaluation period were not statistically significant (p=0.899).

Table 5-30—Time to Treatment in Days

Service Type	Baseline Period	Evaluation Period				Change in Days	*p*-value
	2018	2019	2020	2021	Weighted Average		
Alcohol	2.55	2.64	2.61	2.37	**2.54**	**-0.01**	**0.924**
Opioid	1.85	1.61	1.54	1.32	**1.49**	**-0.36**	**<0.001*** **
Other	2.78	2.98	2.81	2.46	**2.76**	**-0.02**	**0.899**

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

Figure 5-22—Time to Treatment in Days



Although two out of the three indicators were not statistically significant, all exhibited a decline in the time to treatment, and opioid treatment indicated a significant decline in the time to treatment. Therefore, evidence suggests this hypothesis is supported.

Measure 1-23 Conclusion: Supports the hypothesis

Research Question 2: Do enrollees receiving SUD services experience improved health outcomes?

Hypothesis 2.1: The SUD-BH Program will increase the percentage of beneficiaries with SUD or a BH disorder who experience care for comorbid conditions.

Access to physical healthcare (Measure 2-1)

Measure 2-1 describes the accessibility of physical healthcare by evaluating adult waiver beneficiaries' access to preventive/ambulatory services and children and adolescent waiver beneficiaries' access to primary care practitioners (PCPs).

Table 5-31 shows that overall, adults' access to physical healthcare slightly decreased year over year from 84.5 percent in 2018 to 81.8 percent in 2021. The average rate of adults' access to preventive/ambulatory services in the evaluation period was 1.8 percentage points less than the rate in the baseline period, a statistically significant difference ($p<0.001$). This pattern is similar to the rates of children's and adolescents' access to PCPs from 2018–2021. In 2018 and 2019, the rate of children's access to PCPs was around 94 percent before decreasing in 2020 and 2021 to a low of 89.5 percent. On average, the rate of children's access to PCPs was 92 percent in the evaluation period, a statistically significant difference ($p<0.001$) and a decrease of 1.9 percentage points from the rate of 93.9 percent in the baseline period.

Table 5-31—Access to Physical Healthcare

	Baseline Period	Evaluation Period				Percentage Point Change	*p*-value
	2018	2019	2020	2021	Weighted Average		
Adults' Access to Preventive/Ambulatory Health Services	84.5%	84.3%	82.1%	81.8%	**82.7%**	**-1.8pp**	**<0.001*** **
Children and Adolescents' Access to PCPs	93.9%	94.1%	92.2%	89.5%	**92.0%**	**-1.9pp**	**<0.001*** **

Note: pp=percentage point
*p< 0.1, **p < 0.05, ***p<0.001

Measure 2-1 Conclusion: Does not support the hypothesis

Screening for chronic conditions relevant to state Medicaid population (Measure 2-2)

Measure 2-2 aims to evaluate whether there has been an increase in waiver members who are receiving care for comorbid conditions by assessing the screening rates for chronic conditions relevant to the State Medicaid population. Appendix A contains the screening codes used for analysis. Overall, waiver members saw a slight decrease in the percentage screened for chronic conditions from 85.7 percent in the baseline period to an average of 83.8 percent in the evaluation period as seen in Table 5-32. This decrease in the average percentage of members screened for chronic conditions (1.9 percentage points) from baseline to evaluation was statistically significant (p<0.001). It is plausible that the COVID-19 PHE played a role in the chronic condition screening rates as the rates were stable from 2018 (85.7 percent) to 2019 (85.6 percent) before falling in 2020 (82.5 percent) and subsequently seeing an uptick in 2021 (83.2 percent).

Table 5-32—Screening for Chronic Conditions Relevant to State Medicaid Population, 2018–2021

	Baseline Period	Evaluation Period				Percentage Point Change	*p*-value
	2018	2019	2020	2021	Weighted Average		
Screening for chronic conditions relevant to State Medicaid population	85.7%	85.6%	82.5%	83.2%	**83.8%**	**-1.9pp**	**<0.001*** **

Note: pp=percentage point
*p< 0.1, **p < 0.05, ***p<0.001

Measure 2-2 Conclusion: Does not support the hypothesis

Screening for co-morbidity of BH and SUDs within the waiver population compared to the total Medicaid population (Measure 2-3)

Measure 2-3 aims to determine whether the demonstration is increasing the percentage of beneficiaries who are receiving care for co-morbidity of BH disorders and SUDs. To assess this, two rates were calculated: first, the percentage of waiver members screened for BH disorders among beneficiaries diagnosed with SUDs; and second, the percentage of waiver members screened for SUDs among beneficiaries diagnosed with BH disorders.

Table 5-33 shows that both diagnosis groups saw significant decreases in their respective population screened between the baseline and evaluation periods. The average rate of waiver beneficiaries screened for BH disorders

among beneficiaries with SUDs fell by 2.3 percentage points between the baseline and evaluation periods, while the rate of screening for SUDs among waiver beneficiaries with BH disorders fell by 1.3 percentage points. Comparisons with the larger Medicaid population were not feasible due to the measure being limited to members diagnosed with either a SUD or a BH disorder, which constitutes a significant portion of the waiver population.

Table 5-33—Screening for Co-Morbidity of BH Disorders and SUDs Within the Waiver Population, 2018–2021

	Baseline Period	Evaluation Period				Percentage Point Change	*p*-value
	2018	2019	2020	2021	Weighted Average		
Screening for BH disorders among beneficiaries diagnosed with SUDs	21.3%	21.6%	18.8%	16.6%	**19.0%**	**-2.3pp**	**<0.001*** **
Screening for SUDs among beneficiaries diagnosed with BH disorders	20.4%	20.4%	18.4%	18.4%	**19.1%**	**-1.3pp**	**0.002****

Note: pp=percentage point
*p< 0.1, **p < 0.05, ***p<0.001

Measure 2-3 Conclusion: Does not support the hypothesis

Percentage of beneficiaries who rate the quality of their healthcare as very good or excellent (Measure 2-4)

Measure 2-4 aims to assess satisfaction with healthcare by determining what percentage of survey respondents rated the quality of their healthcare as very good or excellent. Table 5-34 shows that approximately seven of 10 adult respondents (68.8 percent) reported a high rating of healthcare (8, 9, or 10 on a scale from 0 to 10). This is below the 5th percentile among managed care Medicaid beneficiaries nationally in 2020.[5-13,5-14] Although the rate among children was higher than among adults (at 79.8 percent), this rate fell well below the 5th percentile nationally. Note that Alaska Medicaid follows an FFS model of care delivery while national percentile data are only available for Medicaid managed care organizations.

Table 5-34—Percentage of Beneficiaries who Rate the Quality of Their Healthcare as Very Good or Excellent

Group	Denominator	Numerator	Rate
Adult	245	170	68.8%
Child	323	251	79.8%

Because these survey results are for a single point in time and no similar comparison group can be found that reflects Alaska Medicaid beneficiaries, data are not sufficient to determine whether the findings support the hypothesis.

Measure 2-4 Conclusion: N/A

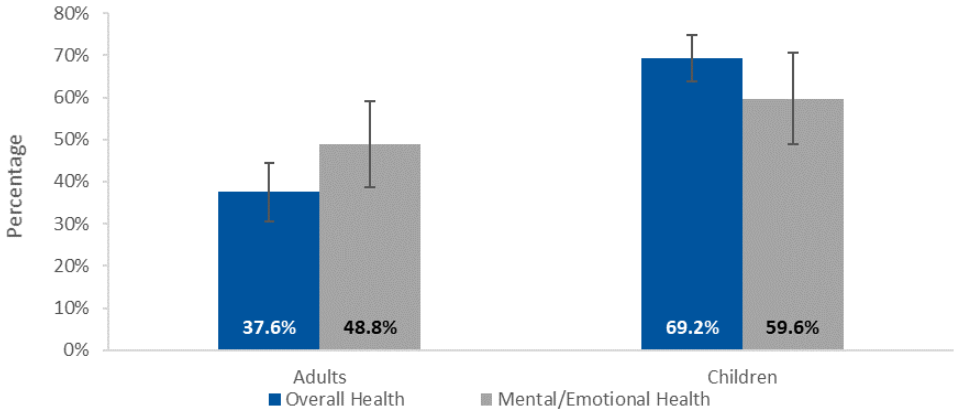
5-13 National Committee for Quality Assurance (NCQA). Quality Compass® Benchmark and Compare Quality Data. Available at: https://www.ncqa.org/programs/data-and-information-technology/data-purchase-and-licensing/quality-compass/. Accessed on: Mar 23, 2023.

5-14 Benchmark values for 2021 were not available at the time this report was produced. Quality Compass® is a registered trademark by National Committee for Quality Assurance (NCQA).

Percentage of beneficiaries who rate their overall mental or emotional health as very good or excellent (Measure 2-5)

Measure 2-5 aims to assess beneficiaries' perception of their overall health and mental health by determining what percentage of survey respondents rated their overall health and mental health as very good or excellent. Figure 5-23 shows that overall, 37.6 percent of adults had a high rating of their overall health, while 48.8 percent of adults had a high rating of their mental health. This relationship was reversed among children, where 69.2 percent rated their overall health status highly while 59.6 percent rated their overall mental health status highly. National percentile data are not available for this survey item.

Figure 5-23—Percentage of Beneficiaries who Rate Their Overall Health/Mental Health as Very Good or Excellent



Note: Error bars show 95% confidence intervals.

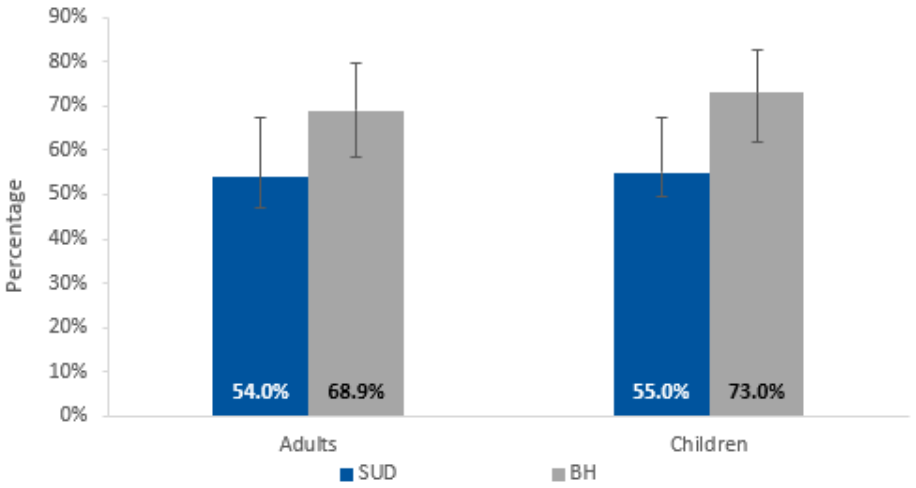
Measure 2-5 Conclusion: N/A

Percentage of beneficiaries who demonstrate very good or excellent knowledge of available treatment and services (Measure 2-6)

Measure 2-6 aims to measure the percentage of Medicaid beneficiaries who demonstrate very good or excellent knowledge of available SUD and BH treatment services through a custom-designed survey instrument.

The first component of this measure assesses the percentage of beneficiaries who responded that they knew where to find SUD or BH treatment services. Figure 5-24 shows that over half of adults (54.0 percent) reported that they knew where to find treatment for substance abuse if needed, while over two-thirds (68.9 percent) reported that they knew where to find treatment for BH disorders if needed. This relationship was similar among children, where 55.0 percent of respondents indicated that they knew where to find treatment for SUD while 73.0 percent knew where to find treatment for a BH disorder for their child.

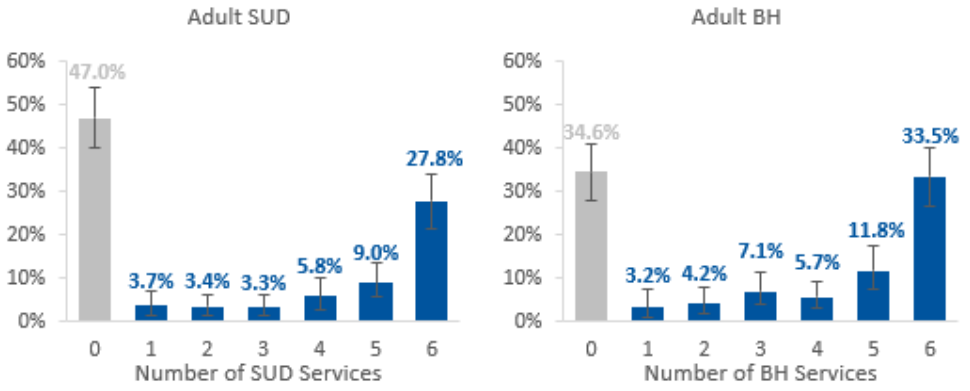
Figure 5-24—Percentage of Beneficiaries who Know Where to find SUD/BH Treatment if Needed



Note: Error bars show 95% confidence intervals.

Figure 5-25 shows that 42.6 percent of adult respondents indicated they knew where to receive four or more different types of treatment for SUD, with just over a quarter (27.8 percent) indicating they knew where to receive all six different types of treatment mentioned in the survey. Over half of adult respondents (51 percent) indicated they knew where to receive four or more different types of BH treatment, with one-third indicating they knew where to receive all six types of BH treatment mentioned.

Figure 5-25—Percentage of Beneficiaries Who Are Knowledgeable of the Number of SUD and BH Services Available for Adults



Note: Error bars show 95% confidence intervals.

Figure 5-26 shows that among those who indicated they knew where to find treatment, group therapy and one-on-one treatment were the most common settings for both SUD and BH treatment. The fewest adult respondents knew where to find treatment through MAT and peer support settings for SUD and BH, respectively.

Figure 5-26—Beneficiary Knowledge of Setting Type–Adults

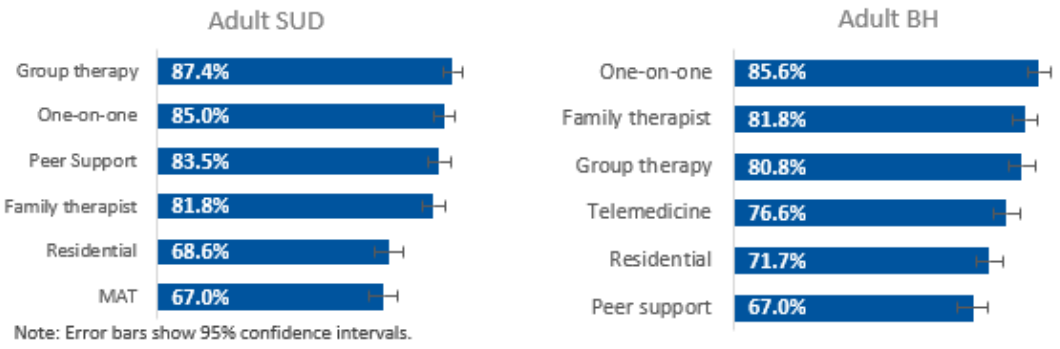


Figure 5-27 shows that among services for children, nearly one-third (31.9 percent) of beneficiaries indicated they knew where to receive all five different types of SUD treatment, and nearly half (48.3 percent) indicated they knew where to receive all four types of treatment for BH mentioned in the survey.

Figure 5-27—Percentage of Beneficiaries Who Are Knowledgeable of the Number of SUD and BH Services Available for Children

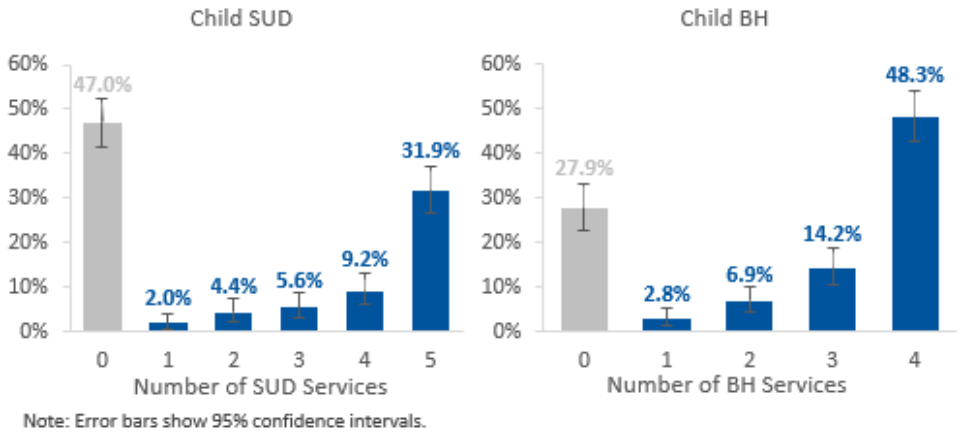
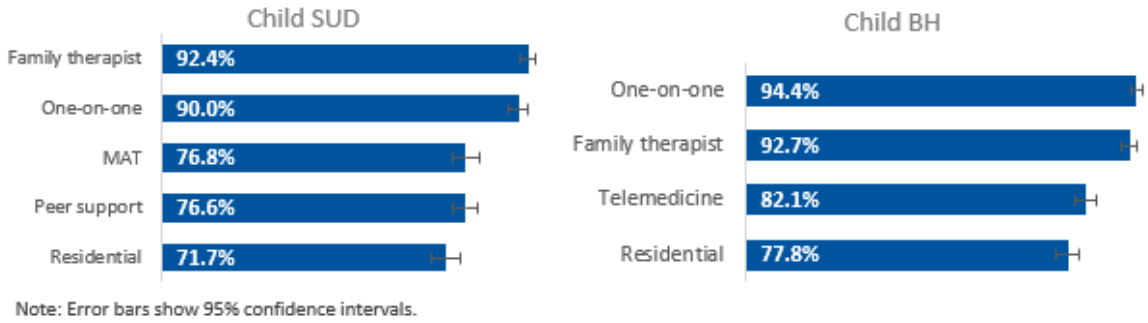


Figure 5-28 shows that, among those who knew where to receive SUD or BH treatment, over nine in 10 respondents knew where to receive family therapy or one-on-one treatment, while more than seven in 10 knew where to receive residential treatment.

Figure 5-28—Beneficiary Knowledge of Setting Type—Children



Because these survey results are for a single point in time and no similar comparison group can be found that reflects Alaska Medicaid beneficiaries, data are not sufficient to determine whether the findings support the hypothesis. Nevertheless, these results indicate that beneficiaries demonstrated a high level of knowledge of treatment for SUD and BH disorders, although there is still room to improve beneficiary knowledge of treatment, particularly for SUD. Just over half of beneficiaries indicated they knew where to receive SUD treatment (for both adults and children), while over two-thirds knew where to receive BH treatment. Among those who did know where to receive treatment, over two-thirds of beneficiaries had knowledge of every treatment setting, and over 70 percent of beneficiaries has knowledge of every child treatment setting.

Measure 2-6 Conclusion: N/A

Maternal depression (Measure 2-7)

Measure 2-7 aims to measure maternal depression by calculating two indicators from the Alaska Childhood Understanding Behaviors Survey (CUBS) survey instrument. The first is a provider discussion indicator that measures the percentage of mothers who are Medicaid beneficiaries and had a discussion with a health care provider in the past 12 months about depression or how they were doing emotionally. The second is a maternal depression composite indicator that asked respondents to rate how often they felt down, depressed, or hopeless, and how often they had little interest or pleasure in doing things they usually enjoyed in the past three months.

As shown in Table 5-35, on average, 30.7 percent of mothers surveyed in the baseline period responded that they had a discussion with a health care professional (HCP) in the past year about how they were doing emotionally, compared to an average of 31.0 percent of mothers surveyed in the evaluation period. Data were available for this question from 2012–2020. Overall, this 0.3 percentage point difference in rates was found not to be statistically significant (p=0.922). Results for each year from 2012 to 2020 can be found in Appendix A.

The maternal depression composite indicator was calculated by taking the average of the respondent's ratings to two questions—how often they felt down, depressed, or hopeless and how often they had little interest in doing things usually enjoyed in the past three months. Possible response values ranged from 1 (Always) to 5 (Never), and data were available for this indicator from 2015-2020. On average, the maternal depression composite indicator was 3.91 among mothers in the baseline period and 3.89 in the evaluation period as demonstrated in Table 5-36. Thus, the difference in means was not found to be statistically significant (p=0.736). Results for each year from 2015 to 2020 can be found in Appendix A.

Table 5-35—Maternal Depression–Provider Discussion Indicator

	Baseline Period Weighted Average	Evaluation Period Weighted Average	Percentage Point Change	*p*-value
Percentage of mothers who had a discussion with a HCP about depression or how they were doing emotionally, past 12 months[1]	**30.7%**	**31.0%**	**0.3pp**	**0.922**

Note: pp=percentage point
[1] Rates are weighted by survey analysis weight, composed of sampling, nonresponse, and noncoverage components.
*p< 0.1, **p < 0.05, ***p<0.001

Table 5-36—Maternal Depression–Maternal Depression Indicator (higher is better)

	Baseline Period Weighted Average	Evaluation Period Weighted Average	Change in Means	*p*-value
Average score-feeling depressed/hopeless/little interest or little pleasure in doing things usually enjoyed, past 3 months[1,2,3]	3.91	3.89	-0.02	0.736

[1]Counts are weighted by survey analysis weight, composed of sampling, nonresponse, and noncoverage components.
[2]Average composite score consists of taking the average of the following questions:
During the past 3 months, how often have you felt down, depressed, or hopeless? (1-5)
During the past 3 months, how often have you had little interest or little pleasure in doing things you usually enjoyed? (1-5)
[3]Scale ranges from 1 (Always) to 5 (Never)
*p< 0.1, **p < 0.05, ***p<0.001

Measure 2-7 Conclusion: Inconclusive

Maternal domestic abuse (Measure 2-8)

Measure 2-8 assesses maternal domestic abuse by calculating how many mothers who completed the CUBS instrument answered that they were physically hurt or made to feel unsafe by their partner in the past year. Data were available from 2012-2020 for this question. Table 5-37 shows that rates were inconsistent throughout both the baseline and evaluation periods. In the baseline period, the rate reached a peak in 2014 at 7.1 percent and began to trend downwards to its lowest point in 2018 at 2.7 percent. During the evaluation period, there was an overall peak in 2019 at 10.4 percent which was followed by a sharp decline to 2.1 percent in the following year 2020. Overall, there was a 1.6 percentage point increase in the rates of reported maternal domestic abuse between the baseline period and evaluation period on average, though this was not a statistically significant difference (p=0.310). Results for each year from 2012 to 2020 can be found in Appendix A.

Table 5-37—Maternal Domestic Abuse

	Baseline Period Weighted Average	Evaluation Period Weighted Average	Percentage Point Change	*p*-value
Percentage of mothers answering they were physically hurt or made to feel unsafe by their partner, past 12 months[1]	4.8%	6.4%	1.6pp	0.310

Note: pp=percentage point
[1]Rates are weighted by survey analysis weight, composed of sampling, nonresponse, and noncoverage components.
*p< 0.1, **p < 0.05, ***p<0.001

Measure 2-8 Conclusion: Inconclusive

Percentage of beneficiaries who experienced alcoholism or mental health disorder among household members (Measure 2-9)

Measure 2-9 aims to evaluate the percentage of child Medicaid beneficiaries who have experienced alcoholism or mental health disorder among household members, as reported by mothers who responded to the CUBS instrument. Data were available from 2012–2020 for this question. Rates were inconsistent during the baseline period from 2012–2018, and the overall average was 8.2 percent as demonstrated in Table 5-38. However, rates

began trending upwards in 2018 from 7.5 percent into the evaluation period to 9.4 percent in 2019 and 13.3 percent in 2020. As a result, the average percentage of youth Medicaid beneficiaries who experienced alcoholism or mental health disorder among household members in the evaluation period was 11.3 percent. This was 3.2 percentage point increase from the average in the baseline period, though this difference was not statistically significant (p=0.104). Results for each year from 2012 to 2020 can be found in Appendix A.

Table 5-38—Percentage of Youth Beneficiaries who Have Experienced Alcoholism or Mental Health Disorder Among Household Members

	Baseline Period Weighted Average	Evaluation Period Weighted Average	Percentage Point Change	*p*-value
Percentage of youth beneficiaries who experienced alcoholism or mental health disorder among household members[1]	8.2%	11.3%	3.2pp	0.104

Note: pp=percentage point
[1]Rates are weighted by survey analysis weight, composed of sampling, nonresponse, and noncoverage components.
*p< 0.1, **p < 0.05, ***p<0.001

Measure 2-9 Conclusion: Inconclusive

Percentage of beneficiaries who witnessed violence or physical abuse between household members (Measure 2-10)

Measure 2-10 assesses the percentage of youth Medicaid beneficiaries who have ever witnessed violence or physical abuse between household members, as reported by mothers who responded to the CUBS instrument. Data were available from 2015–2020 for this question. Table 5-39 shows that rates in the baseline period were generally stable, though the 2017 rate dipped to a low point of 5.9 percent. Overall, the average rate of youth Medicaid beneficiaries witnessing violence between household members during the evaluation period was 7.9 percent, which was a 0.4 percentage point increase from the average of 7.5 percent in the baseline period. This difference in averages was not statistically significant (p=0.833). Results for each year from 2015 to 2020 can be found in Appendix A.

Table 5-39—Percentage of Youth Beneficiaries who Have Witnessed Violence or Physical Abuse Between Household Members

	Baseline Period Weighted Average	Evaluation Period Weighted Average	Percentage Point Change	*p*-value
Percentage of youth beneficiaries who witnessed violence or physical abuse between household members[1]	7.5%	7.9%	0.4pp	0.833

Note: pp=percentage point
1Rates are weighted by survey analysis weight, composed of sampling, nonresponse, and noncoverage components.
*p< 0.1, **p < 0.05, ***p<0.001

Measure 2-10 Conclusion: Inconclusive

Percentage of youth beneficiaries who have ever been physically hurt by an adult in any way (Measure 2-11)

Measure 2-11 assesses the percentage of child Medicaid beneficiaries who have ever been physically hurt by an adult in any way, as reported by mothers who responded to the CUBS instrument. Data were available for this

question from 2015–2019. Overall, the rate of youth Medicaid beneficiaries who were ever physically hurt by an adult in 2019 during the evaluation period was 1.2 percent, which was a 0.3 percentage point increase from the baseline period average of 0.9 percent (Table 5-40). This difference was not statistically significant (p=0.802). Results for each year from 2015 to 2019 can be found in Appendix A.

Table 5-40—Percentage of Youth Beneficiaries who Have Been Physically Hurt by an Adult in Any Way

	Baseline Period Weighted Average	Evaluation Period Weighted Average	Percentage Point Change	*p*-value
Percentage of youth beneficiaries who have ever been physically hurt by an adult in any way[1]	0.9%	1.2%	0.3pp	0.802

Note: pp=percentage point
[1]Rates are weighted by survey analysis weight, composed of sampling, nonresponse, and noncoverage components.
*p< 0.1, **p < 0.05, ***p<0.001

Measure 2-11 Conclusion: Inconclusive

Maternal marijuana or hash use in the past two years (Measure 2-12)

Measure 2-12 assesses the percentage of mothers who completed the CUBS instrument and reported using marijuana or hash at any point in the past two years. Data for this measure were available from 2015–2019. Rates began trending upwards slightly in 2018 from 18.0 percent into the evaluation period to 18.2 percent in 2019 (Table 5-41). Though there was a 1.3 percentage point change in average marijuana usage overall from the baseline period and the evaluation period, this difference was not statistically significant (p=0.712). Results for each year from 2015 to 2019 can be found in Appendix A.

Table 5-41—Maternal Marijuana or Hash Use in the Past Two Years

	Baseline Period Weighted Average	Evaluation Period Weighted Average	Percentage Point Change	*p*-value
Percentage of respondents who have used marijuana in the past two years[1]	16.8%	18.2%	1.3pp	0.712

Note: pp=percentage point
[1]Rates are weighted by survey analysis weight, composed of sampling, nonresponse, and noncoverage components.
*p< 0.1, **p < 0.05, ***p<0.001

Measure 2-12 Conclusion: Inconclusive

Frequency of maternal marijuana or hash use (Days per Week) (Measure 2-13)

Measure 2-13 assesses the average number of days CUBS respondents used marijuana per week, given that they responded that they have used marijuana in the past two years. Data for this measure were available for 2015–2020. From 2015–2019, this question was asked in terms of average days per week marijuana was used, while in 2020 this question was asked in terms of average days per month that marijuana was used. As a result, responses from 2020 were converted to average days per week of marijuana use for consistency. Table 5-42 shows that mothers who were Medicaid beneficiaries, completed the CUBS instrument, and noted that they have used marijuana reported using marijuana 1.48 days per week on average in the baseline period compared to 0.66 days per week on average in the evaluation period, a decrease of 0.82 days. This difference was found to be statistically

significant (p<0.001), although some of this difference may be due to the change of wording in the 2020 CUBS instrument. Results for each year from 2015 to 2020 can be found in Appendix A.

Table 5-42—Frequency of Maternal Marijuana or Hash Use (Days per Week)

	Baseline Period Weighted Average	Evaluation Period Weighted Average	Change in Means	*p*-value
Average number of days respondents report using marijuana or hash per week[1]	1.48	0.66	-0.82	<0.001***

[1]Counts are weighted by survey analysis weight, composed of sampling, nonresponse, and noncoverage components.
*p< 0.1, **p < 0.05, ***p<0.001

Measure 2-13 Conclusion: Supports the hypothesis

Social support—care when sick (Supplemental CUBS Measure 2-14)

Several additional measures utilizing CUBS data were included after development of the evaluation design plan at the State's request. These measures relate to social supports and obtaining SUD or BH treatment, the latter being added into the most recent phase of the CUBS instrument beginning in 2020.

Supplemental CUBS Measure 2-14 aims to assess the social support that mothers who are Medicaid beneficiaries and completed the survey instrument can receive by determining the percentage of respondents who answered they know someone who would help them if they were sick. Data for this measure were available for years 2012–2020. Overall, an average of 82.8 percent of respondents in the baseline period reported that they knew someone who would help if they were sick. In comparison, the average was 78.0 percent of respondents in the evaluation period with a rate of 78.9 percent in 2019 and 77.1 percent in 2020—both of which were lower than any other year in the baseline period (Table 5-43). This was an overall significant decrease of 4.8 percentage points between the averages during baseline period (p=0.094). Results for each year from 2012 to 2020 can be found in Appendix A.

Table 5-43—Social Support–Care When Sick

	Baseline Period Weighted Average	Evaluation Period Weighted Average	Percentage Point Change	*p*-value
Percentage of respondents who answered they know someone who would help them if they were sick[1]	82.8%	78.0%	-4.8pp	0.094*

[1]Rates are weighted by survey analysis weight, composed of sampling, nonresponse, and noncoverage components.
*p< 0.1, **p < 0.05, ***p<0.001

Supplemental CUBS Measure 2-14 Conclusion: No associated hypothesis

Desire to SUD/BH treatment options and obtainment of SUD treatment in the past three months (Supplemental CUBS Measure 2-15)

The CUBS instrument had 2020 data available on the percentage of Medicaid CUBS respondents who desired to obtain SUD treatment or BH treatment, and the percentage of respondents who did obtain SUD treatment or BH treatment in the past three months. Of note, 2.6 percent of respondents stated that they obtained SUD treatment in

the past three months while only 2.0 percent of respondents noted that they desired SUD treatment in the past three months, as shown in Table 5-44. Similarly, 9.6 percent of respondents obtained BH treatment whereas only 7.0 percent of respondents reported that they desired BH treatment in the past three months.

Table 5-44—Desire to SUD/BH Treatment Options and Obtainment of SUD Treatment in the Past Three Months

	Evaluation Period
	2020
Percentage of respondents who desired SUD treatment in the past 3 months[1]	2.0%
Percentage of respondents who obtained SUD treatment in the past 3 months	2.6%
Percentage of respondents who desired mental/behavioral health treatment in the past 3 months	7.0%
Percentage of respondents who obtained mental/behavioral health treatment in the past 3 months	9.6%

[1]Rates are weighted by survey analysis weight, composed of sampling, nonresponse, and noncoverage components.
*p< 0.1, **p < 0.05, ***p<0.001

Supplemental CUBS Measure 2-15 Conclusion: No associated hypothesis

Hypothesis 2.2: The SUD-BH Program will decrease the rate of drug overdoses and overdose deaths due to opioids.

Rate of overdose deaths, specifically overdose deaths due to any opioid (Measure 2-16)

Measure 2-16 assesses the rate of overdose deaths, both overall and specifically due to opioid overdoses, to determine whether the demonstration has decreased the rate of deaths due to overdoses. For Alaska residents statewide the rate of overdose deaths has been steadily rising from state fiscal year (SFY) 2017 to SFY 2021, with a large increase in the overdose cause-specific mortality rate occurring from SFY 2020 to SFY 2021 (from 18.6 to 27.3 per 100,000 Alaska residents). This increase in the rate of overdose deaths could partially be attributable to effects of the COVID-19 PHE.[5-15] The average mortality rate for overdose deaths rose by 4.2 per 100,000 Alaska residents between the baseline and evaluation periods, a statistically significant increase (p=0.006). The mortality rate associated with opioid-specific overdose deaths remained stable from SFY 2017 to SFY 2019 before seeing a rise in SFY 2020 to 13.0 per 100,000 Alaska residents and a subsequent large jump in SFY 2021 to 21.0 per 100,000 Alaska residents. The average opioid-specific overdose death mortality rate rose by 3.4 per 100,000 Alaska residents between the baseline and evaluation periods, also a statistically significant increase (p=0.007). Overdose death data specific to the Medicaid population were not available. Table 5-45 displays the statewide overdose deaths, both overall and opioid-specific, along with the associated mortality rates.

5-15 See, *e.g.*, Walters, S.M., *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: Oct 28, 2022.

Table 5-45—Rate of Overdose Deaths in Alaska Residents, State Fiscal Year 2017-2021

	Baseline Period			Evaluation Period				Rate Change	*p*-value
	SFY 2017	SFY 2018	Weighted Average	SFY 2019	SFY 2020	SFY 2021	Weighted Average		
Overdose Deaths, All - Count	125	130		136	137	200			
Overdose Deaths, All – Cause-Specific Mortality Rate per 100,000	16.9	17.6	**17.3**	18.5	18.6	27.3	**21.5**	**4.2**	**0.006****
Overdose Deaths, Opioid	84	89		83	96	154			
Overdose Deaths, Opioid – Cause-Specific Mortality Rate per 100,000	11.4	12.1	**11.7**	11.3	13.0	21.0	**15.1**	**3.4**	**0.007****

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

Measure 2-16 Conclusion: Does not support the hypothesis

Non-fatal overdoses (All Cause) (Measure 2-17)

Measure 2-17 aims to determine whether the total number of non-fatal overdoses among waiver members has decreased. The trend of non-fatal overdoses among waiver members decreased between 2018 and 2020, falling from 1,450 to 1,176, before seeing a small uptick in the number of non-fatal overdoses in 2021 to 1,217. The number of non-fatal overdoses among waiver members saw a significant decrease between the baseline and evaluation periods, falling from 1,450 in 2018 to an average of 1,200 in the evaluation period (a decrease of 250, p=0.010). Similarly, the rate of non-fatal overdoses among waiver members saw a significant decrease between the baseline and evaluation periods, falling from 4,807.5 per 100,000 waiver members in 2018 to an average of 3,834.8 per 100,000 waiver members in the evaluation period (a decrease of 972.7 per 100,000 waiver members, p=0.008). Rates for measure 2-17 should be compared to measure 2-16 with caution as overdose mortality rates for 2-16 are calculated for Alaska statewide only as overdose death data specific to the Medicaid population were not available. Table 5-46 shows the number of non-fatal overdoses and the rate of non-fatal overdoses in the waiver population each year.

Table 5-46—Non-Fatal Overdose (All Causes), 2018-2021

	Baseline Period	Evaluation Period				Change	*p*-value
	2018	2019	2020	2021	Weighted Average		
Count of Non-Fatal Overdoses (all cause)	1,450	1,207	1,176	1,217	1,200	-250	0.010**
Non-fatal Overdoses (all cause) Rate per 100,000 Medicaid Waiver Beneficiaries	4,807.5	3,804.3	3,781.6	3,919.1	3,834.8	-972.7	0.008**

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

Measure 2-17 Conclusion: Supports the hypothesis

Use of opioids at high dosage in persons without cancer (NQF 2940) (Measure 2-18)

Measure 2-18 utilizes CMS SUD metric 18 data contained in the Alaska SUD Monitoring Metrics to evaluate the use of opioids at high dosage in persons without cancer. The percentage of use of opioids at high dosage in persons without cancer was found to have increased slightly from 2019 to 2020, rising from 13.6 percent to 14.4 percent (a change of 0.8 percentage points, p=0.332). Although no baseline data prior to 2019 were available, the change from 2019 to 2020 was not statistically significant. Limitations in data provided to HSAG for the evaluation prevented the ability to calculate this measure; instead, HSAG relied on rates reported as part of the SUD monitoring reports. Table 5-47 displays the percentage of use of opioids at high dosage in persons without cancer for 2019 and 2020.

Table 5-47—Use of Opioids at High Dosage in Persons Without Cancer, 2019-2020

	2019	2020	Percentage Point Change	*p*-value
Use of Opioids at High Dosage in Persons Without Cancer (NQF 2940)	13.6%	14.4%	0.8pp	0.332

Note: pp=percentage point
*p< 0.1, **p < 0.05, ***p<0.001

Measure 2-18 Conclusion: Inconclusive

Research Question 3: Does the SUD-BH Program reduce the cost of Medicaid for Alaska and the federal government?

Hypothesis 3.1: The SUD-BH Program will reduce Alaska's per capita Medicaid BH costs.

To evaluate the costs associated with the SUD-BH demonstration, HSAG followed descriptions 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.[5-16] HSAG identified members with a SUD or BH diagnosis and calculated cost of care for these beneficiaries.

ITS analysis was performed on per-member per-month (PMPM) costs. As described in the Methodology section, to control for seasonality, indicators for each quarter were included in the model. To account for effects of the COVID-19 PHE, two indicator variables were included, one to capture the initial lock-down period of Q2 2020, and another to capture gradual re-opening during Q3 2020 through Q1 2021. A generalized linear model (GLM) was constructed with a log link because costs are positive and 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 model, which can be interpreted in dollar amount changes. Results in this section are presented as percentage changes in costs.

[5-16] 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: Oct 21, 2022.

The following were calculated for the SUD and BH populations

- Total Costs
- IP
- OP
  - ED OP
  - Non-ED OP
- LTC
- Professional
- Dental
- Pharmacy

The following were calculated for the SUD population only:

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

The following were calculated for the BH population only:

- BH-IMD
- BH-Other
- Non-BH

Total costs of health care (sum of parts below), by State and federal share (Measure 3-1)

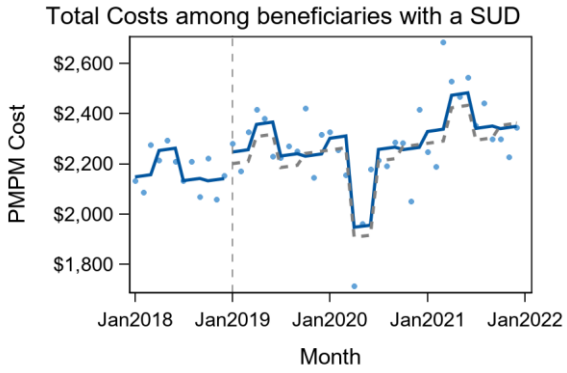
Overall, costs among beneficiaries with a SUD diagnosis increased slightly over time with negligible deviations from this trend following the start of the waiver. Table 5-48 and Figure 5-29 show that the COVID-19 PHE led to significantly lower costs, particularly in March and April 2020, with a return to pre-PHE levels afterward. A GLM with a log link was constructed in order to account for the fact that costs are 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.

Table 5-48—Primary ITS Results (Measure 3-1: Total Cost of Care among SUD Beneficiaries)

Variable	Percent Change in Costs	*p*-value
Baseline monthly trend	0.20%	0.663
Level change	2.11%	0.554
Change in monthly trend	0.00%	0.996

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

Figure 5-29—Illustration of ITS Analysis (Measure 3-1: Total Cost of Care among SUD Beneficiaries)



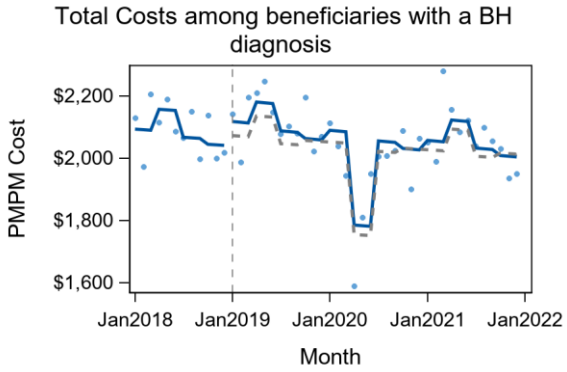
Similarly, there was no significant change in the total cost of care among beneficiaries with a BH disorder following implementation of the demonstration as displayed in Table 5-49 and Figure 5-30. However, costs among BH beneficiaries declined slightly compared to SUD beneficiaries. A GLM with a log link was constructed in order to account for the fact that costs are 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.

Table 5-49—Primary ITS Results (Measure 3-1: Total Cost of Care Among BH Beneficiaries)

Variable	Percent Change in Costs	*p*-value
Baseline monthly trend	-0.08%	0.822
Level change	2.21%	0.439
Change in monthly trend	-0.03%	0.937

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

Figure 5-30—Illustration of ITS Analysis (Measure 3-1: Total Cost of Care Among BH Beneficiaries)



Measure 3-1 Conclusion: Inconclusive

Total cost of SUD, SUD-IMD and SUD-Other and Non-SUD, by setting, including claims data (IP, OP, RX, LTC, and capitated payments to managed care organizations) (Measure 3-2)

Measure 3-2 assesses cost drivers among the SUD population. Because Alaska Medicaid follows a FFS model, there are no capitated payments, and total costs represent direct costs to Medicaid.

Total SUD-IMD costs among SUD beneficiaries

Costs associated with a SUD diagnosis or MAT treatment in an IMD increased significantly following approval of the demonstration, with costs more than doubling, with an increase of 165.50 percent (p=0.003). This increase is expected since the demonstration allows Medicaid to reimburse IMD stays for individuals ages 21 through 64. An IMD is defined as a hospital, nursing facility, or other institution of more than 16 beds that is primarily engaged in providing diagnosis, treatment, or care of persons with mental diseases, including medical attention, nursing care, and related services.

In addition to the increase in average IMD costs after implementation, there was a reversal in the cost trend as displayed in Table 5-50 and Figure 5-31. Prior to the demonstration, IMD costs were decreasing by 3.68 percent, while after implementation they increased by 4.59 percent relative to the baseline trend, although this change was not statistically significant (p=0.303). A GLM with a log link was constructed in order to account for the fact that costs are 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.

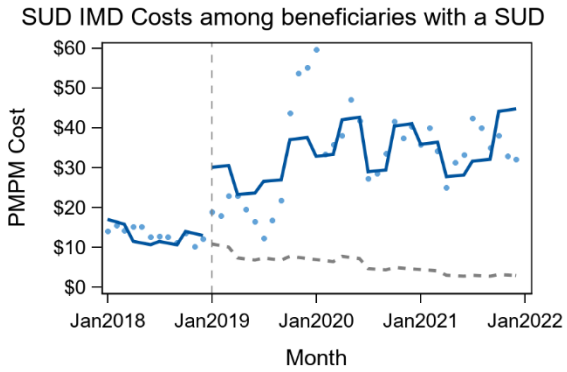
Table 5-50—Primary ITS Results (Measure 3-2: SUD-IMD Costs Among SUD Beneficiaries)

Variable	Percent Change in Costs	*p*-value
Baseline monthly trend	-3.68%	0.392
Level change	165.50%	0.003**
Change in monthly trend	4.59%	0.303

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

Note: Full model results are presented in Appendix A.

Figure 5-31—Illustration of ITS Analysis (Measure 3-2: SUD-IMD Costs Among SUD Beneficiaries)



Total SUD-Other costs among SUD beneficiaries

Costs associated with a SUD diagnosis or MAT treatment outside an IMD (non-IMD) increased steadily before and after the demonstration approval period as displayed in Table 5-51 and Figure 5-32. Cost associated with a

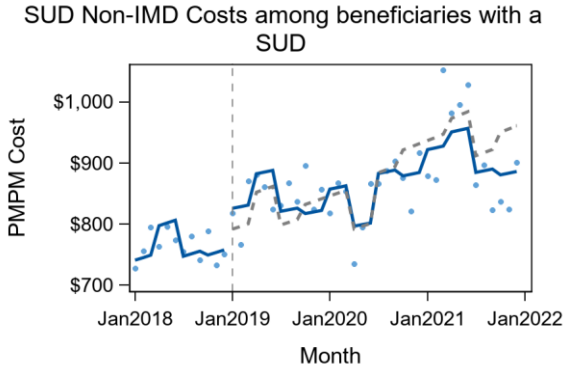
SUD diagnosis of MAT treatment outside an IMD (non-IMD) increased by 0.56 percent per month (P=0.280) prior to approval. After approval, the trend decreased slightly by 0.24 percent relatively to the baseline trend, but this change was not statistically significant (p=0.633) and still represented an increase of 0.32 percentage point per month (0.56 percent–0.24 percent). A GLM with a log link was constructed in order to account for the fact that costs are 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.

Table 5-51—Primary ITS Results (Measure 3-2: Other SUD Costs Among SUD Beneficiaries)

Variable	Percent Change in Costs	*p*-value
Baseline monthly trend	0.56%	0.280
Level change	4.56%	0.244
Change in monthly trend	-0.24%	0.633

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

Figure 5-32—Illustration of ITS Analysis (Measure 3-2: Other SUD Costs Among SUD Beneficiaries)



Costs reported for this measure include those related to SUD diagnosis and MAT. Additional exploratory analysis to assess MAT costs separately showed that on average, MAT comprised approximately 9.0 percent of total SUD and MAT related costs and increased from an average of $57.96 PMPM in 2018 to $82.29 in 2021. The use of Vivitrol—a more expensive form of treatment—actually declined slightly between the baseline and demonstration periods, falling from an average of $14.67 PMPM in 2018 to $11.56 in 2021. This suggests that the use of this costly treatment did not show a commensurate increase in utilization as other MAT during the evaluation period.

Total Non-SUD costs among SUD beneficiaries

Table 5-52 and Figure 5-33 show costs not associated with a SUD diagnosis or MAT treatment among beneficiaries with a SUD remained mostly flat but highly variable both before and after the demonstration period, with a significant impact from the COVID-19 PHE in Q2 2020. Costs decreased slightly by an average of 0.50 percent following approval of the demonstration, but this was not statistically significant (p=0.899). The trend in costs increased slightly by 0.04 percent per month following demonstration approval relative to the baseline trend, but this trend was not statistically significant (p=0.942). A GLM with a log link was constructed in order to account for the fact that costs are positive and not normally distributed. This model allows for a more accurate

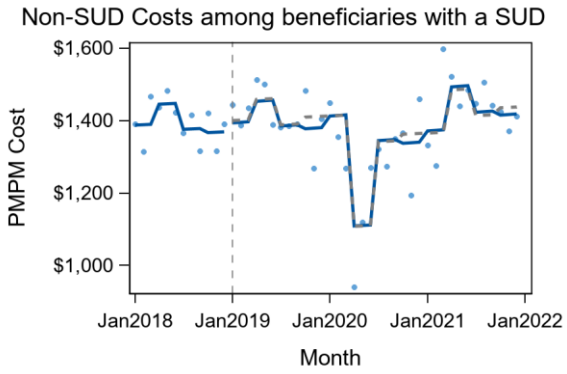
analysis of costs; however, interpretation is not as straightforward as a simple linear regression model, which can be interpreted in dollar amount changes. Results are presented as percentage changes in costs.

Table 5-52—Primary ITS Results (Measure 3-2: Non-SUD Costs Among SUD Beneficiaries)

Variable	Percent Change in Costs	*p*-value
Baseline monthly trend	0.08%	0.884
Level change	-0.50%	0.899
Change in monthly trend	0.04%	0.942

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

Figure 5-33—Illustration of ITS Analysis (Measure 3-2: Non-SUD Costs Among SUD Beneficiaries)



IP costs among SUD beneficiaries

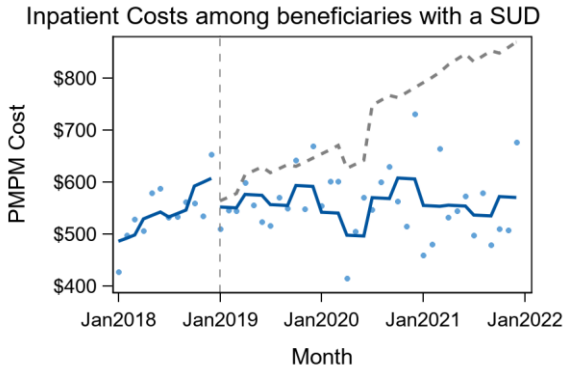
ITS analysis shows the IP costs among SUD beneficiaries were increasing by 1.24 percent per month prior to approval of the demonstration. Table 5-53 and Figure 5-34 show that after approval, the trend decreased by 1.38 percent per month relative to the baseline; however, this trend was not statistically significant (p=0.139). Nevertheless, had the baseline trend continued, the projected PMPM IP cost would have been approximately $860 by the end of 2021 while the actual cost averaged lower at approximately $570, representing a material difference of roughly $410 PMPM in costs to the State. A GLM with a log link was constructed in order to account for the fact that costs are 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.

Table 5-53—Primary ITS Results (Measure 3-2: IP Costs Among SUD Beneficiaries)

Variable	Percent Change in Costs	*p*-value
Baseline monthly trend	1.24%	0.193
Level change	-0.74%	0.915
Change in monthly trend	-1.38%	0.139

*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 3-2: IP Costs Among SUD Beneficiaries)



OP costs among SUD beneficiaries

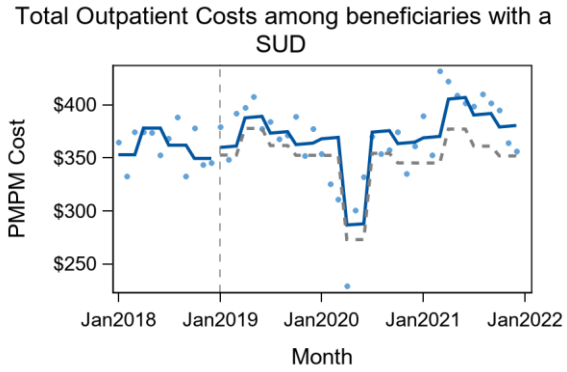
Overall, there were no significant changes or trends in OP costs for beneficiaries with a SUD as displayed in Table 5-54 and Figure 5-35. Prior to the demonstration, OP costs were effectively flat, decreasing by 0.01 percent per month. Upon implementation, costs increased on average slightly by 1.83 percent, but this was not statistically significant (p=0.707). Similarly, the trend in costs increased slightly by 0.19 percent per month relative to the baseline trend but this was not statistically significant (p=0.760). A GLM with a log link was constructed in order to account for the fact that costs are 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.

Table 5-54—Primary ITS Results (Measure 3-2: OP Costs Among SUD Beneficiaries)

Variable	Percent Change in Costs	*p*-value
Baseline monthly trend	-0.01%	0.991
Level change	1.83%	0.707
Change in monthly trend	0.19%	0.760

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

Figure 5-35—Illustration of ITS Analysis (Measure 3-2: OP Costs Among SUD Beneficiaries)



ED OP costs among SUD beneficiaries

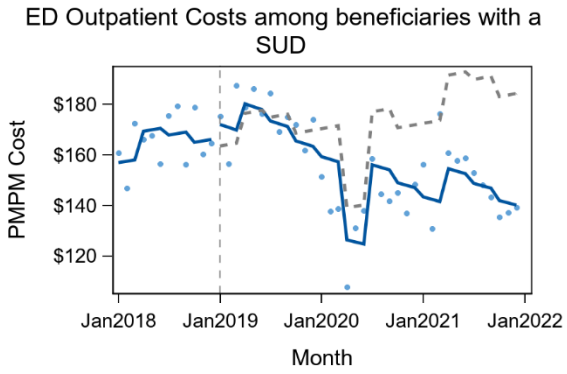
Separating OP costs by ED and non-ED reveals different trends displayed in Table 5-55 and Figure 5-36. ITS analysis of ED costs shows that prior to approval of the demonstration, costs were increasing slightly by 0.34 percent per month (p=0.598). After demonstration approval, the trend declined by 0.98 percent per month relative to the baseline trend; however, this change was not statistically significant (p=0.125). Similar to the IP trend, however, by the last quarter of 2021, the difference between the actual costs and projected costs had the baseline trend continued was $42 PMPM ($183–$141), or 23 percent lower than projected. A GLM with a log link was constructed in order to account for the fact that costs are 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.

Table 5-55—Primary ITS Results (Measure 3-2: ED OP Costs Among SUD Beneficiaries)

Variable	Percent Change in Costs	*p*-value
Baseline monthly trend	0.34%	0.598
Level change	6.22%	0.214
Change in monthly trend	-0.98%	0.125

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

Figure 5-36—Illustration of ITS Analysis (Measure 3-2: ED OP Costs Among SUD Beneficiaries)



Non-ED OP costs among SUD beneficiaries

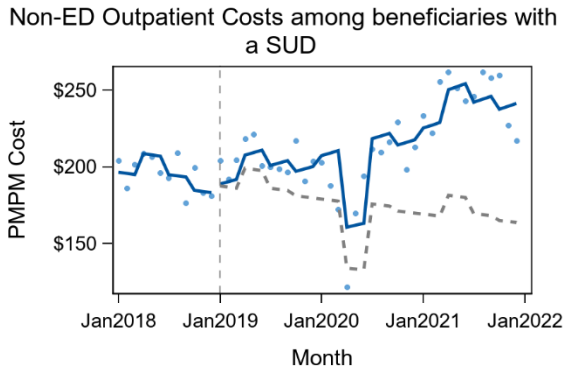
OP costs not associated with the ED demonstrated an opposite trend when compared to ED costs as displayed in Table 5-56 and Figure 5-37. Prior to the demonstration, costs declined slightly by 0.39 percent per month, while after approval costs began increasing by 1.17 percent per month relative to the baseline trend; however, this change was not statistically significant (p=0.105). By the end of 2021, the projected costs were $163 PMPM while the actual costs averaged $239, a difference of $75 PMPM or 47 percent higher than projected. A GLM with a log link was constructed in order to account for the fact that costs are 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.

Table 5-56—Primary ITS Results (Measure 3-2: Non-ED OP Costs Among SUD Beneficiaries)

Variable	Percent Change in Costs	*p*-value
Baseline monthly trend	-0.39%	0.594
Level change	-0.48%	0.931
Change in monthly trend	1.17%	0.105

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

Figure 5-37—Illustration of ITS Analysis (Measure 3-2: Non-ED OP Costs Among SUD Beneficiaries)



LTC costs among SUD beneficiaries

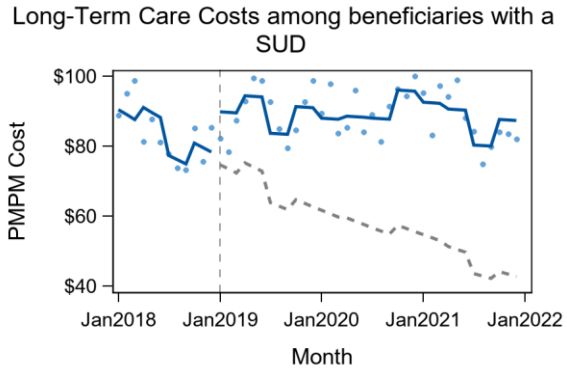
ITS analysis shows that long-term care (LTC) costs for beneficiaries with a SUD diagnosis were decreasing by 1.58 percent per month during the baseline, which was statistically significant (p=0.011). However, Table 5-57 and Figure 5-38 show that following approval of the waiver the average PMPM cost increased significantly by 18.57 percent (p<0.001) and increased significantly by 1.43 percent per month on average relative to the baseline trend (p=0.022). A GLM with a log link was constructed in order to account for the fact that costs are 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.

Table 5-57—Primary ITS Results (Measure 3-2: LTC Costs Among SUD Beneficiaries)

Variable	Percent Change in Costs	*p*-value
Baseline monthly trend	-1.58%	0.011**
Level change	18.57%	<0.001***
Change in monthly trend	1.43%	0.022**

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

Figure 5-38—Illustration of ITS Analysis (Measure 3-2: LTC Costs Among SUD Beneficiaries)



Professional costs among SUD beneficiaries

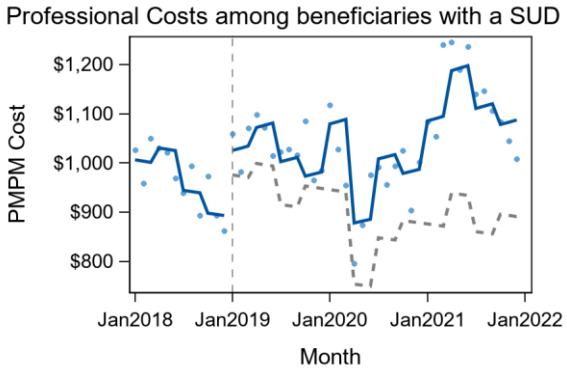
ITS analysis shows that controlling for seasonality, professional costs were decreasing slightly at 0.26 percent per month (p=0.619) as displayed in Table 5-58 and Figure 5-39. Following implementation, average PMPM costs increased slightly by 4.41 percent (p=0.282), and the monthly trend increased by 0.69 percent per month; however, this change was not statistically significant (p=0.182). A GLM with a log link was constructed in order to account for the fact that costs are 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.

Table 5-58—Primary ITS Results (Measure 3-2: Professional Costs Among SUD Beneficiaries)

Variable	Percent Change in Costs	*p*-value
Baseline monthly trend	-0.26%	0.619
Level change	4.41%	0.282
Change in monthly trend	0.69%	0.182

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

Figure 5-39—Illustration of ITS Analysis (Measure 3-2: Professional Costs Among SUD Beneficiaries)



Dental costs among SUD beneficiaries

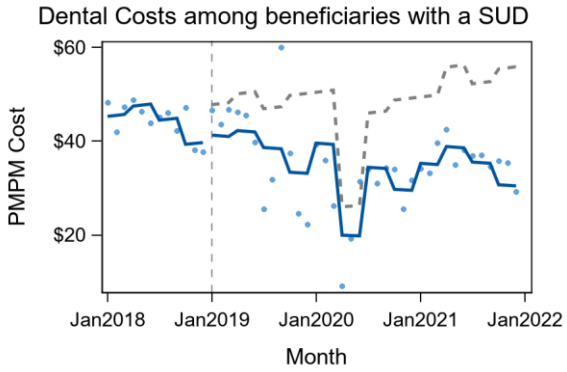
For completeness, HSAG evaluated dental costs among beneficiaries with a SUD as displayed in Table 5-59 and Figure 5-40. Controlling for seasonality, costs were increasing slightly by 0.45 percent per month prior to approval (p=0.754). After demonstration approval, costs decreased by 12.92 percent on average; however, this change was not statistically significant (p=0.221). Similarly, the monthly trend decreased by 0.79 percent relative to the baseline trend, which was not statistically significant (p=0.573). A GLM with a log link was constructed in order to account for the fact that costs are 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.

Table 5-59—Primary ITS Results (Measure 3-2: Dental Costs Among SUD Beneficiaries)

Variable	Percent Change in Costs	*p*-value
Baseline monthly trend	0.45%	0.754
Level change	-12.92%	0.221
Change in monthly trend	-0.79%	0.573

*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 3-2: Dental Costs Among SUD Beneficiaries)



Pharmacy costs among SUD beneficiaries

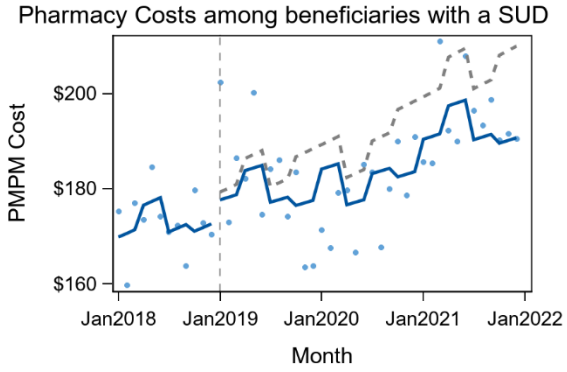
ITS analysis shows that pharmacy costs among beneficiaries with a SUD increased slightly by 0.45 percent per month on average (p=0.363). After implementation, the upward trend continued, decreasing by only 0.15 percent per month relative to the baseline trend for a net trend of 0.30 percentage point per month (Table 5-60). This change in trend was not statistically significant (p=0.755). A GLM with a log link was constructed in order to account for the fact that costs are 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.

Table 5-60—Primary ITS Results (Measure 3-2: Pharmacy Costs Among SUD Beneficiaries)

Variable	Percent Change in Costs	*p*-value
Baseline monthly trend	0.45%	0.363
Level change	-0.75%	0.840
Change in monthly trend	-0.15%	0.755

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

Figure 5-41—Illustration of ITS Analysis (Measure 3-2: Pharmacy Costs Among SUD Beneficiaries)



Although there were no significant changes in total costs among SUD beneficiaries, stratifying by category of service and setting revealed some differing trends. Notably and unsurprisingly, costs associated with a SUD diagnosis in an IMD setting increased significantly upon approval of the demonstration as displayed in Figure 5-41. Costs among LTC claims also increased significantly following the approval of the demonstration. Within the OP setting, the trend in ED costs began to decline while non-ED costs began to increase (albeit neither of these changes were statistically significant).

Measure 3-2 Conclusion: Inconclusive

Total cost of BH diagnosis by IMD and Other, by setting (including claims data IP, OP, RX, LTC, and capitated payments to managed care organizations) (Measure 3-3)

Measure 3-3 assesses cost drivers among the BH population. Because Alaska Medicaid follows a FFS model, there are no capitated payments and total costs represent direct costs to Medicaid.

Total BH-IMD costs among BH beneficiaries

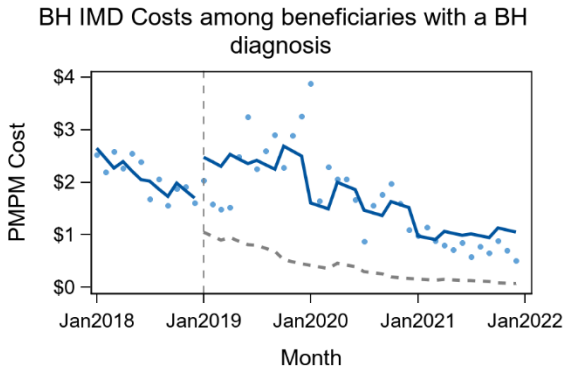
IMD costs associated with a mental health diagnosis among BH beneficiaries were small relative to total costs at only $3 PMPM as shown in Table 5-61 and Figure 5-42Figure 5-42—Illustration of ITS Analysis (Measure 3-3: BH-IMD Costs Among BH Beneficiaries). ITS analysis shows that during the baseline period, costs decreased significantly by 7.45 percent per month (p=0.003). Following implementation, costs significantly increased by more than doubling (127 percent increase, p<0.001). A GLM with a log link was constructed in order to account for the fact that costs are 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.

Table 5-61—Primary ITS Results (Measure 3-3: BH-IMD Costs Among BH Beneficiaries)

Variable	Percent Change in Costs	*p*-value
Baseline monthly trend	-7.45%	0.003**
Level change	127.02%	<0.001***
Change in monthly trend	4.21%	0.097*

*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 3-3: BH-IMD Costs Among BH Beneficiaries)



Total Other BH costs among BH beneficiaries

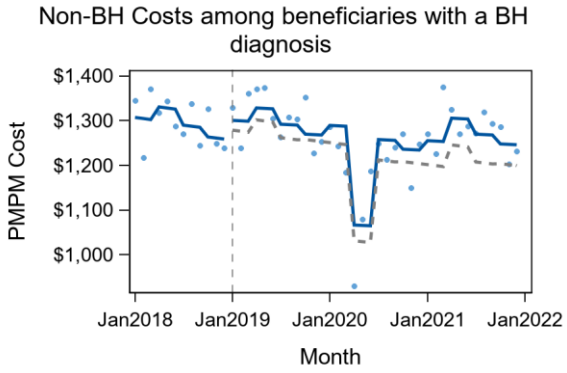
ITS analysis shows that costs associated with mental health diagnoses outside an IMD were generally flat throughout both the baseline and evaluation time periods, averaging $800 as displayed in Table 5-62 and Figure 5-43. There was no discernable trend during the baseline period, with an average increase of only 0.09 percent per month, which was not statistically significant (p=0.808), and following demonstration approval, average PMPM costs decreased by 0.26 percent per month relative to the baseline trend, but this change was not statistically significant (p=0.496). A GLM with a log link was constructed in order to account for the fact that costs are 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.

Table 5-62—Primary ITS Results (Measure 3-3: Other BH Costs Among BH Beneficiaries)

Variable	Percent Change in Costs	*p*-value
Baseline monthly trend	0.09%	0.808
Level change	3.03%	0.312
Change in monthly trend	-0.26%	0.496

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

Figure 5-43—Illustration of ITS Analysis (Measure 3-3: Other BH Costs Among BH Beneficiaries)



Total Non-BH costs among BH beneficiaries

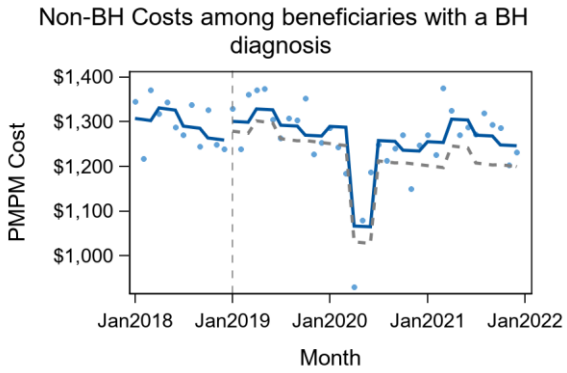
In addition to claims with a mental health diagnosis, ITS analysis shows that non-mental health related costs among beneficiaries with a BH diagnosis remained generally flat throughout the baseline and evaluation periods as displayed in Table 5-63 and Figure 5-44. In the baseline period, PMPM costs declined slightly by 0.18 percent per month on average, but this was not statistically significant (p=0.642). Following approval of the demonstration, this trend increased by 0.11 percent per month relative to the baseline trend but was not statistically significant (p=0.775). A GLM with a log link was constructed in order to account for the fact that costs are 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.

Table 5-63—Primary ITS Results (Measure 3-3: Non-BH Costs Among BH Beneficiaries)

Variable	Percent Change in Costs	*p*-value
Baseline monthly trend	-0.18%	0.642
Level change	1.59%	0.601
Change in monthly trend	0.11%	0.775

*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 3-3: Non-BH Costs Among BH Beneficiaries)



IP costs among BH beneficiaries

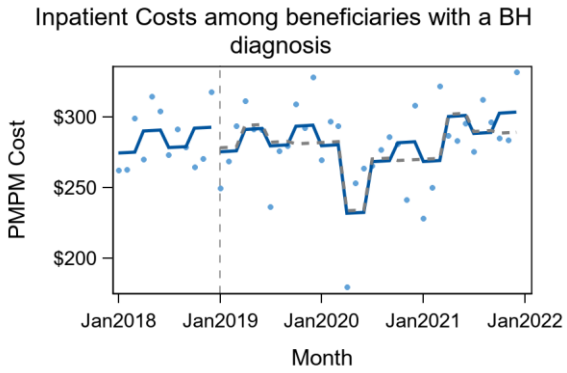
ITS analysis shows that IP costs among BH beneficiaries were effectively flat throughout the baseline and demonstration periods, averaging $281. Table 5-64 and Figure 5-45 show there was no discernable change in the level or trend in costs following approval of the demonstration. A GLM with a log link was constructed in order to account for the fact that costs are 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.

Table 5-64—Primary ITS Results (Measure 3-3: IP Costs Among BH Beneficiaries)

Variable	Percent Change in Costs	*p*-value
Baseline monthly trend	0.11%	0.884
Level change	-1.04%	0.856
Change in monthly trend	0.02%	0.981

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

Figure 5-45—Illustration of ITS Analysis (Measure 3-3: IP Costs Among BH Beneficiaries)



OP costs among BH beneficiaries

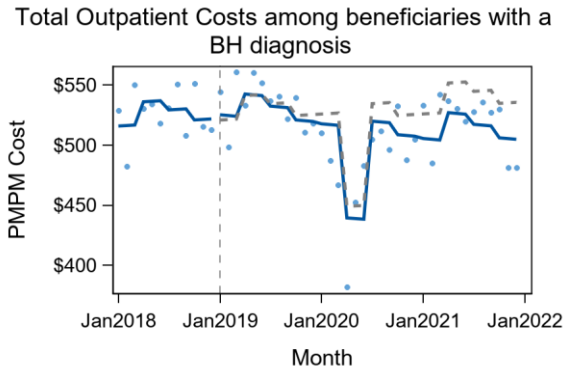
Similar to PMPM IP costs, total OP costs for beneficiaries with a BH diagnosis remained effectively flat throughout the baseline and evaluation periods as displayed in Table 5-65 and Figure 5-46. Costs increased slightly by 0.08 percent per month during the baseline period (p=0.849) and following approval of the demonstration the trend decreased by 0.20 percent per month relative to the baseline trend, but this change in the trend was not statistically significant (p=0.628). A GLM with a log link was constructed in order to account for the fact that costs are 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.

Table 5-65—Primary ITS Results (Measure 3-3: OP Costs Among BH Beneficiaries)

Variable	Percent Change in Costs	*p*-value
Baseline monthly trend	0.08%	0.849
Level change	1.05%	0.743
Change in monthly trend	-0.20%	0.628

*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 3-3: OP Costs Among BH Beneficiaries)



ED OP costs among BH beneficiaries

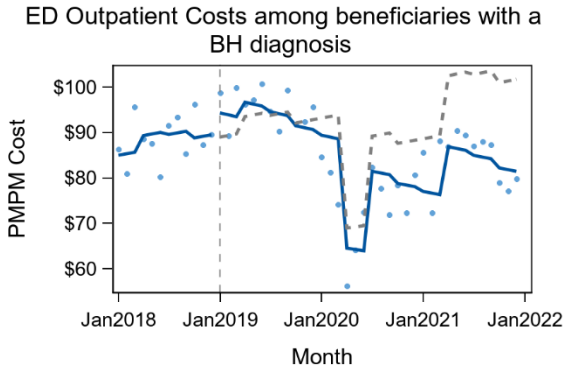
Separating OP costs by ED and non-ED revealed slightly more pronounced trends and changes in costs, but results were not statistically significant as displayed in Table 5-66 and Figure 5-47. Prior to implementation, PMPM costs were increasing slightly at 0.38 percent per month (p=0.525). Costs increased on average by 6.85 percent after approval of the demonstration, but this was not statistically significant (p=0.141), and the trend decreased by 0.82 percent per month relative to the baseline trend, which was not statistically significant (p=0.163). A GLM with a log link was constructed in order to account for the fact that costs are 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.

Table 5-66—Primary ITS Results (Measure 3-3: ED OP Costs Among BH Beneficiaries)

Variable	Percent Change in Costs	*p*-value
Baseline monthly trend	0.38%	0.525
Level change	6.85%	0.141
Change in monthly trend	-0.82%	0.163

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

Figure 5-47—Illustration of ITS Analysis (Measure 3-3: ED OP Costs Among BH Beneficiaries)



Non-ED OP costs among BH beneficiaries

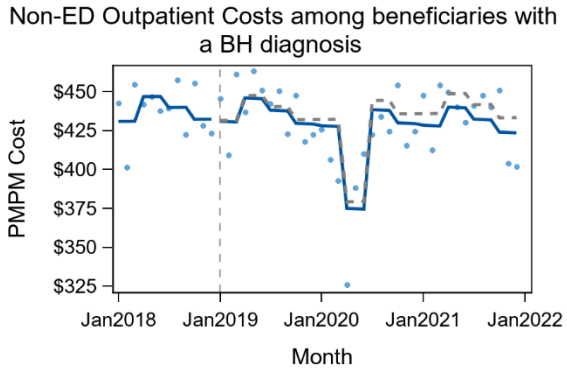
Non-ED OP costs averaged $430 PMPM and did not exhibit discernable changes after approval of the demonstration as displayed in Table 5-67 and Figure 5-48. Non-ED OP costs decreased by an average of 0.06 percent (p=0.985) and decreased of 0.07 percent per month in the trend relative to the baseline trend (p=0.869). A GLM with a log link was constructed in order to account for the fact that costs are 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.

Table 5-67—Primary ITS Results (Measure 3-3: Non-ED OP Costs Among BH Beneficiaries)

Variable	Percent Change in Costs	*p*-value
Baseline monthly trend	0.01%	0.977
Level change	-0.06%	0.985
Change in monthly trend	-0.07%	0.869

*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 3-3: Non-ED OP Costs Among BH Beneficiaries)



LTC costs among BH beneficiaries

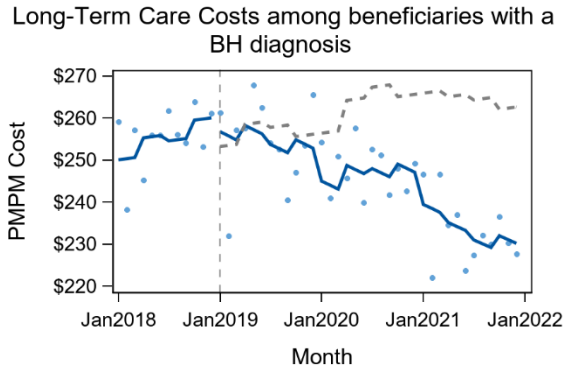
ITS analysis shows that beneficiaries with a BH diagnosis had a slightly increasing trend in LTC costs during the baseline period, increasing by 0.10 percent per month, but this was not statistically significant (p=0.710). However, after approval of the demonstration, costs began to decline by 0.49 percent per month relative to the baseline trend, which was statistically significant at the 0.1 level (p=0.074). Table 5-68 and Figure 5-49 display these trends. A GLM with a log link was constructed in order to account for the fact that costs are 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.

Table 5-68—Primary ITS Results (Measure 3-3: LTC Costs Among BH Beneficiaries)

Variable	Percent Change in Costs	*p*-value
Baseline monthly trend	0.10%	0.710
Level change	1.91%	0.374
Change in monthly trend	-0.49%	0.074*

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

Figure 5-49—Illustration of ITS Analysis (Measure 3-3: LTC Costs Among BH Beneficiaries)



Professional costs among BH beneficiaries

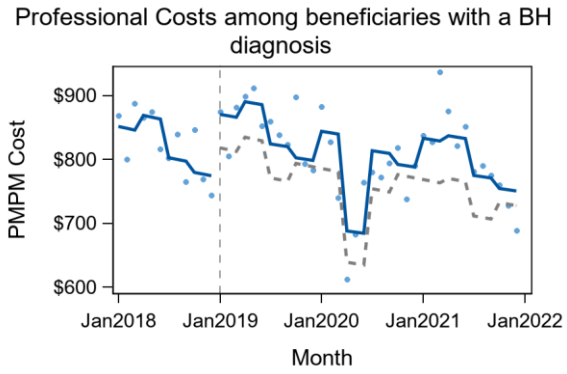
ITS analysis shows a slight decrease in professional costs among beneficiaries with a BH diagnosis throughout the baseline period (-0.33 percent per month, p=0.492) and this trend did not change significantly after demonstration approval, increasing by 0.08 percent per month relative to the baseline trend (p=0.872). Table 5-69 and Figure 5-50 display these trends. A GLM with a log link was constructed in order to account for the fact that costs are 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.

Table 5-69—Primary ITS Results (Measure 3-3: Professional Costs Among BH Beneficiaries)

Variable	Percent Change in Costs	*p*-value
Baseline monthly trend	-0.33%	0.492
Level change	6.33%	0.104
Change in monthly trend	0.08%	0.872

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

Figure 5-50—Illustration of ITS Analysis (Measure 3-3: Professional Costs Among BH Beneficiaries)



Dental costs among BH beneficiaries

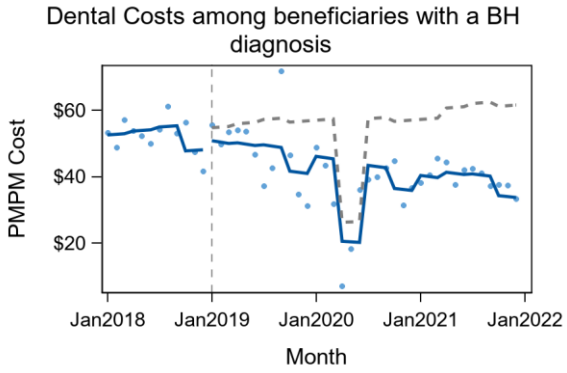
ITS analysis shows that dental costs among members with a BH diagnosis increased slightly by 0.34 percent per month during the baseline period. Following approval of the demonstration, this trend declined by 1.14 percent per month relative to the baseline, and although this decline was not statistically significant (p=0.372), it represented a difference of approximately $25 PMPM by the end of 2021. Table 5-70 and Figure 5-51 display these trends. A GLM with a log link was constructed in order to account for the fact that costs are 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.

Table 5-70—Illustration of ITS Analysis (Measure 3-3: Dental Costs Among BH Beneficiaries)

Variable	Percent Change in Costs	*p*-value
Baseline monthly trend	0.34%	0.796
Level change	-6.09%	0.537
Change in monthly trend	-1.14%	0.372

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

Figure 5-51—Illustration of ITS Analysis (Measure 3-3: Dental Costs Among BH Beneficiaries)



Pharmacy costs among BH beneficiaries

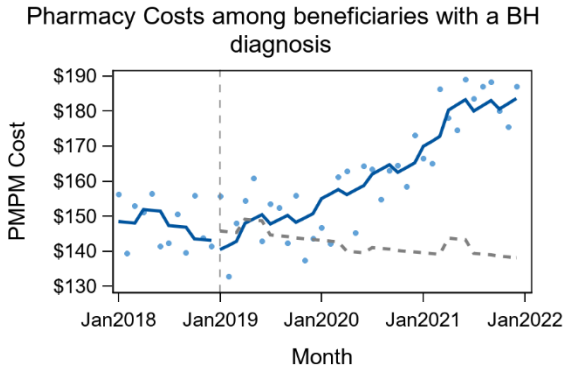
ITS analysis shows that pharmacy costs among beneficiaries with a BH diagnosis increased significantly following approval of the demonstration displayed in Table 5-70 and Figure 5-52. Prior to approval, costs were declining slightly by 0.15 percent per month; after approval, this trend reversed, increasing significantly by 0.98 percent per month relative to the baseline period (p=0.039). By the end of 2021, this translated to a difference of approximately $42 PMPM ($180 average actual costs compared to projected costs of $138 PMPM had the baseline trend continued). This increase would not be unexpected if beneficiaries with a BH diagnosis are receiving needed treatment they otherwise were not receiving. A GLM with a log link was constructed in order to account for the fact that costs are 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.

Table 5-71—Illustration of ITS Analysis (Measure 3-3: Pharmacy Costs Among BH Beneficiaries)

Variable	Percent Change in Costs	*p*-value
Baseline monthly trend	-0.15%	0.748
Level change	-4.57%	0.200
Change in monthly trend	0.98%	0.039**

*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 3-3: Pharmacy Costs Among BH Beneficiaries)



Overall, costs among beneficiaries with a BH diagnosis did not change by a statistically significant, degree; however, separating by category of service and setting revealed some notable changes in costs. First, similar to beneficiaries with a SUD diagnosis, IMD costs associated with BH diagnoses among the BH population increased significantly following approval of the demonstration. Pharmacy costs also began to increase at a significantly higher rate after the demonstration approval compared to before the approval. LTC costs, however, began to decrease after approval relative to before approval.

Measure 3-3 Conclusion: Inconclusive

6. Conclusions

The Alaska Substance Use Disorder and Behavioral Health (SUD-BH) Program Demonstration Waiver allowed the State to cover a variety of new services to treat SUD and BH disorders including residential, partial hospitalization (PH), intensive outpatient (IOP), withdrawal management, and community recovery support services, among others. 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 research question and hypothesis.

Table 6-1—Measure Conclusion Criteria

Conclusion	Criteria
Supports	• Statistical testing results are significant in favorable direction. • For measures without statistical testing, there was conclusive evidence of moderate to large, sustained improvements in the results.
Inconclusive	• Statistical testing results are not significant. • 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 are significant in unfavorable direction. • For measures without statistical testing, there was conclusive evidence of moderate to large, sustained worsening in the results.
N/A	• The measure was based on a survey that was administered at one point in time and does not provide a comparison over time or between groups to draw a conclusion.

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

Measure Number	Measure Name	Results Support Hypothesis
Research Question 1: Does the SUD-BH Program increase access to and utilization of SUD and BH disorder treatment services by increasing access to community-based care?		
Hypothesis 1.1: The SUD-BH Program will increase the number of beneficiaries in the waiver population who are referred to and engage in treatment for SUD and BH disorders in sub-acute, community, or regionally based OP settings.		
1-1	Number of beneficiaries screened for symptoms of SUD using industry recognized, evidence-based screening instruments	No
1-2	Number of beneficiaries screened for symptoms of BH disorders using industry recognized, evidence-based screening instruments	No
1-3	Number of beneficiaries in the waiver population with SUD or BH diagnosis, by setting	Inconclusive
1-4	Initiation and engagement of AOD abuse or dependence treatment (NQF 0004)	Yes
1-5	Follow-up after discharge from ED visits for SUD, and specifically for OUD, by setting (NQF 2605)	No
1-6	Follow-up after discharge from ED visits for a BH disorder, by setting (NQF 2605)	No
1-7	Number of Medicaid qualified SUD providers (identified by provider ID numbers) who bill for SUD services	Yes
1-8	Number of Medicaid qualified professionals licensed in the State to provide BH who bill for BH disorder services	Yes

Measure Number	Measure Name	Results Support Hypothesis
1-9	Providers' reported barriers before, during, and shortly following expansion of BH and SUD services	Inconclusive
1-10	Providers' experience in expanding services	Yes
1-11	Administrators' reported barriers before, during, and shortly following expansion of BH and SUD services	No
1-12	Administrators' plan for program sustainability and anticipated challenges	Yes
1-13	Alaska tribal entities' reported changes in quality of care and access to care following expansion of BH and SUD services	Inconclusive
Hypothesis 1.2: The SUD-BH Program will decrease utilization of ED, IP, or institutional settings within the beneficiary population.		
1-14	IP admissions for SUD, and specifically for OUD, by setting	Inconclusive
1-15	IP admissions for BH disorders, by setting	Inconclusive
1-16a	ED visits for SUD, by setting	No
1-16b	ED visits for OUD, by setting	
1-17	ED visits for BH disorders, by setting	Yes
1-18	Mean length of stay measured from admission date to discharge date, by setting	Yes
1-19	30-day readmission rate to IP facilities following hospitalization for a SUD-related diagnosis, by setting	Yes
1-20	30-day readmission rate to IP facilities following hospitalization for a BH- related diagnosis, by setting	Inconclusive
Hypothesis 1.3: The SUD-BH Program will increase the percentage of beneficiaries who adhere to treatment for SUD and BH disorders.		
1-21	Number of beneficiaries with a SUD diagnosis including those with OUD who used services in the last month or year, by service or benefit type	Yes
1-22	Number of beneficiaries with a BH diagnosis who used services in the last month or year, by service or benefit type	Inconclusive
1-23	Time to treatment, by service type (National Behavioral Health Quality Framework [NBHQF] Goal 1)	Yes
Research Question 2: Do enrollees receiving SUD services experience improved health outcomes?		
Hypothesis 2.1: The SUD-BH Program will increase the percentage of beneficiaries with SUD or a BH disorder who experience care for comorbid conditions.		
2-1	Access to physical healthcare	No
2-2	Screening for chronic conditions relevant to state Medicaid population	No
2-3	Screening for co-morbidity of BH disorders and SUDs within the waiver population compared to the total Medicaid population	No
2-4	Percentage of beneficiaries who rate the quality of their healthcare as very good or excellent	N/A
2-5	Percentage of beneficiaries who rate their overall mental or emotional health as very good or excellent	N/A
2-6	Percentage of beneficiaries who demonstrate very good or excellent knowledge of available treatment and services	N/A
2-7	Maternal depression	Inconclusive
2-8	Maternal domestic abuse	Inconclusive

Measure Number	Measure Name	Results Support Hypothesis
2-9	Percentage of beneficiaries who experienced alcoholism or mental health disorder among household members	Inconclusive
2-10	Percentage of beneficiaries who witnessed violence or physical abuse between household members	Inconclusive
2-11	Percentage of youth beneficiaries who have ever been physically hurt by an adult in any way	Inconclusive
2-12	Maternal marijuana or hash use in the past two years	Inconclusive
2-13	Frequency of maternal marijuana or hash use (days per week)	Yes
2-14	Social support— care when sick (Supplemental CUBS Measure 2-14)	N/A
2-15	Desire to obtain SUD/BH treatment options and obtainment of SUD treatment in the past three months (Supplemental CUBS Measure 2-15)	N/A
Hypothesis 2.2: The SUD-BH Program will decrease the rate of drug overdoses and overdose deaths due to opioids.		
2-16	Rate of overdose deaths, specifically overdose deaths due to any opioid	No
2-17	Non-fatal overdoses (*all cause*)	Yes
2-18	Use of opioids at high dosage in persons without cancer (NQF 2940)	Inconclusive
Research Question 3: Does the SUD-BH Program reduce the cost of Medicaid for Alaska and the federal government?		
Hypothesis 3.1: The SUD-BH Program will reduce Alaska's per capita Medicaid BH costs.		
3-1	Total costs of healthcare (sum of parts below), by State and federal share	Inconclusive
3-2	Total cost of SUD, SUD-IMD and SUD-Other and Non-SUD, by setting, including claims data (IP, OP, RX, LTC, and capitated payments to managed care organizations)	Inconclusive
3-3	Total cost of BH diagnosis by IMD and Other, by setting, including claims data (IP, OP, RX, LTC, and capitated payments to managed care organizations)	Inconclusive

Note: AOD: alcohol and other drug use; BH: Behavioral Health; CUBS: Childhood Understanding Behaviors Survey; ED: emergency department; IMD: Institutions for Mental Disease; IP: inpatient; LTC: long-term care; NBHQF: National Behavioral Health Quality Framework; NCQA: National Committee for Quality Assurance; NQF: National Quality Forum; OP: outpatient; OUD: opioid use disorder; RX: pharmacy; SUD: substance use disorder; SUD-BH: Substance Use Disorder-Behavioral Health

Research Question 1

Research Question 1 assesses whether the SUD-BH Program increased access to and utilization of SUD and BH disorder treatment services. Evaluation of this goal was complicated by the coronavirus disease 2019 (COVID-19) public health emergency (PHE), which began one year after the start of the demonstration approval period and coincided with many implementation milestones. As a result, measures that assess utilization of services were adversely impacted by the PHE as lock-down orders were in effect.

Successes and challenges associated with Research Question 1 include the following.

Successes

- Increased number of practitioners providing SUD and BH services.
- Reduced emergency department (ED) visits specifically for opioid use disorder (OUD) and BH disorders.
- Improved rates of service utilization for SUD treatment.
- Timelier initiation of treatment for SUD.

In addition, there were potential successes in a shift of the type of services that beneficiaries utilized. Specifically, among beneficiaries with a SUD, there appeared to be a shift from the outpatient (OP) setting to residential, inpatient (IP) and IOP/PH settings. Because OP services were originally covered under the State plan but IP and IOP/PH were new services provided under the waiver, this may indicate that beneficiaries were not getting an appropriate level of care prior to the demonstration.

Challenges

Notable challenges include:

- Reduced percentage of beneficiaries screened for SUD or BH disorders.
- Lower rates of follow-up after discharge from an ED visit for SUD or BH disorder.

Lower rates of screening for SUD and BH disorders, chronic conditions, and SUD/BH comorbidities were likely driven by the COVID-19 PHE since many residential and withdrawal management facilities were closed or had reduced censuses due to the PHE, as screening rates in 2019 were higher than in 2020 and 2021 and generally similar to 2018 rates; however, screening rates did not increase in 2021 following the reopening and the consequent delays in any routine, nonessential care.

Rates of follow-up visits after discharge from an ED for SUD or BH disorders also declined following approval of the demonstration in 2019, with seven-day follow-up rates declining by nearly 9 percentage points, a 20 percent relative decline, and 30-day follow-up rates declining by 8.4 percentage points, or a 14 percent relative decline. This represents a notable shift that is likely not attributable to the COVID-19 PHE, as rates began to decline in 2019 prior to the PHE.

Research Question 2

Research Question 2 assesses whether enrollees receiving SUD services experienced improved health outcomes. This goal was measured using administrative claims data, beneficiary surveys, the Alaska Childhood Understanding Behaviors Survey (CUBS) instruments, and overdose data to address this research question. Because beneficiary surveys were conducted at a single point in time, no causal conclusions can be drawn, and results are interpreted in a descriptive manner.

Successes

Due in part to data limitations, there were no successes that could be attributed to the demonstration. However, there was a reduction in non-fatal overdoses among Alaska residents statewide (Medicaid and non-Medicaid recipients). Although analysis of the CUBS data indicates a reduction in frequency of maternal marijuana usage after the waiver approval, this decline was observed in 2020 and could be attributable to revisions in the survey instrument that year.

Among survey measures of Medicaid recipients, there were promising signs regarding the number of treatment services that were known to beneficiaries. No statistical testing was conducted because these surveys were conducted at a single point in time after approval of the demonstration and no viable comparison group could be used, but over half of beneficiaries indicated they knew where to receive SUD treatment (for both adults and children), while over two-thirds knew where to receive BH treatment. Among those who did know where to find treatment, every setting for adult treatment was known to over two-thirds of beneficiaries, and every setting for child treatment was known to at least 70 percent of beneficiaries.

Challenges

Notable challenges include:

- Reduced rates of access to preventive and primary care.
- Reduced screening for chronic conditions and SUD/BH comorbidities.
- Higher rates of statewide (including non-Medicaid) overdose deaths, including those from opioids.

Lower rates of access to preventive and primary care are likely attributable to the COVID-19 PHE because rates did not begin to decline until 2020 and 2021; however, there was no rebound in rates in 2021 following the reopening.

Similar to screening for SUD and BH disorders, lower rates of screening for chronic conditions and SUD/BH comorbidities were likely driven by the COVID-19 PHE, as screening rates in 2019 were higher than in 2020 and 2021 and generally similar to 2018 rates; however, screening rates did not increase in 2021 as the healthcare system reopened.

The increased rate of overdose deaths was exacerbated by the COVID-19 PHE, as was seen across the country during this time.[6-1] Data on Medicaid recipients specifically were not available, and all-cause overdose death rates did not increase substantially until state fiscal year (SFY) 2021. Opioid overdose deaths increased slightly in SFY 2020 and increased substantially in SFY 2021. Studies have shown that COVID-19 had a disproportionate impact on overdoses in rural areas.[6-2]

Research Question 3

Research Question 3 assesses the total cost of care for beneficiaries with a SUD and BH disorder. Costs for these beneficiaries did not demonstrably change following implementation of the demonstration.[6-3] Total costs among beneficiaries with a SUD diagnosis increased by 0.20 percent per month both before and after approval of the demonstration. Costs among beneficiaries with a BH diagnosis declined by 0.08 percent per month.

There were two notable increases in costs among the SUD population when examining costs by setting. Unsurprisingly, average institutions for mental disease (IMD) costs increased significantly following approval of

6-1 Centers for Disease Control and Prevention. "Overdose Deaths Accelerating During COVID-19,"Press Release, December 17, 2020. Available at: https://www.cdc.gov/media/releases/2020/p1218-overdose-deaths-covid-19.html; Accessed on: Nov 3, 2022.

6-2 Walters, S.M., *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); https://ascpjournal.biomedcentral.com/articles/10.1186/s13722-022-00303-8

6-3 Note that the cost analyses do not refer to nor attempt to replicate the formal Budget Neutrality test required under the Section 1115 Demonstration Waiver program, which sets a fixed target under which waiver expenditures must fall that was set at the time the waiver was approved.

the demonstration, which allowed Medicaid to reimburse a greater proportion of IMD stays. Long-term care (LTC) costs also increased significantly among the SUD population after approval of the demonstration.

Similar to the SUD population, IMD and LTC costs among the BH population also increased following the approval of the demonstration. Additionally, pharmacy costs saw an increase in costs following approval of the waiver, which may signify that beneficiaries are receiving needed treatment that they had not been receiving prior to the waiver.

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

Interpretations

Results suggest that Alaska beneficiaries with a substance use disorder (SUD) or behavioral health (BH) disorder were receiving more appropriate care after approval of the waiver than before approval. Beneficiaries with a SUD began reducing their utilization of outpatient (OP) services following the approval of the waiver and there were noticeable increases among new settings of care for treatment, such as intensive outpatient/partial hospitalization (IOP/PH) and residential inpatient (IP). Similarly, beneficiaries with a BH disorder appeared to transition away from the OP and emergency department (ED) settings more permanently following the coronavirus disease 2019 (COVID-19) public health emergency (PHE) in favor of telehealth. Beneficiaries with a BH disorder also exhibited a significant upward trend in pharmacy costs following the approval of the PHE, potentially indicating these beneficiaries were receiving needed treatment.

There were also improvements in meeting the statewide target for average length of stay in an institution for mental disease (IMD) of 30 days. The average length of stay in an IMD decreased significantly following approval of the demonstration, declining from over 76 days in 2018 to just under 27 days.

Finally, the number of providers billing for SUD services increased substantially following approval of the waiver. In 2018, only 17 providers billed for SUD services, who were located in two regions (Anchorage and Fairbanks). By 2021, 134 providers were billing for SUD services across five regions. The number of providers billing for BH services also increased following the demonstration, but to a lesser extent than SUD providers.

The COVID-19 PHE greatly impacted access to care in 2020 and 2021, which is evidenced by lower rates of SUD and BH screening and access to physical care in both 2020 and 2021. The decline in access to care measures is consistent with what has been seen nationally across Medicaid health plans. Improvements could be made, however, in follow-up visits after discharge from the ED for a SUD or BH disorder. Because follow-up visits after discharge from the ED specifically for opioid use disorder (OUD) increased while they decreased for SUD generally, this implies disproportionate handling of ED visits for OUD compared to alcohol or other drug abuse. Moreover, rates of follow-up visits are not as susceptible to the effects of the COVID-19 PHE as access to care measures, as national rates for Medicaid health plans did not decline substantially in 2020 or 2021.

Costs

It is too early to tell in the demonstration whether this translates to cost savings. The slight increase in costs among the SUD population was primarily driven by costs directly associated with a SUD diagnosis. Increases in cost trends were seen among the non-ED OP, long-term care (LTC), and professional settings. Cost trends declined among the IP, ED OP, dental, and pharmacy settings.

The slight decline in the cost trend among the BH population was primarily driven by a decline in OP (both ED and non-ED), LTC, and dental costs. The trend in costs increased significantly for pharmacy and increased slightly among professional and IP settings.

The cost analysis thus far centered on overall costs to Medicaid. Additional research is needed as more post-implementation data points are gathered to assess the impact at the individual level. It is possible that as the demonstration matures, the impact on overall costs may not result in a reduction, given various stages in SUD or BH treatment among the population. That is, at the individual level, the trajectory of costs increases initially as

members receive treatment before beginning to decline as the lower cost of treatment leads to lower costs over the longer run. In aggregate however, because at any given point in time there are individuals in all stages of treatment, this individual effect is unlikely to translate to an overall reduction in costs (unless the proportion of beneficiaries with a SUD fundamentally decreases). Health Services Advisory Group, Inc. (HSAG) expects that with additional data points being available to assess beneficiary-level costs in the Summative Evaluation Report, a more robust panel analysis can be conducted to evaluate the trajectory of costs at the member level following waiver implementation.

Policy Implications

COVID-19 PHE

The COVID-19 PHE has 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 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 demonstration 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 program.

There are likely 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 demonstration waivers for several years. The financial analyses suggest that during the PHE, states faced fiscal pressures of responding to the PHE. However, states may still face fiscal pressures from the demand for services as well as lingering health impacts from COVID-19 on their populations.

The COVID-19 PHE exacerbated already existing workforce shortages in Alaska, particularly for health care workers, creating additional challenges expanding services that require medical staff, such as withdrawal management. Moreover, the COVID-19 PHE significantly impacted the rate of overdose deaths, including those related to opioids. Two findings from this evaluation may assist the State in addressing this issue. First, the State should continue to expand the number of providers who bill for SUD services, particularly in regions 3, 6, 7, and 9 where these providers are not currently available in order to meet the demand in these rural/frontier regions that have been shown to be more disproportionately impacted by COVID-19.[7-1] Second, the State should encourage providers to screen for SUD and BH disorders in order to identify members who may be at risk of an overdose due to a SUD. The Department of Behavioral Health (DBH) may consider ensuring that reimbursement rates for screening services are comparable to non-Medicaid health plans.

Follow-Up After ED Visit for SUD or BH Disorder

The State should work with providers to improve rates of follow-up visits after an ED visit with a SUD or BH diagnosis. Because ED visits for OUD specifically appeared to show improvements, providers should be encouraged to follow similar follow-up protocols and standards for ED visits for alcohol and other drug abuse and BH disorders as they follow for OUD.

7-1 Walters SM, Bolinski RS, *et al.* 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 (2022). Available at: https://ascpjournal.biomedcentral.com/articles/10.1186/s13722-022-00303-8. Accessed on: Nov 8, 2022.

Interactions With Other State Initiatives

Alaska's SUD-BH 1115 demonstration is only one tool that the Alaska Department of Health and DBH is using to address SUD and mental illness. The SUD-BH demonstration can augment other State initiatives through leveraging resources provided under the demonstration. Likewise, the demonstration may be able to utilize goals of other initiatives to increase the effectiveness of the SUD-BH Program. For example, one goal of the Statewide Opioid Action Plan is to provide timely access to screening, referral, and treatment of substance misuse.[7-2] Actions taken under this initiative to further the goal of screening for SUD could be aligned with the demonstration's goal of universally screening all Medicaid recipients for SUD using evidence-based screening instruments. This could help address the challenges identified in SUD and BH screening among Medicaid recipients.

Background on Other State Initiatives

Alaska established the Office of Substance Misuse and Addiction Prevention (OSMAP) in July 2017.[7-3] OSMAP utilizes a public health approach to prevent and reduce SUDs, prevent harms caused by substance use (SU), and support community-based activities across Alaska. Activities supported by OSMAP focus on opioid and marijuana misuse, addiction prevention, data and evaluation, and program and system changes to mitigate harm. On February 14, 2017, the Office of the Governor issued a disaster declaration for the opioid epidemic in Alaska. As a result of the declaration, OSMAP, in coordination with the Alaska Department of Health (DOH), the Department of Public Safety (DPS), other State agencies, and community organizations developed the Statewide Opioid Action Plan.[7-4] The Statewide Opioid Action Plan, published in November 2018, specificized actions for the State to take to support local, regional, tribal, State, federal, and volunteer agencies and efforts to address opioid misuse in Alaska from 2018 through 2022. In addition, the plan outlined six overarching goals intended to guide and inform future work for the State agencies and partners engaged in the opioid response, listed below:

- Uniting to reduce stigma and change social norms surrounding substance misuse and addiction.
- Communication, coordination, and cooperating on substance misuse efforts.
- Reducing the risks of substance misuse and addiction.
- Having fewer Alaskans experience problems associated with drug abuse.
- Providing timely access to the screening, referral, and treatment services required.
- Building communities of recovery across Alaska.[7-5]

OSMAP also coordinates Project HOPE. Project HOPE collaborates with community organizations to distribute or administer naloxone in response to opioid overdoses, directly providing naloxone to Alaskans.[7-6] To date, Project HOPE has distributed over 12,000 naloxone rescue kits and provided training on their use to first responders. Project HOPE further trained and approved 29 opioid response programs to ensure that distribution of

7-2 Alaska Department of Health and Social Services. Statewide Opioid Action Plan. Available at: https://health.alaska.gov/osmap/Pages/action.aspx. Accessed on: Aug 23, 2022.
7-3 Alaska Department of Health and Social Services. Office of Substance Misuse and Addiction Prevention. Available at: https://health.alaska.gov/osmap/Pages/default.aspx. Accessed on: Aug 22, 2022.
7-4 Alaska Department of Health and Social Services. Statewide Opioid Action Plan. Available at: https://health.alaska.gov/osmap/Pages/action.aspx. Accessed on: Aug 23, 2022.
7-5 Alaska Department of Health and Social Services. 2018-2022 Statewide Opioid Action Plan. Available at: https://health.alaska.gov/osmap/Documents/Statewide-Opioid-Action-Plan-2018-2022.pdf. Accessed on: Sept 14, 2022.
7-6 Alaska Department of Health and Social Services. Project HOPE. Available at: https://health.alaska.gov/osmap/Pages/hope.aspx. Accessed on: Aug 23, 2022.

kits and training on their use continues on local levels. Additionally, Project HOPE distributed over 25,000 drug disposal bags across Alaska, providing individuals with safe means to dispose of opioids and unused prescription medication.

DOH developed the Medications for Addiction Treatment Guide to aid providers in Alaska in implementing opioid treatment services.[7-7] The guide centered on understanding how to utilize naltrexone and buprenorphine in office-based settings alongside BH treatment and support. The guide contained an evidence-based approach to treating OUD. The most recent version of the guide, the second edition, was published in February 2021.

Alaska operates a Prescription Drug Monitoring Program (PDMP). Alaska's PDMP is designed to improve patient care and encourage cooperation between stakeholders to reduce the misuse, abuse, and diversion of controlled substances by monitoring Schedule II–IV controlled substances dispensed within the State.[7-8] The State Opioid Response (SOR) grant partially funds the PDMP. The SOR fundings allows the PDMP to enhance and analyze prescribing accuracy; hire a Principal Investigator to review PDMP violations; and hire additional staff to assist with registration, investigations, and education efforts. Providers who prescribe and dispense these controlled substances are required to register with the PDMP to review and report patient prescription information. By the end of 2020, there were 8,087 registered Alaska PDMP users.[7-9]

Alaska hosts an increasing number of Project Extension for Community Healthcare Outcomes (ECHO) sites.[7-10] Alaska Native Tribal Health Consortium (ANTHC), the University of Alaska Anchorage (UAA) Center for Human Development Project, and the Alaska Education Network all host various ECHO projects with different education opportunities. Project ECHO utilizes videoconferencing to connect a team of interdisciplinary specialists with health professionals, educators, and community members. Specialists provide expert advice to aid in building capacity in communities to implement best practices and improve outcomes. ECHO topics covered in the State of Alaska included addiction medicine, behavioral interventions for early childhood, and pain and opioid management.

Alaska places emphasis on programs and initiatives focusing on youth mental health and substance abuse prevention. Youth Mental Health First Aid is a course designed to teach parents, family members, care givers, health and human services workers, and others how to help adolescents experiencing a mental health challenge, an addiction challenge, or who are in crisis.[7-11] Coursework includes a five-step action plan on how to aid youths in crisis and non-crisis situations. Topics covered include anxiety, depression, and SU.

Alaska's Adolescent Health Program established the reduction of youth substance use and abuse as one of its key initiatives.[7-12] The program supports adolescent SU prevention efforts through programming and resource development in conjunction with work done through community organizations and DBH. One project which is

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7-7 Alaska Division of Behavioral Health. Evidence-Based Practices: Medication Addiction Treatment. Available at: https://health.alaska.gov/dbh/Pages/Initiatives/EvidenceBasedPractices/MAT.aspx. Accessed on: Aug 22, 2022.

7-8 Alaska Division of Corporations, Business, and Professional Licensing. Prescription Drug Monitoring Program. Available at: https://www.commerce.alaska.gov/web/cbpl/ProfessionalLicensing/PrescriptionDrugMonitoringProgram.aspx. Accessed on: Aug 22, 2022.

7-9 NPC Research. Alaska's Prescription Drug Monitoring Program. Available at: https://www.commerce.alaska.gov/web/Portals/5/pub/PDMPNPCAnalysis_2021.pdf. Accessed on: Aug 22, 2022.

7-10 Alaska Division of Public Health. Alaska Project ECHO. Available at: https://health.alaska.gov/dph/Emergency/Pages/healthcare/telehealth/ECHO.aspx. Accessed on: Aug 22, 2022.

7-11 Alaska Division of Public Health. Youth Mental Health First Aid. Available at: https://health.alaska.gov/dph/wcfh/Pages/adolescent/Mental-Health-First-Aid.aspx. Accessed on: Aug 22, 2022.

7-12 Alaska Division of Public Health. Reduce Youth Substance Use & Abuse. Available at: https://health.alaska.gov/dph/wcfh/Pages/adolescent/substances.aspx#:~:text=The%20Alaska%20Adolescent%20Health%20Program%20supports%20adolescent%20substance,Division%20of%20Behavioral%20Health%20and%20various%20community%20organizations. Accessed on: Aug 22, 2022.

run through the Adolescent Health Program is the Fourth R program. The Fourth R program was adapted for use in Alaska following its development in Canada.[7-13] The Fourth R is a comprehensive school-based program designed to reduce SU, violence, and other risk behaviors through teaching relationship-building and decision-making skills. The program consists of 21 lessons taught by trained teachers in health and physical education classes for students in seventh through ninth grades. By 2017, over 100 schools across 28 districts received the Fourth R curricula, and 400 staff and partners had been trained. The Health Relationships Plus program teaches these subject areas in a non-classroom setting.[7-14] Healthy Relationships Plus provides instruction to small groups of youth focusing on topics including choice, emotional health and well-being, and communication styles. Healthy Relationships Plus includes an enhanced focus on mental health and suicide prevention, as well as drug and alcohol use.

Workforce Initiatives

DOH, DBH, and other mental health entities created initiatives aimed at addressing health workforce issues created by the general workforce shortage in Alaska. The Alaska Health Workforce Coalition was created in 2010 to address these concerns and has since collaborated with the Alaska Mental Health Trust (the Trust). The goal of this joint effort was to support a statewide system that would help develop a well-qualified healthcare workforce able to meet the needs of the population of Alaska.[7-15] Specific initiatives included recruiting, developing strategies for programming, creating training programs, and training various BH professions.[7-16]

UAA created the Alaska Training Cooperative to provide non-academic trainings, professional development, and continuing education programs for direct service professionals and BH providers who serve Trust beneficiaries.[7-17] The goal of the program was to provide more quality training opportunities and generate an enhanced ability by the Alaska workforce to provide culturally attuned services for the Alaska general and Native population.

Alaska's Service to Health Care Practitioners (SHARP) program is a statewide support-for-service effort providing financial support to healthcare providers working in medical, dental, or BH care.[7-18] SHARP's aim is to improve the recruitment, retention, and distribution of healthcare professionals working in Alaska. Two types of financial support are provided: education loan repayment and direct incentive. SHARP-1, Alaska's main state-operated support-for-service program, is dependent on Alaska's receipt of Health Resources and Services Administration (HRSA) partnership grants from the federal State Loan Repayment Program (SLRP). SHARP-1 only provides education loan repayment to providers specifically practicing in federally designated Health Professional Shortage Areas (HPSAs). In 2021, DOH opened SHARP-3. SHARP-3, named in statute as the Health Care Professionals Workforce Enhancement Program, does not have a sunset date, does not require providers to practice in HPSAs, offers direct incentive in addition to education loan repayment, and broadens the eligible practitioner occupations.

7-13 Alaska Division of Public Health. Fourth R for Healthy Relationships. Available at: https://health.alaska.gov/dph/wcfh/Pages/adolescent/Fourth-R.aspx. Accessed on: Aug 22, 2022.
7-14 Alaska Division of Public Health. Healthy Relationships Plus. Available at: https://health.alaska.gov/dph/wcfh/Pages/adolescent/Healthy-Relationships-Plus.aspx. Accessed on: Aug 22, 2022.
7-15 Rural Health Information Hub. Alaska Health Workforce Coalition. Available at: https://www.ruralhealthinfo.org/project-examples/723. Accessed on: Aug 30, 2022.
7-16 Alaska Health Workforce Coalition. 2017-2021 Action Agenda. Available at: https://www.alaska.edu/research/wd/plans/health/AHWC-2017-2021-Action-Agenda-September-2017-Final-With-Cover-(2).pdf. Accessed on: Aug 30, 2022.
7-17 University of Alaska Anchorage. The Alaska Training Cooperative. Available at: https://www.uaa.alaska.edu/academics/college-of-health/departments/center-for-human-development/alaska-training-cooperative/index.cshtml. Accessed on: September 21, 2022.
7-18 Alaska Division of Public Health. Alaska's SHARP Program. Available at: https://health.alaska.gov/dph/Emergency/Pages/healthcare/sharp/default.aspx. Accessed on: Aug 22, 2022.

Area Health Education Centers (AHECs) are federally funded, state-administered offices that work to improve healthcare services across the United States. The Alaska Center for Rural Health and Health Workforce operates six regional AHECs spread across the State.[7-19] The Alaska AHEC seeks to provide rural areas of the State with qualified health professionals through broadening the training health profession students receive. Specific initiatives include supporting community-based clinic rotations and retaining Alaska's health workforce by providing and increasing access to continuing education opportunities statewide.

DBH-Sponsored Grants

DBH operates several programs, grants, and initiatives outside of the SUD-BH Program to supplement care for Alaska Medicaid members and individuals without insurance. DBH's Behavioral Health Quality Assurance Section provides funding for various BH and SUD programs across its different components. One component is the Community Behavioral Health Grants component. The Community Behavioral Health Grants component provides funding through grants or contracts to local nonprofit or local government agencies to provide an array of OP and residential community mental health services.[7-20] These services include emergency OP and residential crisis/respite services; OP, residential treatment and rehabilitation services for adults with serious mental illness (SMI) and youths with serious emotional disturbance (SED); and OP treatment services for adults and youth with emotional disturbances. The Services to Severely Emotionally Disturbed Youth component provides funding for services to children and youth who suffer from severe emotional disturbances.[7-21] Similarly, the Services to Seriously Mentally Ill component provides funding for services for adults with severe and persistent mental illnesses.[7-22] The Services to Seriously Mentally Ill component funds services within Alaska's community support program including case management, peer support services, crisis intervention, and residential services.

DBH operates the Mainstream Voucher program. This program, a partnership between DOH and the Alaska Housing Finance Corporation (AHFC), provides access to rental subsidies in coordination with existing DOH-funded community support services.[7-23] The goal is to provide support services for individuals with disabilities transitioning from homelessness or institutional settings.

DOH awarded a wide array of grants for BH services throughout the evaluation period.[7-24] Grants each fiscal year (FY) focused on various BH topics including early intervention, medication assisted treatment (MAT), peer support, residential care, and SUD. Grantees were located across Alaska's service areas and DOH regions. In 2019, DOH sponsored 25 BH grants, followed by 27 in 2020. Table 7-1 presents the 22 FY 2021 operating grants for BH sponsored by DOH. While Table 7-1 only presents grants for 2021, similar grants were sponsored in 2019 and 2020.

7-19 Alaska Commission on Postsecondary Education. Alaska Center for Rural Health and Health Workforce. Available at: https://acpe.alaska.gov/PLANNING/Training-Details/ArticleID/69/Alaska-Center-for-Rural-Health-and-Health-Workforce-Alaskas-AHEC. Accessed on: Aug 31, 2022.

7-20 Alaska Division of Behavioral Health. Community Behavioral Health Grants Component. Available at: https://health.alaska.gov/dbh/Pages/TreatmentRecovery/MentalHealth/grants.aspx. Accessed on: Aug 22, 2022.

7-21 Alaska Division of Behavioral Health. Services to Severely Emotionally Disturbed Youth. Available at: https://health.alaska.gov/dbh/Pages/TreatmentRecovery/MentalHealth/severe.aspx. Accessed on: Aug 22, 2022.

7-22 Alaska Division of Behavioral Health. Services to Seriously Mentally Ill. Available at: https://health.alaska.gov/dbh/Pages/TreatmentRecovery/MentalHealth/mill.aspx. Accessed on: Aug 22, 2022.

7-23 Alaska Division of Behavioral Health. Mainstream Voucher Program. Available at: https://health.alaska.gov/dbh/Pages/Initiatives/IntegratedHousing/Mainstream-Voucher-Program.aspx. Accessed on: Aug 22, 2022.

7-24 Alaska Department of Health and Social Services. Annual DHSS Operating Grants Reports. Available at: https://dhss.alaska.gov/dfcs/fms/grants/Pages/grant-reports.aspx. Accessed on: Sept 21, 2022.

Table 7-1—FY 2021 Behavioral Health Operating Grants

Grants	
Alcohol Safety Action Program	Recidivism Reduction
Adult Rural Peer Support	Residential Care for Children and Youth
Bethel Community Service Patrol and Sobering Center	Residential Care for Children and Youth Training
Bring the Kids Home	Rural Human Service System
Comprehensive Behavioral Health Treatment and Recovery	Sobering Center, Withdrawal Management, and Residential SUD Treatment Services
Emergency Grants to Address Mental Health and Substance Use Disorders During COVID-19	State Opioid Response: Peer Support Services
First Episode Psychosis	State Opioid Response: Recovery Housing
Independent Case Management and Flexible Supports	State Opioid Response: Supported Employment
Permanent Supportive Housing- ACT	Strategic Prevention Framework Partnerships for Success
Permanent Supportive Housing- PATH	Supported Employment
Pregnant and Parenting Women SUD Services	Therapeutic Court

Note: ACT: Assertive Community Treatment; COVID-19: coronavirus disease 2019; PATH: Projects for Assistance in Transition from Homelessness; SUD: substance use disorder

Cyberattack

On May 5, 2021, DOH received notice of a cyberattack that breached the Health Insurance Portability and Accountability Act of 1996 (HIPAA) and the Alaska Personal Information Protection Act (APIPA). The attackers may have received information, including protected health information (PHI) on an unknown number of people. A total of 19 DOH systems were taken offline, including the electronic health record (EHR) Alaska's Automated Information Management System (AKAIMS), the background check system, vital records, and the State's grants and contracts online system, the Grants Electronic Management System (GEMS).[7-25]

AKAIMS remained offline through November 2021, when it was announced on November 5 that the system was in its final phase of testing and became publicly available for organizations with an approved Static IP Address.[7-26] During the offline period, the State provided guidance to providers for temporary processes.[7-27] Guidance included instruction to providers to continue documenting encounter notes, progress notes, and treatment plans via paper forms to be uploaded to AKAIMS upon its return. Providers were given the option to wait for the return of AKAIMS to submit their billing, or they could manually enter their billing into Optum via Provider Express. Providers who manually entered billing into Optum were required to reconcile all billing with AKAIMS when it becomes available.

GEMS remained offline for eight months, during which Alaska was forced to implement manual processes to process grants and contracts. This increased the State's and providers' workload and created unique challenges. One such challenge was the loss of GEMS' automatic system of checks and balances to confirm if tallies and

7-25 Alaska Department of Health and Social Services. 2021 Cyberattack: Frequently Asked Questions. Available at: https://dhss.alaska.gov/health/News/Documents/press/2021/DHSS_FAQs_FMS_Cyberattack_20210916.pdf. Accessed on: Aug 30, 2022.

7-26 Alaska Department of Health. AKAIMS Status Update. Available at: https://content.govdelivery.com/accounts/AKDHSS/bulletins/2fafad0. Accessed on: Sept 13, 2022.

7-27 Alaska Department of Health. AKAIMS Agencies. Available at: https://content.govdelivery.com/accounts/AKDHSS/bulletins/2dacccc. Accessed on: Sept 13, 2022.

alignments were appropriate. While using manual processes, providers could make errors, submit out-of-compliance documentation, or allow submissions by non-authorized persons that would need to be corrected manually in a lengthy process. These issues caused by the cyber-attack contributed to the delay in the state-level implementation of grant funds received from the federal government.

Block Grants

The Substance Use and Mental Health Services Administration (SAMSHA) awards Alaska annual block grants distributed between the Community Mental Health Services Block Grant (MHBG) and the Substance Abuse Prevention & Treatment Block Grant (SABG). The MHBG funding is to address the needs of adults with SMI and children with serious emotional disturbances[7-28].The SABG funding is to provide primary prevention and non-primary prevention and treatment services to pregnant women, women with dependent children, and intravenous drug users.[7-29]

Alaska sought additional grant funding from the federal government to bolster its response to the negative impact resulting from the COVID-19 PHE on Alaskans' mental health, BH, and substance abuse. As a result SAMSHA awarded the COVID-19 Appropriations Act Supplemental Awards (Supplemental Awards) and the American Rescue Plan Act (ARPA) funds to be added to the MHBG and SABG.

COVID-19 Initiatives

DBH recognized the strain placed on the healthcare system, emergency response system, and providers by COVID-19 in Alaska.[7-30] As a result, the Alaska Responder's Relief Line was developed for those at risk of exposure to COVID-19 as a result of their job in a medical setting. This is a confidential hotline available to Alaskans 24 hours a day, and seven days a week. The goal of the Responder's Relief Line is to provide support for the mental, emotional, and physical health of these workers.

As part of the State's response to the ongoing COVID-19 PHE, approximately $87.9 million in federal funding was awarded to grantees under eight different programs spread across three divisions, including DBH, in FY 2021. Four programs within DBH received COVID-19 funding: the Emergency Grants to Address Mental Health and Substance Use Disorders During COVID-19; the Comprehensive Behavioral Health Prevention and Early Intervention grant; the Sobering Center, Withdrawal Management, and Residential SUD Treatment grant, and the Comprehensive Behavioral Health Treatment and Recovery grant. Grant money for all four programs was distributed with the goal of providing enhanced SUD or BH care throughout the COVID-19 PHE. Specifically, funding was targeted to address the needs of those with SMI, SUD, or co-occurring SMI and SUD.[7-31]

On April 12, 2021, Alaska submitted a request to SAMSHA to obtain supplemental funds to address the negative impact on mental health, BH, and substance abuse experienced by Alaskans as a result of the COVID-19 PHE. Alaska proposed to utilize these funds to provide services for both mental health and substance abuse as well as co-occurring SMI/SUD disorders for both children and adults. The State planned to provide service hubs in larger communities and deliver care to clients throughout the State, often utilizing telehealth. Projects that Alaska

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7-28 Substance Abuse and Mental Health Services Administration. Community Mental Health Services Block Grant. Available at: https://www.samhsa.gov/grants/block-grants/mhbg. Accessed on: Dec 2, 2022

7-29 Substance Abuse and Mental Health Services Administration. Substance Abuse Prevention and Treatment Block Grant. Available at: https://www.samhsa.gov/grants/block-grants/sabg. Accessed on: Dec 2, 2022.

7-30 Alaska Division of Behavioral health. AK Responder's Relief Line. Available at: https://health.alaska.gov/dbh/Pages/Initiatives/AK-Responders-Relief-Line.aspx. Accessed on: Aug 22, 2022.

7-31 Alaska Department of Health and Social Services. Fiscal Year 2021 Operating Grants. Available at: https://dhss.alaska.gov/dfcs/fms/grants/Documents/Grant-Book/FY21-Grant-Book.pdf. Accessed on: Aug 23, 2022.

planned to implement using MHBG supplemental funds are presented in Table 7-2. The period to use MHBG supplemental funds is March 2021 through March 2024.

Table 7-2—MHBG COVID-19 Supplemental Funds Proposed Projects

Project	Description
Technology/Software for delivery of Crisis Services	Provides funding to advance the technology capabilities needed to support shared GPS-enabled communication to support dispatch and location tracking of mobile crisis teams, real-time bed registries, and OP appointment setting through the Crisis Call Center.
TA for the Crisis Call Center	Provides TA to guide the planning and implementation required to expand call center capacity and services.
TA for business planning for Crisis Services	Provides TA for organizations and providers delivering crisis services.
Youth Mental Health First Aid for Crisis Call Center Staff and Child Protection Workers	Trains crisis call center staff in child and adolescent development and BH from Youth Mental Health First Aid.
Living Works ASIST for law enforcement, crisis services staff, and military	Utilizes a T4T model to expand Alaska's ASIST instructor base to promote opportunities for ASIST training statewide.
Training for BH providers on providing evidence-based treatment for individuals with suicidal ideation and behaviors	Provides CAMS training to BH providers on targeting and treating suicidal ideation and behaviors specifically and in a manner considered culturally appropriate by tribal leadership.
Youth and Young Adult Suicide Prevention Media Campaign	Increases digital outreach that affects young people, provides public health messages of hope and education and links to resources that can support youth and young adult mental health.
Zero Suicide Implementation	Provides TA and training for organizations and providers regarding suicide risk screening and assessment, risk stratification, safety planning, evidence-based clinical interventions and treatment, follow-up, and automating the suicide care pathway within an EHR.
Improving the Child and Adolescent Crisis System	Supports crisis prevention through the development of Mental Health and Social Emotional Learning Lessons for youth.
TA/Training for Crisis Stabilization Services	Provides TA and Training on the development of Crisis Stabilization programs.
Mobile Outreach Grants	Offers smaller communities additional support to develop their mobile outreach programs.
First Episode Psychosis services (10 percent set-aside)	Provides TA to train providers in Fairbanks, Anchorage, and Juneau on the First Episode Psychosis model.
Rural/Remote Emergency Program	Provides financial support to underserved rural and remote children and youth to strengthen access to care.
Safety Net Grants	Provides individuals without insurance access to the same array of services as those with Medicaid or private insurance.

Note: ASIST: Applied Suicide Intervention Skills Training; BH: behavioral health; CAMS: Collaborative Assessment and Management of Suicidality; DBH: Division of Behavioral Health; EHR: electronic health record; GPS: global positioning system; OP: outpatient; T4T: Trainers for Trainers; TA: technical assistance

On April 12, 2021, Alaska also requested funding from SAMHSA for COVID-19 supplemental funds to be used by the SABG. Alaska's request proposed utilizing SABG funding to provide services for both substance abuse as well as co-occurring SMI/SUD disorders for both children and adults through an array of projects presented in Table 7-3. The period for the SABG COVID-19 supplemental funds is March 2021 through March 2024.

Table 7-3—SABG COVID-19 Supplemental Awards Proposed Projects

Project	Description
PSS Training	Develops additional professional training to meet the needs of PSS.
Improving the Child and Adolescent Crisis System	Develops Mental Health and Social Emotional Learning Lessons for youth.
TA/Training for Planning and Implementation of Crisis Stabilization Services	Provides TA and Training on the development of Crisis Stabilization programs.
Mobile Outreach Grants	Offers smaller communities additional support to develop their mobile outreach programs.
ACT	Funds the start-up costs necessary for implementing an ACT team.
Sobering Centers	Provides sobering centers additional time to build capacity for long-term financial stability. This includes developing partnerships and expansion that creates opportunities to bill under the 1115 waiver to foster long-term sustainability.
Quarantine Funding for Residential Programs	Serves clients in need of quarantine prior to admitting into a residential SUD program, or needing to leave a program as a result of COVID-19. The program serves potential clients coming from another community presenting for admission.
SBIRT for Behavioral Health Providers	Provides SBIRT training with MATs to support engagement while clients are waiting for treatment.
SBIRT Training for SENI/Perinatal SUD Screening Initiative (collaborate with DPH)	Trains staff in the use of BI and SBIRT.
Prevention of Underage Drinking	Awards 16 CBHPEI grantees to prevent underage drinking.
YRBS & BRFSS	Provides funding to pose Alaska-specific or related questions that are not included in the standard core survey, adding additional value and utility. The Alaska versions of the national surveys continue to be produced and released in formats helpful to DBH, other divisions, stakeholders, and the general public.
TA for Prevention Team and Coalition Grantees	Provides TA to support prevention staff in working with community coalitions to produce programming and environmental interventions that mirror the data-driven needs of the communities while also attending to outcomes.
Substance Misuse Prevention for Seniors and Elders	Promotes substance misuse prevention and harm reduction activities in support of older Alaskans.
Substance Abuse Prevention Skills Certification	Provides funding to participants attending the Substance Abuse Prevention Skills Training course including training cooperative collaboration and cost of travel for in-person training.
Advanced Community Coalition Strategic Planning and Evaluation Capacity and Building a Data Workgroup	Increases local data collection capacity and needs assessment. This requires training, community planning, and assessment support.
Safety Net Grants	Provides individuals without insurance access to the same array of services as those with Medicaid or private insurance.

Note: ACT: assertive community treatment; BI: brief intervention; BRFSS: Alaska Behavioral Risk Factor Surveillance System; CBHPEI: Comprehensive Behavioral Health Prevention and Early Intervention; DBH: Division of Behavioral Health; DPH: Division of Public Health; MAT: Medication Assisted Therapy; SBIRT: Screening, Brief Intervention, and Referral to Treatment; SENI: substance-exposed newborns initiative; SUD: substance use disorder; TA: technical assistance; YRBS: Youth Risk Behavior Survey.

On July 16, 2021, Alaska submitted a request to SAMSHA to obtain supplemental funding available as a part of the American Rescue Plan Act (ARPA) to be added to the MHBG. Projects that Alaska planned to implement using MHBG ARPA supplemental funds are presented in Table 7-4. The period for the MHBG ARPA funds is September 2021 through September 2025.[7-32]

Table 7-4—ARPA MHBG Proposed Projects

Project	Description
Outreach and Linkage for Homeless Population Grants	Creates positions within DBH to outreach to homeless individuals between the ages of 16 and 24 to connect them to BH resources.
Health Program Manager II, Long Term Non-Perm	Creates position within DBH responsible integrating primary care and behavioral health.
Homeless Service Coordinators for SMI populations	Creates positions committed to working with the homeless SMI population with the goal of obtaining permanent supportive housing.
Project Assistant for SMI/MHBG projects	Creates position with project coordination, document management, and office duties to support DBH's SMI/MHBG projects.
FEP/ESMI- Early Intervention for Serious Mental Illness	Promotes outreach to SMI individuals who may not be ready to engage in services, school, and employment support.
Crisis Stabilization and Crisis Residential Programs	Aids with the development of Crisis Stabilization programs including 23-hour Crisis Stabilization and Short-term Crisis Residential.
Mobile Outreach Grants	Offers smaller communities additional support to develop their mobile outreach programs.
Peer Specialist Training	Trains Peer Specialists based with DBH guidelines and provides focused crisis intervention training.
Safety Net Grants	Provides individuals without insurance access to the same array of services as those with Medicaid or private insurance.
Training for BH providers	Trains BH providers on providing evidence-based treatment for individuals with suicidal ideation and behaviors.
Youth and Young Adult Suicide Prevention Media Campaign	Provides digital outreach for youth and young adult suicide prevention.
Zero Suicide Implementation	Provides TA and training for organizations and providers regarding suicide risk screening and assessment, risk stratification, safety planning, evidence-based clinical interventions and treatment, follow-up, and automating the suicide care pathway within an EHR.
Rural BH Counseling in Schools	Provides resources for rural schools to employ and support counselors.
Crisis Call Center Staffing	Provides staffing required to expand call center capacity and services.

Note: BH: Behavioral Health; DBH: Division of Behavioral Health; EHR: Electronic Health Record; ESMI: Early Serious Mental Illness; FEP: Federal; Employee Program; MHBG: Community Mental Health Services Block Grant; SMI: Serious Mental Illness; TA: Technical Assistance

On July 16, 2021, Alaska submitted a request to SAMSHA to obtain supplemental funding available as a part of the ARPA to be added to the SABG. Projects that Alaska planned to implement using SABG ARPA supplemental funds are presented in Table 7-5. The period to utilize the SABH ARPS funds is September 2021 through September 2025.

7-32 Substance Abuse and Mental Health Services Administration. FFY 2-22-2023 Block Grant Application. Available at: https://www.samhsa.gov/sites/default/files/grants/fy22-23-block-grant-application.pdf. Accessed on: Dec 2, 2022.

Table 7-5—ARPA SABG Proposed Projects

Project	Description
Outreach and Linkage for Homeless Population Grants	Creates positions committed to working with the homeless population with the goal of connecting them to SUD resources.
Residential/Inpatient WM	Provides more residential WM programs and/or an expansion of the number of beds in the existing programs.
Alaska Housing Finance Corporation Vouchers	Provides vulnerable population of homeless mentally ill adults and assist them in making the transition to permanent affordable housing.
SABG Crisis Stabilization and Crisis Residential Programs	Aids with the development of Crisis Stabilization programs including 23-hour Crisis Stabilization and Short-term Crisis Residential.
SABG Mobile Outreach Grants	Offers smaller communities additional support to develop their mobile outreach programs.
Peer Specialist Training	Trains Peer Specialists based with DBH guidelines and provides focused crisis intervention training
ARPA SABG Safety New Grants	Provides individuals without insurance access to the same array of services as those with Medicaid or private insurance.
Narcan Incentive Grants for Business	Trains individuals to administer Narcan and increases the number of people who have access to Narcan.
AKAIMS	Supports the drug test, courts case management, encounter notes restricted access, and confidential client enable access systems.
Academic Detailing	Trains healthcare providers to utilize best prescribing practices and reduce opioid use.
Medication Disposal Bag Distribution	Improves prescribing practices and reduce opioid misuse through medication disposal bag distribution and promotion.
Primary Prevention Projects	Supports primary prevention including the following: accommodations for the deaf and hard of hearing, youth peer screening/SBIRT, rural school substance abuse prevention program coordinator, and preventing underage drinking/substance abuse through promoting Alaska 360.

Note: AKAIMS: AKAIMS: Alaska's Automated Information Management System; ARPA: American Rescue Plan Act; DBH: The Alaska Division of Behavioral Health; SABG: Substance Abuse Prevention & Treatment Block Grant; SBIRT: Screening, brief intervention, referral to treatment; SUD: Substance Use Disorder; WM: Withdrawal Management

Alaska submitted a request in April 2020 for an emergency grant to address mental health and substance use disorders during the COVID-19 PHE and submitted a supplemental request in December 2020 to receive additional funds through the grant. Awards were used to support those with SUD, those with co-occurring SMI and SUDs, healthcare practitioners requiring mental health care as a result of the COVID-19 PHE, and those with mental disorders less severe than an SMI. The period to use the original emergency COVID-19 grant awards was from April 20, 2020, to August 19, 2022, while the time period to spend the supplemental emergency COVID-19 grant awards runs from February 1, 2021, through May 31, 2023.

8. Lessons Learned and Recommendations

Previous sections in this Interim Evaluation Report provide background on the Substance Use Disorder and Behavioral Health (SUD-BH) Medicaid 1115 Demonstration Waiver; a description of the evaluation research questions, hypotheses, measures, data sources and methodology; results; conclusions; and interpretation. This section of the Interim Evaluation Report presents lessons learned from the evaluation and recommendations for future improvements.

Provider Billing Procedures

ISSUE Providers noted some frustration regarding the changes made to and differences between State plan codes and waiver codes.

RECOMMENDATION The State should assess the State plan codes that were replaced or duplicated by waiver codes to ensure there is not a disincentive for billing waiver codes. For example, one provider noted that the waiver code for peer support services had fewer hours associated with it than the State plan code, which provides a disincentive to bill the waiver code.

Expanding Services

ISSUE Several providers expressed difficulties in obtaining clearance through a background check for peers to provide peer support services.

RECOMMENDATION The State should continue working with the Division of Health Care Services to streamline or expedite the approval process, or provide financial incentives for peers so they are encouraged to remain in the program while their paperwork is being approved.

ISSUE From the evaluation, gaps were found in the number of providers billing for SUD services, particularly in rural/frontier regions.

RECOMMENDATION The State should ensure that the certification process for becoming a Qualified Addiction Professional (QAP) who provides SUD services is simplified to the extent appropriate and that providers are educated on the process to encourage providers to expand the types of services offered.

State of Alaska Department of Health, Division of Behavioral Health

Alaska Substance Use Disorder and Behavioral Health Program Section 1115 Waiver Evaluation

Interim Evaluation Report, Appendices

April 2023

HSAG HEALTH SERVICES ADVISORY GROUP

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Appendix A. Supplemental Results and Methodologies

Appendix A contains additional results and methodologies used for the Substance Use Disorder and Behavioral Health (SUD-BH) Program Demonstration Waiver evaluation.

Supplemental Results

Table A-1 through Table A-18 contain additional interrupted time series (ITS) results for measures calculated monthly (Measure 1-14, 1-15, 1-16a, 1-16b, 1-21, and 1-22)

Table A-1—Inpatient (IP) Admissions for SUD (Measure 1-14)

Variable	Estimate	*p*-value
Intercept	-4.084 (0.031)	<0.001***
Baseline monthly trend	0.000 (0.005)	0.959
Level Change	-0.047 (0.040)	0.235
Change in monthly trend	0.001 (0.005)	0.856
COVID-19 Lockdown (Q2 2020)	-0.048 (0.036)	0.186
COVID-19 Reopening (Q3 2020 - Q1 2021)	0.004 (0.022)	0.863
Seasonality: Q2	0.075 (0.025)	0.002**
Seasonality: Q3	0.063 (0.024)	0.008**
Seasonality: Q4	0.022 (0.026)	0.404

*p< 0.1, **p<0.05, ***p<0.001
Standard errors in parentheses.

Table A-2—IP Admissions for Opioid Use Disorder (OUD) (Measure 1-14)

Variable	Estimate	*p*-value
Intercept	-5.712 (0.070)	<0.001***
Baseline monthly trend	0.002 (0.012)	0.850
Level Change	0.010 (0.090)	0.909

Variable	Estimate	*p*-value
Change in monthly trend	-0.002 (0.012)	0.893
COVID-19 Lockdown (Q2 2020)	-0.081 (0.080)	0.315
COVID-19 Reopening (Q3 2020 – Q1 2021)	-0.088 (0.051)	0.081*
Seasonality: Q2	0.019 (0.054)	0.720
Seasonality: Q3	-0.022 (0.053)	0.676
Seasonality: Q4	-0.092 (0.059)	0.118

*p< 0.1, **p<0.05, ***p<0.001
Standard errors in parentheses.

Table A-3—IP Admissions for a Behavioral Health (BH) Disorder (Measure 1-15)

Variable	Estimate	*p*-value
Intercept	-4.443 (0.037)	<0.001***
Baseline monthly trend	0.004 (0.006)	0.516
Level Change	-0.066 (0.049)	0.175
Change in monthly trend	-0.006 (0.006)	0.330
COVID-19 Lockdown (Q2 2020)	-0.111 (0.045)	0.015**
COVID-19 Reopening (Q3 2020 - Q1 2021)	-0.072 (0.028)	0.011**
Seasonality: Q2	0.019 (0.030)	0.527
Seasonality: Q3	0.005 (0.029)	0.866
Seasonality: Q4	-0.077 (0.033)	0.019**

*p< 0.1, **p<0.05, ***p<0.001
Standard errors in parentheses.

Table A-4—Emergency Department (ED) Visits for SUD (Measure 1-16a)

Variable	Estimate	*p*-value
Intercept	-2.529 (0.015)	<0.001***
Baseline monthly trend	-0.006 (0.003)	0.025**
Level Change	0.014 (0.020)	0.488
Change in monthly trend	0.006 (0.003)	0.020**
COVID-19 Lockdown (Q2 2020)	-0.208 (0.018)	<0.001***
COVID-19 Reopening (Q3 2020 – Q1 2021)	0.003 (0.011)	0.770
Seasonality: Q2	0.109 (0.012)	<0.001***
Seasonality: Q3	0.026 (0.012)	0.024**
Seasonality: Q4	0.009 (0.013)	0.501

*p< 0.1, **p<0.05, ***p<0.001
Standard errors in parentheses.

Table A-5—ED Visits for OUD (Measure 1-16b)

Variable	Estimate	*p*-value
Intercept	-4.945 (0.047)	<0.001***
Baseline monthly trend	0.019 (0.008)	0.016**
Level Change	-0.086 (0.058)	0.139
Change in monthly trend	-0.016 (0.008)	0.044**
COVID-19 Lockdown (Q2 2020)	-0.319 (0.057)	<0.001***
COVID-19 Reopening (Q3 2020 - Q1 2021)	-0.098 (0.033)	0.003**
Seasonality: Q2	0.015 (0.035)	0.674
Seasonality: Q3	-0.066	0.057*

Variable	Estimate	*p*-value
	(0.034)	
Seasonality: Q4	-0.101	0.007**
	(0.038)	

*p< 0.1, **p<0.05, ***p<0.001
Standard errors in parentheses.

Table A-6—ED Visits for a BH Disorder (Measure 1-17)

Variable	Estimate	*p*-value
Intercept	-3.298	<0.001***
	(0.021)	
Baseline monthly trend	0.008	0.028**
	(0.004)	
Level Change	0.021	0.433
	(0.027)	
Change in monthly trend	-0.014	<0.001***
	(0.004)	
COVID-19 Lockdown (Q2 2020)	-0.143	<0.001***
	(0.026)	
COVID-19 Reopening (Q3 2020 - Q1 2021)	-0.025	0.115
	(0.016)	
Seasonality: Q2	0.040	0.018**
	(0.017)	
Seasonality: Q3	0.009	0.578
	(0.016)	
Seasonality: Q4	-0.003	0.870
	(0.018)	

*p< 0.1, **p<0.05, ***p<0.001
Standard errors in parentheses.

Table A-7—Beneficiaries with a SUD Diagnosis Using Early Intervention Services (Measure 1-21)

Variable	Estimate	*p*-value
Intercept	-8.359	<0.001***
	(0.232)	
Baseline monthly trend	0.148	<0.001***
	(0.030)	
Level Change	0.521	0.002**
	(0.171)	
Change in monthly trend	-0.157	<0.001***
	(0.030)	
COVID-19 Lockdown (Q2 2020)	0.180	0.125

Variable	Estimate	*p*-value
	(0.118)	
COVID-19 Reopening (Q3 2020 - Q1 2021)	0.130 (0.078)	0.096*
Seasonality: Q2	0.024 (0.093)	0.800
Seasonality: Q3	-0.178 (0.086)	0.039**
Seasonality: Q4	-0.028 (0.088)	0.747

*p< 0.1, **p<0.05, ***p<0.001
Standard errors in parentheses.

Table A-8—Beneficiaries with a SUD Diagnosis Using Intensive Outpatient/Partial Hospitalization (IO/PH) Services (Measure 1-21)

Variable	Estimate	*p*-value
Intercept	-4.770 (0.049)	<0.001***
Baseline monthly trend	-0.032 (0.009)	<0.001***
Level Change	-0.331 (0.070)	<0.001***
Change in monthly trend	0.074 (0.009)	<0.001***
COVID-19 Lockdown (Q2 2020)	-0.457 (0.061)	<0.001***
COVID-19 Reopening (Q3 2020 - Q1 2021)	-0.364 (0.034)	<0.001***
Seasonality: Q2	0.136 (0.039)	<0.001***
Seasonality: Q3	-0.051 (0.039)	0.191
Seasonality: Q4	-0.035 (0.041)	0.389

*p< 0.1, **p<0.05, ***p<0.001
Standard errors in parentheses.

Table A-9—Beneficiaries with a SUD Diagnosis Using IP Services (Measure 1-21)

Variable	Estimate	*p*-value
Intercept	-4.144	<0.001***
	(0.036)	
Baseline monthly trend	-0.004	0.487
	(0.006)	
Level Change	-0.098	0.036**
	(0.047)	
Change in monthly trend	0.017	0.004**
	(0.006)	
COVID-19 Lockdown (Q2 2020)	-0.150	<0.001***
	(0.042)	
COVID-19 Reopening (Q3 2020 - Q1 2021)	0.017	0.484
	(0.024)	
Seasonality: Q2	0.004	0.894
	(0.028)	
Seasonality: Q3	-0.124	<0.001***
	(0.027)	
Seasonality: Q4	-0.064	0.024**
	(0.028)	

*p< 0.1, **p<0.05, ***p<0.001
Standard errors in parentheses.

Table A-10—Beneficiaries with a SUD Diagnosis Using Medication Assisted Treatment (MAT) Services (Measure 1-21)

Variable	Estimate	*p*-value
Intercept	-2.038	<0.001***
	(0.014)	
Baseline monthly trend	0.014	<0.001***
	(0.002)	
Level Change	0.036	0.029**
	(0.016)	
Change in monthly trend	-0.007	<0.001***
	(0.002)	
COVID-19 Lockdown (Q2 2020)	-0.040	0.005**
	(0.014)	
COVID-19 Reopening (Q3 2020 - Q1 2021)	0.027	0.002**
	(0.009)	
Seasonality: Q2	0.021	0.035**
	(0.010)	
Seasonality: Q3	-0.018	0.052*

Variable	Estimate	*p*-value
	(0.009)	
Seasonality: Q4	-0.025	0.015**
	(0.010)	

*p< 0.1, **p<0.05, ***p<0.001
Standard errors in parentheses.

Table A-11—Beneficiaries with a SUD Diagnosis Using Outpatient (OP) Services (Measure 1-21)

Variable	Estimate	*p*-value
Intercept	-1.146	<0.001***
	(0.010)	
Baseline monthly trend	0.008	<0.001***
	(0.002)	
Level Change	0.074	<0.001***
	(0.013)	
Change in monthly trend	-0.016	<0.001***
	(0.002)	
COVID-19 Lockdown (Q2 2020)	-0.116	<0.001***
	(0.012)	
COVID-19 Reopening (Q3 2020 - Q1 2021)	0.078	<0.001***
	(0.007)	
Seasonality: Q2	0.015	0.057*
	(0.008)	
Seasonality: Q3	-0.049	<0.001***
	(0.008)	
Seasonality: Q4	-0.056	<0.001***
	(0.008)	

*p< 0.1, **p<0.05, ***p<0.001
Standard errors in parentheses.

Table A-12—Beneficiaries with a SUD Diagnosis Using Withdrawal Management (WM) (Measure1-21)

Variable	Estimate	*p*-value
Intercept	-5.104	<0.001***
	(0.057)	
Baseline monthly trend	0.011	0.233
	(0.010)	
Level Change	-0.210	0.004**
	(0.072)	
Change in monthly trend	-0.004	0.698
	(0.009)	
COVID-19 Lockdown (Q2 2020)	-0.222	0.001**

Variable	Estimate	*p*-value
	(0.069)	
COVID-19 Reopening (Q3 2020 - Q1 2021)	-0.139 (0.041)	<0.001***
Seasonality: Q2	0.026 (0.044)	0.554
Seasonality: Q3	0.008 (0.043)	0.852
Seasonality: Q4	-0.071 (0.048)	0.135

*p< 0.1, **p<0.05, ***p<0.001
Standard errors in parentheses.

Table A-13—Beneficiaries with a BH Disorder Using Any Service (Measure 1-22)

Variable	Estimate	*p*-value
Intercept	-1.671 (0.015)	<0.001***
Baseline monthly trend	-0.003 (0.003)	0.226
Level Change	0.027 (0.020)	0.162
Change in monthly trend	0.000 (0.003)	0.945
COVID-19 Lockdown (Q2 2020)	0.087 (0.017)	<0.001***
COVID-19 Reopening (Q3 2020 - Q1 2021)	0.291 (0.010)	<0.001***
Seasonality: Q2	0.056 (0.012)	<0.001***
Seasonality: Q3	-0.026 (0.011)	0.023**
Seasonality: Q4	-0.023 (0.012)	0.066*

*p< 0.1, **p<0.05, ***p<0.001
Standard errors in parentheses.

Table A-14—Beneficiaries with a BH Disorder Using ED Services (Measure 1-22)

Variable	Estimate	*p*-value
Intercept	-6.683 (0.177)	<0.001***
Baseline monthly trend	-0.131 (0.037)	<0.001***
Level Change	1.151 (0.296)	<0.001***
Change in monthly trend	0.081 (0.036)	0.025**
COVID-19 Lockdown (Q2 2020)	-1.875 (0.725)	0.010**
COVID-19 Reopening (Q3 2020 - Q1 2021)	-0.773 (0.266)	0.004**
Seasonality: Q2	-0.027 (0.183)	0.881
Seasonality: Q3	0.251 (0.195)	0.198
Seasonality: Q4	0.499 (0.215)	0.020**

*p< 0.1, **p<0.05, ***p<0.001
Standard errors in parentheses.

Table A-15—Beneficiaries with a BH Diagnosis Using IO/PH Services (Measure 1-22)

Variable	Estimate	*p*-value
Intercept	-4.197 (0.047)	<0.001***
Baseline monthly trend	-0.015 (0.009)	0.094*
Level Change	-0.226 (0.069)	0.001**
Change in monthly trend	0.010 (0.009)	0.255
COVID-19 Lockdown (Q2 2020)	-0.703 (0.082)	<0.001***
COVID-19 Reopening (Q3 2020 - Q1 2021)	-0.417 (0.048)	<0.001***
Seasonality: Q2	0.129 (0.042)	0.002**
Seasonality: Q3	0.020	0.657

Variable	Estimate	*p*-value
	(0.045)	
Seasonality: Q4	-0.031	0.538
	(0.051)	

*p< 0.1, **p<0.05, ***p<0.001
Standard errors in parentheses.

Table A-16—Beneficiaries with a BH Diagnosis Using IP Services (Measure 1-22)

Variable	Estimate	*p*-value
Intercept	-4.640	<0.001***
	(0.057)	
Baseline monthly trend	-0.001	0.953
	(0.010)	
Level Change	-0.042	0.554
	(0.072)	
Change in monthly trend	-0.003	0.739
	(0.009)	
COVID-19 Lockdown (Q2 2020)	-0.113	0.122
	(0.073)	
COVID-19 Reopening (Q3 2020 - Q1 2021)	-0.143	0.001**
	(0.044)	
Seasonality: Q2	-0.012	0.805
	(0.047)	
Seasonality: Q3	0.005	0.921
	(0.046)	
Seasonality: Q4	0.182	<0.001***
	(0.049)	

*p< 0.1, **p<0.05, ***p<0.001
Standard errors in parentheses.

Table A-17—Beneficiaries with a BH Diagnosis Using OP Services (Measure 1-22)

Variable	Estimate	*p*-value
Intercept	-1.773	<0.001***
	(0.016)	
Baseline monthly trend	-0.008	0.003**
	(0.003)	
Level Change	0.236	<0.001***
	(0.022)	
Change in monthly trend	-0.018	<0.001***
	(0.003)	
COVID-19 Lockdown (Q2 2020)	-0.669	<0.001***

Variable	Estimate	*p*-value
	(0.026)	
COVID-19 Reopening (Q3 2020 - Q1 2021)	-0.205	<0.001***
	(0.014)	
Seasonality: Q2	-0.028	0.040**
	(0.013)	
Seasonality: Q3	-0.029	0.034**
	(0.014)	
Seasonality: Q4	-0.004	0.813
	(0.015)	

*p< 0.1, **p<0.05, ***p<0.001
Standard errors in parentheses.

Table A-18—Beneficiaries with a BH Diagnosis Using Telehealth (TH) Services (Measure 1-22)

Variable	Estimate	*p*-value
Intercept	-6.072	<0.001***
	(0.101)	
Baseline monthly trend	-0.003	0.837
	(0.016)	
Level Change	0.131	0.230
	(0.109)	
Change in monthly trend	0.098	<0.001***
	(0.016)	
COVID-19 Lockdown (Q2 2020)	1.633	<0.001***
	(0.028)	
COVID-19 Reopening (Q3 2020 - Q1 2021)	1.684	<0.001***
	(0.019)	
Seasonality: Q2	0.789	<0.001***
	(0.029)	
Seasonality: Q3	0.361	<0.001***
	(0.021)	
Seasonality: Q4	0.124	<0.001***
	(0.021)	

*p< 0.1, **p<0.05, ***p<0.001
Standard errors in parentheses.

Table A-19 through Table A-27 display annual rates for each Childhood Understanding Behaviors Survey (CUBS) measure during the baseline and evaluation period.

Table A-19—Maternal Depression–Provider Discussion Indicator (Measure 2-7)

	Baseline Period							Evaluation Period	
	2012	2013	2014	2015	2016	2017	2018	2019	2020
Percentage of mothers who had a discussion with a HCP about depression or how they were doing emotionally, past 12 months[1]	32.6%	27.5%	41.1%	26.1%	29.6%	33.4%	24.9%	33.9%	27.9%

Note: pp=percentage point
[1] Rates are weighted by survey analysis weight, comprised of sampling, nonresponse, and noncoverage components.
*p< 0.1, **p<0.05, ***p<0.001

Table A-20—Maternal Depression–Maternal Depression Indicator (Higher is Better) (Measure 2-7)

	Baseline Period				Evaluation Period	
	2015	2016	2017	2018	2019	2020
Average score-feeling depressed/hopeless/little interest or little pleasure in doing things usually enjoyed, past 3 months[1,2,3]	3.94	4.03	3.84	3.85	3.88	3.90

Note: pp=percentage point
[1]Counts are weighted by survey analysis weight, comprised of sampling, nonresponse, and noncoverage components.
[2]Average composite score is comprised of taking the average of the following questions:
During the past 3 months, how often have you felt down, depressed, or hopeless? (1-5)
During the past 3 months, how often have you had little interest or little pleasure in doing things you usually enjoyed? (1-5)
[3]Scale ranges from 1 (Always) to 5 (Never)
*p< 0.1, **p<0.05, ***p<0.001

Table A-21—Maternal Domestic Abuse (Measure 2-8)

	Baseline Period							Evaluation Period	
	2012	2013	2014	2015	2016	2017	2018	2019	2020
Percentage of mothers answering they were physically hurt or made to feel unsafe by their partner, past 12 months[1]	6.7%	4.0%	7.1%	5.3%	4.0%	4.2%	2.7%	10.4%	2.1%

Note: pp=percentage point
[1]Rates are weighted by survey analysis weight, comprised of sampling, nonresponse, and noncoverage components.
*p< 0.1, **p<0.05, ***p<0.001

Table A-22— Percentage of Youth Beneficiaries who Have Experienced Alcoholism or Mental Health Disorder Among Household Members (Measure 2-9)

	Baseline Period							Evaluation Period	
	2012	2013	2014	2015	2016	2017	2018	2019	2020
Percentage of youth beneficiaries who experienced alcoholism or mental health disorder among household members[1]	6.2%	8.7%	13.4%	6.9%	5.9%	9.0%	7.5%	9.4%	13.3%

Note: pp=percentage point
[1]Rates are weighted by survey analysis weight, comprised of sampling, nonresponse, and noncoverage components.
*p< 0.1, **p<0.05, ***p<0.001

Table A-23—Percentage of Youth Beneficiaries who Have Witnessed Violence or Physical Abuse Between Household Members (Measure 2-10)

	Baseline Period				Evaluation Period	
	2015	2016	2017	2018	2019	2020
Percentage of youth beneficiaries who witnessed violence or physical abuse between household members[1]	7.7%	8.2%	5.9%	8.0%	7.6%	8.1%

Note: pp=percentage point
[1]Rates are weighted by survey analysis weight, comprised of sampling, nonresponse, and noncoverage components.
*p< 0.1, **p<0.05, ***p<0.001

Table A-24—Percentage of Youth Beneficiaries who Have Been Physically Hurt by an Adult in Any Way (Measure 2-11)

	Baseline Period				Evaluation Period	
	2015	2016	2017	2018	2019	2020
Percentage of youth beneficiaries who have ever been physically hurt by an adult in any way[1]	0.0%	1.4%	0.1%	2.0%	1.2%	--

Note: pp=percentage point
[1]Rates are weighted by survey analysis weight, comprised of sampling, nonresponse, and noncoverage components.
*p< 0.1, **p<0.05, ***p<0.001

Table A-25—Maternal Marijuana or Hash Use in the Past Two Years (Measure 2-12)

	Baseline Period				Evaluation Period	
	2015	2016	2017	2018	2019	2020
Percentage of respondents who have used marijuana in the past two years[1]	16.8%	16.5%	15.9%	18.0%	18.2%	--

[1]Rates are weighted by survey analysis weight, comprised of sampling, nonresponse, and noncoverage components.
*p< 0.1, **p<0.05, ***p<0.001

Table A-26—Frequency of Maternal Marijuana or Hash Use (Days per Week) (Measure 2-13)

	Baseline Period				Evaluation Period	
	2015	2016	2017	2018	2019	2020
Average number of days respondents report using marijuana or hash per week[1]	1.86	1.27	1.09	1.73	1.45	0.44

[1]Counts are weighted by survey analysis weight, comprised of sampling, nonresponse, and noncoverage components.
*p< 0.1, **p<0.05, ***p<0.001

Table A-27—Social Support–Care When Sick (Supplemental CUBS Measure 2-14)

	Baseline Period							Evaluation Period	
	2012	2013	2014	2015	2016	2017	2018	2019	2020
Percentage of respondents who answered they know someone who would help them if they were sick[1]	84.5%	83.7%	84.7%	81.1%	80.6%	81.3%	83.7%	78.9%	77.1%

[1]Rates are weighted by survey analysis weight, comprised of sampling, nonresponse, and noncoverage components.
*p< 0.1, **p<0.05, ***p<0.001

Table A-28 through Table A-48 contain additional ITS analyses on cost measures (Measures 3-2 and 3-3).

Table A-28—Dental Costs Among Beneficiaries with a SUD (Measure 3-2)

Variable	Estimate	*p*-value
Intercept	3.814 (0.077)	<0.001***
Baseline monthly trend	0.004 (0.014)	0.754
Level Change	-0.138 (0.113)	0.221
Change in monthly trend	-0.008 (0.014)	0.573
COVID-19 Lockdown (Q2 2020)	-0.708 (0.181)	<0.001***
COVID-19 Reopening (Q3 2020 - Q1 2021)	-0.074 (0.073)	0.315
Seasonality: Q2	0.034 (0.066)	0.611
Seasonality: Q3	-0.045 (0.069)	0.516
Seasonality: Q4	-0.181 (0.082)	0.027**

*p< 0.1, **p<0.05, ***p<0.001
Standard errors in parentheses.

Table A-29—ED Outpatient Costs Among Beneficiaries with a SUD (Measure 3-2)

Variable	Estimate	*p*-value
Intercept	5.056 (0.039)	<0.001***
Baseline monthly trend	0.003 (0.006)	0.598
Level Change	0.060 (0.049)	0.214
Change in monthly trend	-0.010 (0.006)	0.125
COVID-19 Lockdown (Q2 2020)	-0.278 (0.054)	<0.001***
COVID-19 Reopening (Q3 2020 - Q1 2021)	-0.029 (0.030)	0.332
Seasonality: Q2	0.066 (0.030)	0.028**
Seasonality: Q3	0.047 (0.030)	0.120
Seasonality: Q4	0.019 (0.034)	0.571

*p< 0.1, **p<0.05, ***p<0.001
Standard errors in parentheses.

Table A-30—IP Costs Among Beneficiaries with a SUD (Measure 3-2)

Variable	Estimate	*p*-value
Intercept	6.187 (0.060)	<0.001***
Baseline monthly trend	0.012 (0.010)	0.193
Level Change	-0.007 (0.069)	0.915
Change in monthly trend	-0.014 (0.009)	0.139
COVID-19 Lockdown (Q2 2020)	-0.128 (0.071)	0.073*
COVID-19 Reopening (Q3 2020 - Q1 2021)	0.042 (0.039)	0.284
Seasonality: Q2	0.048 (0.045)	0.293
Seasonality: Q3	0.018	0.687

Variable	Estimate	*p*-value
	(0.043)	
Seasonality: Q4	0.086	0.063*
	(0.046)	

*p< 0.1, **p<0.05, ***p<0.001
Standard errors in parentheses.

Table A-31—Long-Term Care Costs Among Beneficiaries with a SUD (Measure 3-2)

Variable	Estimate	*p*-value
Intercept	4.505	<0.001***
	(0.036)	
Baseline monthly trend	-0.016	0.011**
	(0.006)	
Level Change	0.170	<0.001***
	(0.049)	
Change in monthly trend	0.014	0.022**
	(0.006)	
COVID-19 Lockdown (Q2 2020)	-0.043	0.301
	(0.042)	
COVID-19 Reopening (Q3 2020 - Q1 2021)	0.071	0.005**
	(0.025)	
Seasonality: Q2	0.055	0.049**
	(0.028)	
Seasonality: Q3	-0.061	0.031**
	(0.028)	
Seasonality: Q4	0.032	0.276
	(0.029)	

*p< 0.1, **p<0.05, ***p<0.001
Standard errors in parentheses.

Table A-32—Total Outpatient Costs Among Beneficiaries with a SUD (Measure 3-2)

Variable	Estimate	*p*-value
Intercept	5.867	<0.001***
	(0.038)	
Baseline monthly trend	0.000	0.991
	(0.006)	
Level Change	0.018	0.707
	(0.048)	
Change in monthly trend	0.002	0.760
	(0.006)	
COVID-19 Lockdown (Q2 2020)	-0.324	<0.001***

Variable	Estimate	*p*-value
	(0.052)	
COVID-19 Reopening (Q3 2020 - Q1 2021)	-0.020	0.447
	(0.026)	
Seasonality: Q2	0.069	0.016**
	(0.029)	
Seasonality: Q3	0.026	0.363
	(0.028)	
Seasonality: Q4	-0.009	0.767
	(0.031)	

*p< 0.1, **p<0.05, ***p<0.001
Standard errors in parentheses.

Table A-33—Pharmacy Costs Among Beneficiaries with a SUD (Measure 3-2)

Variable	Estimate	*p*-value
Intercept	5.135	<0.001***
	(0.030)	
Baseline monthly trend	0.005	0.363
	(0.005)	
Level Change	-0.008	0.840
	(0.037)	
Change in monthly trend	-0.002	0.755
	(0.005)	
COVID-19 Lockdown (Q2 2020)	-0.076	0.024**
	(0.034)	
COVID-19 Reopening (Q3 2020 - Q1 2021)	-0.002	0.909
	(0.020)	
Seasonality: Q2	0.025	0.264
	(0.022)	
Seasonality: Q3	-0.021	0.338
	(0.022)	
Seasonality: Q4	-0.034	0.154
	(0.024)	

*p< 0.1, **p<0.05, ***p<0.001
Standard errors in parentheses.

Table A-34—Professional Costs Among Beneficiaries with a SUD (Measure 3-2)

Variable	Estimate	*p*-value
Intercept	6.914 *(0.030)*	<0.001***
Baseline monthly trend	-0.003 *(0.005)*	0.619
Level Change	0.043 *(0.040)*	0.282
Change in monthly trend	0.007 *(0.005)*	0.182
COVID-19 Lockdown (Q2 2020)	-0.251 *(0.038)*	<0.001***
COVID-19 Reopening (Q3 2020 - Q1 2021)	-0.046 *(0.021)*	0.028**
Seasonality: Q2	0.031 *(0.022)*	0.160
Seasonality: Q3	-0.048 *(0.022)*	0.031**
Seasonality: Q4	-0.091 *(0.025)*	<0.001***

*p< 0.1, **p<0.05, ***p<0.001
Standard errors in parentheses.

Table A-35—Non-ED Outpatient Costs Among Beneficiaries with a SUD (Measure 3-2)

Variable	Estimate	*p*-value
Intercept	5.280 (0.043)	<0.001***
Baseline monthly trend	-0.004 (0.007)	0.594
Level Change	-0.005 (0.056)	0.931
Change in monthly trend	0.012 (0.007)	0.105
COVID-19 Lockdown (Q2 2020)	-0.350 (0.057)	<0.001***
COVID-19 Reopening (Q3 2020 - Q1 2021)	-0.010 (0.027)	0.716
Seasonality: Q2	0.071 (0.032)	0.024**
Seasonality: Q3	0.015	0.623

Variable	Estimate	*p*-value
	(0.031)	
Seasonality: Q4	-0.027	0.416
	(0.034)	

*p< 0.1, **p<0.05, ***p<0.001
Standard errors in parentheses.

Table A-36—Total Costs Among Beneficiaries with a SUD (Measure 3-2)

Variable	Estimate	*p*-value
Intercept	7.672	<0.001***
	(0.028)	
Baseline monthly trend	0.002	0.663
	(0.005)	
Level Change	0.021	0.553
	(0.035)	
Change in monthly trend	0.000	0.996
	(0.005)	
COVID-19 Lockdown (Q2 2020)	-0.215	<0.001***
	(0.035)	
COVID-19 Reopening (Q3 2020 - Q1 2021)	-0.012	0.512
	(0.019)	
Seasonality: Q2	0.042	0.046**
	(0.021)	
Seasonality: Q3	-0.019	0.351
	(0.020)	
Seasonality: Q4	-0.025	0.253
	(0.022)	

*p< 0.1, **p<0.05, ***p<0.001
Standard errors in parentheses.

Table A-37—Non-SUD Costs Among Beneficiaries with a SUD (Measure 3-2)

Variable	Estimate	*p*-value
Intercept	7.235	<0.001***
	(0.030)	
Baseline monthly trend	0.001	0.884
	(0.005)	
Level Change	-0.005	0.899
	(0.039)	
Change in monthly trend	0.000	0.942
	(0.005)	
COVID-19 Lockdown (Q2 2020)	-0.284	<0.001***

Variable	Estimate	*p*-value
	(0.042)	
COVID-19 Reopening (Q3 2020 - Q1 2021)	-0.043 (0.022)	0.053*
Seasonality: Q2	0.039 (0.024)	0.105
Seasonality: Q3	-0.013 (0.024)	0.584
Seasonality: Q4	-0.022 (0.026)	0.399

*p< 0.1, **p<0.05, ***p<0.001
Standard errors in parentheses.

Table A-38—SUD IMD Costs Among Beneficiaries with a SUD (Measure 3-2)

Variable	Estimate	*p*-value
Intercept	2.833 (0.267)	<0.001***
Baseline monthly trend	-0.038 (0.044)	0.392
Level Change	0.976 (0.332)	0.003**
Change in monthly trend	0.045 (0.044)	0.303
COVID-19 Lockdown (Q2 2020)	0.504 (0.156)	0.001**
COVID-19 Reopening (Q3 2020 - Q1 2021)	0.000 (0.090)	0.996
Seasonality: Q2	-0.279 (0.143)	0.051*
Seasonality: Q3	-0.169 (0.116)	0.145
Seasonality: Q4	0.142 (0.111)	0.202

*p< 0.1, **p<0.05, ***p<0.001
Standard errors in parentheses.

Table A-39—SUD Non-IMD Costs Among Beneficiaries with a SUD (Measure 3-2)

Variable	Estimate	*p*-value
Intercept	6.608 *(0.031)*	<0.001***
Baseline monthly trend	0.006 *(0.005)*	0.280
Level Change	0.045 *(0.038)*	0.244
Change in monthly trend	-0.002 *(0.005)*	0.633
COVID-19 Lockdown (Q2 2020)	-0.140 *(0.034)*	<0.001***
COVID-19 Reopening (Q3 2020 - Q1 2021)	0.035 *(0.019)*	0.065*
Seasonality: Q2	0.057 *(0.022)*	0.010**
Seasonality: Q3	-0.025 *(0.021)*	0.249
Seasonality: Q4	-0.039 *(0.023)*	0.096*

*p< 0.1, **p<0.05, ***p<0.001
Standard errors in parentheses.

Table A-37—Dental Costs Among Beneficiaries with a BH Diagnosis (Measure 3-3)

Variable	Estimate	*p*-value
Intercept	3.963 *(0.072)*	<0.001***
Baseline monthly trend	0.003 *(0.013)*	0.796
Level Change	-0.063 *(0.102)*	0.537
Change in monthly trend	-0.011 *(0.013)*	0.372
COVID-19 Lockdown (Q2 2020)	-0.796 *(0.190)*	<0.001***
COVID-19 Reopening (Q3 2020 - Q1 2021)	-0.036 *(0.067)*	0.590
Seasonality: Q2	0.012 *(0.062)*	0.848
Seasonality: Q3	0.024	0.701

Variable	Estimate	*p*-value
	(0.063)	
Seasonality: Q4	-0.126 *(0.075)*	0.094*

*p< 0.1, **p<0.05, ***p<0.001
Standard errors in parentheses.

Table A-38—ED Outpatient Costs Among Beneficiaries with a BH Diagnosis (Measure 3-3)

Variable	Estimate	*p*-value
Intercept	4.443 *(0.036)*	<0.001***
Baseline monthly trend	0.004 *(0.006)*	0.525
Level Change	0.066 *(0.045)*	0.141
Change in monthly trend	-0.008 *(0.006)*	0.163
COVID-19 Lockdown (Q2 2020)	-0.351 *(0.053)*	<0.001***
COVID-19 Reopening (Q3 2020 - Q1 2021)	-0.096 *(0.027)*	<0.001***
Seasonality: Q2	0.038 *(0.028)*	0.167
Seasonality: Q3	0.029 *(0.028)*	0.285
Seasonality: Q4	0.009 *(0.031)*	0.757

*p< 0.1, **p<0.05, ***p<0.001
Standard errors in parentheses.

Table A-39—Inpatient Costs Among Beneficiaries With a BH Diagnosis (Measure 3-3)

Variable	Estimate	*p*-value
Intercept	5.615 (0.046)	<0.001***
Baseline monthly trend	0.001 (0.008)	0.884
Level Change	-0.010 (0.058)	0.856
Change in monthly trend	0.000 (0.008)	0.981
COVID-19 Lockdown (Q2 2020)	-0.243	<0.001***

Variable	Estimate	*p*-value
	(0.062)	
COVID-19 Reopening (Q3 2020 - Q1 2021)	-0.056 (0.033)	0.089*
Seasonality: Q2	0.052 (0.036)	0.150
Seasonality: Q3	0.007 (0.036)	0.837
Seasonality: Q4	0.052 (0.038)	0.175

*p< 0.1, **p<0.05, ***p<0.001
Standard errors in parentheses.

Table A-40—LTC Costs Among Beneficiaries With a BH Diagnosis (Measure 3-3)

Variable	Estimate	*p*-value
Intercept	5.522 *(0.017)*	<0.001***
Baseline monthly trend	0.001 *(0.003)*	0.710
Level Change	0.019 *(0.021)*	0.374
Change in monthly trend	-0.005 *(0.003)*	0.074*
COVID-19 Lockdown (Q2 2020)	0.009 *(0.020)*	0.641
COVID-19 Reopening (Q3 2020 - Q1 2021)	0.024 *(0.012)*	0.055*
Seasonality: Q2	0.018 *(0.013)*	0.192
Seasonality: Q3	0.012 *(0.013)*	0.376
Seasonality: Q4	0.028 *(0.014)*	0.055*

*p< 0.1, **p<0.05, ***p<0.001
Standard errors in parentheses.

Table A-41—Total Outpatient Costs Among Beneficiaries With a BH Diagnosis (Measure 3-3)

Variable	Estimate	*p*-value
Intercept	6.246 (0.025)	<0.001***
Baseline monthly trend	0.001 (0.004)	0.849
Level Change	0.010 (0.032)	0.743
Change in monthly trend	-0.002 (0.004)	0.628
COVID-19 Lockdown (Q2 2020)	-0.196 (0.033)	<0.001***
COVID-19 Reopening (Q3 2020 - Q1 2021)	-0.009 (0.018)	0.605
Seasonality: Q2	0.036 (0.020)	0.066*
Seasonality: Q3	0.021 (0.019)	0.276
Seasonality: Q4	0.003 (0.021)	0.902

*p< 0.1, **p<0.05, ***p<0.001
Standard errors in parentheses.

Table A-42—Pharmacy Costs Among Beneficiaries With a BH Diagnosis (Measure 3-3)

Variable	Estimate	*p*-value
Intercept	5.000 *(0.028)*	<0.001***
Baseline monthly trend	-0.002 *(0.005)*	0.748
Level Change	-0.047 *(0.037)*	0.200
Change in monthly trend	0.010 *(0.005)*	0.039**
COVID-19 Lockdown (Q2 2020)	-0.045 *(0.031)*	0.153
COVID-19 Reopening (Q3 2020 - Q1 2021)	-0.007 *(0.018)*	0.711
Seasonality: Q2	0.027 *(0.022)*	0.205
Seasonality: Q3	0.001	0.948

Variable	Estimate	*p*-value
	(0.021)	
Seasonality: Q4	-0.020	0.366
	(0.022)	

*p<0.1, **p<0.05, ***p<0.001
Standard errors in parentheses.

Table A-43—Professional Costs Among Beneficiaries with a BH Diagnosis (Measure 3-3)

Variable	Estimate	*p*-value
Intercept	6.747	<0.001***
	(0.028)	
Baseline monthly trend	-0.003	0.492
	(0.005)	
Level Change	0.061	0.104
	(0.038)	
Change in monthly trend	0.001	0.872
	(0.005)	
COVID-19 Lockdown (Q2 2020)	-0.227	<0.001***
	(0.038)	
COVID-19 Reopening (Q3 2020 - Q1 2021)	0.018	0.398
	(0.021)	
Seasonality: Q2	0.030	0.169
	(0.022)	
Seasonality: Q3	-0.039	0.077*
	(0.022)	
Seasonality: Q4	-0.058	0.018**
	(0.025)	

*p< 0.1, **p<0.05, ***p<0.001
Standard errors in parentheses.

Table A-44—Non-ED Outpatient Costs Among Beneficiaries with a BH Diagnosis (Measure 3-3)

Variable	Estimate	*p*-value
Intercept	6.066	<0.001***
	(0.024)	
Baseline monthly trend	0.000	0.977
	(0.004)	
Level Change	-0.001	0.985
	(0.031)	
Change in monthly trend	-0.001	0.869
	(0.004)	
COVID-19 Lockdown (Q2 2020)	-0.167	<0.001***

Variable	Estimate	*p*-value
	(0.032)	
COVID-19 Reopening (Q3 2020 - Q1 2021)	0.007 *(0.018)*	0.677
Seasonality: Q2	0.036 *(0.019)*	0.063*
Seasonality: Q3	0.020 *(0.019)*	0.293
Seasonality: Q4	0.002 *(0.021)*	0.925

*p< 0.1, **p<0.05, ***p<0.001
Standard errors in parentheses.

Table A-45—Total Costs Among Beneficiaries with a BH Diagnosis (Measure 3-3)

Variable	Estimate	*p*-value
Intercept	7.646 *(0.022)*	<0.001***
Baseline monthly trend	-0.001 *(0.004)*	0.822
Level Change	0.022 *(0.028)*	0.439
Change in monthly trend	0.000 *(0.004)*	0.938
COVID-19 Lockdown (Q2 2020)	-0.187 *(0.029)*	<0.001***
COVID-19 Reopening (Q3 2020 - Q1 2021)	-0.002 *(0.016)*	0.892
Seasonality: Q2	0.032 *(0.017)*	0.058*
Seasonality: Q3	-0.008 *(0.017)*	0.654
Seasonality: Q4	-0.016 *(0.019)*	0.388

*p< 0.1, **p<0.05, ***p<0.001
Standard errors in parentheses.

Table A-46—BH IMD Costs Among Beneficiaries with a BH Diagnosis (Measure 3-3)

Variable	Estimate	*p*-value
Intercept	0.973 (0.124)	<0.001***
Baseline monthly trend	-0.077 (0.026)	0.003**
Level Change	0.820 (0.206)	<0.001***
Change in monthly trend	0.041 (0.025)	0.097*
COVID-19 Lockdown (Q2 2020)	0.198 (0.190)	0.298
COVID-19 Reopening (Q3 2020 - Q1 2021)	-0.065 (0.160)	0.682
Seasonality: Q2	0.131 (0.124)	0.291
Seasonality: Q3	0.193 (0.140)	0.167
Seasonality: Q4	0.408 (0.152)	0.007**

*p< 0.1, **p<0.05, ***p<0.001
Standard errors in parentheses.

Table A-47—BH Non-IMD Costs Among Beneficiaries with a BH Diagnosis (Measure 3-3)

Variable	Estimate	*p*-value
Intercept	6.663 *(0.023)*	<0.001***
Baseline monthly trend	0.001 *(0.004)*	0.808
Level Change	0.030 *(0.030)*	0.312
Change in monthly trend	-0.003 *(0.004)*	0.496
COVID-19 Lockdown (Q2 2020)	-0.150 *(0.029)*	<0.001***
COVID-19 Reopening (Q3 2020 - Q1 2021)	0.024 *(0.017)*	0.155
Seasonality: Q2	0.047 *(0.018)*	0.008**
Seasonality: Q3	-0.016	0.355

Variable	Estimate	*p*-value
	(0.018)	
Seasonality: Q4	-0.014 *(0.019)*	0.463

*p< 0.1, **p<0.05, ***p<0.001
Standard errors in parentheses.

Table A-48—Non-BH Costs Among Beneficiaries with a BH Diagnosis (Measure 3-3)

Variable	Estimate	*p*-value
Intercept	7.176 *(0.023)*	<0.001***
Baseline monthly trend	-0.002 *(0.004)*	0.642
Level Change	0.016 *(0.030)*	0.601
Change in monthly trend	0.001 *(0.004)*	0.775
COVID-19 Lockdown (Q2 2020)	-0.211 *(0.031)*	<0.001***
COVID-19 Reopening (Q3 2020 – Q1 2021)	-0.018 *(0.017)*	0.289
Seasonality: Q2	0.023 *(0.018)*	0.203
Seasonality: Q3	-0.002 *(0.018)*	0.898
Seasonality: Q4	-0.018 *(0.020)*	0.380

*p< 0.1, **p<0.05, ***p<0.001
Standard errors in parentheses.

Screening Codes

Table A-49 contains screening codes that were utilized to facilitate calculations on Measure 2-2, *Screening for Chronic Conditions Relevant to State Medicaid Population.*

Table A-49—Chronic Condition Screening Codes (Measure 2-2)

Code	Definition
80047	Basic metabolic panel (Calcium, ionized) This panel must include the following: Calcium, ionized (82330) Carbon dioxide (bicarbonate) (82374) Chloride (82435) Creatinine (82565) Glucose (82947) Potassium (84132) Sodium (84295) Urea Nitrogen (BUN) (84520)
80048	Basic metabolic panel (Calcium, total) This panel must include the following: Calcium, total (82310) Carbon dioxide (bicarbonate) (82374) Chloride (82435) Creatinine (82565) Glucose (82947) Potassium (84132) Sodium (84295) Urea nitrogen (BUN) (84520)
80050	General health panel This panel must include the following: Comprehensive metabolic panel (80053) Blood count, complete (CBC), automated and automated differential WBC count (85025 or 85027 and 85004) OR Blood count, complete (CBC), automated (85027) and appropriate manual differential WBC count (85007 or 85009) Thyroid stimulating hormone (TSH) (84443)
80053	Comprehensive metabolic panel This panel must include the following: Albumin (82040) Bilirubin, total (82247) Calcium, total (82310) Carbon dioxide (bicarbonate) (82374) Chloride (82435) Creatinine (82565) Glucose (82947) Phosphatase, alkaline (84075) Potassium (84132) Protein, total (84155) Sodium (84295) Transferase, alanine amino (ALT) (SGPT) (84460) Transferase, aspartate amino (AST) (SGOT) (84450) Urea nitrogen (BUN) (84520)
80061	Lipid panel This panel must include the following: Cholesterol, serum, total (82465) Lipoprotein, direct measurement, high density cholesterol (HDL cholesterol) (83718) Triglycerides (84478)
80069	Renal function panel This panel must include the following: Albumin (82040) Calcium, total (82310) Carbon dioxide (bicarbonate) (82374) Chloride (82435) Creatinine (82565) Glucose (82947) Phosphorus inorganic (phosphate) (84100) Potassium (84132) Sodium (84295) Urea nitrogen (BUN) (84520)
81000	Urinalysis, by dip stick or tablet reagent for bilirubin, glucose, hemoglobin, ketones, leukocytes, nitrite, pH, protein, specific gravity, urobilinogen, any number of these constituents; non-automated, with microscopy
81001	Urinalysis, by dip stick or tablet reagent for bilirubin, glucose, hemoglobin, ketones, leukocytes, nitrite, pH, protein, specific gravity, urobilinogen, any number of these constituents; automated, with microscopy
81002	Urinalysis, by dip stick or tablet reagent for bilirubin, glucose, hemoglobin, ketones, leukocytes, nitrite, pH, protein, specific gravity, urobilinogen, any number of these constituents; non-automated, without microscopy
81003	Urinalysis, by dip stick or tablet reagent for bilirubin, glucose, hemoglobin, ketones, leukocytes, nitrite, pH, protein, specific gravity, urobilinogen, any number of these constituents; automated, without microscopy
82040	Albumin (82040)
82042	Albumin; other source, quantitative, each specimen
82043	Albumin; urine (e.g., microalbumin), quantitative
82044	Albumin; urine (e.g., microalbumin), semiquantitative (e.g., reagent strip assay)
82247	Bilirubin, total (82247)
82270	Blood, occult, by peroxidase activity (e.g., guaiac), qualitative; feces, consecutive collected specimens with single determination, for colorectal neoplasm screening (i.e., patient was provided 3 cards or single triple card for consecutive collection)
82274	Blood, occult, by fecal hemoglobin determination by immunoassay, qualitative, feces, 1-3 simultaneous determinations
82310	Calcium, total (82310)

Code	Definition
82330	Calcium, ionized
82374	Carbon dioxide (bicarbonate) (82374)
82435	Chloride (82435)
82465	Cholesterol, serum or whole blood, total
82565	Creatinine; blood
82570	Creatinine; other source
82947	Glucose (82947)
82950	Glucose; post glucose dose (includes glucose)
82951	Glucose; tolerance test (GTT), 3 specimens (includes glucose)
83036	Hemoglobin; glycosylated (A1C)
83037	Hemoglobin; glycosylated (A1C) by device cleared by FDA for home use
83655	Lead
83700	Lipoprotein, blood; electrophoretic separation and quantitation
83701	Lipoprotein, blood; high resolution fractionation and quantitation of lipoproteins including lipoprotein subclasses when performed (e.g., electrophoresis, ultracentrifugation)
83704	Lipoprotein, blood; quantitation of lipoprotein particle number(s) (e.g., by nuclear magnetic resonance spectroscopy), includes lipoprotein particle subclass(es), when performed
83718	Lipoprotein, direct measurement; high density cholesterol (HDL cholesterol)
83721	Lipoprotein, direct measurement; LDL cholesterol
83722	Lipoprotein, direct measurement; small dense LDL cholesterol
84075	Phosphatase, alkaline (84075)
84100	Phosphorus inorganic (phosphate) (84100)
84132	Potassium (84132)
84152	Prostate specific antigen (PSA); complexed (direct measurement)
84153	Prostate specific antigen (PSA); total
84154	Prostate specific antigen (PSA); free
84155	Protein, total (84155)
84156	Protein, total, except by refractometry; urine
84295	Sodium (84295)
84443	Thyroid stimulating hormone (TSH) (84443)
84450	Transferase, aspartate amino (AST) (SGOT) (84450)
84460	Transferase, alanine amino (ALT) (SGPT) (84460)
84478	Triglycerides
84520	Urea Nitrogen (BUN) (84520)
85004	Blood count; automated differential WBC count (85004)
85007	Microscopic examination for white blood cells with manual cell count (85007)
85025	Blood count; complete (CBC), automated (Hgb, Hct, RBC, WBC, and platelet count) and automated differential WBC count

Code	Definition
85027	Completed blood count, automated (85027)
87490	Infectious agent detection by nucleic acid (DNA or RNA); Chlamydia trachomatis, direct probe technique
87491	Infectious agent detection by nucleic acid (DNA or RNA); Chlamydia trachomatis, amplified probe technique
87492	Infectious agent detection by nucleic acid (DNA or RNA); Chlamydia trachomatis, quantification
87624	Infectious agent detection by nucleic acid (DNA or RNA); Human Papillomavirus (HPV), high-risk types (e.g., 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 68)
87625	Infectious agent detection by nucleic acid (DNA or RNA); Human Papillomavirus (HPV), types 16 and 18 only, includes type 45, if performed
88141	Cytopathology, cervical or vaginal (any reporting system), requiring interpretation by physician
88142	Cytopathology, cervical or vaginal (any reporting system), collected in preservative fluid, automated thin layer preparation; manual screening under physician supervision
88143	Cytopathology, cervical or vaginal (any reporting system), collected in preservative fluid, automated thin layer preparation; with manual screening and rescreening under physician supervision
88147	Cytopathology smears, cervical or vaginal; screening by automated system under physician supervision
88148	Cytopathology smears, cervical or vaginal; screening by automated system with manual rescreening under physician supervision
88150	Cytopathology, slides, cervical or vaginal; manual screening under physician supervision
88152	Cytopathology, slides, cervical or vaginal; with manual screening and computer-assisted rescreening under physician supervision
88153	Cytopathology, slides, cervical or vaginal; with manual screening and rescreening under physician supervision
88154	Cytopathology, slides, cervical or vaginal; with manual screening and computer-assisted rescreening using cell selection and review under physician supervision
88164	Cytopathology, slides, cervical or vaginal (the Bethesda System); manual screening under physician supervision
88165	Cytopathology, slides, cervical or vaginal (the Bethesda System); with manual screening and rescreening under physician supervision
88166	Cytopathology, slides, cervical or vaginal (the Bethesda System); with manual screening and computer-assisted rescreening under physician supervision
88167	Cytopathology, slides, cervical or vaginal (the Bethesda System); with manual screening and computer-assisted rescreening using cell selection and review under physician supervision
88174	Cytopathology, cervical or vaginal (any reporting system), collected in preservative fluid, automated thin layer preparation; screening by automated system, under physician supervision
88175	Cytopathology, cervical or vaginal (any reporting system), collected in preservative fluid, automated thin layer preparation; with screening by automated system and manual rescreening or review, under physician supervision
94010	Spirometry, including graphic record, total and timed vital capacity, expiratory flow rate measurement(s), with or without maximal voluntary ventilation
99201	Office or other outpatient visit for the evaluation and management of a new patient
99202	Office or other outpatient visit for the evaluation and management of a new patient
99203	Office or other outpatient visit for the evaluation and management of a new patient
99204	Office or other outpatient visit for the evaluation and management of a new patient
99205	Office or other outpatient visit for the evaluation and management of a new patient

Code	Definition
99211	Office or other outpatient visit for the evaluation and management of an established patient that may not require the presence of a physician
99212	Office or other outpatient visit for the evaluation and management of an established patient, 10 minutes
99213	Office or other outpatient visit for the evaluation and management of an established patient, 15 minutes
99214	Office or other outpatient visit for the evaluation and management of an established patient, 25 minutes
99215	Office or other outpatient visit for the evaluation and management of an established patient, 40 minutes
99241	Office consultation for a new or established patient, which requires these 3 key components: A problem focused history; A problem focused examination; and Straightforward medical decision making. Counseling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problem(s) are self-limited or minor. Typically, 15 minutes are spent face-to-face with the patient and/or family.
99242	Office consultation for a new or established patient, which requires these 3 key components: An expanded problem focused history; An expanded problem focused examination; and Straightforward medical decision making. Counseling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problem(s) are of low severity. Typically, 30 minutes are spent face-to-face with the patient and/or family.
99243	Office consultation for a new or established patient, which requires these 3 key components: A detailed history; A detailed examination; and Medical decision making of low complexity. Counseling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problem(s) are of moderate severity. Typically, 40 minutes are spent face-to-face with the patient and/or family.
99244	Office consultation for a new or established patient, which requires these 3 key components: A comprehensive history; A comprehensive examination; and Medical decision making of moderate complexity. Counseling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problem(s) are of moderate to high severity. Typically, 60 minutes are spent face-to-face with the patient and/or family.
99245	Office consultation for a new or established patient, which requires these 3 key components: A comprehensive history; A comprehensive examination; and Medical decision making of high complexity. Counseling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problem(s) are of moderate to high severity. Typically, 80 minutes are spent face-to-face with the patient and/or family.
99251	Inpatient consultation for a new or established patient, which requires these 3 key components: A problem focused history; A problem focused examination; and Straightforward medical decision making. Counseling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problem(s) are self-limited or minor. Typically, 20 minutes are spent at the bedside and on the patient's hospital floor or unit.
99252	Inpatient consultation for a new or established patient, which requires these 3 key components: An expanded problem focused history; An expanded problem focused examination; and Straightforward medical decision making. Counseling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problem(s) are of low severity. Typically, 40 minutes are spe't at the bedsid' and on the patient's hospital floor or unit.

Code	Definition
99253	Inpatient consultation for a new or established patient, which requires these 3 key components: A detailed history; A detailed examination; and Medical decision making of low complexity. Counseling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problem(s) are of moderate severity. Typically, 55 minutes are spent at the bedside and on the patient's hospital floor or unit.
99254	Inpatient consultation for a new or established patient, which requires these 3 key components: A comprehensive history; A comprehensive examination; and Medical decision making of moderate complexity. Counseling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problem(s) are of moderate to high severity. Typically, 80 minutes are spent at the bedside and on the patient's hospital floor or unit.
99255	Inpatient consultation for a new or established patient, which requires these 3 key components: A comprehensive history; A comprehensive examination; and Medical decision making of high complexity. Counseling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problem(s) are of moderate to high severity. Typically, 110 minutes are spent at the bedside and on the patient's hospital floor or unit.
99381	Initial comprehensive preventive medicine evaluation and management of an individual including an age and gender appropriate history, examination, counseling/anticipatory guidance/risk factor reduction interventions, and the ordering of laboratory/diagnostic procedures, new patient; infant (age younger than 1 year)
99382	Initial comprehensive preventive medicine evaluation and management of an individual including an age and gender appropriate history, examination, counseling/anticipatory guidance/risk factor reduction interventions, and the ordering of laboratory/diagnostic procedures, new patient; early childhood (age 1 through 4 years)
99383	Initial comprehensive preventive medicine evaluation and management of an individual including an age and gender appropriate history, examination, counseling/anticipatory guidance/risk factor reduction interventions, and the ordering of laboratory/diagnostic procedures, new patient; late childhood (age 5 through 11 years)
99384	Initial comprehensive preventive medicine evaluation and management of an individual including an age and gender appropriate history, examination, counseling/anticipatory guidance/risk factor reduction interventions, and the ordering of laboratory/diagnostic procedures, new patient; adolescent (age 12 through 17 years)
99385	Initial comprehensive preventive medicine evaluation and management of an individual including an age and gender appropriate history, examination, counseling/anticipatory guidance/risk factor reduction interventions, and the ordering of laboratory/diagnostic procedures, new patient; 18-39 years
99386	Initial comprehensive preventive medicine evaluation and management of an individual including an age and gender appropriate history, examination, counseling/anticipatory guidance/risk factor reduction interventions, and the ordering of laboratory/diagnostic procedures, new patient; 40-64 years
99387	Initial comprehensive preventive medicine evaluation and management of an individual including an age and gender appropriate history, examination, counseling/anticipatory guidance/risk factor reduction interventions, and the ordering of laboratory/diagnostic procedures, new patient; 65 years and older
99391	Periodic comprehensive preventive medicine reevaluation and management of an individual including an age and gender appropriate history, examination, counseling/anticipatory guidance/risk factor reduction interventions, and the ordering of laboratory/diagnostic procedures, established patient; infant (age younger than 1 year)
99392	Periodic comprehensive preventive medicine reevaluation and management of an individual including an age and gender appropriate history, examination, counseling/anticipatory guidance/risk factor reduction

Code	Definition
	interventions, and the ordering of laboratory/diagnostic procedures, established patient; early childhood (age 1 through 4 years)
99393	Periodic comprehensive preventive medicine reevaluation and management of an individual including an age and gender appropriate history, examination, counseling/anticipatory guidance/risk factor reduction interventions, and the ordering of laboratory/diagnostic procedures, established patient; late childhood (age 5 through 11 years)
99394	Periodic comprehensive preventive medicine reevaluation and management of an individual including an age and gender appropriate history, examination, counseling/anticipatory guidance/risk factor reduction interventions, and the ordering of laboratory/diagnostic procedures, established patient; adolescent (age 12 through 17 years)
99395	Periodic comprehensive preventive medicine reevaluation and management of an individual including an age and gender appropriate history, examination, counseling/anticipatory guidance/risk factor reduction interventions, and the ordering of laboratory/diagnostic procedures, established patient; 18-39 years
99396	Periodic comprehensive preventive medicine reevaluation and management of an individual including an age and gender appropriate history, examination, counseling/anticipatory guidance/risk factor reduction interventions, and the ordering of laboratory/diagnostic procedures, established patient; 40-64 years
99397	Periodic comprehensive preventive medicine reevaluation and management of an individual including an age and gender appropriate history, examination, counseling/anticipatory guidance/risk factor reduction interventions, and the ordering of laboratory/diagnostic procedures, established patient; 65 years and older
99401	Preventive medicine counseling and/or risk factor reduction intervention(s) provided to an individual (separate procedure); approximately 15 minutes
99402	Preventive medicine counseling and/or risk factor reduction intervention(s) provided to an individual (separate procedure); approximately 30 minutes
99403	Preventive medicine counseling and/or risk factor reduction intervention(s) provided to an individual (separate procedure); approximately 45 minutes
99404	Preventive medicine counseling and/or risk factor reduction intervention(s) provided to an individual (separate procedure); approximately 60 minutes
99439	Chronic Care Management (CCM)
99487	Chronic Care Management (CCM)
99489	Chronic Care Management (CCM)
99490	Chronic Care Management (CCM)
99491	Chronic Care Management (CCM)
G0506	Comprehensive assessment of and care planning for patients requiring chronic care management services (list separately in addition to primary monthly care management service) (G0506)
H2000	Comprehensive multidisciplinary evaluation (H2000)
P3000	Screening Papanicolaou smear, cervical or vaginal, up to three smears, by technician under physician supervision (P3000)
P3001	Screening Papanicolaou smear, cervical or vaginal, up to three smears, requiring interpretation by physician (P3001)
Q0091	Screening Papanicolaou smear; obtaining, preparing and conveyance of cervical or vaginal smear to laboratory (Q0091)
85610	Prothrombin Time with INR
85730	Partial Thromboplastin Time (PTT)

Appendix B. Evaluation Design

Appendix B contains the Centers for Medicare & Medicaid Services (CMS)-approved evaluation design plan for the Alaska Substance User Disorder and Behavioral Health (SUD-BH) Program Demonstration Waiver.

State of Alaska

Department of Health and Social

Services Division of Behavioral Health

Alaska Substance Use Disorder and Behavioral Health Program (SUD-BHP)

1115 Evaluation Design

For FY2019 Through FY2024

Prepared by Grant J. Rich, PhD and Health Services Advisory Group

TABLE OF CONTENTS AND OUTLINE

A. General Background Information

1. Name of the demonstration, approval date, and time period

Title: Alaska Substance Use Disorder and Behavioral Health Program (SUD-BHP)

Approval Date: September 3rd, 2019 (Special Terms and Conditions/STCs)

Time Period: 01/01/2019 through 12/31/2023

2. The purpose of the section 1115 demonstration and expenditure authorities

The Alaska Department of Health and Social Services (DHSS) has received authority for a Medicaid Section 1115 Demonstration Project from the Centers for Medicare & Medicaid Services (CMS) on September 3, 2019 to develop a data-driven, integrated behavioral health system of care for children, youth, and adults with serious mental illness, severe emotional disturbance, and/or substance use disorders. The demonstration project also seeks to increase services for at-risk families in order to support the healthy development of children and adults through increased outreach and prevention and early intervention supports. The demonstration runs through December 31, 2023 and builds upon the initial Section 1115 Waiver application submitted in January 2018. In brief, the purpose and goal of the Alaska Medicaid Section 1115 Substance Use Disorder and Behavioral Health Program (SUD-BHP) Demonstration is to create a data-driven, integrated behavioral health system of care for Alaskans with serious mental illness, severe emotional disturbance, and/or substance use disorders.

Rationale and Background

Alaskans have, for many years, needed behavioral health (including both substance misuse and mental health) services above national averages across several important domains.

Data from the 2018 Behavioral Risk Factor Surveillance Survey (BRFSS) show that 11.3% of Alaskans reported frequent mental distress (14 or more days per month of poor mental health). 15.8% of Alaska Native adults surveyed reported frequent mental distress[1] and Alaska's 2017 suicide rate of 26.9/100,000 was more than twice the 2015 national rate of 12.32/100,000. The Alaska Native population is over two times likely to complete suicide than non-Alaska Natives.[2]

According to the 2016-2017 National Survey on Drug Use and Health (NSDUH):

- 16.81% of Alaskans (aged 12 and over), compared to 10.9% of respondents in the USA, reported illicit drug use in the past month
- 22.73% of Alaskans (aged 12 and over), compared to 14.5% of respondents in the USA, reported marijuana use in the past year
- 0.44% of Alaskans (aged 12 and over), compared to 0.34% of respondents in the USA, reported heroin use in the past year
- 24.2% of Alaskans (aged 12 and over), compared to 24.37% of respondents in the USA, reported

[1] *AK-IBIS Health Indicator Report of Mental Health – Adults (18+) – Frequent Mental Distres*s, Alaska Division of Public Health, Department of Health and Social Services (*citing* Alaska Behavioral Risk Factor Surveillance System 2018).

[2] Alaska Health Analytics and Vital Records, Alaska Division of Public Health (2013-2017 data: 2017 Annual Report and data).

binge alcohol use in the past month

- 0.68% of Alaskans (aged 18 and over), compared to 0.65% of respondents in the USA, reported pain reliever use disorder in the past year
- 8.46% of Alaskans (aged 12 and over), compared to 6.82% of respondents in the USA, reported needing but not receiving treatment at a specialty facility for substance use in the past year
- 5.02% of Alaskans (aged 18 and over), compared to 4.38% of respondents in the USA, reported serious mental illness in the past year
- 13.02% of Alaskans (aged 18 and over), compared to 14.6% of respondents in the USA, reported receiving mental health services in the past year
- 5.34% of Alaskans (aged 18 and over), compared to 4.19% of respondents in the USA, reported having serious thoughts of suicide in the past year
- 7.69% of Alaskans (aged 18 and over), compared to 6.89% of respondents in the USA, reported having major depressive disorder in the past year.[3]

Alaska has the 10th highest prevalence rate of adult binge drinking in the country and the fifth highest rate of intensity of binge drinking among adults. Alaskan adults and Alaska Native adults report similar rates of binge drinking in the past month (19.9% and 19.8%, respectively).[4] The rate of alcohol-related mortality for Alaska Natives is more than three times (71.4/100,000) that of all Alaskan adults (20.4/100,000) and is eight times the national rate (8.5/100,000).[5] In 2015, Alaska had the 3rd highest rate in the U.S. of alcohol attributed mortality; furthermore, in 2017, 7.6% of all emergency medical service (EMS) transports in Alaska were alcohol-attributable, and in 2016, almost half of the Alaska children in foster care or in "out of home placements" came from a home with parental or guardian alcohol use.[6]

In addition, like all states, Alaska has experienced an uptick in the number of individuals dealing with substance use disorders and the associated rate of deaths due to opioid overdose. Alaska has the 10th highest prevalence rate of adult binge drinking in the country and the 5th highest rate of intensity of binge drinking among adults.[7] Importantly, as noted above, the rate of alcohol-related mortality for Alaska Natives is more than three times (71.4/100,000) that of all Alaskan adults (20.4/100,000) and is eight times the national rate (8.5/100,000).[8] Alaska Native youth ages 10-17 years old are 2.7 times more likely to be hospitalized for unintentional alcohol poisoning than a non-Alaska Native peer.[9] While our opioid crisis has emerged relatively recently, our alarming alcohol-related prevalence rates have remained constant over a much longer period of time. The 2018-2022 Statewide Opioid Action Plan reports alarming statistics regarding opioids in Alaska. From 2010-2017 the opioid death rate increased 77% (from 7.7 per 100,000 to 13.6 in 2017). Furthermore, from 2012-2017, the rate of out-of-hospital naloxone administrations by Emergency Medical Service (EMS) personnel more than doubled from 8.0 to 17.7 administrations per 1,000 EMS calls in 2012 and 2017, respectively. Additionally, the rates of opioid-related inpatient

[3] National Survey on Drug Use and Health, 2016-2017, Center for Behavioral Health Statistics and Quality, SAMHSA.
[4] AK-IBIS Health Indicator Report of Alcohol Consumption - Binge Drinking - Adults *(18+),* Alaska Division of Public Health, Department of Health and Social Services (citing Alaska Behavioral Risk Factor Surveillance System, 2015).
[5] AK-IBIS Health Indicator Report of Alcohol-Induced Mortality Rate, Alaska Division of Public Health, Department of Health and Social Services (citing data from the Alaska Health Analytics and Vital Records, Alaska Division of Public Health and US Centers for Disease Control and Prevention).
[6] Health Impacts of Alcohol Misuse in Alaska (DHSS/DPH/Pachoe, 2018)
[7] AK-IBIS Health Indicator Report of Alcohol Consumption – Binge Drinking – Adults *(18+)*, Alaska Division of Public Health, Department of Health and Social Services (citing Alaska Behavioral Risk Factor Surveillance System 2015).
[8] AK-IBIS Health Indicator Report of Alcohol-Induced Mortality Rate, Alaska Division of Public Health, Department of Health and Social Services (citing data from the Alaska Health Analytics and Vital Records, Alaska Division of Public Health and Centers for Disease Control and Prevention).
[9] BRFSS-2015-AK IBIS-*Youth (10-17)—Alcohol Poisoning-Hospital*

hospitalizations were 28.5 per 100,000 in 2016 and 26.0 in 2017.

Notably, in addition to elevated rates for many behavioral health conditions, both substance misuse and mental health, Alaskans face special challenges related to geography, population, weather, and size, which make it difficult to effectively provide services. Access to services varies widely depending on clients' needs, their location, and their ability to pay. Many of Alaska's remote communities are medically underserved for both primary care and mental health services. Many of these communities are located hundreds of miles from a regional medical center, and individuals travel long distances for services. More specifically, Alaska is geographically the largest state in the United States. Its behavioral health system reaches across a vast area of 570,374 square miles, though its population (710,249) is well under one million persons, the population of a typical mid-sized city in the lower 48 states. In contrast to the high population density in many cities in the contiguous United States, the distance between small villages can range from as few as 15 miles to several hundred miles, while Alaska's largest city, Anchorage has an estimated population of roughly 291,538 (Census.gov, 2018), over approximately forty percent of the state's population. With the exception of the urban communities of Anchorage, Fairbanks, Sitka, and Juneau, all of Alaska's boroughs and census areas are considered "frontier" by the state Office of Rural Health. A rural hub with access to behavioral health professionals is often only accessible from remote villages by plane or boat, and transportation can be unreliable due to extreme weather conditions. Urban areas and rural towns have more access to mental health professionals, yet Alaska statewide is challenged with retention and recruitment of behavioral health professionals. The State of Alaska is roughly two and one half times the size of Texas and represents approximately 1/5 of the landmass of the lower 48, contiguous states, making it extremely challenging to effectively provide services.

In addition to its vast physical size, Alaska's population diversity must also be acknowledged. Alaska is home to 225 recognized Alaskan Native entities and 20 different native languages. There are 31 tribal health organizations in Alaska, many of whom receive grant funding from the Division of Behavioral Health. Alaska also has a growing immigrant population from all over the world, including Ukraine, Russia, Angola, Moldova, Cuba, El Salvador, Yemen, Thailand, Laos, Ethiopia, Kyrgyzstan, Liberia, Sudan, Gambia, Iran, Burma, China, Uzbekistan, Cambodia, and Vietnam. Together, Alaska's elevated rates of behavioral health conditions along with the realities of service provision given the vast and diverse geography and population, present unique challenges for improving care for mental health and substance misuse.

Thus the purpose of the Alaska Medicaid Section 1115 Substance Use Disorder and Behavioral Health Program (SUD-BHP) Demonstration is to create a data-driven, integrated behavioral health system of care for Alaskans with serious mental illness, severe emotional disturbance, and/or substance use disorders. The demonstration seeks to provide Alaskans with a comprehensive suite of cost-effective, high quality behavioral health services designed to ensure access to the right services at the right time in the right setting. Its goals are:

Goal 1: Rebalance the current behavioral health system of care to reduce Alaska's over-reliance on acute, institutional care and shift to more community- or regional-based care

Objectives

- Decrease use of inpatient hospital and emergency department care episodes.
- Decrease use of residential out-of-home placements.

Goal 2: Intervene as early as possible in the lives of Alaskans to address behavioral health symptoms before symptoms cascade into functional impairments:

Objectives

- Provide universal screening to identify symptoms.
- Provide brief, solution-focused interventions to prevent acute care.

Goal 3: Improve the overall behavioral health system accountability by reforming the existing system of care

Objectives

- Contract with an Administrative Services Organization (ASO) to manage Alaska's existing system of behavioral health care.
- Improve the consistency of screening, assessment, and service/placement decisions through use of evidence-based and evidence-informed tools.

3. A brief description of the demonstration and the implementation plan

Current and Proposed New Benefits

Under the demonstration, Alaska will implement a series of proposed strategies and evidence-based interventions aimed at more effectively addressing the needs of each of the selected target populations. A major consideration in designing the waiver is to recognize the anticipated benefits, such as reduced use of acute, costly services, that should result by conducting universal screenings; intervening early, when symptoms are first identified; utilizing sub-acute, community-based step-up/step-down clinical services as alternatives to residential and inpatient services; and developing community-based supports to maintain recovery, health and wellness. Generally speaking, increasing efforts early on, regarding prevention and early intervention, as opposed to greater emphasis on acute, residential, crisis, emergency care, should lead not only to cost savings, but also to improved care for Alaskans. New Medicaid-covered services under the waiver will establish a robust continuum of care designed to anticipate and address the range of behavioral health needs of the target populations. The State of Alaska SUD-BHP Implementation was submitted to CMS in the 1115PMDA website and is in accepted status in the CMS 1115PMDA website as of 3/27/2019; note that per CMS guidance and discussion with the State of Alaska, Alaska does not have a separate behavioral health/mental health implementation plan, rather there is one approved SUD Implementation Plan. This agreement with CMS was decided upon in part due to the timing of the approval of Alaska's SUD Waiver first, prior to CMS approval of the behavioral health/mental health components in the Special Terms and Conditions (STCs, 9/3/2019). The State of Alaska Division of Behavioral Health will work in conjunction with its Administrative Services Organization (ASO), Optum, Inc. to ensure the 1115 Design is implemented as intended, and as per the Special Terms and Conditions (STCs) described by CMS, the state must begin to arrange with an independent party (the Independent Evaluator) (IE) to conduct an evaluation of the demonstration to ensure that the necessary data are collected at an appropriate level of detail sufficient to conduct the research to evaluate the approved hypotheses. Each contract/agreement has or will have language included to describe the process and policies with regard to data sharing and system communication to ensure programs can be appropriately implemented and evaluated. The ASO (and/or Health Care Services- HCS) will provide claims data and other data as required to the Independent Evaluator towards achievement of the deliverables of the evaluation design.

4. Description of the population groups impacted by the demonstration

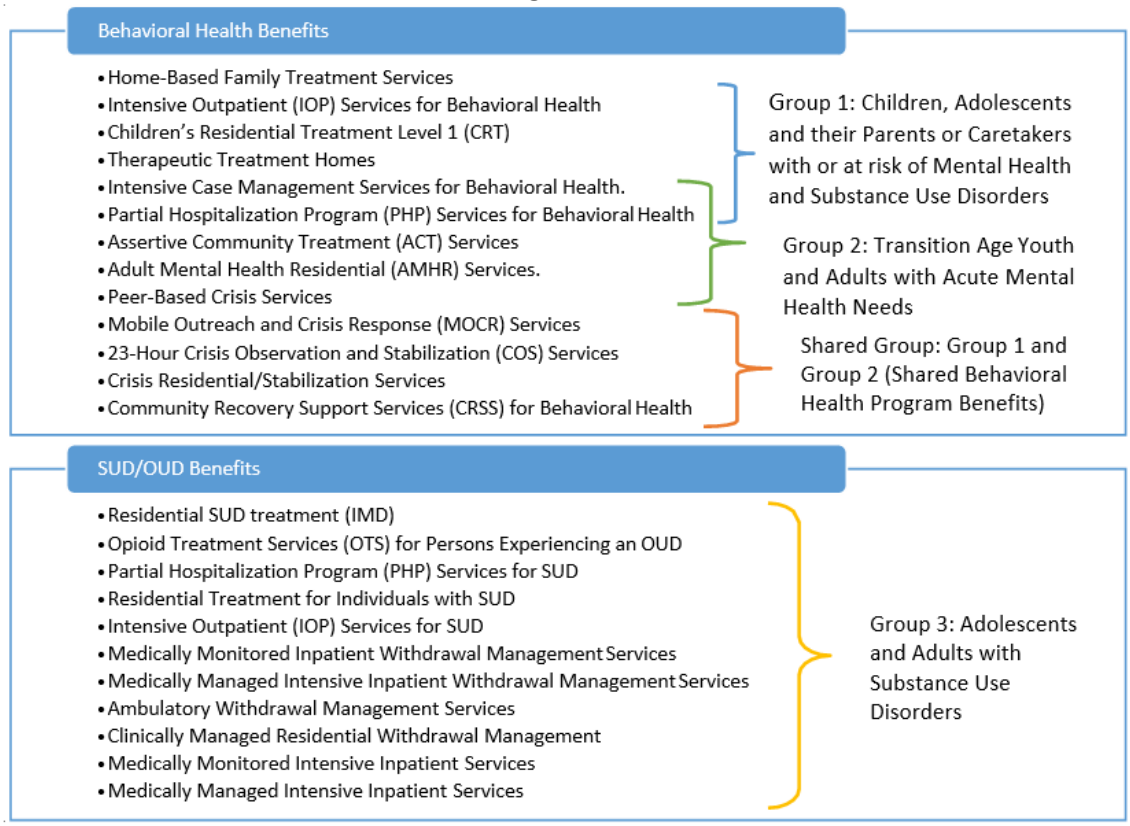
The Integrated Behavioral Health System will be implemented within 2 different initiatives under

1115 expenditure authority:

- Behavioral Health Benefits (STC 20)
- Substance Use Disorder/Opioid Use Disorder Program (STC 21)

Within these initiatives, three distinct groups (and one group that shares behavioral health benefits) are targeted (see Figure 1).

Figure 1:



This Waiver creates an enhanced set of benefits for three target populations (plus one group that shares behavioral health program benefits) of Medicaid recipients:

<u>Group 1: Children, Adolescents and their Parents or Caretakers with, or at risk of, Mental Health and Substance Use Disorders</u>

A significant proportion of Alaska's children and adolescents encounter the child welfare system or juvenile justice system at some point in their upbringing. This waiver provides an important vehicle for strengthening the support system for these young people in hopes of anticipating and preventing crises and reducing the need for out-of-home placements over time. Individuals in this target population are currently in the custody or under the supervision of the Alaska Department of Health and Social Services' Office of Children's Services, the Division of Juvenile Justice, or in tribal custody; formerly in kinship care, foster care, or residential care; and at risk of an out-of-home placement.

For Group 1, Behavioral Health Program benefits include home-based family treatment, intensive case management, partial hospitalization program (PHP) services, intensive outpatient services

(IOP), children's residential treatment level 1 (CRT), and therapeutic treatment homes.

Rationale: The state is targeting this population as an early intervention strategy, which represents a significant shift in the approach to delivering behavioral health services. Alaska's children are 56% more likely to be abused than the national average and 66% of Alaskan adults report one or more adverse childhood experience growing up. In calendar year 2016, one in 10 Alaska children were reported to child protection services (CPS) regarding child abuse or neglect. Twenty-five percent of births experienced a first screened-in report to the Office of Children's Services (OCS) before age seven and one in every 12 births experienced a first substantiated report to OCS before age seven. Alaska also has high rates of repeat child maltreatment as compared to the national average.[10] In addition:

Each month, an average of 130 children and youth reside in foster care or inpatient psychiatric treatment outside of Alaska. This is due to a combination of factors, including a shortage of available therapeutic foster care placements, a small but very challenging group of complex IDD children with significant behavioral and mental health issues that exceed the current service capacity of in-state providers, and an insufficient capacity of outpatient/step-up and step-down providers available to provide mental health care as an alternative to residential and/or inpatient treatment.

Alaska Native children are also over-represented in the state's juvenile justice system. While they comprise less than a quarter of the child and youth population in the state, they account for 33% of referrals made to the juvenile justice system.

With these high rates of Alaska Native children involved in the child welfare and juvenile justice systems, the state places emphasis on the importance of intervention services that are culturally appropriate and trauma-informed.

Group 2: Transitional Age Youth and Adults with Acute Mental Health Needs

This group is composed of transitional age youth and adults who experience mental health disorders with complex co-morbidities or dual diagnoses of intellectual, developmental, or sensory disabilities. This waiver seeks to enhance the availability of mental health treatment and prevention services to this group.

For Group 2, Behavioral Health Program benefits include assertive community treatment services, intensive case management, partial hospitalization program (PHP) services, adult mental health residential (AMHR), and peer-based crisis services.

Shared Behavioral Health Program Benefits (Shared Group 1 and Group 2)

Shared Behavioral Health Program benefits (Shared Group 1 and Group 2) include mobile outreach and crisis response services (MOCR), 23-hour crisis observation and stabilization (COS), crisis residential/stabilization services, and community recovery support services (CRSS).

Rationale: Mental health disorders are very prevalent among Alaska's residents. Data show that:

- Of the 42,123 Medicaid enrollees served in SFY 2016, 28,937 received treatment

[10] Alaska Department of Health and Social Services, Office of Children's Services from dhss.alaska.gov/ocs/Documents/statistics/webdata/mainOohYr.pdf.

for a mental health disorder;
- 20% of Alaskan adults experience a diagnosable mental health disorder each year;
- 21.4% of Alaskan adults report growing up in a household with one or more adults experiencing mental illness;
- 29.7% of Alaskan adults report growing up in a household with one or more adults abusing alcohol and/or other drugs;
- 19.5% of all Alaskan adults – and 28.4% of Alaska Native adults – report four or more adverse childhood experience growing up;
- Alaska's suicide rate of 27.1/100,000 in 2015 was more than twice the national rate (12.32/100,000);
- 22% of the Alaska Corrections population in SFY 2012 experienced a mental health disorder;
- 18% of individuals with five or more hospitalizations between 2012 and 2015 had a behavioral health diagnosis – the most common disease category across all admissions;[11] and
- Analysis of 2016 Emergency Department Super-Utilizers reveal that the top 1.1% of ED users account for 8.6% of charges and two of the eight most common principal diagnoses among the top 1.1% include alcohol-related disorders and anxiety disorders.[12]

Despite the level of need, behavioral health services are difficult to access due to geography, long wait times, lack of workforce, and the high cost of service. With the exception of the urban communities of Anchorage, Fairbanks, Sitka, and Juneau, all of Alaska's boroughs and census areas are considered frontier by the state Office of Rural Health. Access to services varies widely depending on clients' needs, their location, and their ability to pay. Many of Alaska's remote communities are medically underserved for both primary care and mental health services. Many of these communities are located hundreds of miles from a regional medical center, and individuals travel long distances for services.

Limited access to behavioral health providers and services has led to a fragmented and crisis-driven system of care that frequently misses opportunities to engage adults with behavioral health needs that present in the health care, public safety, judicial, and correctional systems.

The result is a system that often pays for behavioral health services at the highest level and cost of care, and where individuals and families often go without needed treatment and recovery services.

Group 3: Adolescents and Adults with Substance Use Disorders

This waiver seeks to enhance the availability of and provide a more comprehensive continuum of substance use disorder treatment for adults, adolescents, and children between 12 and 64 years of age who have at least one diagnosis from the Diagnostic and Statistical Manual of Mental Disorders (DSM-5 or the most current version of the DSM) for substance-related and addictive disorders.

Note that SUD/OUD benefits coverage via 1115 expenditure authority include opioid treatment services for persons experiencing an Opioid Use Disorder (OUD), intensive outpatient services,

[11] The Menges Group. Assessment of Medicaid Reform Options. Report for the Alaska Legislative Budget and Audit Committee. March 24, 2016.
[12] Alaska Department of Health and Social Services, Division of Public Health,

partial hospitalization program (PHP), residential treatment, medically monitored intensive inpatient services, medically managed intensive inpatient services, ambulatory withdrawal management, clinically managed residential withdrawal management, medically monitored inpatient withdrawal management, and medically managed intensive inpatient withdrawal management. In addition, the state plan Medicaid authority offers early intervention services, outpatient services and medication-assisted treatment (MAT).

Rationale: Like many states, Alaska continues to experience increases in opioid use and abuse. According to the State of Alaska Epidemiology Section, the rate of heroin poisoning resulting in hospital admissions doubled between 2008 and 2012 and between 2008 and 2013, the number of heroin-associated deaths more than tripled in Alaska. In 2012, the rate of heroin-associated deaths in Alaska was 42% higher than that for the U.S. overall (2.7 per 100,000 vs. 1.9 per 100,000, respectively). Admissions to publicly funded SUD treatment for heroin dependence increased 58% between 2009 and 2013. The majority of those individuals seeking treatment were age 21-29.[13]

During 2009–2015, 774 drug overdose deaths were entered into the Alaska mortality database. Overall, 512 (66%) decedents had a prescription drug noted as the primary or a contributing cause of death. Of the 311 illicit drug overdose deaths that were recorded in the database, 128 (41%) noted heroin as either the primary or a contributing cause of death. Before receiving a SAMHSA Medication-Assisted Treatment (MAT) Capacity Expansion Grant, Alaska only had MAT capacity to serve 415 individuals, despite having upwards of 1,700 individuals with an Opioid Dependence or SUD diagnosis seeking treatment. Even with Alaska's 2017 SAMHSA MAT Capacity Expansion Grant, the total number of individuals to be served under the grant is only projected to increase by 250. While this is an important capacity development project, further resources are needed to address the 62% of known individuals without access to MAT.

The State considers SUD treatment to be a key component of behavioral health reform. In a 2017 Alaska Opioid Policy Task Force report, stakeholders noted primary prevention policies supporting 'upstream' efforts to improve the overall health and wellness of individuals across the life span that can help reduce the risk of opioid use, misuse, and abuse at the population level. Access to appropriate levels of treatment when a person seeks help, as close to home as possible, is critical to helping Alaskans move from opioid dependence to recovery.

In addition, Alaska's criminal justice reform efforts are expected to increase the demand for SUD treatment services as behavioral health clients are released and/or diverted from the corrections system to treatment. In SFY 2017, 832 citizens returning from Department of Corrections Correctional institutions were successfully enrolled in Medicaid.

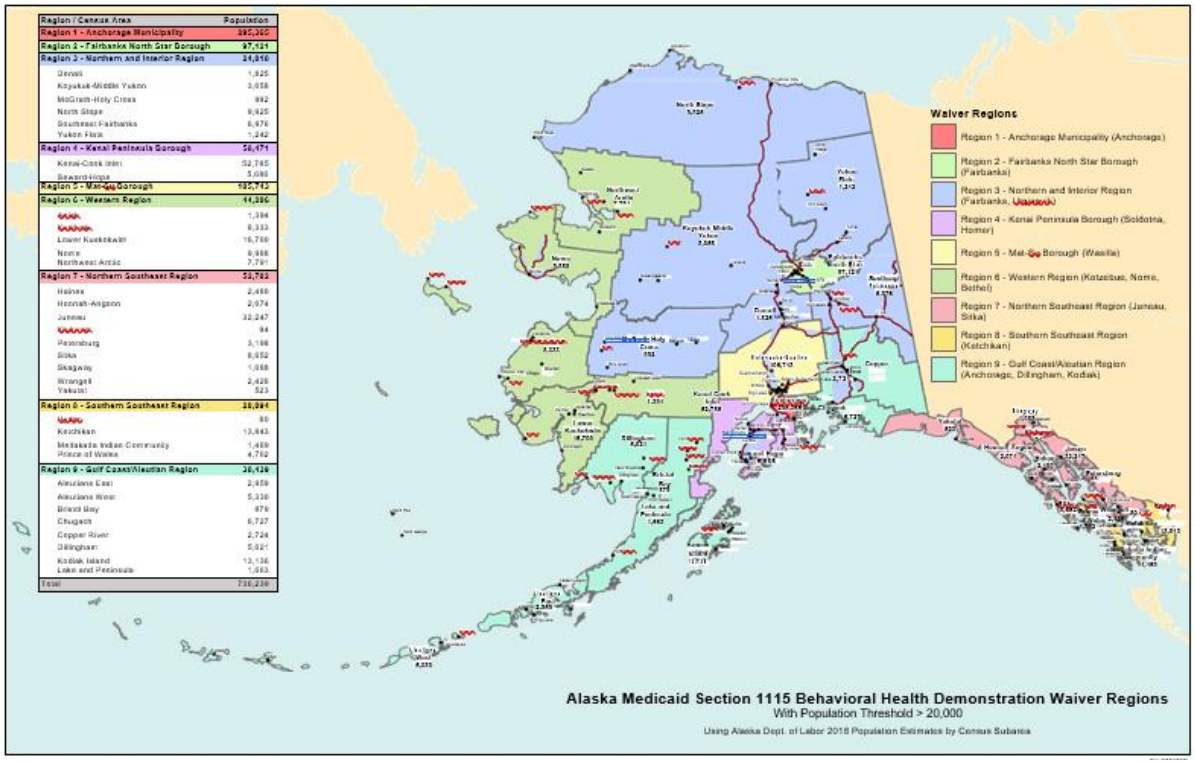
Finally, note that to best serve Alaska's population given the state's vast geography, the Waiver divides the state population into nine regions. Waiver services will be phased in over two years. During year one, region one, region two, region five, and region seven will phase in, along with any agencies in other regions who wish to start early. During year two, the other regions will be phased in. Additional information may be found in the State's CMS approved (3/27/2019) Waiver Implementation Plan.

[13] Alaska Opioid Policy Task Force recommendations, which cited: Health Impacts of Heroin Use in Alaska, State of Alaska Epidemiology Bulletin, July 14, 2015).

Regions are defined as follows:

Region 1 - Anchorage Municipality (Anchorage)
Region 2 - Fairbanks North Star Borough (Fairbanks)
Region 3 - Northern and Interior Region (Fairbanks and Utqiagvik)
Region 4 - Kenai Peninsula Borough (Soldotna and Homer)
Region 5 - MatSu Borough (Wasilla)
Region 6 - Western Region (Kotzebue, Nome, and Bethel)
Region 7 - Northern Southeast Region (Juneau and Sitka)
Region 8 - Southern Southeast Region (Ketchikan)
Region 9 - Gulf Coast/Aleutian Region (Anchorage, Dillingham, and Kodiak)

The following map visually depicts the nine Alaska Medicaid Section 1115 Behavioral Health Demonstration Waiver listed above.



B. Evaluation Questions and Hypotheses

1. Driver Diagram

Per the CMS guidance document 1115 Demonstration Evaluation Design Technical Assistance (3/6/2019), the State of Alaska Division of Behavioral Health has created a Driver Diagram for its 1115 Waiver. This diagram depicts the relationship between the demonstration's goal/purpose/aim, the primary drivers that contribute to realizing that purpose, and the secondary drivers that are necessary to achieve the primary drivers. There are many ways to depict a theory of change, though per CMS guidance, one particularly useful method of doing so is with a driver diagram model, which can represent an organization's current theories regarding change processes (*Defining and using aims and drivers for improvement: A how-to-guide*, CMS, 1/24/2013). As per CMS guidance, State of Alaska Division of Behavioral Health recognizes that there is no single

'correct' way of drawing a driver diagram; driver diagrams are "living" documents that can and should be modified over time as an organization learns what drivers and interventions are important for achieving desired results (*Defining and using aims and drivers for improvement: A how-to-guide*, CMS, 1/24/2013).

The following Driver Diagram was developed via consultation and extended discussions with subject matter experts, clinicians, and researchers at the Alaska Division of Behavioral Health as well as referral to other State of Alaska 1115 documents, including the State's original 1115 Behavioral Health Demonstration Application (1/31/2018), the STCs (Special Terms and Conditions, 9/3/2019), The State's Waiver Implementation Plan (3/27/2019), The State's Monitoring Protocol, and other relevant data, evidence, and information. The Driver Diagram utilizes the 6 CMS goals and is consistent with the three cross-cutting goals and objectives presented in Alaska's initial Waiver Application (1/31/2019):

1) Rebalance the current behavioral health system of care to reduce Alaska's over-reliance on acute, institutional care and shift to more community- or regionally-based care;
2) Intervene as early as possible in the lives of Alaskans to address behavioral health symptoms before they cascade into functional impairments;
3) Improve overall behavioral health system accountability by reforming the existing system of care.

The model serves as an informative framework for the Alaska 1115 Evaluation Design and Waiver Demonstration, recognizing that interrelationships between the goals, primary drivers, and secondary drivers may at times be multidirectional. Furthermore, the desired aims may be achieved through an iterative process of change through which a cycle of feedback from interim reporting informs future plans and enhanced implementation as appropriate.

Driver Diagram for State of Alaska 1115 Demonstration Application

6 CMS Goals/Objectives/Aims	Primary Drivers (Major domains through which Alaska may accomplish the six goals, adapted from STCs)	Secondary Drivers (from Alaska's Implementation Plan, utilizing key milestones identified by CMS)
1. Increased rates of identification, initiation, and engagement in treatment for SU and BH issues by end of FY2024	1. Universally screen all Medicaid recipients, regardless of setting, using industry- recognized, evidence-based SUD screening instruments to identify symptoms for preventive measures and intervene as early as possible before use becomes dependence. 2. Implement American Society of Addiction Medicine (ASAM) Criteria (3rd Edition) to match individuals with SUD with the services and tools necessary for recovery. 3. Increase SUD and BH treatment options for youth (ages 12-17) and adult (18 and over) Medicaid recipients, particularly non- residential, step-up and step-down treatment options.	Milestone #1: Access to Critical Levels of Care for SUD Treatment Milestone #2: Use of Evidence-Based, SUD- Specific Patient Placement Criteria Milestone #5: Implementation of Comprehensive Treatment & Prevention Strategies to Address Opioids Milestone #6: Improved Care Coordination and Transitions Between Levels of Care

6 CMS Goals/Objectives/Aims	Primary Drivers (Major domains through which Alaska may accomplish the six goals, adapted from STCs)	Secondary Drivers (from Alaska's Implementation Plan, utilizing key milestones identified by CMS)
2. Increased adherence to and retention in SU and BH treatment by end of FY2024	1. Implement American Society of Addiction Medicine (ASAM) Criteria (3rd Edition) to match individuals with SUD with the services and tools necessary for recovery. 2. Increase SUD and BH treatment options for youth (ages 12-17) and adult (18 and over) Medicaid recipients, particularly non-residential, step-up and step- down treatment options.	Milestone #1: Access to Critical Levels of Care for SUD Treatment Milestone #2: Use of Evidence-Based, SUD- Specific Patient Placement Criteria Milestone #5: Implementation of Comprehensive Treatment & Prevention Strategies to Address Opioids Milestone #6: Improved Care Coordination and Transitions Between Levels of Care
3. Reduced overdose deaths, particularly those due to opioids by end of FY2024	1. Universally screen all Medicaid recipients, regardless of setting, using industry- recognized, evidence-based SUD screening instruments to identify symptoms for preventive measures and intervene as early as possible before use becomes dependence. 2. Implement American Society of Addiction Medicine (ASAM) Criteria (3rd Edition) to match individuals with SUD with the services and tools necessary for recovery. 3. Increase SUD and BH treatment options for youth (ages 12-17) and adult (18 and over) Medicaid recipients, particularly non- residential, step- up and step- down treatment options. 4. Improve SUD provider infrastructures and capacity utilizing industry-recognized standards for certification and ongoing accountability (with emphasis on residential providers, but across-the- board). 5. Improve SUD workforce by carefully reviewing existing certification requirements and modifying as appropriate to align with Medicaid, Waiver, and industry- recognized credentialing standards.	Milestone #1: Access to Critical Levels of Care for SUD Treatment Milestone #2: Use of Evidence-Based, SUD-Specific Patient Placement Criteria Milestone #3: Use of Nationally Recognized SUD-specific Program Standards for Residential Treatment Facility Provider Qualifications Milestone #4: Sufficient Provider Capacity at Critical Levels of Care Milestone #5: Implementation of Comprehensive Treatment & Prevention Strategies to Address Opioids Milestone #6: Improved Care Coordination and Transitions Between Levels of Care

6 CMS Goals/Objectives/Aims	Primary Drivers (Major domains through which Alaska may accomplish the six goals, adapted from STCs)	Secondary Drivers (from Alaska's Implementation Plan, utilizing key milestones identified by CMS)
4. Reduced utilization of emergency departments and inpatient hospital settings for SU and BH treatment where the utilization is preventable or medically inappropriate through improved access to other more appropriate and focused services by end of FY2024	1. Implement American Society of Addiction Medicine (ASAM) Criteria (3rd Edition) to match individuals with SUD with the services and tools necessary for recovery. 2. Increase SUD and BH treatment options for youth (ages 12-17) and adult (18 and over) Medicaid recipients, particularly non- residential, step- up and step- down treatment options. 3. Improve SUD provider infrastructures and capacity utilizing industry-recognized standards for certification and ongoing accountability (with emphasis on residential providers, but across-the- board).	Milestone #1: Access to Critical Levels of Care for SUD Treatment Milestone #2: Use of Evidence-Based, SUD- Specific Patient Placement Criteria Milestone #3: Use of Nationally Recognized SUD-specific Program Standards for Residential Treatment Facility Provider Qualifications Milestone #4: Sufficient Provider Capacity at Critical Levels of Care Milestone #5: Implementation of Comprehensive Treatment & Prevention Strategies to Address Opioids Milestone #6: Improved Care Coordination and Transitions Between Levels of Care
5. Fewer readmissions to the same or higher level of care where the readmission is preventable or medically inappropriate by end of FY2024	1. Implement American Society of Addiction Medicine (ASAM) Criteria (3rd Edition) to match individuals with SUD with the services and tools necessary for recovery. 2. Increase SUD and BH treatment options for youth (ages 12-17) and adult (18 and over) Medicaid recipients, particularly non- residential, step- up and step- down treatment options. 3. Improve SUD provider infrastructures and capacity utilizing industry-recognized standards for certification and ongoing accountability (with emphasis on residential providers, but across-the- board).	Milestone #1: Access to Critical Levels of Care for SUD Treatment Milestone #2: Use of Evidence-Based, SUD- Specific Patient Placement Criteria Milestone #3: Use of Nationally Recognized SUD-specific Program Standards for Residential Treatment Facility Provider Qualifications Milestone #4: Sufficient Provider Capacity at Critical Levels of Care Milestone #5: Implementation of Comprehensive Treatment & Prevention Strategies to Address Opioids Milestone #6: Improved Care Coordination and Transitions Between Levels of Care

6 CMS Goals/Objectives/Aims	Primary Drivers (Major domains through which Alaska may accomplish the six goals, adapted from STCs)	Secondary Drivers (from Alaska's Implementation Plan, utilizing key milestones identified by CMS)
6. Improved access to care for physical health conditions among beneficiaries by end of FY2024	1. Increase SUD and BH treatment options for youth (ages 12-17) and adult (18 and over) Medicaid recipients, particularly non- residential, step- up and step- down treatment options. 2. Improve SUD provider infrastructures and capacity utilizing industry-recognized standards for certification and ongoing accountability (with emphasis on Residential providers, but across-the- board). 3. Improve SUD workforce by carefully reviewing existing certification requirements and modifying as appropriate to align with Medicaid, Waiver, and industry- recognized credentialing standards.	Milestone #1: Access to Critical Levels of Care for SUD Treatment Milestone #2: Use of Evidence-Based, SUD- Specific Patient Placement Criteria Milestone #3: Use of Nationally Recognized SUD-specific Program Standards for Residential Treatment Facility Provider Qualifications Milestone #4: Sufficient Provider Capacity at Critical Levels of Care
← Causality	← Causality	

2. Questions and Hypotheses

Per the CMS guidance document *1115 Demonstration Evaluation Design Technical Assistance* (3/6/2019), the Driver Diagram that the State of Alaska Division of Behavioral Health created in the previous section of this Evaluation Design for its 1115 Waiver is intended as a framework for developing and refining evaluation questions and hypotheses. In this section, the demonstration's core evaluation questions, hypotheses, and recommended data sources and analytic approaches are presented.

Alaska's Evaluation Design includes both outcome measures and interim process measures. Per the CMS guidance document *1115 Demonstration Evaluation Design Technical Assistance* (3/6/2019), when possible, Medicaid specific metrics sets were given preference over other national sets and data, and SUD core monitoring metrics were leveraged in the evaluation as appropriate. To increase the robustness of the design, mixed methods were utilized, including both quantitative and qualitative approaches, as well as both internal pre-post comparisons and, as appropriate, comparisons between Waiver populations and state and national data.

Summary Table of Evaluation Questions, Hypotheses, and Measures

Measure Description	Data Source	Analytic Approach	Comparison Group[1]	Primary Driver[2]
Evaluation Question: Does the demonstration increase access to and utilization of substance use disorder and behavioral health disorder treatment services by increasing access to community based care?				
Evaluation Hypothesis: The demonstration will increase the number of beneficiaries in the waiver population who are referred to and engage in treatment for substance use disorder and behavioral health disorder in sub-acute, community- or regionally-based outpatient settings.				
Number of beneficiaries screened for symptoms of SUD using industry recognized, evidence-based screening instruments	Claims Data	Descriptive; Pre/post; Single-year DiD	• Beneficiaries pre-implementation • Beneficiaries in Year 2 Regions	Universally screen all Medicaid recipients, regardless of setting, using industry-recognized, evidence-based SUD screening instruments.

Measure Description	Data Source	Analytic Approach	Comparison Group[1]	Primary Driver[2]
Number of beneficiaries screened for symptoms of behavioral health disorders using industry recognized, evidence-based screening instruments	Claims Data	Descriptive; Pre/post	• Beneficiaries pre-implementation	Universally screen all Medicaid recipients, regardless of setting, using industry-recognized, evidence-based MH and SUD screening instruments.
Number of beneficiaries in the waiver population with SUD or behavioral health diagnosis, by setting	Claims Data	Descriptive; compare setting; out-of-state comparison; Single-year DiD	• Beneficiaries in Year 2 Regions • National survey (NSDUH: UDPYILAL)	N/A?
Initiation and Engagement of Alcohol and Other Drug Dependence Treatment (NQF 0004)	Claims Data	Pre/post; compare to national benchmarks; Single-year DiD	• Beneficiaries pre-implementation • Beneficiaries in Year 2 Regions • NCQA benchmarks	Increase SUD and BH treatment options for youth (ages 12-17) and adult (18 and over) Medicaid recipients, particularly non-residential, step-up and step- down treatment options.
Follow up after discharge from emergency department visits for SUD, and specifically for OUD, by setting (NQF 2605)	Claims Data	Pre/post; compare to national benchmarks; Single-year DiD	• Beneficiaries in Year 2 Regions • NCQA benchmarks	Implement American Society of Addiction Medicine (ASAM) Criteria (3rd Edition) to match individuals with SUD with the services and tools necessary for recovery.
Follow up after discharge from emergency department visits for a behavioral health disorder, by setting (NQF 2605)	Claims Data	Pre/post; compare to national benchmarks	• NCQA benchmarks	Provide treatment, rehabilitation, and support services to individuals who are diagnosed with a severe mental illness
Number of Medicaid qualified SUD providers (identified by provider ID numbers) who bill for SUD services	Administrative/provider enrollment records	Descriptive by region	• Providers pre-implementation	Improve SUD provider infrastructures and capacity utilizing industry- recognized standards for certification and ongoing accountability (with emphasis on residential providers, but across-the-board).
Number of Medicaid qualified professionals licensed in the state to provide behavioral health who bill for behavioral health disorder services	Department of Commerce, Community and Economic Development, Occupational Licensing Section Database, MMIS/ASO	Descriptive by region	• Providers pre-implementation	Improve SUD provider infrastructures and capacity utilizing industry- recognized standards for certification and ongoing accountability (with emphasis on residential providers, but across-the-board).

Measure Description	Data Source	Analytic Approach	Comparison Group[1]	Primary Driver[2]
Providers' reported barriers before, during, and shortly following expansion of BH and SUD services	Provider focus group	Qualitative synthesis & thematic analysis	N/A	
Providers' experience in expanding services.	Provider focus group	Qualitative synthesis & thematic analysis	N/A	
Administrators' reported barriers before, during, and shortly following expansion of BH and SUD services.	Administrator key informant interview	Qualitative synthesis & thematic analysis	N/A	
Administrators' plan for program sustainability and anticipated challenges.	Administrator key informant interview	Qualitative synthesis & thematic analysis	N/A	
Alaska tribal entities reported changes in quality of care and access to care following expansion of BH and SUD services	Provider focus group. Quarterly Meetings with Alaska Tribal Entities	Qualitative synthesis & thematic analysis	N/A	
Evaluation Hypothesis: The demonstration will decrease utilization of emergency department, inpatient, or institutional settings within the beneficiary population.				
Inpatient admissions for SUD, and specifically for OUD, by setting	Claims Data	Descriptive; ITS; out-of-state comparison; Single year DiD	• Beneficiaries pre-implementation • Beneficiaries in Year 2 Regions • National survey (NSDUH: TXYRHOSAD)	Increase SUD and BH treatment options for youth (ages 12-17) and adult (18 and over) Medicaid recipients, particularly non-residential, step-up and step- down treatment options. Improve SUD provider infrastructures and capacity
Inpatient admissions for behavioral health disorders, by setting	Claims Data	Descriptive; ITS; out-of-state comparison	• Beneficiaries pre-implementation • National survey (NSDUH: AUINXXX [multiple variables])	Increase SUD and BH treatment options for youth (ages 12-17) and adult (18 and over) Medicaid recipients, particularly non-residential, step-up and step- down treatment options.

Measure Description	Data Source	Analytic Approach	Comparison Group[1]	Primary Driver[2]
Emergency department visits for SUD, and specifically for OUD, by setting	Claims Data	Descriptive; ITS; out-of-state comparison; Single year DiD	• Beneficiaries pre-implementation • Beneficiaries in Year 2 Regions • National survey (NSDUH: TXYREMRAD)	Increase SUD and BH treatment options for youth (ages 12-17) and adult (18 and over) Medicaid recipients, particularly non-residential, step-up and step- down treatment options. Improve SUD provider infrastructures and capacity
Emergency department visits for a behavioral health disorder, by setting	Claims Data	Descriptive; ITS; out-of-state comparison	• Beneficiaries pre-implementation • National survey (NSDUH: NMERTMT)	Increase SUD and BH treatment options for youth (ages 12-17) and adult (18 and over) Medicaid recipients, particularly non-residential, step-up and step- down treatment options.
Mean length of stay measured from admission date to discharge date, by setting	Claims Data	Descriptive; ITS; out-of-state comparison; Single year DiD	• Beneficiaries pre-implementation • Beneficiaries in Year 2 Regions • National survey (NSDUH: NMNGTHS2)	Increase SUD and BH treatment options for youth (ages 12-17) and adult (18 and over) Medicaid recipients, particularly non-residential, step-up and step- down treatment options. Improve SUD provider infrastructures and capacity
30 day readmission rate to inpatient facilities following hospitalization for an SUD related diagnosis, by setting	Claims Data	Descriptive; pre-post; Single year DiD	• Beneficiaries pre-implementation • Beneficiaries in Year 2 Regions	Implement American Society of Addiction Medicine (ASAM) Criteria (3rd Edition) to match individuals with SUD with the services and tools necessary for recovery.
30 day readmission rate to inpatient facilities following hospitalization for a behavioral health related diagnosis, by setting	Claims Data	Descriptive; pre-post	• Beneficiaries pre-implementation	Implement American Society of Addiction Medicine (ASAM) Criteria (3rd Edition) to match individuals with SUD with the services and tools necessary for recovery.
Evaluation Hypothesis: The demonstration will increase the percentage of beneficiaries who adhere to treatment for substance use disorders and behavioral health disorders.				

Measure Description	Data Source	Analytic Approach	Comparison Group[1]	Primary Driver[2]
Number of beneficiaries with a SUD diagnosis including those with OUD who used services in the last month or year, by service or benefit type	Claims Data	Descriptive; pre-post	• Beneficiaries pre-implementation	Increase SUD and BH treatment options for youth (ages 12-17) and adult (18 and over) Medicaid recipients, particularly non-residential, step-up and step- down treatment options.
Number of beneficiaries with a behavioral health diagnosis who used services in the last month or year, by service or benefit type	Claims Data	Descriptive; pre-post	• Beneficiaries pre-implementation	Increase SUD and BH treatment options for youth (ages 12-17) and adult (18 and over) Medicaid recipients, particularly non-residential, step-up and step- down treatment options.
Time to treatment, by service type (National Behavioral Health Quality Framework [NBHQF] Goal 1)	Claims Data	Descriptive; pre-post	• Beneficiaries pre-implementation	Increase SUD and BH treatment options for youth (ages 12-17) and adult (18 and over) Medicaid recipients, particularly non-residential, step-up and step- down treatment options.
Evaluation Question: Do enrollees receiving substance use disorder services experience improved health outcomes?				
Evaluation Hypothesis: The demonstration will increase the percentage of beneficiaries with substance use disorder or a behavioral health disorder who experience care for comorbid conditions.				
Access to physical health care	Claims Data	Pre/post; compare to national benchmarks; Single year DiD	• Beneficiaries pre-implementation • Beneficiaries in Year 2 Regions • NCQA Benchmarks	Increase SUD and BH treatment options for youth (ages 12-17) and adult (18 and over) Medicaid recipients, particularly non-residential, step-up and step- down treatment options.
Screening for chronic conditions relevant to state Medicaid population	Claims Data	Pre/post; compare to national benchmarks; Single year DiD	• Beneficiaries pre-implementation • Beneficiaries in Year 2 Regions • NCQA Benchmarks	Universally screen all Medicaid recipients, regardless of setting, using industry-recognized, evidence-based SUD screening instruments to identify symptoms, preventive measures, and intervene as early as possible before use becomes dependence.

Measure Description	Data Source	Analytic Approach	Comparison Group[1]	Primary Driver[2]
Screening for co-morbidity of behavioral health and substance use disorders within the waiver population compared to the total Medicaid population	Claims Data	Pre/post; compare to national benchmarks; Single year DiD	• Beneficiaries pre-implementation • Beneficiaries in Year 2 Regions • NCQA Benchmarks	Improve SUD provider infrastructures and capacity utilizing industry- recognized standards for certification and ongoing accountability (with emphasis on residential providers, but across-the-board).
Percentage of beneficiaries who rate the quality of their health care as very good or excellent	Beneficiary survey	Descriptive; comparing institutional and community care experience, where appropriate; compare to national benchmarks	• NCQA Benchmarks	Increase SUD and BH treatment options for youth (ages 12-17) and adult (18 and over) Medicaid recipients, particularly non-residential, step-up and step- down treatment options.
Percentage of beneficiaries who rate overall mental or emotional health as very good or excellent	Beneficiary survey	Descriptive; out-of-state comparison; compare to national benchmarks	• NCQA Benchmarks • National survey data (NSDUH: HEALTH, BRFSS: GENHLTH)	Increase SUD and BH treatment options for youth (ages 12-17) and adult (18 and over) Medicaid recipients, particularly non-residential, step-up and step- down treatment options.
Percentage of beneficiaries who demonstrate very good or excellent knowledge of available treatment and services	Beneficiary survey	Descriptive; comparing institutional and community care experience, where appropriate; out-of-state comparison	• National survey data (NSDUH: NDTXDKWHR)	Increase SUD and BH treatment options for youth (ages 12-17) and adult (18 and over) Medicaid recipients, particularly non-residential, step-up and step- down treatment options.
Maternal depression[3]	CUBS	Pre/post	• Beneficiaries pre-implementation	Increase SUD and BH treatment options for youth (ages 12-17) and adult (18 and over) Medicaid recipients, particularly non-residential, step-up and step- down treatment options.
Maternal domestic abuse[4]	CUBS	Pre/post	• Beneficiaries pre-implementation	Increase SUD and BH treatment options for youth (ages 12-17) and adult (18 and over) Medicaid recipients, particularly non-residential, step-up and step- down treatment options.

Measure Description	Data Source	Analytic Approach	Comparison Group[1]	Primary Driver[2]
Percentage of beneficiaries who experienced alcoholism or mental health disorder among household members	CUBS	Pre/post	• Beneficiaries pre-implementation	Universally screen all Medicaid recipients, regardless of setting, using industry-recognized, evidence-based SUD screening instruments to identify symptoms, preventive measures, and intervene as early as possible before use becomes dependence.
Percentage of beneficiaries who witnessed violence or physical abuse between household members	CUBS	Pre/post	• Beneficiaries pre-implementation	Universally screen all Medicaid recipients, regardless of setting, using industry-recognized, evidence-based SUD screening instruments to identify symptoms, preventive measures, and intervene as early as possible before use becomes dependence.
Percentage of youth beneficiaries who have ever been physically hurt by an adult in any way	CUBS	Pre/post	• Beneficiaries pre-implementation	Increase SUD and BH treatment options for youth (ages 12-17) and adult (18 and over) Medicaid recipients, particularly non-residential, step-up and step- down treatment options.
Maternal marijuana or hash use in the past two years	CUBS	Pre/post	• Beneficiaries pre-implementation	Increase SUD and BH treatment options for youth (ages 12-17) and adult (18 and over) Medicaid recipients, particularly non-residential, step-up and step- down treatment options.
Frequency of maternal marijuana or hash use (days per week)	CUBS	Pre/post	• Beneficiaries pre-implementation	Increase SUD and BH treatment options for youth (ages 12-17) and adult (18 and over) Medicaid recipients, particularly non-residential, step-up and step- down treatment options.
Evaluation Hypothesis: The demonstration will decrease the rate of drug overdoses and overdose deaths due to opioids				

Measure Description	Data Source	Analytic Approach	Comparison Group[1]	Primary Driver[2]
Rate of overdose deaths, specifically overdose deaths due to any opioid	Vital Stats	Pre-post; out-of-state aggregate data comparison; Single year DiD	• Beneficiaries pre-implementation • Beneficiaries in Year 2 Regions • Comparison to out-of-state data	Reduced overdose deaths, particularly those due to opioids by end of FY2024
Non-fatal Overdoses (all cause)	Claims Data	Pre-post; Single year DiD	• Beneficiaries pre-implementation • Beneficiaries in Year 2 Regions	Reduced overdose deaths, particularly those due to opioids by end of FY2024
Use of Opioids at High Dosage in Persons Without Cancer (NQF 2940)	Claims Data	Pre-post; compare to national benchmarks; Single year DiD	• Beneficiaries pre-implementation • Beneficiaries in Year 2 Regions • NCQA Benchmarks	Reduced overdose deaths, particularly those due to opioids by end of FY2024
Evaluation Question: Does the demonstration reduce the cost of Medicaid for Alaska and the Federal Government?				
Evaluation Hypothesis: The demonstrations will reduce Alaska's per capita Medicaid behavioral health costs.				
Total costs of healthcare (sum of parts below), by state and federal share	Claims Data	Panel Analysis (ITS)	• Beneficiaries pre-implementation • Beneficiaries in Year 2 Regions	Increase SUD and BH treatment options for youth (ages 12-17) and adult (18 and over) Medicaid recipients, particularly non-residential, step-up and step- down treatment options.
Total cost of SUD, SUD-IMD and SUD-Other and Non-SUD, by setting (including claims data (inpatient (IP), outpatient (OT), pharmacy (RX), long-term care (LT), and capitated payments to managed care organizations)	Claims Data	Panel Analysis (ITS)	• Beneficiaries pre-implementation • Beneficiaries in Year 2 Regions	Increase SUD and BH treatment options for youth (ages 12-17) and adult (18 and over) Medicaid recipients, particularly non-residential, step-up and step- down treatment options.
Total cost of behavioral health diagnosis by IMD and Other, by setting (including claims data (inpatient (IP), outpatient (OT), pharmacy (RX), long-term care (LT), and capitated payments to managed care organizations)	Claims Data	Panel Analysis (ITS)	• Beneficiaries pre-implementation • Beneficiaries in Year 2 Regions	Increase SUD and BH treatment options for youth (ages 12-17) and adult (18 and over) Medicaid recipients, particularly non-residential, step-up and step- down treatment options.

[1]Comparison groups are not necessarily mutually exclusive. Measures that utilize beneficiaries in year 2 regions will also utilize other comparison groups in order to evaluate the full duration of the demonstration period.
[2]Primary drivers were selected as the most relevant driver for the measure. Multiple primary drivers may relate to the measure.
[3]This will be a composite measure of the following four questions from the CUBS survey (Phase 5, 2015-2018): During the past 3 months, how often have you felt down, depressed or hopeless? During the past 3 months, how often have you had little interest or little please in doing things you usually enjoyed? During the past 3 months, how often have you felt down, depressed or hopeless OR had little interest or little pleasure in doing things? During the past 12 months, did a doctor, nurse or other health care or mental health provider talk to you about depression or how you are feeling emotionally?
[4]This will be a composite measure of the following two questions from the CUBS survey (Phase 5, 2015-2018): During the past 12 months, did your husband or partner push, hit, slap, kick, choke or physically hurt you in any other way? During the past 12 months, did your husband or partner threaten you, limit your activities against your will or make you feel unsafe in any other way?

While State of Alaska Division of Behavioral Health believes that overall the above table of evaluation questions, hypotheses, and measures is sufficient, the state will also include additional evaluation measures as appropriate, and in response to stakeholder feedback on emergent issues, themes, and questions that develop during the course of the Waiver period. For instance, in addition to outcome measures, the state will be monitoring Waiver implementation over time as various interim interval points, which may allow for the reporting of process measures.

Furthermore, for a number of the measures in the table above, additional analyses by subpopulations and settings of interest may be warranted. For instance, as appropriate, such sub-populations of interest include children and youth, transitional youth, children existing in therapeutic foster care, children who are in state custody who received behavioral health services through residential child care/therapeutic foster care programs, individuals receiving service through Indian Health Services, individuals admitted to a hospital 90 days after MAT, etc. As an another example, settings of interest for additional sub-analyses may include hospitals, IMDs, residential psychiatric treatment centers, telehealth, Indian Health Services and community-based services also referred to as "other continuum of care services' (e.g., home-based family treatment, wrap-around services for children and family, school-based services, therapeutic foster care, etc.).

State of Alaska Division of Behavioral Health recognizes that program effectiveness and outcomes may vary developmentally in accordance with ample evidence collected by lifespan development researchers (e.g., Berk, 2018; Santrock, 2019). Thus, age graded analyses are appropriate as needed. Another consideration methodologically is the phase-in implementation approach to the Alaska 1115 Waiver services; in terms of its implications for evaluation, this approach affords an opportunity for additional potential comparison groups, as outcomes could be evaluated from the additional perspective of Alaska waiver regions that have implemented their waiver services vs. Alaska waiver regions that have yet to implement their waiver services.

C. Methodology

1. Evaluation Methodology

The Evaluation of Alaska's 1115 Waiver has several goals:

a) Describe progress made on implementation of specific waiver activities (e.g., those noted in Alaska's 1115 Waiver application and STCs)
b) Demonstrate changes and accomplishments regarding the Alaska 1115 Waiver's key milestones and domains (i.e., interim monitoring as required and needed during the Waiver period)
c) Demonstrate progress towards meeting the state and federal goals/objectives/aims of Alaska's 1115 Waiver
d) Evaluate Alaska 1115 Waiver questions and hypotheses with appropriate data, measures, and analyses
e) Design, collect, and analyze sufficient and appropriate data with sound methods for production of required reporting to CMS, such as the Mid-Point Assessment, the Interim Report, and the Summative Draft and Final Evaluation Reports.

Due to the target populations included in the Demonstration, a combination of evaluation design approaches is warranted. Though a true experimental design (Randomized Controlled Trial/RCT) is

considered the "gold standard approach to establishing causality" (Contreary, Bradley, & Chao, 2018), such a design is not feasible or ethical for evaluation of the 1115 Waiver (for example, ethically, one should not deny services to a substance use client by randomly assigning such persons to a control group that receives no therapeutic treatment). Instead, a mixed-methods approach with both quantitative and qualitative components and multiple data types and sources is the most robust and appropriate design to assess the effectiveness of Alaska's 1115 Waiver. Data sources include administrative data such as Medicaid claim and encounter data, electronic health record data (EHR) from AKAIMS (Alaska Automated Information Management System), State Psychiatric Hospital data, and HEDIS-style data. Additionally, data from national data sets such as the BRFSS, YRBSS and NSDUH (SAMHSA) will be utilized as appropriate for additional comparisons between Alaska data and national and other state data. Qualitative data will also be collected and analyzed, including document review and surveys/interviews conducted with beneficiaries, providers, administrators and other stakeholders, such as Tribal Entities/Interests.

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 methodology is selected based on data availability factors relating to: (1) data to measure the outcomes; (2) data for a valid comparison group; and (3) data during the time periods of interest—typically defined as the year prior to implementation and annually thereafter. The Sampling of Analytic Approaches table illustrates a sampling of standard analytic approaches and whether the approach requires data gathered at the baseline (i.e., pre-implementation), requires a comparison group, or allows for causal inference to be drawn. It also notes key requirements unique to a particular approach.

Sampling of Analytic Approaches

Analytic Approach	Baseline Data	Comparison Group	Allows Causal Inference	Notes
Randomized Controlled Trial		✓	✓	Requires full randomization of intervention and comparison group.
Difference-in-Differences	✓	✓	✓	Trends in outcomes should be similar between comparison and intervention groups at baseline.
Panel Data Analysis	✓		✓	Requires sufficient data points both prior to and after implementation.
Regression Discontinuity		✓	✓	Program eligibility must be determined by a threshold
Interrupted Time Series	✓		✓	Requires sufficient data points prior to and after implementation.
Pre-test/post-test	✓			
Cross-Sectional Analysis		✓		

For most core analyses, a pre-post design will be utilized, using the pre-demonstration period as a baseline when possible, and then using the first year as a baseline for those cases where no

equivalent pre-demonstration data are available due to the nature of the specific target population or other practicalities. In addition to analysis of baseline and endpoint data, interim assessments and evaluations of progress may be conducted at multiple observation points between these two start and end positions. The timing of the data collection periods will vary depending on the data source, the reporting requirements and needs, and information that emerges during the course of the evaluation, such as continuous quality control needs and queries from stakeholders, including from other agencies, divisions, and/or the ASO (Administrative Services Organization).

2. Target and Comparison Populations

The target population for the Evaluation Design is the population served by the Alaska 1115 Waiver for Substance Use Disorder- Behavioral Health Program (SUD-BHP). In particular, the waiver (and thus the evaluation of the waiver) focuses on three groups. Group 1 are Children, Adolescents and their Parents or Caretakers with, or at risk of, Mental Health and Substance Use Disorders. Individuals in this target population include, but are not limited to, those who are currently in the custody or under the supervision of the Alaska Department of Health and Social Services' Office of Children's Services, the Division of Juvenile Justice, or in tribal custody; formerly in kinship care, foster care, or residential care; and at risk of an out-of-home placement. Group 2 are Transitional Age Youth and Adults with Acute Mental Health Needs. As appropriate, since the Waiver covers some behavioral health program benefits shared by both Group 1 and Group 2, for such analyses, data for these groups may be combined for analysis. Finally, Group 3 are Adolescents and Adults with Substance Use Disorders. These Group 3 individuals are adults, adolescents, and children between 12 and 64 years of age who have at least one diagnosis from the Diagnostic and Statistical Manual of Mental Disorders (DSM-5 or the most current version of the DSM) for substance-related and addictive disorders.

As noted by Reschovsky and Bradley (2019) "selecting a valid comparison group is arguably the most critical aspect of planning a quasi-experimental evaluation design" (p. 4). Comparison population groups in the Alaska 1115 Waiver Evaluation Design will vary as appropriate and in keeping with best practices for such evaluation designs. For some analyses the target population will serve as its own comparison group, as in pre-post design analyses, and variations on pre-post analyses that utilize multiple observation points. For other analyses, additional comparison groups will be identified as needed. For example, to increase the robustness of the evaluation design, and to permit analyses when within state comparison groups are not available or feasible, comparisons with national data and data from other states will be utilized.

Among considerations when choosing non-Alaska comparison groups, will be pragmatic issues such as the feasibility and ability to access the comparison group data within a reasonable timeframe and in a usable format, and methodological issues, such as whether a comparison group based on data from another state shares sufficient similarities to Alaska, in terms of population size and demographics, rurality, geography, size of Native population, economic and political climate, etc. Additionally, since the Alaska 1115 Waiver (SUD-BHP) utilizes a phased implementation, other opportunities for analysis and comparison are presented with within state data between regions and services that are phased in and those that not yet phased in. As noted in the 3/6/2019 1115 ED Technical Assistance document, "if the implementation is phased in, late implementation groups can be used as comparison groups for early implementation groups" (SUD Section 1115 Demonstration Evaluation Design Technical Assistance, 3/6/2019, p. 13). Together, this broad range of comparative population possibilities provides ample opportunity and sufficient sample sizes for in-depth analysis of the effectiveness of the Alaska 1115 Waiver from multiple

perspectives and approaches.

The following outlines the selection of approaches that will be considered for identifying comparison groups and subsequent analytic methodologies in general order of preference.

1. Utilizing data from other states provided through the national Transformed Medicaid Statistical Information System (T-MSIS) data repository.
2. Out-of-state comparison group, resulting from aggregated data sharing agreement with other states.
3. Beneficiaries in-state residing in regions that have yet to roll-out services.
4. Utilize national survey data to triangulate in-state findings with out-of-state findings.
5. Comparison to pre-demonstration outcomes and/or to national benchmarks where appropriate.

Under all approaches, Year 1 of the demonstration would be treated as a ramp-up period due to the staged roll out.

To best isolate the effects of the demonstration, HSAG will first seek to leverage beneficiary-level data from the Transformed Medicaid Statistical Information System (T-MSIS) maintained and collected by the Centers for Medicare & Medicaid Services (CMS). It is expected that T-MSIS will provide microdata containing information on eligibility, enrollment, demographics, and claims/encounters, which will support individual-level matching to Alaska beneficiaries. However, these data are not yet available, and HSAG is prepared to rely on alternative data sources for the comparison group. If these data become available in time for the summative evaluation report, HSAG will examine the completeness and viability of using these data in the analyses. With robust beneficiary-level data covering the baseline period and multiple years during the demonstration period (if not the entire demonstration period), more robust methods can be employed to estimate the effect of the demonstration on outcomes. Measures that utilize administrative claims/encounter data or enrollment and eligibility data may use methods such as propensity score matching, reweighting, or stratification to construct a valid out-of-state comparison group.

The second strategy utilizes an out-of-state comparison group to serve as the counterfactual for Alaska beneficiaries. The comparison group would be constructed from one or more states as similar to Alaska as possible and does not have a similar SUD 1115 waiver program. Similarity to Alaska will be identified in terms of overall demographics and Medicaid programs and policies. In addition to sharing demographic factors and similar Medicaid policies, comparison state(s) should not have a major change in Medicaid policies during either the baseline or evaluation period. Selection of states will be conducted on a measure-by-measure basis depending on the available data and state willingness to share data. In HSAG's experience, aggregate data sharing agreements are more likely to be concluded than de-identified claim- or individual-level data. In the event that data sharing agreements cannot be concluded with other states or that T-MSIS data is unavailable for the evaluation additional strategies would be employed.

Under the third approach, while comparing the target population to in-state beneficiaries through the staged roll out is a potentially strong design, there are three key limitations to this approach. First, only one year of the demonstration period will be able to leverage this approach, as all regions will have implemented the demonstration activities by the end of Year 2. Second, there are likely to be substantial differences between the various regional populations as the phased roll out is done by region. Specifically, rural/frontier regions would end up serving as the comparison group for more urban municipalities. To mitigate this issue, propensity score matching, or reweighting can be used to construct a valid comparison group based on any existing similarities. For example, individuals living principally in larger cities and towns in regions that have yet to

implement certain phases (e.g., Fairbanks) may be given a higher weight or used exclusively through a match on urbanicity. Finally, not all measures would be impacted uniformly by the phased-in approach, since, according to the SUD implementation plan, some services will be implemented only in one year or only for a certain subset of regions To mitigate this issue, some measures will not benefit from this strategy, and others would be caveated that partial effects are expected. The revised Measure Table includes an option for an in-state comparison group for measures where appropriate.

The fourth comparison strategy involves triangulating results from claims-based measures and beneficiary survey responses to national survey metrics to provide a broader context within which results may be more effectively interpreted. For example, measures of emergency department visits for SUD/OUD using claims data may be compared to rates from the National Survey on Drug Use and Health (variable TXYRERDRG, or NMERTMT2). This would provide a sense as to how rates for Alaska tracked against similar measures nationally over time. Where possible, statistical controls will be employed to account for observable differences between Alaska beneficiaries and beneficiaries nationally. Such controls would include age, gender, and race/ethnicity. The population, where feasible, will be limited to respondents on Medicaid (NSDUH variable CAIDCHIP) with past drug/alcohol use (variable DPPYILLALC).

The final strategy compares changes in rates after implementation of the demonstration to national benchmarks. Similar to national survey data, this will provide a sense as to how rates for Alaska tracked against the same measures nationally. With multiple data points both before and after implementation of the SUD waiver, comparisons can be made in a difference-in-differences framework. HSAG will utilize the most granular data available, such as at the health plan level. The level of granularity will determine the extent to which statistical testing can be performed. Where possible, health plans from states as similar to Alaska as possible will be selected for comparison.

3. Evaluation Period

The 1115 Waiver period covers FY2019 through FY2024. Annual Monitoring Reports are due to CMS on 03/31/2020, 04/01/2021, 04/01/2022, 04/03/2023, and 03/31/2024. The Behavioral Health Demonstration- Draft Interim Report is due 12/30/2022. The SUD Draft Summative Evaluation Report is due 6/30/2025. Data to be used for the evaluation will span the entire Demonstration period from FY2019 through FY2024. As methodologically appropriate and needed, for target population groups where comparable pre-demonstration data are available, retrospective data from prior to the start of the 1115 Waiver period will be used for comparative purposes. Similarly, where comparable target- population specific data from other states may be available and methodologically appropriate, data from the Alaska 1115 Demonstration Waiver period, and as needed, from prior to the onset of the Waiver period, will be analyzed.

4. Data Sources and Collection Plan

Aligned with best practices in research methods, this evaluation will include multiple sources and forms of both qualitative and quantitative research methods and data to effectively and comprehensively evaluate Alaska's 1115 Demonstration hypotheses. Utilizing both types of data, and a range of relevant data sources, will permit a more carefully considered assessment of the impact of Alaska's waiver than reliance on any one type of method or data source alone (Bernard, Wutich, & Ryan, 2012). As Reschovsky, Heeringa, and Colby (2018) astutely note "quantitative evaluation results should be triangulated with results from qualitative analyses, which can validate

and add depth to the interpretation of quantitative impact evaluation results" (p. 19). Thus, among the data sources that will be included in the Alaska Evaluation Design are: administrative data (e.g., Medicaid claims), survey data (including use of national, state, and regional level data sets for comparative purposes), interview data (including semi-structured interviews with providers and beneficiaries designed specifically for this Waiver evaluation), and documentation and data from providers (e.g., quarterly reports and data from AKAIMS, Alaska's Automated Information Management System).

The section below offers detailed descriptions of the various data sources proposed for this 1115 Evaluation Design.

Administrative Data

State of Alaska's 1115 Waiver Evaluation Design will utilize several sources of administrative data to best assess the impact of its Waiver Demonstration on relevant processes and outcomes and to address the stated hypotheses. The major sources of Administrative Data for the Waiver are Medicaid claim and encounter data, electronic health record (EHR) data from AKAIMS (Alaska Automated Information Management System), state psychiatric hospital data, and HEDIS-style data.

Medicaid Management Information System

The Medicaid Management Information System (MMIS) is the repository for all State-based Medicaid claims and encounter data, per CMS standards. Among the information contained therein are service utilization data, types of care provided, payments per service, health care visits, diagnoses, procedures, service setting, service dates, etc. Additionally, MMIS includes information regarding client demographics, such as age, race/ethnicity, eligibility/enrollment and geographic location. Data on provider characteristics such as type, specialty, and geographic location (which will permit identifying location relative to the nine Alaska 1115 Waiver regions), will aid in the Alaska 1115 Evaluation Design. Among the types of measures that can be evaluated utilizing this data source are:

a) Utilization per 1000 beneficiaries in the waiver population of subacute professional services and community settings such as community behavioral health clinics for behavioral health diagnoses
b) Number of unique beneficiaries in the waiver population with SUD or BH diagnosis, by setting
c) Total cost of telehealth claims for beneficiaries in the waiver population with SUD or BH diagnosis
d) Utilization per 1000 beneficiaries in the waiver population of inpatient and institutional settings (including residential psychiatric treatment centers, hospital settings and Institutes for mental disease) for substance use diagnoses
e) Number of individuals in the beneficiaries in the waiver population who are hospitalized for a substance use disorder within 90 days of receiving MAT services
f) Number of children in state custody and receiving behavioral health services through residential child care/therapeutic foster care programs
g) Screening for chronic conditions such as diabetes within the waiver population
h) Total costs of healthcare (behavioral health and non-behavioral health) on a per recipient basis (Waiver vs. non-waiver population)

Data Limitations

While the use of Medicaid claims data has strengths that are desirable to include in the evaluation design, they each have weaknesses as well which are important to understand within the context of the evaluation. For example, the claims/encounter data used to calculate performance metrics are 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 may be 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/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. A complete description of the limitations associated with Medicaid claims data is provided in Section D: Methodological Limitations.

HSAG has substantial experience in cleaning, validating, and transforming data suitable for analysis, including using claims data for cost analyses. The exact data validation processes will vary across the specific data sources to be used for the evaluation, depending on the nature of the data being evaluated. Data are generally assessed through:

- **Completeness**: The completeness of data is assessed through the degree to which required fields or measures are fully populated with data. Data that are reported as Not Available or Not Reportable may be considered complete depending on the specific nature of the data fields.
- **Validity**: The validity of data sets is assessed through the degree to which data are clinically and mathematically within required constraints. Data fields will be verified to ensure they are within an appropriate and credible range through a comparison of values to valid value tables as well as national and regional averages as appropriate to the data field.
- **Reliability**: The reliability of the data is assessed through the degree to which equivalent fields in different data sets contain the same information. This will involve performing cross-field checks, ensuring that data fields and data sets contain similar values where appropriate.
- **Comprehensiveness**: The comprehensiveness of data sets is assessed through the degree to which required fields or measures are present in the data. When required measures or data are not present, additional data may be requested.

Alaska Automated Information Management System

The goal of the Alaska Automated Information Management System (AKAIMS) project is to develop, implement, and maintain an evolving, web-based application and database that serve the dual purpose of a management information system (MIS) and an electronic medical record (EMR) . As an MIS reporting tool, the system allows the State of Alaska Division of Behavioral Health to meet current and emerging state and federal reporting requirements, such as state quarterly reporting, Treatment Episode Data Set (TEDS), Government Performance and Results Act (GPRA), both of SAMHSA's Block Grants (Mental Health- MHBG and Substance Abuse- SABG) and the National Outcome Measurements (NOMs). Data collected include data on client diagnoses and clinical conditions/issues, demographics, agency provider and location, types of services (such as special programs or evidence-based practices) provided, and more. AKAIMS will permit the State of Alaska to assess several of the indicators it has proposed as part of its 1115 Waiver Evaluation Design plan. The AKAIMS system is flexible and open- ended by design so that new data fields representing new information of relevance can be added to the system via programming by State of Alaska AKAIMS data team and its subcontractors as needed. Among the types of data relevant to the 1115 Waiver that may be assessed via AKAIMS data include information on:

a) Number of beneficiaries in the community behavioral health clinic population beneficiaries with a positive employment status
b) Number of beneficiaries in the community behavioral health clinic population beneficiaries with a positive housing status
c) Number of beneficiaries in the community behavioral health clinic population beneficiaries with a positive drug use status

National Survey Data

To best evaluate Alaska's 1115 Waiver, national survey data will also be utilized as part of the Evaluation Design. As Daly, Kazi, and Bradley (2019) note "Surveys are the recommended data source for many research questions in CMS's policy-specific evaluation design guidance" (p. 21). Additionally, Reschovsky, Heeringa, & Colby (2019) note the potential value of utilizing national data sets in conjunction with state level subsets from national surveys as part of 1115 Evaluation Designs. The national data sets Alaska anticipates utilizing to conduct state-level analyses include the BRFSS, YRBSS, and NSDUH surveys. Additionally, the Alaska CUBS survey will be leveraged for further data support. Combined with data and evidence from other sources, utilizing these national and state survey sources will help ensure Alaska's 1115 Waiver Evaluation Plan is both cost-effective and robust.

Behavioral Risk Factor Surveillance System

The Behavioral Risk Factor Surveillance System (BRFSS) developed by the CDC (Centers for Disease Control and Prevention) is a health-focused telephone survey that collects state and national data about U.S. residents concerning their health-related risk behaviors, chronic health conditions, and use of preventive services. The BRFSS now collects data in all fifty states, the District of Columbia and three U.S. Territories, permitting comparison across time and between states. Overall, BRFSS completes over 400,000 surveys annually, with approximately a one to two-year lag. CDC supports BRFSS in Alaska, and the potential to add specialty modules, or questions, or to create new Alaska specific questions is provided annually, should the State wish to implement additional data or questions. Categories of BRFSS questions relate to various chronic diseases, including physical conditions (such as diabetes, arthritis, cardiovascular disease, and cancer) and mental health. The Alaska BRFSS also asks questions regarding a range of risk factors, from adverse childhood experiences, alcohol, tobacco, and substance use to issues regarding suicidal ideation, exercise and overweight/obesity and preventive health care. BRFSS data from prior to the implementation of the 1115 Waiver can serve as baseline data to which to compare BRFSS data annually after 1115 Waiver implementation. Additionally, Alaska will find it helpful to compare Alaska BRFSS data with national BRFSS survey data and with BRFSS survey data from select comparison states to offer an additional method by which to assess state progress and potential Waiver impact. BRFSS data currently inform a range of projects at State of Alaska, including SAMHSA grant reporting.

Youth Risk Behavior Factor Surveillance System

The Youth Risk Behavior Factor Surveillance System (YRBSS) developed by the CDC (Centers for Disease Control and Prevention) is a state and national school-based survey developed in 1990 to monitor health behaviors that contribute markedly to the leading causes of death, disability, and social problems among youth and adults in the United States. YRBSS includes a national school-based survey conducted by CDC and state, territorial, tribal, and local surveys conducted by state,

territorial, and local education and health agencies and tribal governments. Every two years, the YRBSS surveys representative samples of 9th through 12th grade students; and from 1991 through 2017, YRBSS has collected data from over 4.4 million high school students. According to the CDC, the Youth Risk Behavior Surveillance System (YRBSS) monitors six categories of health-related behaviors that contribute to the leading causes of death and disability among youth and adults. These behaviors, often established during childhood and early adolescence, include: behaviors that contribute to unintentional injuries and violence; sexual behaviors related to unintended pregnancy and sexually transmitted diseases, including HIV infection; alcohol and other drug use; tobacco use; unhealthy dietary behaviors; and inadequate physical activity. YRBSS also measures the prevalence of obesity and asthma and other health-related behaviors. The YRBSS is typically conducted once every two years (Spring semester of odd-numbered years) and results are released the following year in the Summer. CDC supports YRBSS in Alaska, and the potential to add specialty modules, or questions, or to create new Alaska specific questions is provided every two years, should the State wish to implement additional data or questions. YRBSS data from prior to the implementation of the 1115 Waiver can serve as baseline data to which to compare YRBSS data after 1115 Waiver implementation. Additionally, Alaska will find it helpful to compare Alaska YRBSS data with national YRBSS survey data and with BRFSS survey data from select comparison states to offer an additional method by which to assess state progress and potential Waiver impact. YRBSS data currently inform a range of projects at State of Alaska, including SAMHSA grant reporting, such as indicators for its Block Grant.

National Survey of Drug Use and Health

The National Survey of Drug Use and Health (NSDUH) is a SAMHSA (Substance Abuse and Mental Health Administration) sponsored comprehensive household survey of substance use, substance use disorders, mental health and the receipt of treatment services for those disorders. NSDUH data are collected via face to face interviews and include the civilian, noninstitutionalized population aged 12 and over (including household, university dormitories, sheltered homeless, civilians on military bases but excluding active military, prison populations, unsheltered homeless, and long-term hospital residents). All 50 states and the District of Columbia are surveyed, with over 67,000 interviewed annually. Questions focus on substance use and mental health issues and can help guide policy decisions with evidence-based information regarding problem substances, mental illness prevalence, co-occurring mental health and substance misuse conditions. NSDUH public use data are reported annually, with periodic release of state level data, as well as regional within-a-state level data released as restricted use data files. Restricted data files are released after approximately a two-year lag. Utilizing state-level and regional- level NSDUH data can allow Alaska to better assess the state status and progress in terms of a range of mental health and substance use issues, and can permit comparisons both in time (longitudinal and pre- post data) and in place (such as comparisons between Alaska data and national or selected state data). Selecting a comparison group or state for analysis is an involved, multi-faceted process, including considerations of state demographics (e.g., age distribution, race/ethnicity), overall population size and geography (e.g. rural vs. urban), economic conditions, etc. (e.g., Reschovsky, Heeringa, & Colby, 2019), and a range of comparisons must be made sensibly, each with advantages and disadvantages depending upon the comparison group(s) selected. However, since the NSDUH data are freely accessible, utilizing these data sets is a cost-effective and appropriate method by which to supplement the State's Evaluation Design and several comparison groups can be assessed as needed. NSDUH data currently inform a range of projects at State of Alaska, including SAMHSA grant reporting, such as indicators and information for its Block Grant and specialty grants.

Alaska Childhood Understanding Behaviors Survey (CUBS)

Alaska CUBS is a program designed to find out more about the health and early childhood experiences of young children in Alaska. CUBS collects information by conducting a follow-up survey to the Alaska version of the CDC-developed Alaska Pregnancy Risk Assessment Monitoring System (PRAMS). PRAMS sends a survey to approximately one of every six mothers of newborns in Alaska, and CUBS is an Alaska specific program through the Division of Public Health that sends a follow-up survey three years later to all mothers who completed PRAMS and are still living in Alaska. CUBS asks questions about both the mother and her child. The CUBS program began sending out surveys in 2006, and the annual sample size is approximately n=600. There is a question on the survey asking whether or not the participant receives Medicaid or not, which will permit useful comparison data for purposes of evaluating the CMS Alaska 1115 Medicaid Waiver. CUBS program is federally funded by the Title V, MCH Block Grant. CUBS collects information related to toddler behavior, health, health care access, parenting, and school readiness. By using the methodology of re-interviewing mothers who completed a PRAMS survey, CUBS is able to evaluate those factors present at birth or early life that increase risk for later adverse childhood outcomes. The goal of CUBS is to provide data related to the health and well-being of Alaskan toddlers. These data are provided to public health, health-care and education professionals across Alaska to assist them in improving child health. Child-focused topics on CUBS include: current height and weight; nutrition and eating habits; general and specialized health care utilization and access, including dental care; child care and barriers to use of child care; parenting behaviors; immunizations; safety; and development and behaviors.

Other Data Sources

In addition to the BRFSS, YRBSS, NSDUH, and CUBS surveys, Alaska also plans to utilize additional administrative and archival data as needed and appropriate. Examples of other data sources include:

- State of Alaska Division of Public Health, Epidemiology Alaska Violent Death Reporting System (AKVDRS), which tracks violent deaths from multiple sources, including toxicology,
- State of Alaska Division of Public Health, Health Analytics and Vital Records (HAVR), which reports demographics and causes of death for all reported deaths in Alaska, including injury deaths
- Alaska Prescription Drug Monitoring Program (PDMP), which tracks prescribing trends (individual and statewide), including information on each prescription dispensed for a federally scheduled Ii-IV controlled substance
- Alaska's Opioid Data Dashboard, which reports monthly and annual trends in relevant opioid indicators for Alaska from a range of agencies and divisions, including data from Public Health, Behavioral Health, criminal justice, and OSMAP (Office of Substance Misuse and Prevention)
- Department of Commerce, Community and Economic Development, Occupational Licensing Section Database, which will assist Alaska in evaluating trends and anticipated growth regarding workforce development in relevant health-related professions
- Alaska Epidemiological Profile ("Consumption and Consequence"), which is produced each year by the State Epidemiology Workgroup (SEW) and reports on a veritable plethora of data regarding Alaska's behavioral health, including substance use and mental health (Hull-Jilly & Rich, 2019)

Stakeholder Surveys and Interviews

Typically survey and interview data are utilized to gather information that is not possible to be obtained via administrative data (such as Medicaid claims) or observational data (such as fieldwork in naturalistic settings). Thus surveys and interviews are especially valuable in assessing stakeholders' cognitions, perceptions, attitudes, emotions, and satisfaction regarding select topics and issues. Additionally, the nature of surveys and interviews permits semi-structured and open-ended assessment that can reveal stakeholders' views and perceptions more fully, and in more nuanced ways, than forced- choice closed ended questions or administrative data (e.g., Bernard, 2016; Creswell & Creswell, 2018; Rich, 2016).

Three groups of stakeholders will be surveyed or interviewed: 1) Medicaid beneficiaries, 2) Division of Behavioral Health subrecipient providers, and 3) State of Alaska Department and Health and Social Services and Division of Behavioral Health administrators, managers, and employees involved with 1115 Waiver implementation, including individuals representing the ASO (Administrative Services Organization).

Beneficiary Surveys

First, beneficiaries will be surveyed regarding their improvements in care coordination and integration, experiences with ease of access to health care, care quality, health improvements. Interviews will be conducted with a sample of beneficiaries from each of the nine Alaska Waiver regions. Utilizing questions from the Consumer Assessment of Healthcare Providers and Systems (CAHPS®)14 as a baseline and supplemented by several additional questions tailored to this 1115 Waiver, beneficiary surveys will assess client satisfaction, access to care, and health. Supplemental questions will be drawn from existing surveys such as the State of Alaska Division of Behavioral Health Consumer Survey, which is Alaska's version of SAMHSA's Mental Health Statistics Improvement Program (MHSIP) survey. Utilizing several of these pre-existing survey questions will permit further ability to examine trends and Waiver impact in a manner that will permit more reliable and valid comparisons and assessments than if entirely new questions were developed. Additionally, State of Alaska proposes to utilize data from Member Satisfaction Surveys provided by DBH's ASO (Administrative Service Organization) regarding quarterly and annual performance targets on client satisfaction with services to further assess beneficiary experiences.

Two rounds of surveys will be conducted during the course of the demonstration. The first will be fielded in Q1 of 2021 and the second will occur in the first half of 2023. Up to 2,000 surveys will be sent each to the child and adult populations in each round. Stratified random sampling will be conducted by region, urbanicity, and other relevant characteristics to construct a statistically valid sample that will allow for valid analyses at a number of demographic and geographic levels, to identify how the impacts of the program may vary across the State. Since stratified random sampling creates stratifications disproportionate to the overall statewide beneficiary demographics, rates will be weighted to adjust for proportionality when calculating aggregate rates. Completed surveys will be evaluated to identify the extent of any response bias across measurable provider demographic characteristics. Weighting will also be used to correct for any identified nonresponse bias. HSAG will work with DBH to streamline survey administration to minimize the number of surveys required, thereby minimizing the burden on beneficiaries and providers as well as maximizing response rates. To maximize response rates, HSAG may employ a

[14] CAHPS is a registered trademark of the Agency for Healthcare Research and Quality.

mixed-mode methodology (e.g., telephone and mail) for survey data collection. The addition of email reminders, when data are available, or pre-notification letters to beneficiaries, has been shown to increase response rates and will be incorporated into survey administration. Mode of administration of survey or interview assessment (such as in-person vs. phone vs. mail) is an important consideration methodologically, with implications for costs, data integrity, response rates, response bias, and attrition (Sudman, Bradburn, & Wasnick, 2004; Tourangeau, Rips, & Rasinski, 2000).

Sample survey items/interview questions/issues may include the following topics:

1. How/Whether the beneficiary rates the quality of their health care as very good or excellent
2. How/Whether the beneficiary rates overall mental or emotional health as very good or excellent
3. How/Whether the beneficiary rates their behavioral health as very good or excellent in each year of the waiver period
4. How/Whether/to what degree the beneficiary demonstrates knowledge of available treatment and services
5. (For children in such settings): How/Whether the child rates their progress as very good or excellent upon exiting therapeutic foster care settings

Provider Focus Groups

Second, provider interviews will be conducted with approximately 30 providers distributed across Alaska's nine 1115 regions, and will focus on documenting providers' experience with care coordination and integration as well as quality of service provision during the Alaska 1115 demonstration. Additionally, provider questions will assess perceptions of the impact of Health Information Technology (HIT) in providing patient care and management. Sample interview questions may include the following topics:

1. Tell me about your experience with some of the new programs and services? How have the new programs and services expanded treatment capacity? How have they improved access to care? How has care quality changed?
2. Are you/your agency using wrap-around services? Evidence-based practices? Home-based care? Describe your experiences.
3. What have been some of the successes regarding these new programs or services? What have been some of the challenges?
4. What have been some of the barriers regarding information sharing between providers?
5. Tell me about your experience with how changes and reforms in the delivery system have impacted your/your agency's efforts?
6. Describe how your system has changed with respect to integration of care?
7. Describe your experience with the changes regarding costs, payment and accountability reforms?
8. What types of assistance/support would be helpful to you as you continue to move forward with your integration efforts?
9. Is there anything else you'd like to mention?

Provider interviews will be conducted either face-to-face or via telephone and will last approximately 45 to 60 minutes. Interviews will be recorded after provider permission, and pseudonyms will be utilized to ensure participant confidentiality. Recordings will be transcribed verbatim. Interviews will be conducted by the independent evaluator and the state will not have access to the recordings, which will be destroyed after transcription.

Key Informant Interviews

Third, in addition to beneficiary and provider interviews, interviews with administration and other stakeholders will also be conducted to best offer a holistic overview of the impact of the 1115 Waiver from a range of perspectives. Semi-structured interviews will be conducted with two DBH program managers per Alaska 1115 region, along with interviews from those representing the State's administration/managerial team, two representing the fiscal implementation, two representing the data/research implementation, and two representing the program/clinical implementation.

The interview will include such questions/topics as:

1. Thus far, what were the successes regarding the 1115 Demonstration Waiver implementation from your perspective? What were the challenges? (For fiscal managers only, also ask this question specifically regarding experiences with cost, provider payment and accountability reform)
2. What are the major changes you see in Alaska's capacity to serve SU and MH populations since the implementation of the 1115 waiver?
3. How have the 1115 Waiver programs impacted care integration, access to services, and treatment capacity in your view? How has care quality changed?
4. From your perspective, what is the plan for program sustainability? What are the challenges associated with ongoing program maintenance and expansion and required policy changes?
5. What strategies were most effective in implementing the 1115 so far in your view?
6. What have been the effects of changes in HIT (Health Information Technology) for patient care, ongoing monitoring, and care coordination as well as for program management?
7. Is there anything else you'd like to mention?

Administrator/Other Stakeholder interviews will be conducted either face-to-face or via telephone and will last approximately 45 to 60 minutes. Interviews will be recorded after participant permission, and pseudonyms will be utilized to ensure participant confidentiality. Recordings will be transcribed verbatim. Interviews will be conducted by the independent evaluator and the state will not have access to the recordings, which will be destroyed after transcription.

5. Analytic Methods

As suggested in the 3/6/2019 1115 ED Technical Assistance document, as recommended by CMS, State of Alaska Division of Behavioral health will utilize a mixed methods evaluation design, collecting both qualitative and quantitative data and applying descriptive and impact analyses (SUD Section 1115 Demonstration Evaluation Design Technical Assistance, 3/6/2019, p. 15). The range of Alaska Waiver goals, aims and objectives and evaluation questions and hypotheses requires the use of both quantitative and qualitative data analytic methods. Alaska's 1115 Waiver Evaluation Design is created to comply with conventional standards for best practices in terms of scientific and academic standards of rigor, with ample attention devoted to ensuring the design is also practical, feasible and appropriate for the Alaska Waiver in terms of design, data analysis, and interpretation and reporting.

a. Qualitative Analyses

Qualitative analyses include a range of non-numerical methods, including interviews, focus groups, field observations, and document review of archival and other materials (Bernard, 2016; Creswell & Creswell, 2018; Rich, 2016). As noted in the 1115 ED Technical Assistance document, "The objective of these types of analyses is to understand and document the demonstration design, implementation and ongoing operations to support the design and interpretation of quantitative descriptive and impact analyses" (SUD Section 1115 Demonstration Evaluation Design Technical

Assistance, 3/6/2019, p. 15). Such type of analyses often permit the type of rich "thick description" described by social anthropologists (e.g., Geertz, 2000, 2013) and allow the presentation of phenomenological data from the perspective of lived experience of the participants, giving voice and empowerment to diverse populations and stakeholders (e.g., Creswell & Creswell, 2018; Rich, 2016; Wertz, Charmaz, McMullen, Josselson, Anderson, & McSpadden, 2011). Qualitative methods are typically the preferred method for collecting in-depth data that cannot be collected or reduced to closed-ended surveys or numeric data or estimates.

For its 1115 Evaluation Design, State of Alaska Division of Behavioral Health will utilize a range of qualitative methods, including interviews, focus groups, and document review. Open-ended questions will be used to maximize the diversity and richness of responses and ensure a more holistic understanding of the subject's experience. Probing follow-up questions will be used as appropriate to elicit additional detail and understanding of critical points, terminology, and perspectives. The sessions will be recorded and transcribed with participant consent. Qualitative methods will also be used to analyze these responses. Interviews are especially valuable in assessing stakeholders' cognitions, perceptions, attitudes, emotions, and satisfaction regarding select topics and issues, and to gather information not possible to be obtained via other means (such as Medicaid claims). Alaska plans interviews with three groups of stakeholders: 1) Medicaid beneficiaries,

2) Division of Behavioral Health subrecipient providers, and 3) State of Alaska Department and Health and Social Services and Division of Behavioral Health administrators, managers, and employees involved with 1115 Waiver implementation. Section C.4 Data Sources of this 1115 Evaluation Design provides additional information on the State's intended process for sample selection and stratification, sample size, qualitative analysis approach, and sample interview questions/topics. Sampling decisions are determined to fit appropriate methodological considerations for qualitative data, and were determined after consideration of other approved State 1115 Waiver Evaluation Designs and best practices for qualitative research, such as qualitative sample sizes proportionally in line with population size, such as relates to the potential to reach saturation points with adequate sampling, and to ensure appropriate representation of intended populations (Creswell & Creswell, 2018).

The information obtained from these focus groups and interviews will be synthesized with the results from other quantitative data analyses providing an in-depth discussion of each of the domains/objectives to be considered. As the key informant interviews are being conducted, HSAG will perform ongoing and iterative review of the interview responses and notes to identify overall themes and common response patterns. Unique responses that are substantively interesting and informative will also be noted and may be used to develop probing questions for future interviews. The results of these preliminary analyses will be used to document the emergent and overarching

themes related to each research question. The documentation of emergent themes will be reviewed in an iterative manner to determine if responses to interview questions are continuing to provide new perspectives and answers, or if the responses are converging on a common set of response patterns indicating saturation on a particular interview question. As additional interview data are collected, the categories, themes, and relationships will be adjusted to reflect the broader set of concepts and different types of relationships identified. The documentation of emergent themes will also be used as an initial starting point for organizing the analysis of the interview data once all interviews are completed.

Following the completion of the focus groups and key informant interviews, the interview notes and transcripts will be reviewed using standard qualitative analysis techniques using MAXQDA software. The data will first be examined through open coding to identify key concepts and themes that may not have been captured as emergent themes during previous analyses. After identifying key concepts, axial coding techniques will be used to develop a more complete understanding of the relationships among categories identified by respondents in the data. The open and axial coding will be performed with a focus on identifying the dimensionality and breadth of responses to the research questions posed for the overall project. If certain outcomes or themes among responses begin to emerge and can be quantified, then these responses may be reported through a mixed methods quantitative approach. It is important to caveat that because data would be gathered through interviews or focus groups among likely small sample sizes, rigorous analytic techniques may not be permitted. Interviewee responses will be identified through the analysis to illustrate and contextualize the conclusions drawn from the research and will be used to support the development of the final report.

b. Quantitative Analyses

Quantitative analyses include a range of numerical methods, including descriptive and inferential statistics, such as correlations, regressions, ANOVAs, chi-squares, factor analyses, meta- analyses, and both parametric and non-parametric statistic (e.g., Bernard, Wutich, & Ryan, 2012; Creswell & Creswell, 2018; Field, 2017). As noted in the 1115 ED Technical Assistance document, "The objective of these types of analyses is to assess measured changes and to determine any impacts – that is, whether the measured changes are attributable to the demonstration intervention" (SUD Section 1115 Demonstration Evaluation Design Technical Assistance, 3/6/2019, p. 15).

The primary challenge to the evaluation is identifying a suitable comparison group. As described in the **Target and Comparison Populations** section, HSAG plans on utilizing five approaches to drawing comparisons. The comparison strategy largely depends on data availability, frequency of data reporting/collection, and level of data provided (unit of analysis). The following analytic approaches will be considered:

1. Difference-in-differences
2. Pre-test/post-test
3. Comparison to national benchmarks and/or historical rates
4. Interrupted time series
5. Panel data analysis

Difference-in-Differences

A DiD analysis covering a single evaluation year will be performed on measures that are linked to

the staged rollout of the expanded SUD services. Specifically, the two years prior to the beginning of the staged rollout will serve as the baseline, and year 1 of the demonstration will serve as the evaluation year. Beneficiaries residing in regions that implemented services in year 1 (implementation regions) will be compared against those in regions that implemented services in year 2 (comparison regions). By subtracting the change in outcomes among beneficiaries in comparison regions from the change in implementation regions, potential biases due to secular trends in outcomes that apply to both groups equally will be removed from the final estimate.[15] The result is a clearer picture of the actual effect of the program on the evaluated outcomes.

The generic DiD model is:

$$Y_{it} = \beta_0 + \beta_1 X_i + \beta_2 R_t + \beta_3 (R_t * X_i) + \boldsymbol{\gamma} \mathbf{D}'_{\boldsymbol{it}} + u_{it}$$

where Y_{it} is the outcome of interest for individual *i* in time period *t*. R_t is a dummy variable for the remeasurement time period (i.e., evaluation year 1). The dummy variable X_i identifies the intervention group with a 1 and the comparison group with a 0. The vector $\mathbf{D}'$ will include observable covariates to ensure comparability of the groups for any measure-specific subgrouping and $\boldsymbol{\gamma}$ is the related coefficient vector. The coefficient, β_1, identifies the average difference between the groups prior to the effective date of the policy. The time period dummy coefficient, β_2, captures the change in outcome between baseline and remeasurement time periods. The coefficient of interest, β_3, is the coefficient for the interaction term, $R_t * X_i$, which is the same as the dummy variable equal to one for those observations in the intervention group in the remeasurement period. This represents the estimated effect of the waiver on the intervention group, conditional on the included observable covariates. The final DiD estimate is:

$$\hat{\beta}_3 = \left(\bar{y}_{T,R} - \bar{y}_{\mathrm{T,B}}\right) - \left(\bar{y}_{\mathrm{C,R}} - \bar{y}_{\mathrm{C,B}}\right) \mid \mathbf{D}'$$

Assuming trends in the outcome between the comparison and intervention groups are approximately parallel during the baseline period, the estimate will provide the expected costs and rates without intervention. If the β_3 coefficient is significantly different from zero, then it is reasonable to conclude that the outcome differed between the intervention and comparison group after the policy went into effect. In addition to assessing the degree of statistical significance for the result, as represented by the p-value associated with β_3, the results will be interpreted in a broader context of clinical and practical significance.

Because this approach in utilizing the staged roll-out for some measures can only evaluate Year 1 of the demonstration, results from this single evaluation year analysis will be combined with additional approaches noted below in order to provide a more comprehensive evaluation of the demonstration. The findings from the Year 1 analysis are likely not generalizable to future years or regions, due to systematic differences in in geographies and population density, unobservable or complex factors, such as learning and practice in implementation, beneficiary knowledge of services, and changes in economic conditions and healthcare landscape following Year 1.

Pre-Test/Post-Test

For measures and time periods for which there is no contemporaneous comparison group and

[15] To the extent trends do not apply to both groups equally, arising from potential differences among data sources, regions, demographic, and differential impact of economic changes over the course of the waiver, results may be biased. Additionally, the DiD approach would be employed to estimate the program impact for year 1 regions in year 1. Therefore, causal inferences should not be extrapolated to other regions or future years. To address this limitation, the DiD approach will be combined with additional approaches to better triangulate program impact.

have too few observations to support an interrupted time series analysis, rates will be calculated and compared both before and after the implementation of the waiver. Statistical testing will be conducted through a chi-square analysis. A chi-square test allows for comparison between two groups that have a categorical outcome, such as survey results or numerator compliance, to determine if the observed counts are different than the expectation.

Comparison to National Benchmarks and/or Historical Rates

To provide additional context of rates and changes in rates after the implementation of the BH/SUD waiver, HSAG will compare post-implementation rates with both historical rates prior to the program and against national benchmarks without necessarily conducting formal statistical testing (e.g., DiD or pre-test/post-test approaches). By combining reference points from historical rates with contemporaneous national benchmarks, rates calculated for the waiver can be reported in the context of historical Alaska-specific performance in addition to performance nationally, thus triangulating an impact of the BH/SUD expansion of benefits on outcomes. Although statistical testing through a DiD or pre-test/post-test approach would be preferable, these comparisons may be necessary if the level of data for the comparison group are not granular enough to support such statistical testing.

Interrupted Time Series

When a suitable contemporaneous comparison group cannot be found but data can be collected at multiple points in time before and after the implementation of the demonstration, such as costs or ED utilization, an ITS methodology can be used to estimate the impact of the demonstration on outcomes. The generic ITS model is:

$$Y_t = \beta_0 + \beta_1 time_t + \beta_2 post_t + \beta_3 time_t \times post_t + \varepsilon_t$$

where Y_t is the outcome of interest for the time period t, $time_t$ represents a linear time trend, $post_t$ is a dummy variable to indicate the time periods post-implementation, and $time_t \times post_t$ is the interaction term between time and 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 demonstration, β_2 is the change in the outcome immediately following implementation, and β_3 is the change in the slope for the measurements after the demonstration.

Panel Data Analysis

Related to interrupted time series in this context, panel data analysis may be used on outcomes that can be collected on a more frequent basis at the individual level, such as monthly or quarterly costs. The panel data set can exploit differential timing of member interaction and engagement with BH and/or SUD services. The general panel regression model is:

$$Y_{it} = \beta_0 + \sum_{m=1}^{M} \beta_m X_{mit} + \beta_t Time_t + v_i + \varepsilon_{it} \qquad (1)$$

where:

Y_{it} = the value of the dependent variable *Y* for member *i* at time t.

β_0= the average outcome when all covariates are equal to zero.

β_m = a vector of parameter estimates representing the association between the explanatory variables, X_{mit}, and the outcome. The vector, X_{mit}, will include a dummy variable for periods after

implementation of the demonstration. Additional covariates for treatment identification, and time trends will be added as needed.

β_t = the trend in the outcome, net of program impacts and other relevant covariates.

X_{mit} = the value of covariate X_m for member *i* at time *t*.

$Time_t$ = a covariate or set of covariates representing the outcome trend.

v_i= the systematic difference between member i and the average outcome.

ε_{it} = a normally distributed error term.

The model described in equation 1 may take either a fixed effects or random effects form. The fixed effect panel model provides an unbiased estimate of the program impact but has the drawback that time-invariant covariates cannot be included in the model due to the data transformations required by the model (e.g., gender, age, chronic conditions). In contrast, the random effects model allows the inclusion of time-varying and time-invariant covariates. However, the random effects panel regression model may also generate biased results if any of the covariates are correlated with the residual error term, ε_{it}. The appropriateness of the random effects panel regression model will be assessed for outcomes with a normal response distribution using a Hausman test to determine whether the random effects estimates are likely to be biased relative to the fixed effects model results (Kennedy, 2003). For outcomes with a binary or negative binomial response distribution, a Hausman test is not readily available. As a result, HSAG will estimate present the results from a fixed effects specification, as these estimates are unbiased, whereas a random effects model may be biased if an independent covariate is correlated with the error term. Random effects model will still be estimated to serve as a robustness check.

The majority of measures in the Alaska 1115 Evaluation Design are quantitative Medicaid data and follow a pre-post design, with the potential and expectation for multipoint, interim assessment during the course of the Waiver period to monitor progress regarding 1115 activities in terms of Alaska state Waiver goals/objectives/aims, domains and key milestones as indicated in the Driver Diagram as well as described in the summary table of evaluation questions, hypotheses, and measures (see section B. Evaluation Questions and Hypotheses of this Evaluation Design document for additional information and details).

Given the limitations of non-randomized assignment and lack of contemporaneous in-state comparison group, the methods detailed above will be combined with methods that best account for any known of possible external influences and their potential interactions with the Demonstration's goals and activities. For example, since this 1115 Waiver and Evaluation Design aims to assess the effect of the Alaska 1115 Medicaid waiver, other potential sources of influence should be excluded, such as possible effects external to the Waiver programs, such as changes in state or national policy, or state or national economic trends, or socio- cultural cohort changes and trends that exist beyond the waiver services. This evaluation design seeks to isolate effects of the Demonstration Waiver on the observed outcomes through careful design including several considerations: a) when possible, information concerning the context within which the Alaska Waiver exists will be gathered to observe its potential contributions to observed effects in the Waiver, such as documentation regarding legal, regulatory, or policy changes and national/state economic trends; b) when possible, the evaluation will include baseline data collected for the period prior to the start of the Waiver (and when not possible, baseline data from the start of the Waiver period); c) where appropriate, Alaska Waiver populations will be compared to relevant data from other states and the nation to help best assess trends that may exist beyond the Alaska

Waiver activities that may influence Alaska Waiver outcomes. Consideration of such external influences, coupled with Alaska's mixed method, multi data source design, will assist in satisfying many conditions for causal inference, including temporal precedence, association, and elimination when possible of potential confounding factors (Contreary, Bradley, & Chao, 2018).

When appropriate, supplemental analyses will also be conducted to assess issues that emerge during the course of the Waiver period, to respond to stakeholder queries and quality improvement needs, and to delve more deeply into potential differences between Waiver subpopulations, various demographic (e.g., race/ethnicity, age, gender) or geographic variables, and beneficiary types. Additionally, HSAG will collect data for and conduct an actuarial analysis to assess compliance with CMS budget neutrality requirements.

In sum, examination of multiple data sources of both qualitative and quantitative data for Alaska's 1115 Evaluation Design permits an integrative, holistic assessment of the Waiver's effects that is more rigorous and robust that analysis of either quantitative or qualitative data alone.

c. Cost Analyses

Costs of the SUD and BH components to the demonstration will be estimated through three levels, as described in Appendix C to CMS SMI/SED and SUD Evaluation Design Guidance. The first level will estimate total per-member per-month (PMPM) costs across all categories of service (e.g. emergency department, inpatient, outpatient, professional, pharmacy, long-term care). These costs will be computed through reimbursement amounts on fee-for-service Medicaid claims. The analytic team will ensure that only de-duplicated paid claims are considered for the analysis to provide the most accurate picture of costs. Administrative costs will be calculated through identifying state-specific costs associated with the waiver, including a contract with an Administrative Services Organization (ASO) to manage the state's BH system, and costs associated with this evaluation. These costs will be allocated on a PMPM basis.

The second level will stratify total costs by IMD services with a SUD diagnosis, costs associated with other SUD diagnoses, and all other costs not directly related to a SUD diagnosis. It is expected that the SUD-related costs will increase, particularly in the short-term, as additional treatment services are opened and beneficiaries begin utilizing previously absent services.

The third level will stratify total costs by category of service in order to help identify cost drivers and potential cost savings, such as reductions in ED costs.

All cost analysis will be constructed using a panel dataset with the member-month as the unit of analysis. Beneficiaries with a SUD diagnosis during the demonstration period and up to two years prior will be included in the analysis with no enrollment requirements. The first SUD diagnosis during this period will serve as the entry date for beneficiaries in the study and will be followed for up to 11 months after the month of diagnosis. Subsequent SUD diagnoses during this time period will extend the study period. Beneficiaries who have subsequent SUD diagnoses after the initial year will be re-introduced into the study. Indicator flags will denote months in which the member was not enrolled in Medicaid (thereby effectively flagging cases with missing data) and monthly trend variables will be included in the panel dataset relative to each individual's SUD diagnosis. Another indicator variable will flag months after the introduction of the SUD demonstration.

Additional analyses from levels two and three may be conducted to leverage the staged rollout of SUD services. In particular, beneficiaries from regions 2, 3, 4, 6, 7, 8, and 9 may be used as an in-

state contemporaneous comparison group for beneficiaries in regions 1 and 5, which have intended to roll-out most SUD services in demonstration Year 1, according to the state's approved SUD implementation plan.

If data from other states that do not have a SUD demonstration are available, such as through the Transformed Medicaid Statistical Information System (T-MSIS), then analytic methods utilizing a contemporaneous comparison group may be employed. The panel structure of the dataset allows for flexibility in precise analytic technique. For instance, a difference-in-differences approach, with modifications to accommodate the panel nature of the dataset, can be used when a contemporaneous comparison group is available. When not available, an interrupted time series approach will be used. Results will be provided in two stages using a two-part hurdle model where the first stage reports the probability of a beneficiary having any costs in a particular month. The second stage reports the estimated log transformed costs among beneficiary-months in which costs were incurred.

D. Methodological Limitations

Despite many positive aspects, the Alaska SUD-BHP Demonstration evaluation does have several limitations. One limitation likely experienced with all 1115 Demonstration evaluations is the impossibility of utilizing a true experimental design, also known as a randomized controlled trial (RCT), a design which is often referred to as the "gold standard approach to establishing causality" (Contreary, Bradley, & Chao, 2018). RCTs feature random assignment of participants to either an experimental/treatment group or a control group (Creswell & Creswell, 2018), thus permitting it possible to infer that differences in outcomes were caused by the treatment (such as 1115 services). For ethical and practical reasons, such designs are not typically possible for 1115 waivers; for instance, one could not ethically randomly assign one person with a SU or mental health condition to receive therapeutic services and another such person to a control group that received no services. Additionally, RCTs are often better applied to test applications of a single policy, rather than an entire demonstration, since it may not be easily possible to determine which policy or policies impact the outcomes. In recognition of such concerns, State of Alaska Division of Behavioral Health has selected a multifaceted mixed methods design that is appropriate and feasible for evaluating the Alaska 1115 demonstration waiver; for example, both qualitative and quantitative data are utilized, as well as pre-post comparisons, comparisons between phased-in and yet to be phased-in Waiver populations, and comparisons with other state and national data. While not equivalent to a true experimental, RCT design, Alaska's multimodal, mixed methods evaluation design may be considered a robust design in line with best practices in such situations, and taken as a whole, satisfies many conditions for causal inference, including temporal precedence, association, and elimination when possible of potential confounding factors (Contreary, Bradley, & Chao, 2018).

Another limitation of the present evaluation design is the reliance on diagnostic codes (such as for conditions and procedures and prescription drugs) to identify beneficiary populations. The codes may not capture all behavioral health conditions/disorders/issues. Reliance on such codes may reduce outcome differences between beneficiary populations with and without behavioral health conditions, making a fully accurate interpretation of the demonstration's impact more challenging. Nevertheless, the use of coding (such as ICD codes) is in keeping with best practices, and indeed most historians of psychology and psychiatry point to the use of such classification systems as improvements over less evidence-based or less systematic alternatives to diagnosis (e.g., Benjamin, 2019; Porter, 2002; Shorter 1998). State of Alaska Division of Behavioral Health

does recognize that diagnostic codes may sometimes not reflect the full range of SU and BH client/patient experiences, and indeed that sometimes coding practicalities may lead to challenges in data interpretation; for instance, in some cases, a patient prescribed a common psychiatric medication, may be prescribed that medication for a non-BH purpose, leading to data interpretation nuances. In conjunction with State of Alaska Division of Behavioral Health, HSAG will examine carefully best practices in coding and interpretation to ensure the optimal possible evaluation.

A third limitation of Alaska's 1115 Evaluation Plan likely impacts other state evaluation plans as well. Since Alaska, like other states, aims to be responsive to its population in timely fashion, often multiple substance use and mental health initiatives are being developed and implemented by various groups and organizations simultaneously. Furthermore, changes at the state policy level, and federal level, during the Waiver period, may lead to macro-level changes in the substance use and MH/behavioral health system that impact potential to fully interpret all data in terms of their relation to changes effected by the Alaska 1115 Waiver. Ecological models of human development (e.g., Bronfenbrenner, 2009) describe factors beyond individual biology and family/community environment that impact human behavior, such as large scale systemic social or cultural changes, including technological innovations, economic recession, and chronosystem effects such as cohort effects between generations. Despite the practical and methodological challenges of anticipating or predicting all potential macro-level changes that may emerge during the evaluation period, the Alaska multimodal, mixed methods design provides a logical approach to disentangling as many possibly confounding factors as possible.

Finally, one limitation of the Evaluation Design relates to the Waiver period duration FY19 through FY24. State of Alaska Division of Behavioral Health aims to implement its waiver and effect positive, dynamic change for its SU and MH/BH beneficiaries in its SUD-BHP waiver. However, some health changes and outcomes require many years to be apparent or to be detectable via measurement (e.g., Berk, 2018; Santrock, 2019), leading to challenges in assessing all potential impacts of the present Waiver within the Waiver and evaluation period. For instance, prevention and early intervention services for children and youth may potentially lead to health improvements later in the lifespan, such as relating to educational, housing, and employment outcomes and to lifetime involvement with the criminal justice system or with medical professionals for chronic physical conditions related to substance misuse (such as hepatic cirrhosis or Korsakoff syndrome). Nevertheless, Alaska's evaluation design is aimed to assess those changes or precursors to change that may be assessed within the evaluation period, permitting examination to determine which programs and services are most effective. Alaska's proposed evaluation plan, with its mixed quantitative and qualitative methods, and range of data sources and analytic techniques, affords a pragmatic plan that will yield ample evidence of those changes that may be assessed during the evaluation period.

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E. Attachments

1. Independent Evaluator

As part of the Special Terms and Conditions (STCs) described by CMS, the state has contracted with an Independent Evaluator (IE), Health Services Advisory Group, Inc. (HSAG), to conduct an evaluation of the demonstration to ensure that the necessary data are collected at an appropriate level of detail sufficient to conduct the research to evaluate the approved hypotheses. HSAG has signed an agreement attesting it will conduct the demonstration evaluation in an independent manner in accordance with the CMS-approved Evaluation design. In conducting these evaluations and producing these evaluation reports, all efforts will be made to follow approved methodology, though per the STCs, the state may request, and CMS may agree to changes to methods in appropriate circumstances.

The State of Alaska has procured HSAG as the IE and has complied with all federal and state policies regarding making an appropriate selection. The IE's contract objectives are:

- To ensure compliance with State and Federal requirements regarding evaluation of the demonstration project, with specific emphasis on conducting data analysis and to ensure timely reporting
- To review/revise and assist in the development of the Evaluation Design
- Participation in activities related to the CMS-required Monitoring Measures and Evaluation Deliverables (e.g., the Mid Point Assessment, Draft Interim Report, and Draft Summative Evaluation Report)
- To advance data management and analysis capabilities
- To develop effective strategies with Federal, State, and local partners for cross- system, cross-organization coordination

Below are some of the qualifications for the Independent Evaluator (IE) that HSAG has met:

- Experience working with federal programs, especially with 1115 Demonstration Waivers and with Medicaid, and with MMIS data
- Experience and knowledge of behavioral health
- Experience in program evaluation of complex, multifaceted programs
- Experience with CMS federal standards and policies for program evaluation
- Familiarity with national data sources, especially those that may be utilized in this Waiver project, such as NSDUH, BRFSS, YRBSS, Core Set and HEDIS measures
- Skills and experience in quantitative data analysis, including analytic ability regarding statistical methods, including descriptive and inferential statistics, including frequencies, chi-squares, t-Tests, regressions, ANOVAs, and related techniques.
- Skills and experience in qualitative data analysis, including ability regarding creating, conducting and analyzing interview data, provider and beneficiary surveys, focus groups, and field observations, as well as thematic narrative analysis of archival or historical documents.

- Experience with longitudinal and pre-post designs, and in selecting and analyzing appropriate comparison data (such as non-waiver, and national and other state data)
- Experience with quasi-experimental and mixed methods designs, and with both primary and secondary data collection and analysis
- Experience with appropriate sample selection techniques and design of data collection instruments

Additionally, among the desired qualifications HSAG has the following:

- Documented successful experience (preferably at least five years) with assisting state governments with design implementation and evaluation, including management of evaluation teams for projects of similar size and scope
- Knowledge and understanding of Alaska-specific data and of Alaska's unique qualities, such as its geography (rural/urban) and size, and its populations and health systems.
- Demonstrated experience and understanding of Alaska's health delivery system and Medicaid program
- Demonstrated experience conducting Medicaid financial analysis
- Personnel whose resumes reflect appropriate education and experience for this Project; a designated evaluation lead with at least a Master's Degree in Statistics, Social Science (e.g., sociology or psychology), or Public Health, with a Ph.D. preferred.
- Experience working with Tribes, including Tribal Consultation

In selecting HSAG, the State has taken the appropriate steps to ensure HSAG is indeed free of any conflict of interest and that it remains free of conflicts of interest during the contract term. Among the potential conflicts avoided are: 1) the IE must not provide services to any healthcare providers doing business in Alaska under the Medicaid program as per contractual agreements as noted in the contract between the State and the IE and 2) the IE must not provide direct services to individuals in State of Alaska-administered programs as specified in the contractual agreements agreed upon by the State and the IE. If the State discovers such conflicts during the contract term, the State may terminate the contract pursuant to the contract provisions.

Additionally, HSAG will comply with all state and federal laws regarding protecting human subjects and assuring confidentiality of data, including procuring any needed data sharing agreements. The IE will follow generally accepted procedures for safeguarding data, such as password protection and encryption, and HIPAA and 42 CFR Part II regulations.

2. Evaluation Budget

As required by the CMS STCs (Special Terms and Conditions, 9/3/2019), the state must arrange with its IE to conduct an evaluation of the demonstration to ensure that the necessary data are collected at an appropriate level of detail sufficient to conduct the research to evaluate the approved hypotheses. HSAG estimates a cost of $230,119.80 based on its experience with research and evaluation services for the Initial Year of this contact through June 30, 2021. The table below displays the proposed budget that will be utilized during the evaluation.

Deliverable Description	Initial Year thru 6/30/21	Option 1 of 5 Year 2 thru 6/30/22	Option 2 of 5 Year 3 thru 6/30/23	Option 3 of 5 Year 4 thru 6/30/24	Option 4 of 5 Year 5 thru 6/30/25	Option 5 of 5 Year 6 thru 6/30/26	TOTALS
Revise Evaluation Design	$9,682.00						**$9,682.00**
Mid-Point Assessment	$91,009.00						**$91,009.00**
Draft Interim Evaluation Report	$45,280.00	$71,765.00	$54,323.00				**$171,368.00**
Final Interim Evaluation Report			$34,799.00				**$34,799.00**
Draft Summative Report			$58,471.00	$86,069.00	$62,627.00		**$207,167.00**
Final Summative Report						$62,291.00	**$62,291.00**
Draft Close Out Report				$44,143.00			**$44,143.00**
Final Close Out Report					$31,553.00		**$31,553.00**
Semi-Annual progress reports to include all activities with data analysis, reflections and insight on the implementation of projects drawing on key informant interviews, document review, meetings attended, and activity review.	$19,001.60	$19,001.60	$19,001.60	$19,001.60	$19,001.60		**$95,008.00**
Specification for data required from state including a timeline, data gap analysis, and plan to address data gaps.	$3,368.20	$3,368.20	$3,368.20	$3,368.20	$3,368.20		**$16,841.00**
Focus groups and key informant interviews to create baseline information for quantitative analysis	$30,095.00	$25,847.00	$15,216.00				**$71,158.00**

Deliverable Description	Initial Year thru 6/30/21	Option 1 of 5 Year 2 thru 6/30/22	Option 2 of 5 Year 3 thru 6/30/23	Option 3 of 5 Year 4 thru 6/30/24	Option 4 of 5 Year 5 thru 6/30/25	Option 5 of 5 Year 6 thru 6/30/26	TOTALS
Analysis of existing survey results, data, key informant interviews, and focus groups	$21,324.00	$20,402.00	$25,393.00	$37,049.00	$27,190.00		**$131,358.00**
Travel NTE	$10,360.00	$5,180.00	$5,180.00	$5,180.00	$5,180.00		**$31,080.00**
TOTAL COST PER YEAR / PROJECT TOTAL	**$230,119.80**	**$145,563.80**	**$215,751.80**	**$194,810.80**	**$148,919.80**	**$62,291.00**	**$997,457.00**

3. Timeline and Major Milestones (Performance Period 1/01/2019 to 12/31/2023)

Note: The documents labeled SUD/BH below are labeled SUD by CMS in the CMS PMDA1115 website system. With the approved CMS STCs (9/3/2019), that added behavioral health in addition to substance use services, the Alaska Division of Behavioral Health has described the items as SUD/BH below for clarity. Additionally, note that per CMS approval, Alaska's 1115 Waiver has a CMS approved SUD Waiver Implementation Plan (3/27/2019), but Alaska will not have a separate BH Implementation Plan submission.

Task Name	CMS Due Date
SUD Implementation Plan Protocol	4/1/2019 (Accepted 3/27/2019)
SUD Quarterly Monitoring Report April 2019	5/31/2019
Behavioral Health Demonstration/SUD Monitoring Protocol March 2019	6/30/19 (Received 6/26/2019)
SUD/BH Quarterly Monitoring Report July 2019	8/30/2019
SUD/BH Quarterly Monitoring Report October 2019	12/02/2019
SUD/BH Draft Evaluation Design July 2019	03/31/2020
Annual Monitoring Report January 2020	03/31/2020
SUD/BH Quarterly Monitoring Report April 2020	06/01/2020
SUD/BH Quarterly Monitoring Report July 2020	08/31/2020
Mid-Point Assessment November 2020	11/15/2020
SUD/BH Quarterly Monitoring Report October 2020	11/30/2020
Annual Monitoring Report January 2021	04/01/2021
SUD/BH Quarterly Monitoring Report April 2021	05/31/2021
SUD/BH Quarterly Monitoring Report July 2021	08/31/2021

SUD/BH Quarterly Monitoring Report October 2021	11/30/2021
Annual Monitoring Report January 2022	04/01/2022
SUD/BH Quarterly Monitoring Report April 2022	05/31/2022
SUD/BH Quarterly Monitoring Report July 2022	08/30/2022
SUD/BH Quarterly Monitoring Report October 2022	11/30/2022
Behavioral Health Demonstration- Draft Interim Report (12/22)	12/30/2022
Annual Monitoring Report January 2023	04/03/2023
SUD/BH Quarterly Monitoring Report April 2023	05/31/2023
SUD/BH Quarterly Monitoring Report July 2023	08/30/2023
SUD/BH Quarterly Monitoring Report October 2023	11/30/2023
Annual Monitoring Report January 2024	03/31/2024
SUD/BH Quarterly Monitoring Report April 2024	05/31/2024
SUD/BH Draft Summative Evaluation Report June 2025	06/30/2025

Appendix C. Additional Qualitative Results

Health Services Advisory Group, Inc. (HSAG) conducted three rounds of semi-structured interviews with providers, administrators, and Tribal entities to collect qualitative information regarding the impacts of the expansion of substance use disorder and behavioral health (SUD-BH) services between September 2020 and June 2022. These interviews focused on the expansion of services, perceptions and experiences of stakeholders impacted by the SUD-BH Program, barriers encountered, anticipated challenges, successes, impacts on quality of and access to care, and sustainability of the expansion. The interviews also examined how the unexpected burdens of responding to the coronavirus disease 2019 (COVID-19) public health emergency (PHE) impacted the planning and implementation of the SUD-BH Program.

HSAG developed flexible interview protocols using an open-ended questions format to maximize the diversity and richness of responses and ensure a holistic understanding of the subject's experience. To understand the evolving implementation of the waiver, HSAG returned to many of the same informants in each round of interviews. The responses from the interviews are aggregated and summarized, organized according to the interview protocols.

Key Informants

State administrators, healthcare providers, and non-provider stakeholders were approached for inclusion in all three years of interviews. HSAG was able to speak with most of the state administrators across all three years. The same two non-providers, a professional organization representing BH providers and a group representing Alaskans with mental health and SUDs, were interviewed in all three years. Although many of the providers were included in all three years, The Division of Behavioral Health (DBH) provided HSAG with contact information for several additional providers for year three, and a representative sample of these new providers was also interviewed. Table C-1 displays key informants interviewed throughout the three years of interviews.

Table C-1—Key Informants

Organization Type	Organization
State Administrators	State Medicaid Director Deputy Director Legislative Liaison Chief of Risk and Research Management Behavioral Quality Assurance Section Managers Waiver Research Analyst III
Providers	JAMHI Health and Wellness Central Peninsula Hospital Interior AIDS Association SeaView Community Services Set Free Alaska True North Alaska Cordova Community Medical Center Cook Inlet Council on Alcohol and Drug Abuse Juneau Youth Services Nugen's Ranch Volunteers of America Alaska

Organization Type	Organization
Tribal Health Organizations	Alaska Native Tribal Health Consortium Aleutian Pribilof Islands Association Cook Inlet Tribal Council Kodiak Area Native Association Maniilaq Association Norton Sound Health Corporation Southcentral Foundation SouthEast Alaska Regional Health Consortium Tanana Chiefs Conference Bristol Bay Area Health Corporation
Consumer Health Advocates	Alaska Behavioral Health Association Alaska Board on Alcohol and Drug Abuse Alaska Mental Health Board Alaska Mental Health Trust Authority

Major Themes

Several major themes emerged from the three rounds of key informant interviews:

- Broad-based support for the ambitious and far-reaching Section 1115 demonstration waiver and a general sentiment that the implementation proceeded as well as could be expected.
- A growing list of examples of the expansion in numbers of providers and types of services available to Alaskans with SUD and BH needs with support from the 1115 waiver.
- A positive attitude toward DBH's implementation process, despite some expressions of frustration with the level of communication and technical assistance provided.
- Workforce limitations continue to limit the ability to expand services among all stakeholders, as entities struggle to maintain their existing services with the major challenges presented by specific Alaska-related challenges and the issues presented by the COVID-19 PHE.
- All stakeholders continue to work through the details of the qualification and certification processes for providers of new services, notably around qualified addiction professionals (QAPs). Feedback moved from whether these individuals should be certified to specific issues with the process. Several informants mentioned that due to the bifurcation of SUD and BH waiver services, providers of similar services were subject to different enrollment/certification/billing standards depending on where they worked (i.e., in a BH facility or an SUD treatment center) or on the precise nature of the patient's diagnosis. An issue heard in year three was the barrier to certification of QAPs presented by the difficulty many addiction peers encountered in passing background clearances.
- Administrative burden continues to present a significant challenge to expanding services and to normal billing practices under the wavier.

The following sections provide further detail about the major themes that were mentioned during the key informant interviews, divided into successes and concerns by type of informant.

Successes

All informants were asked to describe their perception of the successes and drivers of success regarding the waiver's expansion of SUD and BH services.

State Administrators

Throughout the evaluation period state administrators felt that the underlying philosophy of the Section 1115 waiver was sound and recognized that a key driver of success has been the dedication of a number of people who worked hard to bring about this significant change in practice, both within the state administrative structure and among other stakeholders. State administrators highlighted several areas of success across all three rounds of interviews and expressed considerable excitement about the growth of services across the continuum of care and early intervention services.

The original waiver plan approved by CMS contemplated a phased rollout of the implementation based on geographic regions, with services expanded first in urban areas followed by rural and frontier areas. However, administrators discovered that acceptance of the need for change and readiness to change were strong in rural and frontier areas as well as urban areas and decided to implement the program statewide from the beginning. Additionally, implementation required a complete rewriting of the state's regulations governing BH and SUD services, which were addressed separately.

As a result, the first round of interviews focused largely on the regulations for BH services, and the second round addressed the regulations governing SUD services and identified some unintended consequences arising from inconsistencies between the two bodies of regulations. During the third round of interviews, state administrators felt they had addressed many of these issues and were still revising processes to implement further improvements. All stakeholders revealed that these issues are still being worked out, although the focus has started to shift to the upcoming renewal of the waiver.

The greatest success of the first year for state administrators was completing the major overhaul of regulations needed to make the waiver a reality. This coincided with significant changes in provider enrollment and billing practices as the State employed an administrative services organization (ASO), Optum, and as many providers enrolled in Medicaid for the first time. Expansion success continued into the second year when interviewees explained that crisis services were successfully billed, mobile outreach was activated in larger cities, and the number of providers and agencies enrolled in Medicaid increased. The number of providers offering services and the variety of services offered continued to grow in year three of the demonstration, especially in rural areas of the state.

State administrators noted that steadily increasing numbers of trainings offered and certifications completed were a success over the first three years of the demonstration. Interviewees noted in the first year of interviews that the waiver raised the bar on staffing qualifications by adding requirements for professional standards and years of experience. By the second year, 35 applications for peer support certification had been processed and approximately 1,200 QAPs had been granted provisional or full certification, and the availability of workforce training had increased. Positive sentiment continued through the end of the evaluation period, especially with respect to increases in the number of training opportunities.

State administrators were continuously engaged with stakeholders throughout the implementation process, communicating waiver direction and timelines and responding to questions. A series of roundtables in each region were held by DBH in the first year to encourage communication. Interviewees reported increased community

engagement from mental health providers, support from law enforcement, and other community stakeholders in the second year.

State administrators viewed relationships within the state government as a driver of success for the waiver. State administrators described a positive engagement with other State agencies in the first year as well as positive leadership changes, specifically noting the leadership skills of the new director of DBH. Informants identified sufficient internal capacity and a successful experience onboarding Optum. State administrators shared positive feedback during the second year surrounding increased bipartisan support from the state legislature. Administrators praised collaboration with other divisions at DHSS and other state agencies throughout the entire evaluation period in the third year.

Other areas of continued success identified by DBH informants included:

- Increased funding in the system, both in general and from the Coronavirus Aid, Relief, and Economic Security (CARES) Act, to build crisis intervention services.
- Relationships and support from the independent evaluator, HSAG, and CMS.
- Familiarization with the process for submitting reports to CMS on time, including quarterly and annual reports.
- Receiving weekly reports from the Medicaid Provider Assistance Services Section (MPASS) about providers and waiver services being offered.

Providers

When asked to share their experience with the demonstration waiver, providers described successes in service quality and accessibility, service expansion, and interactions with DBH. Services expanded steadily across all three years of interviews, as providers were able to offer new services and expand their capabilities to provide a broader continuum of care throughout the evaluation period including the addition or expansion of:

- American Society of Addiction Medicine (ASAM) Level 1.0, 2.1, 2.5, and 3.1 services [C-1]
- Broader use of screening, brief intervention, and referral to treatment (SBIRT)
- Crisis intervention
- Withdrawal management
- Improved care planning processes
- Case management and intensive case management services
- Counseling and community support services (CCSS)[C-2]
- Peer support services
- Adult mental health residential
- Community recovery support services (CRSS)
- Support for independent living

[C-1] DBH also expanded 3.3 services along with adolescent SUD services (2.5 and 3.1) although providers did not mention expanding these services.

[C-2] CCSS has been sunsetted but was mentioned as being expanded by a provider. CCSS was replaced by Community Recovery Support Services.

- Assertive community treatment-based teams working with SMIs

Most services were expanded in the first and second years of the demonstration. Several providers did not add additional services in the third year. Additional areas of action include pioneering the license variance for adult mental health residential, requiring parent involvement in their children's care in a concentrated non-assertive approach, receiving level of care certifications, hiring peer support specialists, and improving awareness and consistency of care through SUD care coordination.

Throughout the course of the evaluation period, providers felt that the waiver had improved service quality and accessibility to serve local individuals, including their abilities to provide the right service at the right time and move patients between levels of care. Specifically, providers noted the implementation of adult mental health residential programs, housing, and stabilization for those in need, and the increase in quantity of care without compromising quality. However, change in quality was not consistent. In the third year, one provider shared that while quality had not decreased, it had not necessarily increased either. Overall, providers felt that their patients were unaware of any changes, which was identified as a success due to continued internal challenges providers faced with billing and reimbursement. Patients continued to receive necessary services with positive outcomes throughout the transition.

Providers shared positive interactions with DBH during the interview process. In the first year, providers thought the round tables held by DBH were helpful, although sometimes unfocused. By year three, providers felt DBH was present in conversations with providers, was transparent, supportive, and responsive with consistent communication. One provider expressed appreciation for DBH's guidance and support through the waiver specifically during COVID-19. Another provider expressed appreciation for the listening sessions hosted by DBH regarding the waiver renewal. A third provider experienced numerous helpful site visits by representatives of DHSS and DBH which helped to identify potential gaps in providing services.

Telehealth improved providers' ability to engage with patients over the course of the waiver. In the first year, a provider shared their enhanced ability to engage with youth and children due to telehealth. In year two, positive experiences with telehealth continued and providers conveyed reduced no-shows and appointment cancelations along with increased patient compliance with treatment regimens.

Individual providers shared additional successes at various points throughout the evaluation period:

- Utilization of ASAM improved service delivery and advocacy through demonstrating medical necessity, structure, and communication in the referral process
- Satisfaction with waiver regulations
- Satisfaction with new case management definitions and defined levels of care
- Excitement for the prospect of expanding peer support group services
- Progress in documentation, coding, and billing practices
- Development of a self-audit checklist by DBH
- Satisfaction with communication and responsiveness by the MPASS unit and Optum among some providers

Successes were not universal. One provider explicitly noted that there were no successes within their organization relating to the waiver.

Tribal Health Organizations

Alaska's Tribal Health Organizations (THOs) are significant providers of and payors for BH and SUD services in Alaska. In the second year of interviews HSAG scheduled and conducted interviews with key informants from five THOs. In the third year of interviews, the number of key THOs informants increased to eight.

THO informants expressed support for the expansion of services across the continuum of care and excitement about the opportunity to provide peer-based services. Specific services that were expanded during the evaluation period included:

- ASAM Level 1.0 (Outpatient) and 2.1 (Intensive Outpatient) services
- Crisis stabilization services
- Same day services
- Women-specific services [C-3]

THOs experienced some growth in the number of services expanded during the third year and shared a list of services that they felt were important to their communities and were planning on expanding including:

- ASAM Level 2.1 and 2.5 (Partial Hospitalization Intensive Outpatient Services)
- 23-hour stabilization services
- Medication-assisted treatment (MAT)
- Peer-based support and crisis services
- BH family services

THO informants expressed experiences with early issues with the process of enrolling providers for Medicaid billing but by year three, several THOs shared that they felt the transition to the waiver had been a relatively easy experience and that the waiver was a good framework for providing services they otherwise would not have been able to provide. One THO informant appreciated that the waiver allowed them to think about how SUD integrates with general healthcare and impacts other areas of care. Two THOs commented on improved staff retention after the waiver implementation.

THO informants mentioned that DBH has been responsive to their requests and willing to hear criticism and expressed appreciation for the State's investment in the family services training center and their commitment to infant and early child mental health. One THO appreciated DBH's and Optum's prioritization of liaisons for tribal health and child welfare, two traditionally marginalized groups. The THO indicated that Optum was willing to have these liaisons attend the recurring weekly calls with THO BH directors as needed. In addition to their work through liaisons, some THOs reported that Optum was available to answer questions and was receptive to their suggestions for improvement, such as making provider-specific billing trainings available.

Other notable successes different THOs attributed to the waiver included:

- Investing in the continuum of care, higher levels of care for youth, and early family intervention.
- Utilizing peers and integrated care teams for peer support.

[C-3] The Alaska 1115 SUD-BH waiver does not provide for any women-specific services; however the services were mentioned by a THO informant with respect to services they have expanded related to SUD and BH care and is included as such.

- Collaborating with other THOs throughout the implementation process via a THO specific learning network of BH directors.
- Utilizing telehealth to provide care.
- Developing and implementing a consistent intake process.
- Standing up a process for receiving referrals from the 988 Suicide and Crisis Lifeline.
- Implementing new assessment and screening tools to place patients in the appropriate level of care.
- Implementing a mobile crisis team operating out of a fire department.
- Doubling residential youth bed numbers.
- Hiring 50 new staff to respond to an increase in patient volume.
- Doubling the number of staff working in intensive care management.
- Contracting with a consulting company to assist in the navigation of waiver challenges.
- Including a cultural competency continuing education unit (CEU) requirement for certification of QAPs, acknowledging the importance of including cultural sensitivity training for providers in certification standards.
- Increasing the quality of care due to enhanced patient engagement as peer support services began.

Non-Provider Stakeholders

Both of the non-provider stakeholders interviewed expressed that while the waiver had its challenges, the underlying principles and goals of the waiver were sound. Across all three years of interviews, these stakeholders highlighted DBH's assistance and communication as a positive. In year one, non-providers cited that DBH pushed out trainings and technical assistance to aid providers in implementing waiver services, specifically MAT and peer support. In the second year, non-providers discussed DHB's continued responsiveness to provider concerns and their flexibility in the transition to the waiver. In year three non-providers provided a mixed reception, with some providers feeling that DBH continues to be helpful, noting the listening sessions, while others feel that communication was confusing and DBH was stepping back.

Non-providers described costs as an area of continued success. In year two, non-providers highlighted lowered costs to the State for Medicaid expenditures and other BH programs compared to pre-waiver. Positive sentiments continued in year three, when non-providers discussed new innovative types of billing they were seeing in the community. One non-provider stakeholder shared how a healthcare provider was providing outpatient services to those in need while simultaneously offering lodging to patients for six to eight weeks for free in a successful, voluntary experiment.

Additional successes noted by non-providers include:

- A surge in new hires and incentives in the third year for providers to remain in Alaska, combatting typical workforce issues.
- A quick transition to patients receiving the appropriate level of care. For example, as of year one, patients were already receiving once a week care rather than residential services when weekly services were more appropriate.

Concerns

All informants were asked to describe barriers or difficulties they had encountered related to the expansion of SUD and BH services during implementation of the waiver, and steps they had taken to address them. The interviews revealed the evolution of the program as all stakeholders shared their experience and collaborated to make necessary course corrections.

State Administrators

When asked to share their concerns about the waiver, state administrators noted several areas of concern including the bifurcation of BH and SUD services, administrative burden, and workforce challenges. State administrators acknowledged that the bifurcation of SUD and BH waiver service regulations had resulted in some unintentional complexity and inconsistencies between the handling of SUD and BH services that may have interfered with their goal of providing integrated care and may have caused confusion among other stakeholders. State administrators found that providers seemed to have had an easier time switching to SUD waiver services compared to BH services. They reported awareness that some provider experienced issues due to SUD and BH QAP certification requirements being different despite QAPs performing the same responsibilities for SUD and BH services. One state administrator also identified that the bifurcation may have resulted in a greater focus on SUD services rather than BH services, resulting perhaps in missed BH opportunities.

State administrators shared awareness of and concern for providers' experience of administrative burden as a result of the waiver, particularly as it related to billing for services and the fears related to potential future Medicaid audits. State administrators understood that some providers found waiver regulations difficult to understand, and that this was perhaps exacerbated by the volume of changes to regulations as well as the differences between the separately released SUD and BH components. Informants recognized there may have been some disconnect between the administrative burden they believed they were imposing with the regulations and that experienced by providers seeking to work under the regulations.

State administrators reported an adjustment period as DBH became accustomed to working with CMS and its regulatory environment, and noted they had faced increased administrative burden internally, as they worked through the waiver process. For example, Alaska's fee-for-service (FFS) environment added complications not present for many states who use managed care entities to provide Medicaid services.

Several state administrators also shared the broader stakeholder community's concerns about billing under the waiver. One informant acknowledged that reimplementing service authorizations will be a challenge when the COVID-19 PHE ends and recognized the need to educate providers on the process. For example, there might be misapprehensions about how authorizations would relate to discharges.

Administrators acknowledged that they heard providers' requests for payment reforms, and concerns about whether they can grow their service array on the current rate trajectory, however the state has limited ability to change rates set or approved by CMS. Another concern was finding a middle ground between for coverage of services that were borderline long-term care (LTC) and might not be able to be billed to Medicaid. Informants were aware of issues related to the sunsetting of state plan codes, particularly in how rates were impacted by the transition.

One administrator mentioned concern about DHSS' internal restructure that occurred during the third year of interviews. The informant specifically noted there was a split of internal resources between new departments. Most State interviewees, however, believed that the restructure would have limited impact on waiver issues.

State administrators cited lessons learned about the process of onboarding the ASO, Optum. For example, one informant indicated that Optum did not capture National Provider Identifier (NPI) numbers, so DBH had to pull data from other sources. The transition to Optum was described as difficult by several state administrators, who said that many providers had not successfully transitioned as of the second year of interviews; however, this was no longer reported to be an issue by the third year of interviews.

Other delays and challenges noted by state administrators included:

- Significant workforce shortages in Alaska continued to impact waiver expansion and services at the provider and state administrative level.
  - Alaska's geography, cost of living, and access to broadband contributed to workforce challenges.
  - A volatile economy reflecting reliance on the oil industry.
- Lack of specific guidance from CMS regarding its expectations for engaging in meaningful dialogue with tribal entities.
- An increased urgency of children's mental health issues with the evolution of the COVID-19 PHE.
- The waiver renewal occurring during an election year.
  - The new administration may not have recognized the importance of the waiver.
  - Negotiations for the waiver occurred during the legislative session, increasing the pressure on the timeframe for renewal.
- Increase in opioid-related overdose deaths prior to the implementation of the waiver.

Providers

Providers highlighted administrative burden as a key concern throughout the three rounds of interviews. Initially, providers experienced long wait times to enroll providers in Medicaid. Once providers were enrolled, they expressed confusion in interpreting and complying with waiver guidelines and what they perceived as restrictions on provider's abilities to provide services in a specific manner. Many struggled with complying with the certification processes associated with employing QAPs. The certification process was costly and lengthy with no chance for reimbursement; many providers did not feel there was enough time for certification. Many providers also expressed difficulties with paperwork associated with background checks for peer support workers and the variance process. Additionally, one provider mentioned that they experienced increased administrative burden due to having to fill out paperwork for every provider.

Providers noted workforce challenges were a continued concern throughout the three years of interviews. Providers experienced extensive staffing issues and had difficulty hiring and retaining staff. One provider noted a 56 percent turnover among their staff in the preceding 12 months. Another provider noted four clinicians had left their organization in the past year. Workforce challenges shared by providers include difficulty getting workers to move to Alaska, inability to pay relocation fees, difficulty encouraging workers to remain in Alaska, and difficulty in offering competitive wages.

In year one of interviews, providers shared concerns about the sunset of state plan services before the 1115 waiver would be viable. State plan codes were discussed again in year three, when providers expressed frustration that waiver services were not always a direct replacement for state plan services, especially with regard to adult mental health residential services. One provider cited issues with the transition from home-based state plan codes to waiver codes; the provider, in anticipation of the state plan codes being sunset, transitioned their billing to utilize waiver codes. However, DBH delayed the sunsetting a few days before State plan codes were expected to be sunsetted. The provider had already transitioned their systems away from State plan codes and was unable to

reverse in time, causing the provider to stop providing school-based services, and resulting in a major loss in revenue. [C-4]

There was also discussion about differences between the state plan codes and waiver codes. Specifically, peer support and CRSS had a lower limit of 200 hours on the waiver compared to 840 available hours on the state plan codes. The provider felt that in this situation it would not make sense to bill to the waiver codes. Similarly, an additional provider shared that they continued to bill state plan codes for peer support, case management, assessment, and psychotherapy. Another provider noted that they understand why some providers are continuing to bill to state plan and expressed that they wished 1115 and state plan billing were the same. Medicaid and non-Medicaid services utilize different codes; one provider noted that they would like the State to make these codes match. [C-5]

Informants expressed additional concerns surrounding billing:

- Inability to bill for arranging travel for case management resulted in providers spending unpaid hours on this process.
- Lack of understanding on the documentation required to bill for peer support. The administrative burden of this billing process was too high, and a provider explained their staff worked weekends to bill for these services.[C-6]
- Fears over the return of service authorizations after the PHE ends.
- Clarity on bill codes and paybacks.
- Difficulties in providing every location and provider their own NPI.
- Optum not itemizing payments and voids, leaving providers vulnerable in an audit.

Many providers experienced concerns specifically with Optum. In years one and two, the majority of interviewed providers highlighted the difficulty of the transition from Conduent to Optum. Issues in this transition included billing issues (denied claims, providers not in the billing system), inconsistent instructions, lack of communication, and a reduction in information technology (IT) and technical support. Providers felt that the transition to Optum at the same time as rolling out the waiver and during the COVID-19 PHE was too much. Additionally, providers felt that Optum did not provide the cost reduction and support that was originally indicated. By the third year, interviewed providers did not express concerns regarding Optum.

Providers also expressed a similar lack of support, training, and guidance from DBH in the billing and documentation processes in the first year of interviews. Some interviewees felt that DBH's responses were inconsistent. By the third-year, similar feelings remained. Providers noted that DBH was not responsive to questions, and that different DBH representatives gave different answers to the same question. Providers who did feel that DBH was responsive maintained that answers were unclear. Informants expressed the need for more transparency from DBH. Several providers shared that they were looking forward to meeting with DBH in person to get their questions answered.

C-4 School-based services provided by the Tribal Behavioral Health System (TBHS) remain in the Alaska state plan.

C-5 If the recipient is ineligible for Medicaid, then neither State plan nor 1115 billing codes should be used. For those ineligible for Medicaid, State grants are used to support provider organizations that serve non-resourced service recipients; funding for this population has continued during the demonstration period to ensure access to services via grants. Providers are only required to provide services to non-Medicaid recipients as a component of their grant requirements.

C-6 There may be confusion among providers between peer support services and peer-based crisis services. Peer support services are provided under the Alaska state plan, while peer-based crisis services have not been implemented.

Several providers experienced difficulties providing services in 2021 due to a cybersecurity attack on the Alaska's Automated Information Management System (AKAIMS) system. Prior to the incident, providers billed Medicaid through the AKAIMS system and were forced to switch to Optum's provider express system online. One provider missed timely filing when AKAIMS was taken offline and were not given a grace period under the waiver or the state plan; the provider estimates a loss of approximately $40,000 over seven months.

Lastly, providers reported experiencing difficulties expanding services, namely in providing peer support services. Peers had difficulties gaining clearance via a background check to perform peer support services because many peers had an issue appear on the background check. Providers had to complete a variance to allow the peer to work which could take up to eight weeks to gather all the correct paperwork. Many peers dropped out of the program because they could not wait unpaid.[C-7] Additionally, providers felt there was not enough funding and resources for proper implementation. One provider required grant funds to operate for the first six months of implementation.

There were additional areas of concern highlighted throughout the evaluation period:

- The geography of Alaska limited providers' ability to provide services within a safe driving distance.
- Difficulty in providing services to youth with BH needs due to the limited number of beds, especially residential psychiatric treatment beds for youth.
- Community stigma against SUD residential providers.
- Some providers felt that access to care had not changed, some feel it had increased, and others felt that access decreased. Reasons that providers believe access decreased include:
  - One provider was forced to stop providing school-based youth services and closed an entire clinic due to waiver billing issues.
  - Patients must wait for service authorizations while in crisis. This was identified as burdensome and clinically unhealthy.
- Providers struggled to continue providing services to non-Medicaid patients.
  - Prior to the waiver, same services were available to Medicaid and non-Medicaid patients. The waiver created a gap in services available between groups.
  - The State maintained a heavy focus on Medicaid and, according to one provider, forgot that providers must serve non-Medicaid patients to stay in business.
- The waiver's focus on early intervention and prevention was not conducive to adults with long-term serious mental illness (SMI).
- Providers had to identify what setting clients are in when they receive telehealth services (i.e., at home or another setting).
- Agencies had to become licensed as an assisted living facility to provide adult mental health residential services.

Tribal Health Organizations

During the second year of interviews, informants' major concerns were the administrative burden, the evolving process of development and revision of the new regulatory system, confusion over which services were billable

[C-7] Background checks and clearances are under the purview of the Division of Health Care Services (HCS). DBH is collaborating with HCS to reduce the process time to enroll peer support staff.

and which were not, and the long processing time for applications to enroll with CMS for billing. Interviews conducted in the third year showed that administrative burden continued to be a concern amongst THOs, and their feedback was quite similar to that provided in the prior two years by THOs and other stakeholders, centering on licensure requirements, certification of QAPs, and enrollment of providers. Informants did not raise previously unidentified issues and acknowledged DBH's continuing efforts to address their concerns. However, there was a perception of change fatigue due to the cumulative effects of a lot of change over time.

THOs identified some concerns about the regulatory scheme itself; one THO felt the waiver eliminated flexibility and did not allow for programs to grow and develop naturally. Another perceived that the waiver focused on ASAM level 1.0 and 2.1 services while disregarding others. A third mentioned the need to address coverage for involuntary care.

Several THOs highlighted the bifurcation of SUD and BH regulations and services as a concern in year three. Since many SUD and BH patients present with co-occurring issues, the waiver's bifurcation resulted in issues with billing, created potential problems for audits, and impacted the treatment of patients. THOs hoped that this confusion would be alleviated in the renewal of the waiver.

The lack of resources for early intervention and service for youth and families was one of the main drivers of the design of the waiver and remains an acute concern among THOs across the continuum of care. This situation was described in the second year of interviews as especially acute for youth with BH needs due to the limited number of inpatient/residential psychiatric treatment beds for youth. The shortage was exacerbated by the lengthy process to get approval or authorization for placements in state and even lengthier for placements out of state. Informants felt that early screening and intervention had begun to improve with the adoption of the SBIRT screening tool. However, during the third year one informant observed that the intake paperwork for BH was still much longer than the paperwork required for physical health visits or that required in federally qualified health centers (FQHCs), presenting an overwhelming burden for providers and a barrier to patients' engagement in care.

In the third year, THOs also noted that home-based family treatment billing codes did not always match the work THOs were doing and seemed designed to support reactive rather than preventative care. Ultimately, the services seemed to be geared toward older youth in an effort to prevent them from incarceration rather than supplying true early intervention care, as originally intended. Informants felt they had not been able to translate the opportunities presented by the new codes in the waiver into actual growth in youth programming. One THO highlighted this as an area of opportunity for DBH to translate what code sets mean in practice and explain how organizations could build capacity to support families.

In the third year of interviews, billing issues continued to present concerns. Many THOs were especially concerned about the impending return of service authorizations, which were not required during the COVID-19 PHE. Several THOs believed there appeared to be inconsistency in guidance from Optum and DBH regarding when service authorizations would return and noted there were many other unknowns surrounding their return. One informant described that they would need to manually track all service authorizations since their electronic health record (EHR) system did not automatically do so.

In the second year of interviews THOs wondered whether smaller providers would be driven out of business due to the waiver. In year three, there were anecdotal reports by THOs of the loss of services that they attributed to complications of the waiver. One informant was unable to alter its children's home service to fit the waiver bill codes and withdrew the service from Medicaid billing. One THO was considering enrolling as a tribal FQHC instead of providing services through the waiver due to the administrative burden associated with the waiver. Multiple THOs noted that waiver billing rates were too low to both continue existing state plan services and support the expansion of several waiver services, especially rates for residential services for youth, and 24-hour multidisciplinary, and assertive community treatment (ACT) services.

Several THOs in year three mentioned additional workforce challenges, including a limited pool of prospective employees and high rates of unfilled vacancies within their organizations. THOs lacked administrative staff, case managers, and paraprofessionals. One informant's workforce fears centered around the concern that masters' levels providers would leave for the private sector to avoid administrative burden.

THOs shared that funding challenges limited expansion in year three. The high cost to staff new programs was named as a chief friction point. The recent economy was also a factor, with increasing general costs negatively impacting already thin margins. Additional limiting factors in expansion mentioned by THOs in the third year included limited infrastructure and lacking knowledge of how to implement new services in practice. One THO noted that they were only able to shift the bill codes of its pre-existing services and did not add any new waiver services to its service array. THOs also felt that the service definitions and requirements were designed for an urban population and were not easily adaptable to rural tribal areas due to the unique rural lifestyles of these groups. One THO shared that strict program and engagement requirements were difficult for rural populations to align with while trying to provide for their families in a remote setting. For example, the patient population in Alaska may leave treatment depending on the season due to the unique lifestyles of some Alaskans.

While some THOs expressed positive sentiments around their interactions with DBH and Optum, others felt that communication could be improved. THOs would like an easily available resource on up-to-date information on regulations, fee schedules, and manuals. While they conceded there was information available online, THOs pointed out that much of this information was outdated, creating significant potential ramifications in the case of an audit.

Several THOs expressed difficulties performing their typical duties for several months in 2021 due to a Statewide cyberattack that impacted AKAIMS. During the cyberattack, THOs were forced to switch to a paper-based record systems instead of an electronic version. This caused one THO to have to spend time away from patients and physically move records around the facility each day, impacting the quality of care they were able to provide. During the cyberattack, progress towards expanding services and implementing key waiver functions halted as THOs focused on providing care while using cumbersome paper methods. One THO mentioned that having to deal with the cyberattack and the COVID-19 PHE simultaneously was a challenge and there continues to be a need to provide early intervention and prevention services. One THO was concerned that DBH had been unable to meet with tribal behavioral health directors to discuss the administrative burden of the waiver. One THO recommended that DBH help Optum with documentation requirements associated with the waiver because Optum experienced difficulties working with THOs on documentation requirements due to stringent regulations. One informant also felt that the Optum conferences were unproductive; in the future, they would like to spend more time at conferences on what services are supposed to look like in practice when implemented.

Non-Provider Stakeholders

Non-provider stakeholders (one BH professional association and one consumer advocate organization) raised various concerns over the three years of interviews, generally centered around the level of communication between DBH and stakeholders. Primary concerns were the level of DBH interactions with providers, lack of transparency, and transition planning for phasing-out state plan services. However, as mentioned earlier, the consensus was that DBH had done a fairly good job at responding to issues and learning from challenges.

In all three years, non-providers felt DBH may have missed an opportunity to work more closely with providers. The consumer advocate informant discussed a need for more active change management and waiver education for other State agencies/departments, especially because informants had observed other departments pass out incorrect information about covered services to community members. In year one, the professional association felt that DBH had started major system changes with little to no follow up, leaving providers with inadequate

information to commit to new changes and initiatives. By the third year, both of these stakeholder groups reported that communication had improved, although mixed responses on the subject persisted. One non-provider indicated that DBH was cutting back on their communication in year three, while another noted that DBH was helpful in getting services stood up.

Both non-provider stakeholders shared a common concern regarding a lack of transparency with the waiver. One informant during the second year of interviews recommended that more data, including the number of Medicaid enrollees or the number or types or service claims, should be more public facing. By the third year, the same informant indicated that a quality assurance (QA) review was going to be performed by providers and consumer advocates to review data and make recommendations to the ASO, Optum, but planning was discontinued due to lack of funding and other resources.

Non-providers felt as though there had been inadequate transition planning for the phase-out of state plan services and were concerned that patients might have been injured during the transition of state plan services to waiver services due to disruptions in their continuum of care. State plan services were phased-out before many providers were ready to complete the transition to waiver services, and waiver services were not always a clear replacement for existing state plan services.

Other concerns offered by these stakeholders included:

- The cyberattack on DOH website that occurred in May 2019 impacted the ability of providers to transition to new EHR systems and lengthened the amount of time it took to perform background checks for new employees.
- Parts of the waiver were rolled out under COVID-19 emergency regulations causing the public commenting period to occur after the waiver was implemented.[C-8]
- There was a possible loss of small BH providers who were unwilling or unable to meet the requirements of the waiver.
- There was a possible loss of funding streams due to not utilizing unrestricted general funds in addition to waiver funds.
- Providers had to alter their workplace to incorporate trainings, modify their EHR, and redesigned infrastructure, all of which created burdens that were not compensated.
- Regulations were overly flexible, causing confusion about service requirements.
- There were frequent changes in service requirements causing disruptions for providers who were in active implementation processes.
- There was confusion with new QAP credentialing requirements and how long training should take for degreed and non-degreed employees.

Budget Neutrality/Sustainability

State Administrators

State administrators highlighted a variety of topics related to budget neutrality and sustainability. During the first year, interviewees cited the need to understand how to establish and measure budget neutrality, explaining there

[C-8] In fact, the regulations relating to the Alaska 1115 SUD-BH Waiver were put into place using the state's emergency regulation process, but the use of the emergency regulation process was unrelated to the COVID-19 PHE.

was much to learn about the new processes for the waiver. COVID-19 greatly threatened the core sustainability of waiver services during the first year.

The second year of interviews highlighted several new topics related to budget neutrality and sustainability. Interviewees reiterated the need to look at improved outcomes from providing early intervention in the long term when judging sustainability. Several state administrators described difficulty obtaining the data from Optum that was needed to demonstrate sustainability, while acknowledging that some of these difficulties might be due to the COVID-19 PHE rather than the waiver. State administrators expressed at that time a clear view of the waiver's financial impact which included $200 million entering Alaska to pay BH providers' Medicaid claims. Most state agencies received more Medicaid revenue than state plan revenue.

State administrators identified the waiver as generally stable in year three, although sustainability planning continued to be an ongoing process. Interviewees shared concerns about funding and shared that they were seeking additional grant dollars to support waiver services. One informant highlighted that grant funding, specifically COVID-19-related funding, may have caused a general decline in the Medicaid budget due to a line veto performed by the state legislature. State administrators also discussed issues regarding select reimbursement rates. Youth crisis residential services were noted as being too low and not cost effective while mobile crisis services were identified as difficult to implement without proper staffing. Additionally, one informant shared that Milliman, the contractor who performs Alaska's budget neutrality work related to the waiver, aligned the CMS 64 reports and XML files from Optum to determine budget neutrality; the contract is ending after 2022. Work related to budget neutrality will need to be moved in-house at DBH if that contract is not extended.

Providers

The chief sustainability topic area identified in all three years by providers was the billing rates set for waiver services. Providers expressed that they believed rates were mostly reasonable and that services would be sustainable once they were up and running in year one. However, several areas of concern with service rates were identified:

- Unhappiness with the rate approved by CMS for ACT.
- Decreases in rates for several services including group services and community support.
- Insufficient rates for mobile outreach to support the service.

In year two, providers expressed concern about the rates set for children's services. Providers felt that the rates, set at half that of adults for similar services, failed to consider that children's needs are more complex and more urgent than those of adults. As a result, providers struggled financially to provide these services, noting that they were losing money on every patient served due to the way the regulations were written. In round three these sentiments continued. Again, providers specifically identified mobile outreach rates as being insufficient to support the service. One provider shared that they were only able to bill for $125,000 while accumulating $800,000 in costs to run the service. Providers also noted home-based service rates as insufficient to support the service.

Individual providers made additional comments on sustainability or budget neutrality during the third year of interviews:

- The separation of ASAM level 1.0 and 2.1 services contributed to increased sustainability.
- Separating waiver services and state plan billing did not allow providers to see budget neutrality.
- Billing rates may not keep pace with salary increases.

- Adult mental health residential services were not sustainable in the long term; however, ending this service would displace 40–50 patients.

Non-Provider Stakeholders

The non-provider stakeholders highlighted several areas of importance in sustainability. Interviewees agreed that billing rates were insufficient to sustain waiver services and were concerned that providers would cease operations. They agreed that rates for children's services had been set too low compared to adult rates for services, despite a need for more intensive care. Informants also expressed concern with the rates for mobile crisis services, citing that these rates were a quarter of the true cost of the service. According to interviewees, DBH was made aware of the issues with the rates and made promises to increase them, however, they did not seem to have been addressed in the budget.

Other issues on the minds of these stakeholders included:

- The need for the state and providers to diversify funding to continue operations after funding from grants decreased.
- Providers were unable to take on additional grants due to their staff's limited capacity.
- An ongoing attempt to use funding from the Family First Prevention Services Act in conjunction with the waiver to increase sustainability.

COVID-19

All of the key informants recognized the stress on themselves, their patients, and on the healthcare system as a whole from the COVID-19 PHE. For example, many residential and withdrawal management facilities were closed or had reduced census due to PHE. All recognized that increased telehealth services were helpful in dealing with the needs of patients and staff. Response to the pandemic also led stakeholders to work together in creative ways that brought a spirit of innovation that will continue as the pandemic becomes less acute. For example, providers who normally did not work together collaborated to provide joint access to 23-hour crisis stabilization for quarantined individuals that they hoped would last beyond the needs of the pandemic.

In the third year of interviews, informants continued to share the impacts of increased telehealth services including increased flexibility, higher attendance rates in rural areas, and better provider retention. However, they also reported difficulty providing telehealth services to rural areas and identifying how to utilize telehealth while simultaneously expanding services.

The COVID-19 PHE was also perceived as creating a back log for higher levels of service as more patients and staff were impacted by mental health crises. Informants, particularly THOs observed an increase in alcohol use and the number of deaths in rural populations unengaged in care. One THO experienced multiple staff suicides within its organization during the pandemic. THOs described experiencing challenges with employee recruitment and retention attributed to the pandemic. Staff members became exhausted when dealing with COVID-19, leading to high staff turnover which was further exacerbated by a lack of staff housing.

Appendix D. Measure Definitions and Specifications

Health Services Advisory Group, Inc. (HSAG) identified the waiver population according to the three target groups specified in the Centers for Medicare & Medicaid Services (CMS)-approved evaluation design plan.

- **Group 1**: Children, adolescents, and their parents or caretakers with or at risk of mental health disorders and substance use disorders (SUDs)
  - COE 51 – Child Under 21 and in state custody (including Title IV-E Foster Care)
- **Group 2**: Transition age youth and adults with acute mental health needs
  - Beneficiaries 16–24 years old
  - COE 31, 71 or 81
    - COE 31 – Adults with Physical and Developmental Disabilities Waiver
    - COE 71 – Intellectual and Developmental Disability Waiver
    - COE 81 – Complex Medical Condition Waiver
  - Claim with a diagnosis code listed in the HEDIS MY 2020 Mental Health diagnosis value set
- **Group 3**: Adults, adolescents, and children with SUDs
  - Beneficiaries 12–64 years old
  - Claim with a diagnosis code listed under one of the following HEDIS MY 2020 Value Sets:
    - Alcohol Abuse and Dependence Value Set
    - Opioid Abuse and Dependence Value Set
    - Other Drug Abuse and Dependence Value Set

Beneficiaries screened for symptoms of SUD using industry recognized, evidence-based screening instruments (Measure 1-1)	
Numerator	The number of unique beneficiaries screened for symptoms of SUD
Denominator	The total number of unique waiver beneficiaries
Comparison Population	N/A
Analytic Approach	Pre/post analysis
Measure Steward	N/A
Data Source	MMIS
Frequency	Annual
Desired Direction	Higher is better
Notes for measure calculation	The following HCPCS/CPT codes were used to identify SUD screening: H0049 H2000 H0001 Alcohol and/or Drug Assessment H0002 H0031 - HH Integrated MH and SU intake assessment*

* The H0031 – HH code does not disaggregate SUD from MH

Beneficiaries screened for symptoms of behavioral health disorders using industry recognized, evidence-based screening instruments (Measure 1-2)	
Numerator	The number of unique beneficiaries screened for symptoms of BH
Denominator	The total number of unique waiver beneficiaries
Comparison Population	N/A
Analytic Approach	Pre/post analysis
Measure Steward	N/A
Data Source	MMIS
Frequency	Annual
Desired Direction	Higher is better
Notes for measure calculation	The following HCPCS/CPT codes were used to identify BH screening: T1023 90791 H0031 Mental Health Assessment H0031 - HH Integrated MH and SU intake assessment

Number of beneficiaries in the waiver population with SUD or behavioral health diagnosis, by setting (Measure 1-3)	
Numerator	The number of unique beneficiaries (de-duplicated total) enrolled in the measurement period who receive MAT or have qualifying facility, provider, or pharmacy claims with a SUD diagnosis and a SUD-related treatment service during the measurement period and/or in the 11 months before the measurement period
Denominator	The total number of unique waiver beneficiaries
Comparison Population	N/A
Analytic Approach	Pre/post analysis
Measure Steward	CMS
Data Source	MMIS
Frequency	Annual
Desired Direction	Higher is better
Notes for measure calculation	Measure specifications rely on *Medicaid Section 1115 SUD Demonstrations: Technical Specifications for Monitoring Metrics, version 4.0*, Metric #4: Medicaid Beneficiaries with SUD Diagnosis (annually).

Initiation and Engagement of Alcohol and Other Drug Dependence Treatment (Measure 1-4)	
Numerator	*Initiation of AOD Treatment:* the number of members who initiate treatment through an inpatient AOD admission, outpatient visit, intensive outpatient encounter or partial hospitalization, telehealth, or medication treatment within 14 days of the diagnosis. *Engagement of AOD Treatment:* the number of members who initiated treatment and who were engaged in ongoing AOD treatment within 34 days of the initiation visit.
Denominator	The total number of waiver beneficiaries with a new diagnosis of AOD abuse or dependence
Comparison Population	N/A

Initiation and Engagement of Alcohol and Other Drug Dependence Treatment (Measure 1-4)	
Analytic Approach	Pre/post analysis
Measure Steward	NCQA (NQF 0004)
Data Source	MMIS
Frequency	Annual
Desired Direction	Higher is better
Notes for measure calculation	This measure follows NCQA specifications for Initiation and Engagement of Alcohol and Other Drug Abuse or Dependence Treatment (IET).

Follow up after discharge from emergency department visits for SUD, and specifically for OUD, by setting (Measure 1-5)	
Numerator	Of the visits identified in the denominator, the number of follow-up visits with any practitioner, with a principal diagnosis of AOD within 7 days after the ED visit (8 total days). Of the visits identified in the denominator, the total number of follow-up visits with any practitioner, with a principal diagnosis of AOD within 30 days after the ED visit (31 total days).
Denominator	The total number of emergency department visits for members 13 years of age and older with a principal diagnosis of alcohol or other drug (AOD) abuse or dependence.
Comparison Population	N/A
Analytic Approach	Pre/post analysis
Measure Steward	NCQA (NQF 2605)
Data Source	MMIS
Frequency	Annual
Desired Direction	Higher is better
Notes for measure calculation	This measure follows NCQA specifications for Follow-Up After Emergency Department Visit for Alcohol and Other Drug Abuse or Dependence (FUA).

Follow up after discharge from emergency department visits for a behavioral health disorder, by setting (Measure 1-6)	
Numerator	7-day follow-up: Of the visits identified in the denominator, the total number of follow-up visits with any practitioner, with a principal diagnosis of a mental health disorder or with a principal diagnosis of intentional self-harm and any diagnosis of a mental health disorder within 7 days after the ED visit (8 total days). 30-day follow-up: Of the visits identified in the denominator, the total number of follow-up visits with any practitioner, with a principal diagnosis of a mental health disorder or with a principal diagnosis of intentional self-harm and any diagnosis of a mental health disorder within 30 days after the ED visit (31total days).
Denominator	The total number of emergency department visits for members 6 years of age and older with a principal diagnosis of mental illness or intentional self-harm.
Comparison Population	N/A
Analytic Approach	Pre/post analysis
Measure Steward	NCQA (NQF 2605)

Follow up after discharge from emergency department visits for a behavioral health disorder, by setting (Measure 1-6)	
Data Source	MMIS
Frequency	Annual
Desired Direction	Higher is better
Notes for measure calculation	This measure follows NCQA specifications for Follow-Up After Emergency Department Visit for Mental Illness (FUM).

Number of Medicaid qualified SUD providers (identified by provider ID numbers) who bill for SUD services (Measure 1-7)	
Numerator	The number of Qualified Addiction Specialists with a claim for a SUD service.
Denominator	N/A
Comparison Population	N/A
Analytic Approach	Descriptive analysis
Measure Steward	N/A
Data Source	Administrative/provider enrollment records/MMIS
Frequency	Annual
Desired Direction	N/A
Notes for measure calculation	SUD service is defined as a claim meeting any of the following criteria: Diagnosis code in any of the following HEDIS MY 2020: Alcohol Abuse and Dependence Value Set Opioid Abuse and Dependence Value Set Other Drug Abuse and Dependence Value Set HEDIS MY 2020AOD Medication Treatment Value Set CPT H0009, H0010, H0011, H2036, H0047, H0023, H0014, H2021, H0015, T1007, H0035

Number of Medicaid qualified professionals licensed in the state to provide behavioral health who bill for behavioral health disorder services (Measure 1-8)	
Numerator	The number of behavioral health providers with a claim for behavioral health disorder services.
Denominator	N/A
Comparison Population	N/A
Analytic Approach	Descriptive analysis
Measure Steward	N/A
Data Source	Administrative/provider enrollment records/MMIS
Frequency	Annual
Desired Direction	N/A
Notes for measure calculation	BH service is defined as a claim with a diagnosis code in the Mental Health Diagnosis Value Set.

Providers' reported barriers before, during, and shortly following expansion of BH and SUD services (Measure 1-9)	
Numerator	N/A
Denominator	N/A
Comparison Population	N/A
Analytic Approach	Qualitative Analysis
Measure Steward	N/A
Data Source	Provider key informant interviews
Frequency	N/A
Desired Direction	N/A
Notes for measure calculation	Interviews were conducted annually from 2020-2022.

Providers' experience in expanding services (Measure 1-10)	
Numerator	N/A
Denominator	N/A
Comparison Population	N/A
Measure Steward	N/A
Data Source	Provider key informant interviews
Frequency	N/A
Desired Direction	N/A
Analytic Approach	Qualitative Analysis
Notes for measure calculation	Interviews were conducted annually from 2020-2022.

Administrators' reported barriers before, during, and shortly following expansion of BH and SUD services (Measure 1-11)	
Numerator	N/A
Denominator	N/A
Comparison Population	N/A
Measure Steward	N/A
Data Source	Administrator key informant interview
Frequency	N/A
Desired Direction	N/A
Analytic Approach	Qualitative Analysis
Notes for measure calculation	Interviews were conducted annually from 2020-2022.

Administrators' plan for program sustainability and anticipated challenges (Measure 1-12)	
Numerator	N/A
Denominator	N/A
Comparison Population	N/A

Administrators' plan for program sustainability and anticipated challenges (Measure 1-12)	
Measure Steward	N/A
Analytic Approach	Qualitative Analysis
Data Source	Administrator key informant interview
Frequency	N/A
Desired Direction	N/A
Notes for measure calculation	Interviews were conducted annually from 2020-2022.

Alaska tribal entities reported changes in quality of care and access to care following expansion of BH and SUD services (Measure 1-13)	
Numerator	N/A
Denominator	N/A
Comparison Population	N/A
Measure Steward	N/A
Data Source	Tribal Health Organization key informant interviews.
Frequency	N/A
Desired Direction	N/A
Analytic Approach	Qualitative Analysis
Notes for measure calculation	Interviews were conducted annually from 2020-2022.

Inpatient admissions for SUD, and specifically for OUD, by setting (Measure 1-14)	
Numerator	The number of inpatient discharges related to a SUD stay during the measurement period. The number of inpatient discharges related to an OUD stay during the measurement period. OUD is defined as having an ICD-10-CM diagnosis code in the Opioid Abuse and Dependence Value Set.
Denominator	The total number of unique waiver beneficiaries
Comparison Population	N/A
Analytic Approach	Interrupted time series analysis
Measure Steward	CMS
Data Source	MMIS
Frequency	Monthly
Desired Direction	Lower is better
Notes for measure calculation	Measure specifications rely on *Medicaid Section 1115 SUD Demonstrations: Technical Specifications for Monitoring Metrics, version 4.0*, Metric #24: Inpatient Stays for SUD per 1,000 Medicaid Beneficiaries.

Inpatient admissions for behavioral health disorders, by setting (Measure 1-15)	
Numerator	The number of inpatient discharges related to a BH stay during the measurement period.
Denominator	The total number of unique waiver beneficiaries
Comparison Population	N/A
Analytic Approach	Interrupted time series analysis
Measure Steward	CMS
Data Source	MMIS
Frequency	Monthly
Desired Direction	Lower is better
Notes for measure calculation	Measure specifications rely on a modified *Medicaid Section 1115 SUD Demonstrations: Technical Specifications for Monitoring Metrics, version 4.0*, Metric #24: Inpatient Stays for SUD per 1,000 Medicaid Beneficiaries. Instead of the Alcohol Abuse and Dependence, Opioid Abuse and Dependence, and Other Drug Abuse and Dependence value sets to identify SUD, this measure is modified to use the Mental Health diagnosis value set to identify BH disorders.

Emergency department visits for SUD, and specifically for OUD, by setting (Measure 1-16)	
Numerator	The number of ED visits for SUD during the measurement period. The number of ED visits for OUD during the measurement period. OUD is defined as having an ICD-10-CM in the Opioid Abuse and Dependence Value Set.
Denominator	The total number of unique waiver beneficiaries
Comparison Population	N/A
Analytic Approach	Interrupted time series analysis
Measure Steward	CMS
Data Source	MMIS
Frequency	Monthly
Desired Direction	Lower is better
Notes for measure calculation	Measure specifications rely on *Medicaid Section 1115 SUD Demonstrations: Technical Specifications for Monitoring Metrics, version 4.0*, Metric #23: Emergency Department Utilization for SUD per 1,000 Medicaid Beneficiaries.

Emergency department visits for a behavioral health disorder, by setting (Measure 1-17)	
Numerator	The number of ED visits for BH during the measurement period.
Denominator	The total number of unique waiver beneficiaries
Comparison Population	N/A
Analytic Approach	Interrupted time series analysis
Measure Steward	CMS
Data Source	MMIS
Frequency	Monthly

Emergency department visits for a behavioral health disorder, by setting (Measure 1-17)	
Desired Direction	Lower is better
Notes for measure calculation	Measure specifications rely on modified *Medicaid Section 1115 SUD Demonstrations: Technical Specifications for Monitoring Metrics, version 4.0*, Metric #23: Emergency Department Utilization for SUD per 1,000 Medicaid Beneficiaries. Instead of the Alcohol Abuse and Dependence, Opioid Abuse and Dependence, and Other Drug Abuse and Dependence value sets to identify SUD, this measure is modified to use the Mental Health diagnosis value set to identify BH disorders instead.

Mean length of stay measured from admission date to discharge date, by setting (Measure 1-18)	
Numerator	The total number of days in an IMD for inpatient/residential discharges for SUD.
Denominator	The total number of discharges from an IMD for beneficiaries with an inpatient or residential treatment stay for SUD.
Comparison Population	N/A
Analytic Approach	Pre/post analysis
Measure Steward	CMS
Data Source	MMIS
Frequency	Annual
Desired Direction	Statewide goal of 30 days average length of stay.
Notes for measure calculation	Measure specifications rely on modified *Medicaid Section 1115 SUD Demonstrations: Technical Specifications for Monitoring Metrics, version 4.0*, Metric #36: Average Length of Stay in IMDs.

30-day readmission rate to inpatient facilities following hospitalization for an SUD related diagnosis, by setting (Measure 1-19)	
Numerator	30-day inpatient and residential readmission rates for beneficiaries discharged with SUD diagnosis and readmitted to either inpatient or residential treatment facilities.
Denominator	The number of inpatient discharges with a principal diagnosis of SUD. Step 1: Calculate the Denominator: Count of Index Hospital Stays Step 1a. Identify all acute inpatient discharges with any diagnosis in the first 11 months of the measurement year. To identify acute inpatient discharges: Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set). Exclude nonacute inpatient stays (Nonacute Inpatient Stay Value Set). Determine whether the discharge date for the stay falls in the first 11 months of the measurement year. Inpatient stays where the discharge date from the first setting and the admission date to the second setting are two or more calendar days apart must be considered distinct inpatient stays. This measure includes acute discharges from any type of acute facility (including behavioral healthcare facilities). Step 1b. Address acute-to-acute direct transfers. Exclude the hospital stay if the direct transfer's discharge date occurs in the last 30 days of the measurement year.

30-day readmission rate to inpatient facilities following hospitalization for an SUD related diagnosis, by setting (Measure 1-19)	
	Step 1c. Exclude hospital stays where the Index Admission Date is the same as the Index Discharge Date. Step 1d. Exclude hospital stays for the following reasons: The beneficiary died during the stay. Female beneficiaries with a principal diagnosis of pregnancy (Pregnancy Value Set) on the discharge claim. A principal diagnosis of a condition originating in the perinatal period (Perinatal Conditions Value Set) on the discharge claim. Note: For hospital stays where there was an acute-to-acute direct transfer (identified in Step 1), use both the original stay and the direct transfer stay to identify exclusions in this step. Step 1e. Identify stays with a principal diagnosis for SUD (AOD Abuse and Dependence Value Set). Step 1f. To calculate the count of Index Hospital Stays (i.e., the denominator), count the number of Index Hospital Stays that meet the criteria in Steps 1a-1e.
Comparison Population	N/A
Analytic Approach	Pre/post analysis
Measure Steward	N/A
Data Source	MMIS
Frequency	Annual
Desired Direction	Lower is better
Notes for measure calculation	Specifications for this measure were developed following modified *Medicaid Section 1115 SUD Demonstrations: Technical Specifications for Monitoring Metrics, version 4.0*, Metric #25: Readmissions Among Beneficiaries with SUD v4.0.

30-day readmission rate to inpatient facilities following hospitalization for a behavioral health related diagnosis, by setting (Measure 1-20)	
Numerator	30-day inpatient and residential readmission rates for beneficiaries discharged with BH diagnosis and readmitted to either inpatient or residential treatment facilities.
Denominator	The number of inpatient discharges with a principal diagnosis of BH. Step 1: Calculate the Denominator: Count of Index Hospital Stays Step 1a. Identify all acute inpatient discharges with any diagnosis in the first 11 months of the measurement year. To identify acute inpatient discharges: Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set). Exclude nonacute inpatient stays (Nonacute Inpatient Stay Value Set). Determine whether the discharge date for the stay falls in the first 11 months of the measurement year. Inpatient stays where the discharge date from the first setting and the admission date to the second setting are two or more calendar days apart must be considered distinct inpatient stays. This measure includes acute discharges from any type of acute facility (including behavioral healthcare facilities).

30-day readmission rate to inpatient facilities following hospitalization for a behavioral health related diagnosis, by setting (Measure 1-20)	
	Step 1b. Address acute-to-acute direct transfers. Exclude the hospital stay if the direct transfer's discharge date occurs in the last 30 days of the measurement year. Step 1c. Exclude hospital stays where the Index Admission Date is the same as the Index Discharge Date. Step 1d. Exclude hospital stays for the following reasons: The beneficiary died during the stay. Female beneficiaries with a principal diagnosis of pregnancy (Pregnancy Value Set) on the discharge claim. A principal diagnosis of a condition originating in the perinatal period (Perinatal Conditions Value Set) on the discharge claim. Note: For hospital stays where there was an acute-to-acute direct transfer (identified in Step 1), use both the original stay and the direct transfer stay to identify exclusions in this step. Step 1e. Identify stays with a principal diagnosis for BH (Mental Health Diagnosis Value Set). Step 1f. To calculate the count of Index Hospital Stays (i.e., the denominator), count the number of Index Hospital Stays that meet the criteria in Steps 1a-1e.
Comparison Population	N/A
Analytic Approach	Pre/post analysis
Measure Steward	N/A
Data Source	MMIS
Frequency	Annual
Desired Direction	Lower is better
Notes for measure calculation	Specifications for this measure were developed following modified *Medicaid Section 1115 SUD Demonstrations: Technical Specifications for Monitoring Metrics, version 4.0*, Metric #25: Readmissions Among Beneficiaries with SUD v4.0.

Number of beneficiaries with a SUD diagnosis including those with OUD who used services in the last month or year, by service or benefit type (Measure 1-21)	
Numerator	The number of beneficiaries using the following services defined by *Medicaid Section 1115 SUD Demonstrations: Technical Specifications for Monitoring Metrics, version 4.0*: Metric #7: Early Intervention Metric #8: Outpatient Metric #9: Intensive Outpatient and Partial Hospitalization Metric #10: Residential and Inpatient Metric #11: Withdrawal Management Metric #12: Medication Assisted Treatment
Denominator	The total number of unique waiver beneficiaries with a SUD diagnosis (HEDIS MY 2020 AOD Abuse and Dependence Value Set)
Comparison Population	N/A
Analytic Approach	Interrupted time series analysis
Measure Steward	N/A

Number of beneficiaries with a SUD diagnosis including those with OUD who used services in the last month or year, by service or benefit type (Measure 1-21)	
Data Source	MMIS
Frequency	Monthly
Desired Direction	Higher is better
Notes for measure calculation	

Number of beneficiaries with a behavioral health diagnosis who used services in the last month or year, by service or benefit type (Measure 1-22)	
Numerator	The number of beneficiaries using the following services defined by HEDIS MY 2020 Specifications of Mental Health Utilization (MPT): Inpatient Intensive Outpatient or Partial Hospitalization Outpatient ED Telehealth Any service
Denominator	The total number of unique waiver beneficiaries with a BH diagnosis (HEDIS MY 2020 Mental Health Diagnosis Value Set)
Comparison Population	N/A
Analytic Approach	Interrupted time series analysis
Measure Steward	N/A
Data Source	MMIS
Frequency	Monthly
Desired Direction	Higher is better
Notes for measure calculation	

Time to treatment, by service type (National Behavioral Health Quality Framework [NBHQF] Goal 1) (Measure 1-23)	
Numerator	Index episode start date (IESD) definition is aligned with HEDIS MY 2020 IET specifications for initiation of treatment. The total number of days from IESD, i.e., the earliest date of service for an eligible encounter with a diagnosis of alcohol, opioid, or other drug-related abuse or dependence, through an inpatient alcohol-related admission, outpatient visit, intensive outpatient encounter or partial hospitalization, telehealth, or medication treatment within 14 days.
Denominator	The total number of claims for initiation of alcohol, opioid, or other drug-related abuse treatment through an inpatient AOD admission, outpatient visit, intensive outpatient encounter or partial hospitalization, telehealth, or medication treatment within 14 days of the diagnosis among waiver beneficiaries.
Comparison Population	N/A

Time to treatment, by service type (National Behavioral Health Quality Framework [NBHQF] Goal 1) (Measure 1-23)	
Analytic Approach	Pre/post analysis
Measure Steward	N/A
Data Source	MMIS
Frequency	Annual
Desired Direction	Lower is better
Notes for measure calculation	For an ED, inpatient stay, observation visits that result in an inpatient stay, or for detoxification that occurred during an inpatient stay, the index episode start date is considered the initiation of treatment. Time to treatment is set to 0 for these claims.

Access to physical health care (Measure 2-1)	
Numerator	The number of adult waiver members aged 20 and older who had an ambulatory or preventative care visit during the measurement year. The number of children and young adults 12 months – 19 years of age who had a visit with a primary care practitioner during the measurement year.
Denominator	The total number of unique adult waiver beneficiaries aged 20 and older. The total number of unique child waiver beneficiaries aged 12 months – 19 years.
Comparison Population	N/A
Analytic Approach	Pre/post analysis
Measure Steward	NCQA
Data Source	MMIS
Frequency	Annual
Desired Direction	Higher is better
Notes for measure calculation	This measure follows NCQA specifications for Adults' Access to Preventive/Ambulatory Health Services (AAP) and Children and Adolescents' Access to Primary Care Practitioners (CAP).

Screening for chronic conditions relevant to state Medicaid population (Measure 2-2)	
Numerator	The number of unique waiver beneficiaries screened for a chronic condition (Appendix Table A-19).
Denominator	The total number of unique waiver beneficiaries
Comparison Population	N/A
Analytic Approach	Pre/post analysis
Measure Steward	N/A
Data Source	MMIS
Frequency	Annual
Desired Direction	Higher is better
Notes for measure calculation	

Screening for co-morbidity of behavioral health and substance use disorders within the waiver population compared to the total Medicaid population (Measure 2-3)	
Numerator	Rate Indicator 1: The number of unique beneficiaries with a SUD diagnosis (denominator rate indicator 1) screened for symptoms of BH, as defined by Measure 1-2 (Beneficiaries screened for symptoms of BH using industry recognized, evidence-based screening instruments). Rate Indicator 2: The number of unique beneficiaries with a BH diagnosis (denominator rate indicator 2) screened for symptoms of SUD, as defined by Measure 1-1 (Beneficiaries screened for symptoms of SUD using industry recognized, evidence-based screening instruments).
Denominator	Rate Indicator 1: The number of unique beneficiaries (de-duplicated total) enrolled in the measurement period who receive MAT or have qualifying facility, provider, or pharmacy claims with a SUD diagnosis and a SUD-related treatment service during the measurement period and/or in the 11 months before the measurement period Rate Indicator 2: The number of unique beneficiaries (de-duplicated total) enrolled in the measurement period diagnosed with a BH disorder.
Comparison Population	N/A
Analytic Approach	Pre/post analysis
Measure Steward	N/A
Data Source	MMIS
Frequency	Annual
Desired Direction	Higher is better
Notes for measure calculation	Two rate indicators were combined to provide a composite rate score of screening for co-morbid BH and SUD conditions.

Percentage of beneficiaries who rate the quality of their of health care as very good or excellent (Measure 2-4)

Numerator

Summary rates are evaluated based on an 8+9+10 top-box rating system as indicated in the table below. The response score value or numerator compliance for each member answering the following question:

"Using any number from 0 to 10, where 0 is the worst health care possible and 10 is the best health care possible, what number would you use to rate all your health care in the last 6 months?"

Responses and their corresponding score values and numerator compliance are as follows:

Response Choices	Score Value
0 – Worst health care possible	0
1	0
2	0
3	0
4	0
5	0
6	0
7	0

Percentage of beneficiaries who rate the quality of their of health care as very good or excellent (Measure 2-4)	
	8 – 1 9 – 1 10 – Best health care possible – 1
Denominator	The number of respondents who had a valid response to the question indicated in the numerator.
Comparison Population	N/A
Analytic Approach	Descriptive analysis
Measure Steward	CAHPS
Data Source	Beneficiary survey
Frequency	Once
Desired Direction	Higher is better
Notes for measure calculation	Rates for calculated for both adult respondents and child respondents.

Percentage of beneficiaries who rate overall mental or emotional health as very good or excellent (Measure 2-5)	
Numerator	Summary rates will be evaluated based on a very good + excellent top-box rating system indicated in the table below. The numerator will be defined as the response score value or numerator compliance for each member answering the following question: "In general, how would you rate your overall mental or emotional health? Responses and their corresponding score values and numerator compliance are as follows: Excellent – 1 Very good – 1 Good – 0 Fair – 0 Poor – 0
Denominator	The number of respondents who had a valid response to the question indicated in the numerator.
Comparison Population	N/A
Analytic Approach	Descriptive analysis
Measure Steward	CAHPS
Data Source	Beneficiary survey
Frequency	Once
Desired Direction	Higher is better
Notes for measure calculation	Rates for calculated for both adult respondents and child respondents.

Percentage of beneficiaries who demonstrate very good or excellent knowledge of available treatment and services (Measure 2-6)	
Numerator	Two indicators for this measure were calculated: The number of beneficiaries who responded yes to the following questions: "If you needed treatment for substance abuse, do you know how you can receive this treatment?" "If you needed treatment for behavioral or mental health concerns, do you know how you can receive this treatment?" The total number of "Yes" responses per beneficiary to each of the following questions: For SUD: Do you know how you can receive one-on-one help from a person who has training to help treat substance abuse? Do you know how you can get group therapy treatment for substance abuse in your community, such as rehab or recovery therapy in a group setting led by a licensed health professional? Do you know how you can receive help from a person who has training to treat substance abuse, who would meet with you and your family (family therapist or counselor)? Do you know how you can get treatment or support for substance abuse from someone who has already recovered from substance abuse (for example, peer mentoring or coaching)? Are you aware of any place you can stay to receive treatment 24 hours a day, seven days a week for substance abuse? If you wanted to get medication-assisted treatment (MAT) for substance abuse, do you know where to go? MAT refers to the use of medicines such as methadone, Suboxone, or buprenorphine to treat opioid addiction and reduce withdrawal symptoms. For BH: Do you know how you can receive one-on-one help from a person who has training to help treat behavioral or mental health concerns? Do you know how you can get group therapy treatment for behavioral or mental health programs in your community, such as therapy in a group setting led by a counselor? Examples include group therapy for anxiety, depression, panic disorders, family concerns, etc. Do you know how you can receive help from a person who has training to treat behavioral and mental health concerns, who would meet with you and your family (family therapist or counselor)? Do you know how you can get treatment or support for behavioral or mental health concerns offered by someone who has already recovered from mental or behavioral health concerns (for example, peer mentoring or coaching)? Are you aware of any place you can stay to receive treatment 24 hours a day, seven days a week for behavioral or mental health concerns? Do you know if there are options for you to meet with a person who has training to help treat behavioral or mental health concerns through the phone or computer?
Denominator	

Percentage of beneficiaries who demonstrate very good or excellent knowledge of available treatment and services (Measure 2-6)	
	The number of respondents who had a valid response to the question indicated in the numerator. Results presented as a histogram for number of SUD/BH services known indicator.
Comparison Population	N/A
Analytic Approach	Descriptive analysis
Measure Steward	CAHPS
Data Source	Beneficiary survey
Frequency	Once
Desired Direction	Higher is better
Notes for measure calculation	Rates for calculated for both adult respondents and child respondents.

Maternal depression (Measure 2-7)	
Numerator	Two indicators of maternal depression were calculated: Maternal depression composite indicator Sum the number of respondents' answers to the following questions: During the past 3 months, how often have you felt down, depressed, or hopeless? (1-5) During the past 3 months, how often have you had little interest or little pleasure in doing things you usually enjoyed? (1-5) Responses are coded as follows: 1 Always 2 Often 3 Sometimes 4 Rarely 5 Never Then, divide by two to get an average composite score. Provider discussion indicator During the past 12 months, did a doctor, nurse or other health care or mental health provider talk to you about depression or how you are feeling emotionally? (Yes/No) Sum the number of respondents who answered "Yes" to this question.
Denominator	The maternal depression composite indicator does not have a denominator, as we are calculating average composite score. The denominator for the provider discussion indicator is the number of respondents who self-reported that their child was covered by Medicaid and had a valid response to the questions indicated in the numerator.
Comparison Population	N/A
Analytic Approach	Pre/post analysis
Measure Steward	N/A
Data Source	CUBS

Maternal depression (Measure 2-7)	
Frequency	Annual
Desired Direction	For the maternal depression composite indicator, higher is better. For the provider discussion indicator, lower is better.
Notes for measure calculation	Data for the maternal depression composite indicator was available for 2012-2020. Data for the provider discussion indicator was available for 2015-2020.

Maternal domestic abuse (Measure 2-8)	
Numerator	The number of respondents answering they were physically hurt or made to feel unsafe by their partner from one of the following questions: During the past 12 months, did your husband or partner push, hit, slap, kick, choke or physically hurt you in any other way? (Yes/No); *or* During the past 12 months, did your husband or partner threaten you, limit your activities against your will or make you feel unsafe in any other way? (Yes/No) Respondents who answered 'Yes" to at least one of the above questions will be assigned a "1" for this measure overall. Respondents not answering "Yes" both of the above questions will be assigned a "0" for this measure overall.
Denominator	The number of respondents who self-reported that their child was covered by Medicaid and had a valid response to the questions indicated in the numerator.
Comparison Population	N/A
Analytic Approach	Pre/post analysis
Measure Steward	N/A
Data Source	CUBS
Frequency	Annual
Desired Direction	Lower is better
Notes for measure calculation	Data for this measure was available for 2012-2020.

Percentage of beneficiaries who experienced alcoholism or mental health disorder among household members (Measure 2-9)	
Numerator	The number of respondents who self-reported that their child was enrolled in Medicaid and who answered that the child experienced alcoholism or mental health disorder among household members. Has your child ever experienced any of the following events or situations? For each event circle Y(Yes) or circle N(No). Phase 4 – Alcoholism or mental health disorder in family Phase 5 – Alcoholism or mental health disorder among household members Phase 6 (a 'Yes' for either of these questions constitutes a 'Yes' for the numerator) Living with someone who had a problem with alcohol or drugs Living with someone who was mentally ill, suicidal, or severely depressed

Percentage of beneficiaries who experienced alcoholism or mental health disorder among household members (Measure 2-9)	
Denominator	The number of respondents who self-reported that their child was covered by Medicaid and had a valid response to the questions indicated in the numerator.
Comparison Population	N/A
Analytic Approach	Pre/post analysis
Measure Steward	N/A
Data Source	CUBS
Frequency	Annual
Desired Direction	Lower is better
Notes for measure calculation	Data for this measure was available for 2012-2020.

Percentage of beneficiaries who witnessed violence or physical abuse between household members (Measure 2-10)	
Numerator	The number of respondents who self-reported that their child was enrolled in Medicaid and who answered that the child witnessed violence or physical abuse between household members.
Denominator	The number of respondents who self-reported that their child was covered by Medicaid and had a valid response to the question indicated in the numerator.
Comparison Population	N/A
Analytic Approach	Pre/post analysis
Measure Steward	N/A
Data Source	CUBS
Frequency	Annual
Desired Direction	Lower is better
Notes for measure calculation	Data for this measure was available for 2015-2020.

Percentage of youth beneficiaries who have ever been physically hurt by an adult in any way (Measure 2-11)	
Numerator	The number of respondents who self-reported that their child was enrolled in Medicaid and who answered that their child has ever been physically hurt by an adult in any way.
Denominator	The number of respondents who self-reported that their child was covered by Medicaid and had a valid response to the question indicated in the numerator.
Comparison Population	N/A
Analytic Approach	Descriptive
Measure Steward	N/A
Data Source	CUBS
Frequency	Annual
Desired Direction	Lower is better
Notes for measure calculation	Data for this measure was available for 2015-2020.

Maternal marijuana or hash use in the past two years (Measure 2-12)	
Numerator	The number of respondents who answered they have used marijuana or hash in the past 2 years.
Denominator	The number of respondents who self-reported that their child was covered by Medicaid and had a valid response to the question indicated in the numerator.
Comparison Population	N/A
Analytic Approach	Descriptive
Measure Steward	N/A
Data Source	CUBS
Frequency	Annual
Desired Direction	Lower is better
Notes for measure calculation	Data for this measure was available for 2015-2020.

Frequency of maternal marijuana or hash use (days per week) (Measure 2-13)	
Numerator	The sum of the average number of days respondents report using marijuana or hash per week.
Denominator	The number of respondents who self-report that their child was enrolled in Medicaid and had a valid response to the question indicated in the numerator.
Comparison Population	N/A
Analytic Approach	Pre/post analysis
Measure Steward	N/A
Data Source	CUBS
Frequency	Annual
Desired Direction	Lower is better
Notes for measure calculation	Data for this measure was available for 2015-2020. From 2015-2019 this question was asked in terms of average days per week marijuana was used. In 2020, this question was asked in terms of average days per month that marijuana was used. Responses from 2020 were converted to average days per week of marijuana use for consistency.

Social support – care when sick (Supplemental CUBS Measure 2-14)	
Numerator	The number of respondents who answered they know someone who would help them if they were sick.
Denominator	The number of respondents who self-reported that their child was covered by Medicaid and had a valid response to the question indicated in the numerator.
Comparison Population	N/A
Analytic Approach	Descriptive
Measure Steward	N/A
Data Source	CUBS
Frequency	Annual
Desired Direction	Higher is better

Social support – care when sick (Supplemental CUBS Measure 2-14)	
Notes for measure calculation	Data for this measure was available for 2012-2020.

Desire to Obtain SUD/BH Treatment Options and Obtainment of SUD Treatment in the Past 3 Months (Supplemental CUBS Measure 2-15)	
Numerator	Three individual indicators of desire to obtain SUD/BH treatment and obtainment of SUD treatment were calculated: The number of respondents who answered they had a desire to obtain SUD treatment in the past 3 months. The number of respondents who answered they had a desire to obtain BH treatment in the past 3 months. The number of respondents who answered they had obtained SUD treatment in the past 3 months.
Denominator	The number of respondents who self-reported that their child was covered by Medicaid and had a valid response to the respective question indicated in the numerator.
Comparison Population	N/A
Analytic Approach	Descriptive
Measure Steward	N/A
Data Source	CUBS
Frequency	Annual
Desired Direction	Higher is better
Notes for measure calculation	Data for this measure was only available for 2020.

Rate of overdose deaths, specifically overdose deaths due to any opioid (Measure 2-16)	
Numerator	The number of overdose deaths among Alaska residents.
Denominator	The number of Alaska residents.
Comparison Population	N/A
Analytic Approach	Pre/post analysis
Measure Steward	N/A
Data Source	Alaska Health Analytics and Vital Records/American Community Survey
Frequency	Annual
Desired Direction	Lower is better
Notes for measure calculation	

Non-fatal Overdoses (all cause) (Measure 2-17)	
Numerator	The number of non-fatal overdoses among waiver beneficiaries.
Denominator	N/A

Non-fatal Overdoses (all cause) (Measure 2-17)	
Comparison Population	N/A
Analytic Approach	Pre/post analysis
Measure Steward	N/A
Data Source	MMIS
Frequency	Annual
Desired Direction	Lower is better
Notes for measure calculation	Drug overdoses were defined as having a principal or secondary diagnosis ICD-10-CM code in T36–T50, encounter=A, intent = 1-4. Only one non-fatal overdose is counted per waiver beneficiary stay.

Use of Opioids at High Dosage in Persons Without Cancer (NQF 2940) (Measure 2-18)	
Numerator	The number beneficiaries aged 18 and older who received prescriptions for opioids with an average daily dosage greater than or equal to 90 morphine milligram equivalents (MME) over a period of 90 days or more. Beneficiaries with a cancer diagnosis, sickle cell disease diagnosis, or in hospice are excluded.
Denominator	All Medicaid beneficiaries within the eligible population defined in the measure steward's specifications.
Comparison Population	N/A
Analytic Approach	Pre/post analysis
Measure Steward	CMS SUD Monitoring Metrics, CMS Adult Core Set
Data Source	DBH
Frequency	Annual
Desired Direction	Lower is better
Notes for measure calculation	Measure specifications rely on *Medicaid Section 1115 SUD Demonstrations: Technical Specifications for Monitoring Metrics, version 4.0*, Metric #18: Use of Opioids at High Dosage in Persons Without Cancer (OHD-AD).

Total costs of healthcare (sum of parts below), by state and federal share (Measure 3-1)	
Numerator	The sum of total paid claim amounts for all inpatient, long-term care, outpatient, professional, dental and pharmacy categories of service for members flagged with an SUD or BH diagnosis. Members flagged with an SUD diagnosis are those enrolled in the measurement period and who receive MAT or have qualifying facility, provider, or pharmacy claims with a SUD diagnosis and a SUD-related treatment service during the measurement period. Step 1. Identify claims for MAT, defined in one of the following HEDIS MY 2020 IET Value Sets or Medications Lists: AOD Medication Treatment Value Set Alcohol Use Disorder Treatment Medication Lists Opioid Use Disorder Treatment Medication Lists

Total costs of healthcare (sum of parts below), by state and federal share (Measure 3-1)	
	Step 2. Identify claims with a diagnosis code (any diagnosis on the claim) listed under one of the following HEDIS MY 2020 Value Sets: Alcohol Abuse and Dependence Opioid Abuse and Dependence Other Drug Abuse and Dependence Members flagged with a BH diagnosis are those enrolled in the measurement period and who have a claim with a diagnosis code from the HEDIS MY 2020 Mental Health Diagnosis Value Set during the measurement period. Members are considered a part of the SUD/BH cost analysis group beginning the first month in which they have a relevant diagnosis or treatment claim for either SUD or BH, and up to 11 additional months that did not include relevant claims, if the beneficiary remained enrolled in Medicaid. If a member has additional claims with a relevant diagnosis or treatment code, their inclusion in the SUD/BH cost analysis group is extended to include up to 11 additional months following the subsequent claim, if the member remained enrolled in Medicaid.
Denominator	The total number of member months among beneficiaries in the SUD/BH cost analysis group.
Comparison Population	
Analytic Approach	Interrupted time series analysis
Measure Steward	CMS
Data Source	MMIS
Frequency	Monthly
Desired Direction	Lower is better
Notes for measure calculation	Methodology for assessing costs follows CMS SMI/SED Evaluation Design Guidance: Appendix C, https://www.medicaid.gov/medicaid/section-1115-demo/downloads/evaluation-reports/smi-sed-sud-cost-appendix-c.pdf; last accessed November 1, 2022.

Total cost of SUD, SUD-IMD and SUD-Other and Non-SUD, by setting (including claims data (inpatient (IP), outpatient (OT), pharmacy (RX), long-term care (LT), and capitated payments to managed care organizations) (Measure 3-2)	
Numerator	The sum of total paid claim amounts stratified by SUD-IMD, SUD-Other, Non-SUD, inpatient, long-term care, outpatient, professional, dental and pharmacy categories of service for members flagged with an SUD diagnosis. Outpatient costs were further stratified into ED and non-ED categories of service. Members flagged with an SUD diagnosis are those enrolled in the measurement period and who receive MAT or have qualifying facility, provider, or pharmacy claims with a SUD diagnosis and a SUD-related treatment service during the measurement period. Step 1. Identify claims for MAT, defined in one of the following HEDIS MY 2020 IET Value Sets or Medications Lists: AOD Medication Treatment Value Set Alcohol Use Disorder Treatment Medication Lists Opioid Use Disorder Treatment Medication Lists

Total cost of SUD, SUD-IMD and SUD-Other and Non-SUD, by setting (including claims data (inpatient (IP), outpatient (OT), pharmacy (RX), long-term care (LT), and capitated payments to managed care organizations) (Measure 3-2)	
	Step 2. Identify claims with a diagnosis code (any diagnosis on the claim) listed under one of the following HEDIS MY 2020 Value Sets: Alcohol Abuse and Dependence Opioid Abuse and Dependence Other Drug Abuse and Dependence Members are considered a part of the SUD cost analysis group beginning the first month in which they have a relevant diagnosis or treatment claim for SUD, and up to 11 additional months that did not include relevant claims, if the beneficiary remained enrolled in Medicaid. If a member has additional claims with a relevant diagnosis or treatment code, their inclusion in the SUD cost analysis group is extended to include up to 11 additional months following the subsequent claim, if the member remained enrolled in Medicaid. SUD-IMD and SUD-Other costs included costs from: Claims with a diagnosis code from one of the following MAT medications lists: Alcohol Abuse and Dependence Opioid Abuse and Dependence Other Drug Abuse and Dependence value sets. Claims for MAT defined by: AOD Medication Treatment value Set Alcohol Use Disorder Treatment Medication Lists Opioid Use Disorder Treatment Medication Lists Claims with SUD /MAT treatment codes H0009, H0010, H0011, H2036, H0047, H0023, H0014, H2021, H0015, T1007, H0035 SUD-IMD costs were costs incurred from claims with an IMD provider. SUD-Other costs are all other SUD costs from claims for a non-IMD provider. HSAG used the DBH provided list of Billing Provider NPIs and Billing provider IDs to flag IMD providers. Non-SUD costs included all other costs from non-SUD claims for the member.
Denominator	The total number of member months among beneficiaries in the SUD cost analysis group.
Comparison Population	N/A
Analytic Approach	Interrupted time series analysis
Measure Steward	CMS
Data Source	MMIS
Frequency	Monthly
Desired Direction	Lower is better
Notes for measure calculation	Methodology for assessing costs follows CMS SMI/SED Evaluation Design Guidance: Appendix C, https://www.medicaid.gov/medicaid/section-1115-demo/downloads/evaluation-reports/smi-sed-sud-cost-appendix-c.pdf; last accessed November 1, 2022.

Total cost of behavioral health diagnosis by IMD and Other, by setting (including claims data (inpatient (IP), outpatient (OT), pharmacy (RX), long-term care (LT), and capitated payments to managed care organizations) (Measure 3-3)	
Numerator	The sum of total paid claim amounts stratified by BH-IMD, BH-Other, Non-BH, inpatient, long-term care, outpatient, professional, dental and pharmacy categories of service for members flagged with an BH diagnosis. Members flagged with a BH diagnosis are those enrolled in the measurement period and who have a claim with a diagnosis code from the HEDIS MY 2020 Mental Health Diagnosis Value Set during the measurement period. Members are considered a part of the BH cost analysis group beginning the first month in which they have a relevant diagnosis or treatment claim for BH, and up to 11 additional months that did not include relevant claims, if the beneficiary remained enrolled in Medicaid. If a member has additional claims with a relevant diagnosis or treatment code, their inclusion in the BH cost analysis group is extended to include up to 11 additional months following the subsequent claim, if the member remained enrolled in Medicaid. BH-IMD and BH-Other costs included costs from: Claims with a diagnosis code from the HEDIS MY 2020 Mental Health Diagnosis Value Set Claims from medication lists for BH put together by HSAG's clinical experts BH-IMD costs were costs incurred from claims with an IMD provider. BH-Other costs are all other BH costs from claims for a non-IMD provider. HSAG used the DBH-provided list of Billing Provider NPIs and Billing provider IDs to flag IMD providers. Non-BH costs included all other costs from non-BH claims for the member.
Denominator	The total number of member months among beneficiaries in the BH cost analysis group.
Comparison Population	N/A
Analytic Approach	Interrupted time series analysis
Measure Steward	CMS
Data Source	MMIS
Frequency	Monthly
Desired Direction	Lower is better
Notes for measure calculation	Methodology for assessing costs follows CMS SMI/SED Evaluation Design Guidance: Appendix C, https://www.medicaid.gov/medicaid/section-1115-demo/downloads/evaluation-reports/smi-sed-sud-cost-appendix-c.pdf; last accessed November 1, 2022.

Appendix E. Survey Instruments

Health Services Advisory Group, Inc. (HSAG) utilized a questionnaire to facilitate a beneficiary phone survey for adults and children. The questionnaires are provided below for reference.

Adult Beneficiary Survey Questionnaire

Introduction

This document contains telephone interviewing instructions for the Adult 2021 Alaska Department of Behavioral Health knowledge assessment survey. This survey is conducted as part of the evaluation of the Substance Use Disorder 1115 Waiver Demonstration.

Survey Question	Telephone Interviewing Specifications	Comments
	>Intro< Hello, I'm calling on behalf of the Alaska Department of Health and Social Services to conduct an important study and would like your feedback. We are conducting this study to find out members' knowledge of services that Alaska Medicaid offers. The results of the study will help the Department improve the care they provide. If at any time you wish to end the survey you may do so. The interview is completely confidential and voluntary and will not affect your health care or benefits in any way. This call will be recorded and may be monitored for quality and training purposes. **[Q1]**	
	Survey vendors with different Telephone Interviewing systems may have their own preferred "path" for establishing contact with a respondent and beginning the interview. The screen shown above assumes that the interviewer is already speaking to the sampled respondent. The interviewer should only read or clarify response choices if necessary. For questions with a Yes/No answer, only read the answer choices "YES" and "NO" if necessary. For all questions, do not read response options for UNCERTAIN/UNSURE, NOT ASCERTAINED or DECLINED TO DISCLOSE.	

Survey Question	Telephone Interviewing Specifications	Comments
1. Using any number from 0 to 10, where 0 is the worst health care possible and 10 is the best health care possible, what number would you use to rate all your health care in the last 6 months? Do not include care you got when you stayed overnight in a hospital. Do not include the times you went for dental care visits. ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ 0 1 2 3 4 5 6 7 8 9 10 Worst health care — Best health care	Now I'm going to ask you some questions about your own health care from a clinic, emergency room, or doctor's office. This includes care you got in person, by phone, or by video. When you answer these questions, please provide one answer for each question, unless otherwise instructed. Using any number from 0 to 10, where 0 is the worst health care possible and 10 is the best health care possible, what number would you use to rate all your health care in the last 6 months? Do not include care you got when you stayed overnight in a hospital. Do not include the times you went for dental care visits. {READ RESPONSE CHOICES ONLY IF NECESSARY} <00> 0 [Q2] <01> 1 [Q2] <02> 2 [Q2] <03> 3 [Q2] <04> 4 [Q2] <05> 5 [Q2] <06> 6 [Q2] <07> 7 [Q2] <08> 8 [Q2] <09> 9 [Q2] <10> 10 [Q2] <99> DECLINED TO DISCLOSE [Q2]	
2. In general, how would you rate your overall health? ☐ Excellent ☐ Very Good ☐ Good ☐ Fair ☐ Poor	In general, how would you rate your overall health? Would you say it is… <1> Excellent, [Q3] <2> Very Good, [Q3] <3> Good, [Q3] <4> Fair, or [Q3] <5> Poor? [Q3] <9> DECLINED TO DISCLOSE [Q3]	
3. In general, how would you rate your overall mental or emotional health?	In general, how would you rate your overall **mental or emotional** health? Would you say it is… <1> Excellent, [Q4] <2> Very Good, [Q4] <3> Good, [Q4] <4> Fair, or [Q4] <5> Poor? [Q4] <9> DECLINED TO DISCLOSE [Q4]	

Survey Question	Telephone Interviewing Specifications	Comments
	These next questions ask you about your knowledge and awareness of treatment services that may be available to you and covered through Medicaid. These services are about treatment for substance abuse. Substance abuse refers to an inability to control the use of legal or illegal drugs or medications, such as alcohol, marijuana, nicotine, opioids, or pain killers. For each of the following questions, please consider where you might go to obtain these services if you needed them, even if you do not need them right now.	
4. If you needed treatment for substance abuse, do you know how you can receive this treatment? ☐ Yes ☐ No ➔ **If NO, SKIP to Question 11**	If you needed treatment for substance abuse, do you know how you can receive this treatment? <1> YES **[Q5]** <2> NO **[Q11]** <3> UNCERTAIN/UNSURE **[Q5]** <8> NOT ASCERTAINED **[Q5]** <9> DECLINED TO DISCLOSE **[Q11]**	
5. Do you know how you can receive one-on-one help from a person who has training to help treat substance abuse? ☐ Yes ☐ No	Do you know how you can receive one-on-one help from a person who has training to help treat substance abuse? <1> YES **[Q6]** <2> NO **[Q6]** <3> UNCERTAIN/UNSURE **[Q6]** <8> NOT ASCERTAINED **[Q6]** <9> DECLINED TO DISCLOSE **[Q6]**	
6. Do you know how you can get group therapy treatment for substance abuse in your community, such as rehab or recovery therapy in a group setting led by a licensed health professional? ☐ Yes ☐ No	Do you know how you can get group therapy treatment for substance abuse in your community, such as rehab or recovery therapy in a group setting led by a licensed health professional? <1> YES **[Q7]** <2> NO **[Q7]** <3> UNCERTAIN/UNSURE **[Q7]** <8> NOT ASCERTAINED **[Q7]** <9> DECLINED TO DISCLOSE **[Q7]**	

Survey Question	Telephone Interviewing Specifications	Comments
7. Do you know how you can receive help from a person who has training to treat substance abuse, who would meet with you and your family (family therapist or counselor)? ☐ Yes ☐ No	Do you know how you can receive help from a person who has training to treat substance abuse, who would meet with you and your family, also called a family therapist or counselor? <1> YES **[Q8]** <2> NO **[Q8]** <3> UNCERTAIN/UNSURE **[Q8]** <8> NOT ASCERTAINED **[Q8]** <9> DECLINED TO DISCLOSE **[Q8]**	
8. Do you know how you can get treatment or support for substance abuse from someone who has already recovered from substance abuse (for example, peer mentoring or coaching)? ☐ Yes ☐ No	Do you know how you can get treatment or support for substance abuse from someone who has already recovered from substance abuse (for example, peer mentoring or coaching)? <1> YES **[Q9]** <2> NO **[Q9]** <3> UNCERTAIN/UNSURE **[Q9]** <8> NOT ASCERTAINED **[Q9]** <9> DECLINED TO DISCLOSE **[Q9]**	
9. Are you aware of any place you can stay to receive treatment 24 hours a day, seven days a week for substance abuse? ☐ Yes ☐ No	Are you aware of any place you can stay to receive treatment 24 hours a day, seven days a week for substance abuse? <1> YES **[Q10]** <2> NO **[Q10]** <3> UNCERTAIN/UNSURE **[Q10]** <8> NOT ASCERTAINED **[Q10]** <9> DECLINED TO DISCLOSE **[Q10]**	
10. If you wanted to get medication-assisted treatment (MAT) for substance abuse, do you know where to go? MAT refers to the use of medicines such as methadone, Suboxone, or buprenorphine to treat opioid addiction and reduce withdrawal symptoms. ☐ Yes ☐ No	If you wanted to get medication-assisted treatment or M.A.T. for substance abuse, do you know where to go? MAT refers to the use of medicines such as methadone, Suboxone, or buprenorphine to treat opioid addiction and reduce withdrawal symptoms. <1> YES **[Q11]** <2> NO **[Q11]** <3> UNCERTAIN/UNSURE **[Q11]** <8> NOT ASCERTAINED **[Q11]** <9> DECLINED TO DISCLOSE **[Q11]**	

Survey Question	Telephone Interviewing Specifications	Comments
	Now I'm going to ask you about the same type of services but for mental or behavioral health concerns. Mental or behavioral health concerns refer to concerns like stress, anxiety, depression and other mood disorders, personality disorders, psychotic disorders such as Schizophrenia, eating disorders, obsessive-compulsive disorder or OCD, or post-traumatic stress disorder or PTSD. This does not include substance abuse/misuse. Again, please provide one answer for each question, unless otherwise instructed.	
11. If you needed treatment for behavioral or mental health concerns, do you know how you can receive this treatment? ☐ Yes ☐ No ➔ **If NO, SKIP to Question 18**	If you needed treatment for behavioral or mental health concerns, do you know how you can receive this treatment? <1> YES **[Q12]** <2> NO **[Q18]** <3> UNCERTAIN/UNSURE **[Q12]** <8> NOT ASCERTAINED **[Q12]** <9> DECLINED TO DISCLOSE **[Q18]**	
12. Do you know how you can receive <u>one-on-one</u> help from a person who has training to help treat behavioral or mental health concerns? ☐ Yes ☐ No	Do you know how you can receive one-on-one help from a person who has training to help treat behavioral or mental health concerns? <1> YES **[Q13]** <2> NO **[Q13]** <3> UNCERTAIN/UNSURE **[Q13]** <8> NOT ASCERTAINED **[Q13]** <9> DECLINED TO DISCLOSE **[Q13]**	

Survey Question	Telephone Interviewing Specifications	Comments
13. Do you know how you can get group therapy treatment for behavioral or mental health programs in your community, such as therapy in a group setting led by a counselor? Examples include group therapy for anxiety, depression, panic disorders, family concerns, etc. ☐ Yes ☐ No	Do you know how you can get group therapy treatment for behavioral or mental health programs in your community? Group therapy is treatment you can get in a group setting led by a counselor.? Examples include group therapy for anxiety, depression, panic disorders, family concerns. <1> YES **[Q14]** <2> NO **[Q14]** <3> UNCERTAIN/UNSURE **[Q14]** <8> NOT ASCERTAINED **[Q14]** <9> DECLINED TO DISCLOSE **[Q14]**	
14. Do you know how you can receive help from a person who has training to treat behavioral and mental health concerns, who would meet with you and your family (family therapist or counselor)? ☐ Yes ☐ No	Do you know how you can receive help from a person who has training to treat behavioral or mental health concerns, who would meet with you and your family, also known as a family therapist or counselor? <1> YES **[Q15]** <2> NO **[Q15]** <3> UNCERTAIN/UNSURE **[Q15]** <8> NOT ASCERTAINED **[Q15]** <9> DECLINED TO DISCLOSE **[Q15]**	
15. Do you know how you can get treatment or support for behavioral or mental health concerns offered by someone who has already recovered from mental or behavioral health concerns (for example, peer mentoring or coaching)? ☐ Yes ☐ No	Do you know how you can get treatment or support for behavioral or mental health concerns offered by someone who has already recovered from mental or behavioral health concerns (for example, peer mentoring or coaching)? <1> YES **[Q16]** <2> NO **[Q16]** <3> UNCERTAIN/UNSURE **[Q16]** <8> NOT ASCERTAINED **[Q16]** <9> DECLINED TO DISCLOSE **[Q16]**	

Survey Question	Telephone Interviewing Specifications	Comments
16. Are you aware of any place you can stay to receive treatment <u>24 hours a day, seven days a week</u> for behavioral or mental health concerns? ☐ Yes ☐ No	Are you aware of any place you can stay to receive treatment 24 hours a day, seven days a week for behavioral or mental health concerns? <1> YES **[Q17]** <2> NO **[Q17]** <3> UNCERTAIN/UNSURE **[Q17]** <8> NOT ASCERTAINED **[Q17]** <9> DECLINED TO DISCLOSE **[Q17]**	
17. Do you know if there are options for you to meet with a person who has training to help treat behavioral or mental health concerns through the phone or computer? ☐ Yes ☐ No	Do you know if there are options for you to meet with a person who has training to help treat behavioral or mental health concerns through the phone or computer? <1> YES **[Q18]** <2> NO **[Q18]** <3> UNCERTAIN/UNSURE **[Q18]** <8> NOT ASCERTAINED **[Q18]** <9> DECLINED TO DISCLOSE **[Q18]**	
18. What is your age? ☐ 18 to 24 ☐ 25 to 34 ☐ 35 to 44 ☐ 45 to 54 ☐ 55 to 64 ☐ 65 to 74 ☐ 75 or older	What is your age? {IF NECESSARY: "Are you…" THEN READ RESPONSE CHOICES} <1> 18 to 24, **[Q19]** <2> 25 to 34, **[Q19]** <3> 35 to 44, **[Q19]** <4> 45 to 54, **[Q19]** <5> 55 to 64, **[Q19]** <6> 65 to 74, or **[Q19]** <7> 75 or older. **[Q19]** <9> DECLINED TO DISCLOSE **[Q19]**	
	The respondent should report age as of his or her last birthday. Do not round. Reading response choices is optional.	
19. What is your gender? ☐ Male ☐ Female ☐ Other ☐ Decline to disclose	What is your gender? <1> MALE **[Q20]** <2> FEMALE **[Q20]** <3> OTHER **[Q20]** <9> DECLINED TO DISCLOSE **[Q20]**	

Survey Question	Telephone Interviewing Specifications	Comments
20. What is the highest grade or level of school that you have completed? ☐ 8th grade or less ☐ Some high school, but did not graduate ☐ High school graduate or GED ☐ Some college or 2-year degree ☐ 4-year college graduate ☐ More than 4-year college degree	What is the highest grade or level of school that you have completed? Did you complete… <1> 8th grade or less, **[Q21]** <2> Some high school, but did not graduate, **[Q21]** <3> High school graduate or GED, **[Q21]** <4> Some college or 2-year degree, **[Q21]** <5> 4-year college graduate, or **[Q21]** <6> More than 4-year college degree? **[Q21]** <9> DECLINED TO DISCLOSE **[Q21]**	
	Code academic training beyond a high school diploma that does not lead to a bachelor's degree as **4**. This includes business school training or a three-year nursing degree. If the respondent describes non-academic training, such as trade school, probe to find out if he or she has a high school diploma and code **2** or **3**, as appropriate.	
21. Are you of Hispanic or Latino origin or descent? ☐ Yes, Hispanic or Latino ☐ No, Not Hispanic or Latino	Are you of Hispanic or Latino origin or descent? <1> YES, HISPANIC OR LATINO **[Q22]** <2> NO, NOT HISPANIC OR LATINO **[Q22]** <9> DECLINED TO DISCLOSE **[Q22]**	
22. What is your race? Mark one or more. ☐ White ☐ Black or African-American ☐ Asian ☐ Native Hawaiian or other Pacific Islander ☐ American Indian ☐ Alaska Native ☐ Other	[FOR TELEPHONE INTERVIEWING THIS QUESTION IS BROKEN INTO PARTS A-G] >22a< I am going to read a list of race categories. For each category, please say yes or no if it describes your race. I must ask you about all categories in case more than one applies. Are you white? <1> YES **[Q22b]** <9> NO OR DECLINED TO DISCLOSE **[Q22b]**	

Survey Question	Telephone Interviewing Specifications	Comments
	If the respondent replies "Why are you asking my race?" say: "We ask about your race for demographic purposes only. We want to be sure that the people we survey accurately represent the racial diversity of Medicaid enrollees in Alaska." If the respondent answers with a category not listed here, such as "Hispanic" or "American" or "Mixed race", the interviewer can probe using the category "Other."	
	>22b< Black or African-American? <1> YES **[Q22c]** <9> NO OR DECLINED TO DISCLOSE **[Q22c]**	
	>22c< Asian? <1> YES **[Q22d]** <9> NO OR DECLINED TO DISCLOSE **[Q22d]**	
	>22d< Native Hawaiian or other Pacific Islander? <1> YES **[Q22e]** <9> NO OR DECLINED TO DISCLOSE **[Q22e]**	
	>22e< American Indian? <1> YES **[Q22f]** <9> NO OR DECLINED TO DISCLOSE **[Q22f]**	
	>22f< Alaska Native? <1> YES **[Q22g]** <9> NO OR DECLINED TO DISCLOSE **[Q22g]**	

Survey Question	Telephone Interviewing Specifications	Comments
	>22g< Other? <1> YES **[Q23]** <9> NO OR DECLINED TO DISCLOSE **[Q23]**	
23. If you are uncertain about how to find services, you can find a provider online at Alaska.Optum.com.	{ASK IF Q4="NO" *OR* Q11="NO} If you are uncertain about how to find services, you can find a provider online at Alaska (dot) Optum (dot) com. Do you have any additional comments?	
24. Do you have any additional comments?	[RECORD ANY RESPONSES HERE] **[close]**	
	>close< Those are all the questions I have. If you feel like you need support on any of the concerns we discussed today, you may call Alaska Careline at 1-877-266-HELP, or 1-877-266-4357 any time. You may also visit CareLine Alaska (dot) com. Thank you for taking part in this important interview.	

Child Beneficiary Survey Questionnaire

Introduction

This document contains telephone interviewing instructions for the Child 2021 Alaska Department of Behavioral Health knowledge assessment survey, child version. This survey is conducted as part of the evaluation of the Substance Use Disorder 1115 Waiver Demonstration.

Survey Question	Telephone Interviewing Specifications	Comments
	>Intro< Hello, I'm calling on behalf of the Alaska Department of Health and Social Services to conduct an important study and would like your feedback. We are conducting this study to find out members' knowledge of services that Alaska Medicaid offers. The results of the study will help the Department improve the care they provide. If at any time you wish to end the survey you may do so. The interview is completely confidential and voluntary and will not affect your health care or benefits in any way. This call will be recorded and may be monitored for quality and training purposes. I would like to speak to the person who knows the most about [CHILD NAME]'s health care. Is that you? **[Q1]**	

Survey Question	Telephone Interviewing Specifications	Comments
	Survey vendors with different Telephone Interviewing systems may have their own preferred "path" for establishing contact with a respondent and beginning the interview. The screen shown above assumes that the interviewer is already speaking to the sampled respondent. This screen should be adapted to ask for a better respondent if the parent on the phone is not the person who knows the most about the sampled child's health care, and to collect that person's telephone number, if necessary. This person will usually be a parent, but might be a grandparent or other guardian. The interviewer should only read or clarify response choices if necessary. For questions with a Yes/No answer, only read the answer choices "YES" and "NO" if necessary. For all questions, do not read response options for UNCERTAIN/UNSURE, NOT ASCERTAINED or DECLINED TO DISCLOSE.	

Survey Question	Telephone Interviewing Specifications	Comments
1. Using any number from 0 to 10, where 0 is the worst health care possible and 10 is the best health care possible, what number would you use to rate all your child's health care in the last 6 months? Do not include care your child got when he or she stayed overnight in a hospital. Do not include the times your child went for dental care visits. ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ 0 1 2 3 4 5 6 7 8 9 10 Worst health care — Best health care	I will be asking you about [CHILD NAME]'s health care. Please answer these questions based on the experiences you have had in getting health care for [CHILD NAME] and not on any experiences you may have had getting care for yourself or other members of your family. When you answer these questions, please provide one answer for each question, unless otherwise instructed. Using any number from 0 to 10, where 0 is the worst health care possible and 10 is the best health care possible, what number would you use to rate all your child's health care in the last 6 months? Do not include care your child got when he or she stayed overnight in a hospital. Do not include the times your child went for dental care visits. {READ RESPONSE CHOICES ONLY IF NECESSARY} <00> 0 [Q2] <01> 1 [Q2] <02> 2 [Q2] <03> 3 [Q2] <04> 4 [Q2] <05> 5 [Q2] <06> 6 [Q2] <07> 7 [Q2] <08> 8 [Q2] <09> 9 [Q2] <10> 10 [Q2] <99> DECLINED TO DISCLOSE [Q2]	
2. In general, how would you rate your child's overall health? ☐ Excellent ☐ Very Good ☐ Good ☐ Fair ☐ Poor	In general, how would you rate your child's overall health? Would you say it is… <1> Excellent, [Q3] <2> Very Good, [Q3] <3> Good, [Q3] <4> Fair, or [Q3] <5> Poor? [Q3] <9> DECLINED TO DISCLOSE [Q3]	

Survey Question	Telephone Interviewing Specifications	Comments
3. **In general, how would you rate your child's overall <u>mental or emotional</u> health?**	In general, how would you rate your child's overall **mental or emotional** health? Would you say it is… <1> Excellent, **[Q4]** <2> Very Good, **[Q4]** <3> Good, **[Q4]** <4> Fair, or **[Q4]** <5> Poor? **[Q4]** <9> DECLINED TO DISCLOSE **[Q4]**	
	These next questions ask you about your knowledge and awareness of treatment services that may be available to your child and covered through Medicaid. These services are about treatment for substance abuse. Substance abuse refers to an inability to control the use of legal or illegal drugs or medications, such as alcohol, marijuana, nicotine, opioids, or pain killers. For each of the following questions, please consider where you might go to obtain these services if your child needed them, even if your child does not need them right now.	
4. **If your child needed treatment for substance abuse, do you know how they can receive this treatment?** ☐ Yes ☐ No ➔ **If NO, SKIP to Question 10**	If your child needed treatment for substance abuse, do you know how they can receive this treatment? <1> YES **[Q5]** <2> NO **[Q10]** <3> UNCERTAIN/UNSURE **[Q5]** <8> NOT ASCERTAINED **[Q5]** <9> DECLINED TO DISCLOSE **[Q10]**	
5. **Do you know how your child can receive <u>one-on-one</u> help from a person who has training to help treat substance abuse?** ☐ Yes ☐ No	Do you know how your child can receive one-on-one help from a person who has training to help treat substance abuse? <1> YES **[Q6]** <2> NO **[Q6]** <3> UNCERTAIN/UNSURE **[Q6]** <8> NOT ASCERTAINED **[Q6]** <9> DECLINED TO DISCLOSE **[Q6]**	

Survey Question	Telephone Interviewing Specifications	Comments
6. Do you know how your child can receive help from a person who has training to treat substance abuse, who would meet with you and your family (family therapist or counselor)? ☐ Yes ☐ No	Do you know how your child can receive help from a person who has training to treat substance abuse, who would meet with you and your family, also called a family therapist or counselor? <1> YES [Q7] <2> NO [Q7] <3> UNCERTAIN/UNSURE [Q7] <8> NOT ASCERTAINED [Q7] <9> DECLINED TO DISCLOSE [Q7]	
7. Do you know how your child can get treatment or support for substance abuse from someone who has already recovered from substance abuse (for example, peer mentoring or coaching)? ☐ Yes ☐ No	Do you know how your child can get treatment or support for substance abuse from someone who has already recovered from substance abuse (for example, peer mentoring or coaching)? <1> YES [Q8] <2> NO [Q8] <3> UNCERTAIN/UNSURE [Q8] <8> NOT ASCERTAINED [Q8] <9> DECLINED TO DISCLOSE [Q8]	
8. Are you aware of any place your child can stay to receive treatment 24 hours a day, seven days a week for substance abuse? ☐ Yes ☐ No	Are you aware of any place your child can stay to receive treatment 24 hours a day, seven days a week for substance abuse? <1> YES [Q9] <2> NO [Q9] <3> UNCERTAIN/UNSURE [Q9] <8> NOT ASCERTAINED [Q9] <9> DECLINED TO DISCLOSE [Q9]	

Survey Question	Telephone Interviewing Specifications	Comments
9. If you wanted to get medication-assisted treatment (MAT) for substance abuse for your child, do you know where to take them? MAT refers to the use of medicines such as methadone, Suboxone, or buprenorphine to treat opioid addiction and reduce withdrawal symptoms. ☐ Yes ☐ No	If you wanted to get medication-assisted treatment or M.A.T. for substance abuse for your child, do you know where to take them? MAT refers to the use of medicines such as methadone, Suboxone, or buprenorphine to treat opioid addiction and reduce withdrawal symptoms. <1> YES **[Q10]** <2> NO **[Q10]** <3> UNCERTAIN/UNSURE **[Q10]** <8> NOT ASCERTAINED **[Q10]** <9> DECLINED TO DISCLOSE **[Q10]**	
	Now I'm going to ask you about the same type of services but for mental or behavioral health concerns. Mental or behavioral health concerns refer to concerns like stress, anxiety, depression and other mood disorders, personality disorders, psychotic disorders such as Schizophrenia, eating disorders, obsessive-compulsive disorder or OCD, or post-traumatic stress disorder or PTSD. This does not include substance abuse/misuse. Again, please provide one answer for each question, unless otherwise instructed.	
10. If your child needed treatment for behavioral or mental health concerns, do you know how they can receive this treatment? ☐ Yes ☐ No ➔ **If NO, SKIP to Question 15**	If your child needed treatment for behavioral or mental health concerns, do you know how they can receive this treatment? <1> YES **[Q11]** <2> NO **[Q15]** <3> UNCERTAIN/UNSURE **[Q11]** <8> NOT ASCERTAINED **[Q11]** <9> DECLINED TO DISCLOSE **[Q15]**	

Survey Question	Telephone Interviewing Specifications	Comments
11. Do you know how your child can receive <u>one-on-one</u> help from a person who has training to help treat behavioral or mental health concerns? ☐ Yes ☐ No	Do you know how your child can receive one-on-one help from a person who has training to help treat behavioral or mental health concerns? <1> YES **[Q12]** <2> NO **[Q12]** <3> UNCERTAIN/UNSURE **[Q12]** <8> NOT ASCERTAINED **[Q12]** <9> DECLINED TO DISCLOSE **[Q12]**	
12. Do you know how your child can receive help from a person who has training to treat behavioral and mental health concerns, who would meet with you and your family (family therapist or counselor)? ☐ Yes ☐ No	Do you know how your child can receive help from a person who has training to treat behavioral and mental health concerns, who would meet with you and your family, also known as a family therapist or counselor? <1> YES **[Q13]** <2> NO **[Q13]** <3> UNCERTAIN/UNSURE **[Q13]** <8> NOT ASCERTAINED **[Q13]** <9> DECLINED TO DISCLOSE **[Q13]**	
13. Are you aware of any place your child can stay to receive treatment <u>24 hours a day, seven days a week</u> for behavioral or mental health concerns? ☐ Yes ☐ No	Are you aware of any place your child can stay to receive treatment 24 hours a day, seven days a week for behavioral or mental health concerns? <1> YES **[Q14]** <2> NO **[Q14]** <3> UNCERTAIN/UNSURE **[Q14]** <8> NOT ASCERTAINED **[Q14]** <9> DECLINED TO DISCLOSE **[Q14]**	
14. Do you know if there are options for your child to meet with a person who has training to help treat behavioral or mental health concerns through the phone or computer? ☐ Yes ☐ No	Do you know if there are options for your child to meet with a person who has training to help treat behavioral or mental health concerns through the phone or computer? <1> YES **[Q15]** <2> NO **[Q15]** <3> UNCERTAIN/UNSURE **[Q15]** <8> NOT ASCERTAINED **[Q15]** <9> DECLINED TO DISCLOSE **[Q15]**	

Survey Question	Telephone Interviewing Specifications	Comments
	Now I will ask you a series of questions about your child and you. Please provide only one answer unless otherwise instructed.	
15. What is your child's age? _____	What is your child's age? _____ **[Q16]** <99> DECLINED TO DISCLOSE **[Q16]**	
	The respondent should report the child's age as of his or hers last birthday. Do not round.	
16. What is your child's gender? ☐ Male ☐ Female ☐ Other ☐ Decline to disclose	What is your child's gender? <1> MALE **[Q17]** <2> FEMALE **[Q17]** <3> OTHER **[Q17]** <9> DECLINED TO DISCLOSE **[Q17]**	
17. Is your child of Hispanic or Latino origin or descent? ☐ Yes, Hispanic or Latino ☐ No, Not Hispanic or Latino	Is your child of Hispanic or Latino origin or descent? <1> YES, HISPANIC OR LATINO **[Q18]** <2> NO, NOT HISPANIC OR LATINO **[Q18]** <9> DECLINED TO DISCLOSE **[Q18]**	
18. What is your child's race? Mark one or more. ☐ White ☐ Black or African-American ☐ Asian ☐ Native Hawaiian or other Pacific Islander ☐ American Indian ☐ Alaska Native ☐ Other	[FOR TELEPHONE INTERVIEWING THIS QUESTION IS BROKEN INTO PARTS A-G] >18a< I am going to read a list of race categories. For each category, please say yes or no if it describes your child's race. I must ask you about all categories in case more than one applies. Is your child white? <1> YES **[Q18b]** <9> NO OR DECLINED TO DISCLOSE **[Q18b]**	

Survey Question	Telephone Interviewing Specifications	Comments
	If the respondent replies "Why are you asking about my child's race?" say: "We ask about your child's race for demographic purposes only. We want to be sure that the people we survey accurately represent the racial diversity of Medicaid enrollees in this country." If the respondent answers with a category not listed here, such as "Hispanic" or "American" or "Mixed race", the interviewer can probe using the category "Other."	
	>18b< Black or African-American? <1> YES **[Q18c]** <9> NO OR DECLINED TO DISCLOSE **[Q18c]**	
	>18c< Asian? <1> YES **[Q18d]** <9> NO OR DECLINED TO DISCLOSE **[Q18d]**	
	>18d< Native Hawaiian or other Pacific Islander? <1> YES **[Q18e]** <9> NO OR DECLINED TO DISCLOSE **[Q18e]**	
	>18e< American Indian? <1> YES **[Q18f]** <9> NO OR DECLINED TO DISCLOSE **[Q18f]**	
	>18f< Alaska Native? <1> YES **[Q18g]** <9> NO OR DECLINED TO DISCLOSE **[Q18g]**	

Survey Question	Telephone Interviewing Specifications	Comments
	>18g< Other? <1> YES **[Q19]** <9> NO OR DECLINED TO DISCLOSE **[Q19]**	
19. What is your age? ☐ 18 to 24 ☐ 25 to 34 ☐ 35 to 44 ☐ 45 to 54 ☐ 55 to 64 ☐ 65 to 74 ☐ 75 or older ☐ Declined to disclose	What is your age? {IF NECESSARY: "Are you…" THEN READ RESPONSE CHOICES} <1> 18 to 24, **[Q20]** <2> 25 to 34, **[Q20]** <3> 35 to 44, **[Q20]** <4> 45 to 54, **[Q20]** <5> 55 to 64, **[Q20]** <6> 65 to 74, **[Q20]** <7> 75 or older, or **[Q20]**<9> DECLINED TO DISCLOSE **[Q20]**	
20. What is your gender? ☐ Male ☐ Female ☐ Other ☐ Declined to disclose	What is your gender? <1> MALE **[Q21]** <2> FEMALE **[Q21]** <3> OTHER **[Q21]** <9> DECLINED TO DISCLOSE **[Q21]**	
21. Are you of Hispanic or Latino origin or descent? ☐ Yes, Hispanic or Latino ☐ No, Not Hispanic or Latino	Are you of Hispanic or Latino origin or descent? <1> YES, HISPANIC OR LATINO **[Q22]** <2> NO, NOT HISPANIC OR LATINO **[Q22]** <9> DECLINED TO DISCLOSE **[Q22]**	
22. What is your race? Mark one or more. ☐ White ☐ Black or African-American ☐ Asian ☐ Native Hawaiian or other Pacific	[FOR TELEPHONE INTERVIEWING THIS QUESTION IS BROKEN INTO PARTS A-G] >22a< I am going to read a list of race categories. For each category, please say yes or no if it describes your race. I must ask you about all categories in case more than one applies. Are you white? <1> YES **[Q22b]** <9> NO OR DECLINED TO DISCLOSE **[Q22b]**	

Survey Question	Telephone Interviewing Specifications	Comments
Islander ☐ American Indian ☐ Alaska Native ☐ Other	If the respondent replies "Why are you asking my race?" say: "We ask about your race for demographic purposes only. We want to be sure that the people we survey accurately represent the racial diversity of Medicaid enrollees in Alaska." If the respondent answers with a category not listed here, such as "Hispanic" or "American" or "Mixed race", the interviewer can probe using the category "Other."	
	>22b< Black or African-American? <1> YES **[Q22c]** <9> NO OR DECLINED TO DISCLOSE **[Q22c]**	
	>22c< Asian? <1> YES **[Q22d]** <9> NO OR DECLINED TO DISCLOSE **[Q22d]**	
	>22d< Native Hawaiian or other Pacific Islander? <1> YES **[Q22e]** <9> NO OR DECLINED TO DISCLOSE **[Q22e]**	
	>22e< American Indian? <1> YES **[Q22f]** <9> NO OR DECLINED TO DISCLOSE **[Q22f]**	
	>22f< Alaska Native? <1> YES **[Q22g]** <9> NO OR DECLINED TO DISCLOSE **[Q22g]**	

Survey Question	Telephone Interviewing Specifications	Comments
	>22g< Other? <1> YES [Q23] <9> NO OR DECLINED TO DISCLOSE [Q23]	
23. What is the highest grade or level of school that you have completed? ☐ 8th grade or less ☐ Some high school, but did not graduate ☐ High school graduate or GED ☐ Some college or 2-year degree ☐ 4-year college graduate ☐ More than 4-year college degree	What is the highest grade or level of school that you have completed? Did you complete… <1> 8th grade or less, [Q24] <2> Some high school, but did not graduate, [Q24] <3> High school graduate or GED, [Q24] <4> Some college or 2-year degree, [Q24] <5> 4-year college graduate, or [Q24] <6> More than 4-year college degree? [Q24] <9> DECLINED TO DISCLOSE [Q24]	
	Code academic training beyond a high school diploma that does not lead to a bachelor's degree as **4**. This includes business school training or a three-year nursing degree. If the respondent describes non-academic training, such as trade school, probe to find out if he or she has a high school diploma and code **2** or **3**, as appropriate.	
24. How are you related to the child? ☐ Mother or father ☐ Grandparent ☐ Aunt or uncle ☐ Older brother or sister ☐ Other relative ☐ Legal guardian ☐ Someone else	How are you related to the child? <1> Mother or father, [Q25] <2> Grandparent, [Q25] <3> Aunt or uncle, [Q25] <4> Older brother or sister, [Q25] <5> Other relative, [Q25] <6> Legal guardian, [Q25] <7> Someone else, [Q25] <9> DECLINED TO DISCLOSE [Q25]	

Survey Question	Telephone Interviewing Specifications	Comments
25. If you are uncertain about how to find services, you can find a provider online at Alaska.Optum.com.	{ASK IF Q4="NO" *OR* Q10="NO} If you are uncertain about how to find services, you can find a provider online at Alaska (dot) Optum (dot) com. Do you have any additional comments?	
26. Do you have any additional comments?	[RECORD ANY RESPONSES HERE] **[close]**	
	>close< Those are all the questions I have. If you feel like you need support on any of the concerns we discussed today, you may call Alaska Careline at 1-877-266-HELP, or 1-877-266-4357 any time. You may also visit CareLine Alaska (dot) com. Thank you for taking part in this important interview.	

Appendix F. Mid-Point Assessment Update

The Mid-Point Assessment (MPA) identified several substance use disorder (SUD) milestones that were of medium risk for not being attained, as shown in Table F-1. Milestones 1, 2, 5, and 6, were all identified as being medium risk. Milestones 3 and 4 were identified as low risk. Since the time the MPA was submitted in June 2022, several action items were completed or had a revised status, which is reflected in the table below.

Table F-1—Assessment of the Level of Risk of Not Meeting Milestones

Milestone	Level of Risk	Factors
Milestone 1: Access to Critical Levels of Care for OUD and other SUDs	Medium	• Implementation Plan action items complete: 90% • Critical metrics meeting target: 43% • Multiple stakeholders identified challenges around developing the physical infrastructure necessary to provide and expand services, but all are being addressed within the planned timeframe.[1] • Availability is not yet adequate, largely due to geographic and demographic limitations on the availability of physical facilities and providers at critical levels of care but is moving in the expected direction.
Milestone 2: Widespread Use of Evidence-Based, SUD-Specific Patient Placement Criteria	Medium	• Implementation Plan action items complete: 40% • Critical metrics meeting target: 50% • A few stakeholders identified challenges around the logistics of working through new certification and billing processes, especially in view of the broader landscape of change in processes unrelated to the Waiver. All challenges are being addressed within the planned timeframe and moving in the right direction.
Milestone 3: Use of Nationally Recognized, evidence-Based, SUD-specific Program Standards for Residential Treatment Facility Provider Qualifications	Low	• Implementation Plan action items complete: 86% • Critical metrics meeting Target: NA[2] • Few stakeholders identified minor economic and administrative burdens that are being addressed within the planned timeframe
Milestone 4: Sufficient Provider Capacity at Each Level of Care, Including MAT	Low	• Implementation Plan action items complete: 78% • Critical metrics meeting Target: 100% • Few stakeholders identified challenges around the logistics of working through new certification and billing processes, expressed challenges around the time needed to enroll providers in Medicaid, as well as overall limited provider capacity. DHB is actively addressing these issues within the planned timeframe. • Availability is not yet adequate, largely due to geographic and demographic limitations on the availability of physical facilities and providers at critical levels of care, but is moving in the expected direction.

Milestone	Level of Risk	Factors
Milestone 5: Implementation of Comprehensive Treatment and Prevention Strategies to Address Opioid Abuse and OUD	Medium	• Implementation Plan action items complete: NA[3] • Critical metrics meeting target: 50% • Stakeholders identified no risks
Milestone 6: Improved Care Coordination and Transitions Between Levels of Care	Medium	• Implementation Plan action items complete: 100% • Critical metrics meeting target: 14% • Most stakeholders felt that new requirements and stricter training and certification were positive overall, although a few indicated that adapting to the new peer recovery certification requirements would take some time.

1: DBH and HSAG agree that not all levels of care require additional infrastructure.

2: There are no monitoring metrics attached to Milestone 3.

3: Due to the State of Alaska rolling out services on a 50/50 schedule, there were no applicable action items for Milestone #5.

Note: DBH: Department of Behavioral Health; MAT: medication assisted therapy; OUD: opioid use disorder; SUD: substance use disorder.

Table F-2 shows the status of the action items associated with implementing each milestone as of March 2023.

Table F-2—Milestone Actions and Timeframes

Level of Care	Action	Timeline	Status (e.g., complete, partially complete, delayed)	Completion Date (if applicable)	State Notes
Milestone #1: Access to Critical Levels of Care for SUD Treatment					
OTS	Pursue HCPCS code modifications for expanded MAT, treatment plan development, and Community services and RSS	Target to complete code modifications—4/1/2019	Complete	7/1/2019 for SUD and 5/21/2020 for the BH	OTS refers to opioid treatment services, which is included within boarder SUD services.
	Pursue AAC modifications accordingly	Target 4/1/2019	Complete	7/1/2019 for SUD and 5/21/2020 for the BH	
	Certify two additional OTPs, OBOTs, and residential providers for appropriate opioid medication (methadone, buprenorphine, or naltrexone)	Will be staggered based on 50/50 schedule; the two additional OTPs will be developed during Demonstration Year 2	N/A	Enhanced services 7/1/2019 were onboarded per the SUD STC component and completed September 2022	Note that Alaska Medicaid is FFS, so there is a not a mechanism for the State to require existing providers to expand. There is no special funding to start a new OTP, but DBH has expanded its capacity with SAMHSA SOR grant funds and has established enhanced rates to ensure long term operations.
0.5 – Early Intervention	Pursue SPAs to modify SUD screening and SBIRT services	Target effective date 4/1/2019	Delayed		Alaska is not moving SBIRT into the Section 1115 waiver demonstration at present. Currently SBIRT is a highly utilized state plan service. This activity has had varied impacts across the system of care, including financial, so in an abundance of caution, this item has been delayed.
	Pursue AAC modifications accordingly	Will be filed 5/1/2019	Delayed		See notes concerning SBIRT above.

Level of Care	Action	Timeline	Status (e.g., complete, partially complete, delayed)	Completion Date (if applicable)	State Notes
	Train hospital ED staff members in 10 selected hospitals regarding SBIRT	Will be completed 4/30/2019	Partially Complete/Delayed/Ongoing		Ongoing, DBH has worked with two hospitals, but when the COVID-19 pandemic began, focus shifted elsewhere, and hospitals' ability to engage was impacted. Hospitals are now transitioning out of COVID-19 protocols, which has allowed the Division to reengage key partners in SBIRT training. Due to significant staff shortages in Alaska heavily impacting hospitals, efforts are focused on reengaging new hospital leadership regarding the value of SBIRT.
1.0 – Outpatient Services	Develop a new waiver service to allow reimbursement for IOP services	Target date for development of new waiver service—April 2019	Complete	10/2019	This was completed with the SUD roll out.
	Pursue AAC modifications to add coverage of service	Will be filed by 5/1/2019	Complete	10/7/2019	
	Develop provider notification/communication regarding new service	Formal notification to be released at least 90 days before initiation of waiver services	Complete	10/7/2019	Using existing communication mechanisms, provider communication is ongoing, including technical assistance and support from the ASO (Optum).
	Conduct provider training on ASAM requirements for ASAM 1.0 Level of Care	Based on 50/50 schedule	Complete	10/7/2019	
2.5 – PHP	Develop a new waiver service to allow reimbursement for SUD PHP services	Target effective date April 2019	Complete	7/1/2019	Using existing communication mechanisms, provider communication is ongoing, including technical assistance and support from the ASO (Optum).
	Pursue AAC modifications to add coverage of service	Will be filed by 5/1/2019	Complete	7/1/2019	
	Develop provider notification/	Formal notification to be released at least 90 days	Complete	7/1/2019	

Level of Care	Action	Timeline	Status (e.g., complete, partially complete, delayed)	Completion Date (if applicable)	State Notes
	communication regarding new service	before initiation of waiver services			
	Conduct provider training on ASAM requirements for ASAM 2.5 Level of Care	All training completed waiver Year 1	Complete	7/1/2019	
3.1 – Clinically Managed Low-Intensity Residential Services for Youth and Adults	Pursue AAC modifications to add coverage for youth	Will be filed 5/1/2019	Complete	7/1/2019	
	Develop provider notification of IMD status and certification requirements	Formal notification to be released upon CMS approval of SUD implementation plan, anticipated date 2/1/2019	Complete	7/1/2019	
	Conduct provider training on ASAM requirements for ASAM 3.1 Level of Care	Based on 50/50 schedule	Complete	7/1/2019	
3.3 – Clinically Managed Population—Specific High Intensity Residential Services for Adults	Pursue AAC modifications regarding coverage of service	Will be filed 5/1/2019	Complete	7/1/2019	
	Develop provider notification of service and certification requirements	Formal notification to be released at least 90 days before initiation of waiver services	Complete	7/1/2019	
	Conduct provider training on ASAM requirements for ASAM 3.3 Level of Care	Waiver Year 1—Regions 1 and 2	Complete	7/1/2019	
3.5 – Clinically Managed Medium-Intensity Residential Services for Youth and Clinically Managed High-	Pursue AAC modifications regarding coverage of service	Will be filed 5/1/2019	Complete	7/1/2019	
	Develop provider notification of IMD status, women/children's requirement, and certification requirements	Formal notification to be released upon CMS approval of SUD implementation plan, anticipated date 2/1/2019	Complete	7/1/2019	

Level of Care	Action	Timeline	Status (e.g., complete, partially complete, delayed)	Completion Date (if applicable)	State Notes
Intensity Residential Services for Adults	Conduct provider training on ASAM requirements for ASAM 3.5 Level of Care	Based on 50/50 schedule	Complete	7/1/2019	
3.7 – Medically Monitored High Intensity Inpatient Services for Youth and Adults	N/A	N/A	Complete	7/1/2019	
4.0 – Medically Managed Intensive Inpatient Services for Youth and Adults	N/A	N/A	Complete	7/1/2019	
1 – WM—Ambulatory WM Without Extended On-Site Monitoring for Youth and Adults	Pursue AAC modifications accordingly	Will be filed 4/1/2019	Complete	7/1/2019	
	Develop provider notification of modifications to 1-WM	Formal notification to be released at least 90 days before initiation of waiver services, anticipated date 2/1/2019	Complete	7/1/2019	
	Conduct provider training on ASAM requirements for ASAM 1-WM Level of Care	Based on 50/50 schedule	Complete	7/1/2019	
2 – WM—Ambulatory WM with Extended On-Site Monitoring for Youth and Adults	Develop new waiver service to allow reimbursement for ASAM 2- WM	Target effective date 4/1/2019	Complete	7/1/2019	
	Pursue AAC modifications accordingly	Will be filed 5/1/2019	Complete	7/1/2019	
	Develop provider notification of new 2-WM service.	Formal notification to be released at least 90 days before initiation of	Complete	7/1/2019	

Level of Care	Action	Timeline	Status (e.g., complete, partially complete, delayed)	Completion Date (if applicable)	State Notes
		waiver services, anticipated date 2/1/2019			
	Conduct provider training on ASAM requirements for ASAM 2-WM Level of Care	Based on 50/50 schedule	Complete	7/1/2019	
3.2 – WM— Clinically Managed Residential WM	Develop new waiver service to allow reimbursement for ASAM 3.2- WM	Target effective date 5/1/2019	Complete	7/1/2019	
	Pursue AAC modifications accordingly	Will be filed 6/1/2019	Complete	7/1/2019	
	Develop provider notification of new 3.2-WM service.	Formal notification to be released at least 90 days before initiation of waiver	Complete	7/1/2019	
	Conduct provider training on ASAM requirements for ASAM 3.2-WM Level of Care	Waiver Year 2	Complete	7/1/2019	
3.7 – WM— Medically Monitored Inpatient WM	Develop new waiver service to allow reimbursement for ASAM 3.7- WM	Target effective date 4/1/2019	Complete	7/1/2019	
	Pursue AAC modifications accordingly	Will be filed 5/1/2019	Complete	7/1/2019	
	Develop provider notification of new 3.7-WM service.	Formal notification to be released at least 90 days before initiation of waiver services	Complete	7/1/2019	
	Conduct provider training on ASAM requirements for ASAM 3.7-WM Level of Care	Waiver Year 2	Complete	7/1/2019	
4 – WM— Medically Managed Intensive Inpatient WM	Develop new waiver service to allow reimbursement for ASAM 4- WM	Target effective date 4/1/2019	Complete	7/1/2019	
	Pursue AAC modifications accordingly	Will be filed 5/1/2019	Complete	7/1/2019	

Level of Care	Action	Timeline	Status (e.g., complete, partially complete, delayed)	Completion Date (if applicable)	State Notes
	Develop provider notification of new 4-WM service.	Formal notification to be released at least 90 days before initiation of waiver services	Complete	7/1/2019	
	Conduct provider training on ASAM requirements for ASAM 4-WM Level of Care	Waiver Year 2	Complete	7/1/2019	
Community Recovery Support Services	Pursue a SPA to delete CCSS and RSS. Develop new Waiver service to allow reimbursement for Community services and RSS	Target effective date 4/1/2019	Complete	6/30/2021	The State has rolled out CRSS and are tentatively engaged in conversation with tribes for consultation. The State is following appropriate sequencing to ensure a smooth transition.
	Pursue AAC modifications accordingly	Will be filed 5/1/2019	Complete	7/1/2019	Completed specific to CRSS (7/1/2019).
	Develop provider notification of new service	Formal notification to be released at least 90 days before initiation of waiver services	Complete	7/1/2019	
	Phase-out deleted services and phase-in new service	Based on 50/50 schedule	Partially Complete/Delayed	6/30/2021	
	Conduct provider training on ASAM elements of Dimension 6 and requirements for Community services and RSS	Based on 50/50 schedule	Complete	7/1/2019	Ongoing; training remains ongoing and technical assistance is also available.
Milestone #2: Use of Evidence-Based, SUD-Specific Patient Placement Criteria					
N/A	Conduct provider training on ASAM criteria	Ongoing throughout 2019	Complete	7/1/2019	Ongoing; training remains ongoing and technical assistance is also available.
	Finalize ASAM-aligned assessment instrument	6/1/2019	Partially Complete	7/1/2019	Regulations promulgated which require alignment with all ASAM criteria; however, no specific assessment instrument mandated.

Level of Care	Action	Timeline	Status (e.g., complete, partially complete, delayed)	Completion Date (if applicable)	State Notes
	Conduct provider training on assessment instrument	Ongoing throughout 2019	N/A		See notes concerning regulations above.
	Procure contract with ASO	Early Spring 2019	Complete	November 2019	
	Approve ASO policies and procedures	6/1/2019	Partially Complete		Ongoing
Milestone #3: Use of Nationally Recognized SUD-specific Program Standards for Residential Treatment Facility Provider Qualifications					
N/A	Finalize process for provisional ASAM designation of qualified residential provider (including MAT requirement)	Will be completed by May 2019	Complete	7/1/2019	
	Modify AAC to include formal certification process based on the ASAM criteria (including MAT requirement)	Will be filed by May 2019	Complete	7/1/2019	
	Modify Provider Medicaid Billing Manual to include formal certification process based on the ASAM criteria (including MAT requirement)	Will be completed by May 2019	Complete	7/1/2019	For details, see the Administrative and Procedures Manual for SUD, preamble which discusses ASAM and QAP issues.
	Develop loss of certified addiction professionals located in existing SUD residential providers	Will be completed by March 2019	Complete	7/1/2019	Ongoing as individuals enroll.
	Work with ACBHC to modify existing certification standards to align with ASAM Levels 3.1, 3.3, and 3.5 staffing requirements	Will be completed by August 2019	Complete	7/1/2019	
	Develop monitoring protocol	Will be completed by August 2019	Complete	7/1/2019	Original Monitoring Protocol submitted in June 2019; Revised Monitoring Protocol submitted in May/June 2020.

Level of Care	Action	Timeline	Status (e.g., complete, partially complete, delayed)	Completion Date (if applicable)	State Notes
	Initiate ongoing monitoring process	Will begin September 2019	Partially Complete		Ongoing
	Milestone #4: Sufficient Provider Capacity at Critical Levels of Care				
N/A	Recruit qualified providers to address increased capacity	Based on 50/50 schedule	Partially Complete		Ongoing; note that Alaska Medicaid is FFS, so there is a not a mechanism for the State to require existing providers to expand. However, DBH has established enhanced rates and provider capacity has increased particularly in SUD service provision.
	Identify new providers types by region	Will be completed by February 2019	Partially Complete		Ongoing; the ASO (Optum) is continuously monitoring the issue. Initial efforts focused on claims processing and education but moving forward the ASO will begin to focus on claims processing and provider education/recruitment.
	Develop notification/communication regarding waiver and ASAM requirements	Will be completed by March 2019	Complete	7/1/2019	Ongoing
	Pursue AAC and Provider Medicaid Billing Manual changes	Will be completed by May 2019	Complete	7/1/2019	Since the Section 1115 is a demonstration, the provider billing manual will have multiple iterations with updated information; 10/7/2019 being the latest revision.
	Enroll new provider types as independent Medicaid billing providers	Will be completed by April 2019	Complete	7/1/2019	Ongoing
	Assess ASAM providers and services by region	March 2019	Complete	April 2020	Ongoing; due to ongoing expansion and growth of SUD services, the Division implemented an ongoing level of care review to assess and evaluate ASAM services and providers statewide
	Work with ASO to provide training on ASAM criteria	Ongoing, beginning 5/1/2019	Complete	7/1/2019	Ongoing; the ASO began working with providers February 2020; prior

Level of Care	Action	Timeline	Status (e.g., complete, partially complete, delayed)	Completion Date (if applicable)	State Notes
	and requirements for waiver reimbursement				to that DBH staff worked on this issue.
	Develop notification/communication regarding formal designation	May 2019	Complete	7/1/2019	Ongoing as new services are onboarded that require ASAM (this item is specific to residential services).
	Implement formal designation process	June 2019	Complete	7/1/2019	Ongoing as new services are onboarded that require ASAM (this item is specific to residential services).
Milestone #5: Implementation of Comprehensive Treatment and Prevention Strategies to Address Opioid Abuse					
N/A	Recruit qualified buprenorphine and naltrexone providers to address expanded capacity	Based on 50/50 schedule	N/A		Note that Alaska Medicaid is FFS, so there is a not a mechanism for the State to require existing providers to expand. There is no special funding to start a new OTP, but DBH has expanded its capacity with SAMHSA SOR grant funds and has established enhanced rates.
	Expand use of buprenorphine or any currently approved effective pharmacological treatment for SUDs to address OUD and expand use of naltrexone to address alcohol use disorders and OUDs	Based on 50/50 schedule	N/A		Note that Alaska Medicaid is FFS, so there is a not a mechanism for the State to require existing providers to expand. There is no special funding to start a new OTP, but DBH has expanded its capacity with SAMHSA SOR grant funds and has established enhanced rates. This item is primarily an educational activity. DBH expects the ASO (Optum) will engage in more now that claims processing has moved forward.
Milestone #6: Improved Care Coordination and Transitions Between Levels of Care					
N/A	Develop SUD care coordination guidelines for transitions from residential to non-residential settings	March 2019	Complete	7/1/2019	See Administrative and Procedures Manual for SUD for details.

Level of Care	Action	Timeline	Status (e.g., complete, partially complete, delayed)	Completion Date (if applicable)	State Notes
	Develop ICM guidelines to clarify difference from SUD care coordination services and circumstances for concurrent use	May 2019	Complete	7/1/2019	See Administrative and Procedures Manual for SUD for details.
	Develop and implement peer recovery certification requirements	Begin certification process – summer of 2018; implement Demonstration Year 2	Complete	1/1/2021	

AAC: Alaska Administrative Code; ACBHC: Alaska Commission for Behavioral Health Certification; ASAM: American Society of Addiction Medicine; ASO: administrative services organization; CCSS: comprehensive community support services; CMS: Centers for Medicare & Medicaid Services; COVID-19: coronavirus disease 2019; ED: emergency department; FFS: fee-for-service; HCPCS: healthcare common procedure coding system; ICM: intensive case management; IMD: Institution for Mental Disease; IOP: intensive outpatient; MAT: medication assisted treatment; OBOT: office-based opioid treatment; OTP: opioid treatment program; OTS: opioid treatment service; OUD: opioid use disorder; PHP: Partial Hospitalization Program; QAP: qualified addiction professional; RSS: recovery support services; SBIRT: screening, brief intervention and referral to treatment; SOR: state opioid response; SPA: state plan amendment; STCs: special terms and conditions; SUD: substance use disorder; WM: withdrawal management.

Among the implementation action items for **Milestone 1**, 90 percent were identified as complete as of March 2023 The remaining items that were not complete include a state plan amendment (SPA) to modify SUD screening and screening, brief intervention and referral to treatment (SBIRT) services, pursuing necessary modifications to the Alaska Administrative Code, and training hospital emergency department (ED) staff members regarding SBIRT. An item that was completed since the MPA includes pursuing an SPA to delete counseling and community support services (CCSS) and recovery support services (RSS) and to develop a new waiver service to allow reimbursement for Community Recovery Support services.

Only 40 percent of implementation plan action items for **Milestone 2** were completed as of March 2023. As indicated in Table F-2, items not yet completed include finalizing American Society of Addiction Medicine (ASAM)-aligned assessment instrument and conducting provider training the assessment instrument. Approving administrative services organization (ASO) policies and procedures was ongoing and partially complete. DOH indicated that regulations required alignment with ASAM criteria, but did not mandate a specific assessment instrument.

Among implementation items for **Milestone 5**, Alaska Department of Health (DOH) operates under a fee-for-service model, which does not provide a mechanism for requiring existing providers to expand services medication assisted therapy (MAT) services, nor are there existing grants to further these goals. As a result, there are no applicable updates to these action items.

Each of the three items for **Milestone 6** were completed by January 2021, including an item that had been delayed according to information provided for the MPA in June 2022. This item related to developing and implementing peer recovery certification requirements.

There are several monitoring metrics that these delays may have impacted.

- **Monitoring metric #7: Early Intervention**. Although implementation items related to early intervention were indicated as delayed or partially complete, these items relate to SPAs to modify the SUD screening and SBIRT services, which DOH had indicated are already a "highly utilized state plan service". Therefore, delays in implementing these items are unlikely to have a detrimental impact on early intervention services; indeed, the MPA showed improvements in this monitoring metric.
- **Monitoring metric #15: Initiation and Engagement of Alcohol and Other Drug Dependence Treatment**. This metric is used to assess Milestone 6, which in part relies on completing peer recovery certification requirements. DBH has completed implementing this action item by January 2021. This could be contributing to the decline in the observed rates shown in the MPA; however, the Interim Evaluation Report shows a general improvement in rates between the baseline and evaluation period (Measure 1-4). It is possible the delay in implementing this item could be suppressing further increases in this rate prior to 2021.
- **Monitoring metric #17.1: Follow-up after Emergency Department Visit for Alcohol or Other Drug Dependence**. This metric is used to assess Milestone 6, which in part relies on completing peer recovery certification requirements. DBH has completed implementing this action item by January 2021. This could be contributing to the decline in the observed rates prior to 2021 shown in the MPA and Interim Evaluation Report (Measure 1-5).
- **Monitoring metric #17.2: Follow-up after Emergency Department Visit for Mental Illness**. This metric is used to assess Milestone 6, which in part relies on completing peer recovery certification requirements. DBH has completed implementing this action item by January 2021. This could be

contributing to the decline in the observed rates prior to 2021 shown in the MPA and Interim Evaluation Report (Measure 1-6)

- **Monitoring Metric #21: Concurrent Use of Opioids and Benzodiazepines.** This metric is used to assess Milestone 5, which in relies on expanding the use of buprenorphine. Since Alaska operates under a FFS model, which does not provide a mechanism for the State to require existing providers to expand, increases observed in this metric in the MPA could have been suppressed due to these challenges. Nonetheless, this metric showed improvements in the MPA.