

DEPARTMENT OF HEALTH & HUMAN SERVICES
Centers for Medicare & Medicaid Services
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Baltimore, Maryland 21244-1850



State Demonstrations Group

April 5, 2021

Renee Gayhart
Director
Division of Health Care Services
240 Main Street, Suite 202
Juneau, AK 99801

Dear Ms. Gayhart:

The Centers for Medicare & Medicaid Services (CMS) completed its review of the Substance Use Disorder (SUD) Evaluation Design, which is required by the Special Terms and Conditions (STC) #41 of Alaska's section 1115 demonstration entitled, "Alaska Substance Use Disorder and Behavioral Health Program (SUD-BHP)" (Project No: 11-W-00318/0), effective through December 31, 2023. CMS has determined that the evaluation design, which was submitted on December 5, 2019 and revised on December 20, 2020, meets the requirements set forth in the STCs and our evaluation design guidance, and therefore, approves the state's SUD evaluation design.

CMS has added the approved SUD evaluation design to the demonstration's STCs as Attachment C. A copy of the STCs, which includes the new attachment, is enclosed with this letter. In accordance with 42 CFR 431.424, the approved evaluation design may now be posted to the state's Medicaid website within thirty days. CMS will also post the approved evaluation design as a standalone document, separate from the STCs, on Medicaid.gov.

Please note that an interim evaluation report, consistent with the approved evaluation design, is due to CMS one year prior to the expiration of the demonstration, or at the time of the extension application, if the state chooses to extend the demonstration. Likewise, a summative evaluation report, consistent with this approved design, is due to CMS within 18 months of the end of the demonstration period. In accordance with 42 CFR 431.428 and the STCs, we look forward to receiving updates on evaluation activities in the demonstration monitoring reports.

We appreciate our continued partnership with Alaska 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,

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Danielle Daly
Director
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Monitoring and Evaluation

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Angela D. Garner
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cc: Maria Garza, State Monitoring Lead, CMS Medicaid and CHIP Operations Group

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

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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 distress¹ 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 Distress*, 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

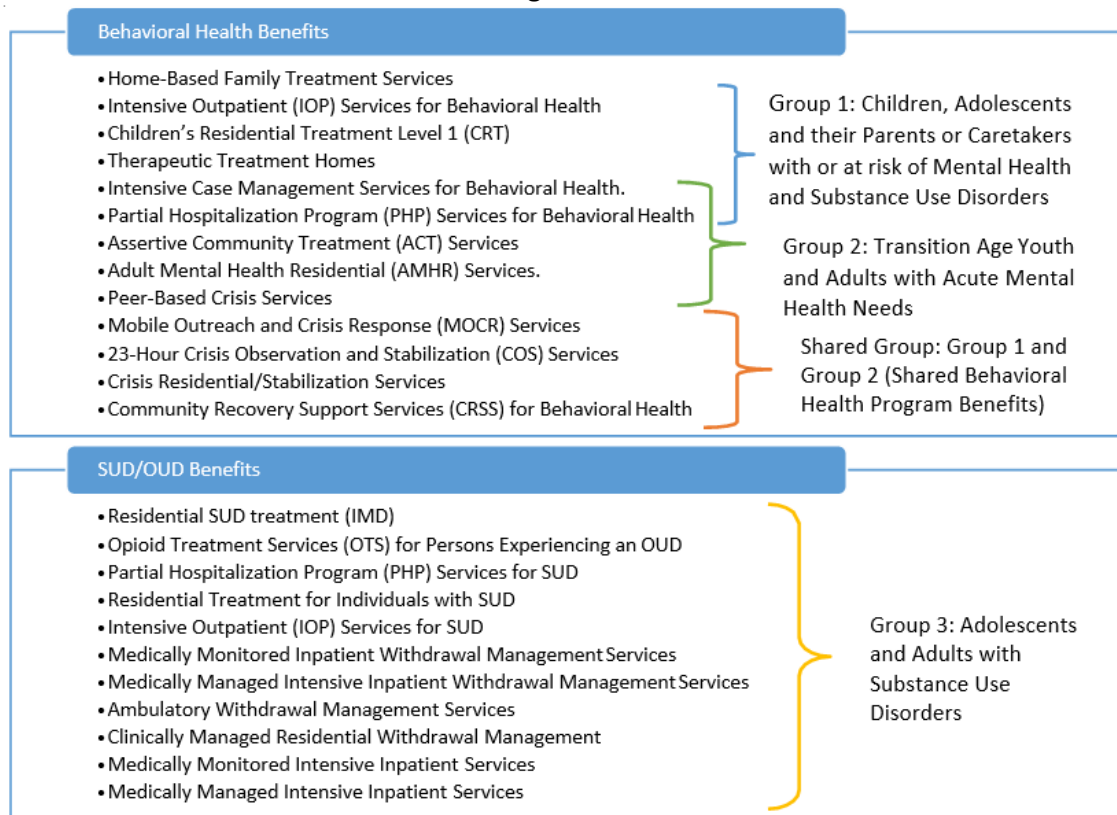
The Integrated Behavioral Health System will be implemented within 2 different initiatives under

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:

Group 1: Children, Adolescents and their Parents or Caretakers with, or at risk of, Mental Health and Substance Use Disorders

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/ODU 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.

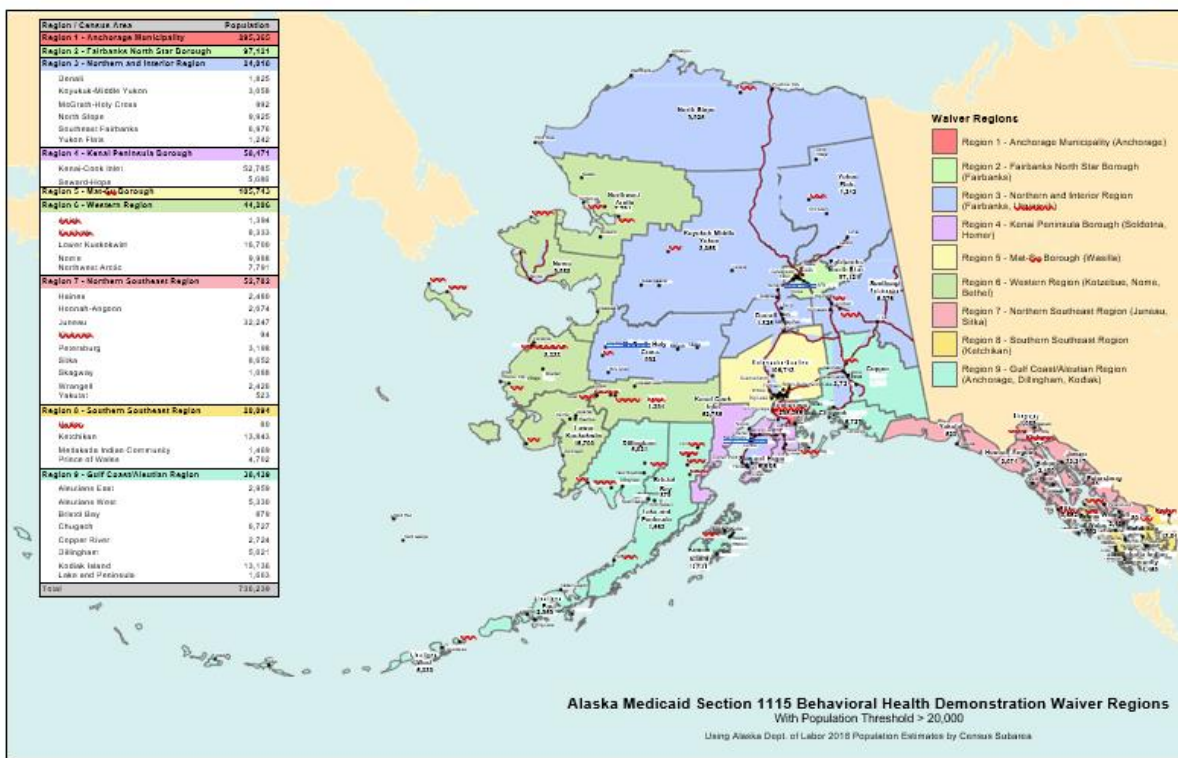
Finally, note that to best serve Alaska’s population given the state’s vast geography, the Waiver divides the state population into nine regions. Waiver services will be phased in over two years. During year one, region one, region two, region five, and region seven will phase in, along with any agencies 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	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 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. 	<p>Milestone #1: Access to Critical Levels of Care for SUD Treatment</p> <p>Milestone #2: Use of Evidence-Based, SUD-Specific Patient Placement Criteria</p> <p>Milestone #5: Implementation of Comprehensive Treatment & Prevention Strategies to Address Opioids</p> <p>Milestone #6: Improved Care Coordination and Transitions Between Levels of Care</p>
3. Reduced overdose deaths, particularly those due to opioids by end of FY2024	<ol style="list-style-type: none"> 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. 	<p>Milestone #1: Access to Critical Levels of Care for SUD Treatment</p> <p>Milestone #2: Use of Evidence-Based, SUD-Specific Patient Placement Criteria</p> <p>Milestone #3: Use of Nationally Recognized SUD-specific Program Standards for Residential Treatment Facility Provider Qualifications</p> <p>Milestone #4: Sufficient Provider Capacity at Critical Levels of Care</p> <p>Milestone #5: Implementation of Comprehensive Treatment & Prevention Strategies to Address Opioids</p> <p>Milestone #6: Improved Care Coordination and Transitions Between Levels of Care</p>

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)
<p>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</p>	<ol style="list-style-type: none"> 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). 	<p>Milestone #1: Access to Critical Levels of Care for SUD Treatment</p> <p>Milestone #2: Use of Evidence-Based, SUD- Specific Patient Placement Criteria</p> <p>Milestone #3: Use of Nationally Recognized SUD-specific Program Standards for Residential Treatment Facility Provider Qualifications</p> <p>Milestone #4: Sufficient Provider Capacity at Critical Levels of Care</p> <p>Milestone #5: Implementation of Comprehensive Treatment & Prevention Strategies to Address Opioids</p> <p>Milestone #6: Improved Care Coordination and Transitions Between Levels of Care</p>
<p>5. Fewer readmissions to the same or higher level of care where the readmission is preventable or medically inappropriate by end of FY2024</p>	<ol style="list-style-type: none"> 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). 	<p>Milestone #1: Access to Critical Levels of Care for SUD Treatment</p> <p>Milestone #2: Use of Evidence-Based, SUD- Specific Patient Placement Criteria</p> <p>Milestone #3: Use of Nationally Recognized SUD-specific Program Standards for Residential Treatment Facility Provider Qualifications</p> <p>Milestone #4: Sufficient Provider Capacity at Critical Levels of Care</p> <p>Milestone #5: Implementation of Comprehensive Treatment & Prevention Strategies to Address Opioids</p> <p>Milestone #6: Improved Care Coordination and Transitions Between Levels of Care</p>

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	<ol style="list-style-type: none"> 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 utilizing industry- recognized standards for certification and ongoing accountability (with emphasis on Residential providers, but across-the- board). Improve SUD workforce by carefully reviewing existing certification requirements and modifying as appropriate to align with Medicaid, Waiver, and industry- recognized credentialing standards. 	<p>Milestone #1: Access to Critical Levels of Care for SUD Treatment</p> <p>Milestone #2: Use of Evidence-Based, SUD- Specific Patient Placement Criteria</p> <p>Milestone #3: Use of Nationally Recognized SUD-specific Program Standards for Residential Treatment Facility Provider Qualifications</p> <p>Milestone #4: Sufficient Provider Capacity at Critical Levels of Care</p>
← 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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)	<ul style="list-style-type: none"> 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)	<ul style="list-style-type: none"> 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)	<ul style="list-style-type: none"> 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.

¹Comparison 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.

²Primary drivers were selected as the most relevant driver for the measure. Multiple primary drivers may relate to the measure.

³This 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 pleasure 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?

⁴This 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 subpopulations 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 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/ODU 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 I-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:

$$Y_{it} = \beta_0 + \beta_1 X_i + \beta_2 R_t + \beta_3 (R_t * X_i) + \boldsymbol{\gamma} \mathbf{D}'_{it} + u_{it}$$

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:

$$\hat{\beta}_3 = (\bar{y}_{T,R} - \bar{y}_{T,B}) - (\bar{y}_{C,R} - \bar{y}_{C,B}) \mid \mathbf{D}'$$

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:

$$Y_{it} = \beta_0 + \sum_{m=1}^M \beta_m X_{mit} + \beta_t Time_t + v_i + \varepsilon_{it} \quad (1)$$

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 than 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.

References

- Benjamin, L. T. (2019). *A brief history of modern psychology (3rd Ed.)*. Hoboken, NJ: Wiley.
- Berk, L. E. (2018). *Development through the lifespan (7th Ed.)*. Hoboken, NJ: Pearson.
- Bernard, H. R. (2016). *Analyzing qualitative data: Systematic approaches (2nd Ed.)*. Thousand Oaks, CA: Sage.
- Bernard, H. R., Wutich, A. Y., & Ryan, G. W. (2012). *Social research methods: Qualitative and quantitative approaches (2nd Ed.)*. Thousand Oaks, CA: Sage.
- Bronfenbrenner, U. (2009). *The ecology of human development*. Cambridge, MA: Harvard.
- Contreary, K., Bradley, K., & Chao, S. (2018, June). *Best practices for causal inference for evaluations of Section 1115 Eligibility and Coverage Demonstrations*. White paper: Mathematica Policy Research.
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches (5th Ed.)*. Thousand Oaks, CA: Sage Publications.
- Daly, D., Kazi, P., & Bradley, K. (2019, July 31). *Evaluation design Resources for Section 1115 Medicaid Waivers*. CMS Webinar.
- Field, A. (2017). *Discovering statistics using IBM SPSS statistics (5th Edition)*. Thousand Oaks, CA: Sage.
- Geertz, C. (2013). *The interpretation of cultures (3rd Ed.)*. New York, NY: Basic Books. (Original work published 1973)
- Geertz, C. (2000). *Local knowledge: Further essays in interpretative anthropology*. New York, NY: Basic Books. (Original work published 1983)
- Hull-Jilly, D.M.C., & Rich, G. (2019). *State epidemiological profile on substance use, abuse, and dependency*. Alaska: Alaska Department of Health and Social Services. 192 pp.
- Kennedy, P. (2003). *A guide to econometrics*. 5th Edition. Cambridge, MA: The MIT Press.
- Porter, R. (2002). *Madness: A brief history*. New York, NY: Oxford University Press.
- Reschovsky, J. D., & Bradley, K. (2019, March). *Planning section 1115 demonstration implementation to enable strong evaluation designs*. White paper: Mathematica Policy Research.
- Reschovsky, J. D., Heeringa, J., & Colby, M. (2018, June). *Selecting the best comparison group and evaluation design: A guidance document for state section 1115 demonstration evaluations*. White paper: Mathematica Policy Research.
- Rich, G. (2016). The promise of qualitative inquiry for positive psychology: Diversifying methods. *Journal of Positive Psychology*, 220-231.
- Santrock, J. W. (2019). *Lifespan development (17th Ed.)*. New York, NY: McGraw-Hill.
- Shorter, E. (1998). *A history of psychiatry: From the era of the asylum to the age of Prozac*. Hoboken, NJ:

John Wiley.

Sudman, S., Bradburn, N. M., & Wansink, B. (2004). *Asking questions: The definitive guide to questionnaire design* (Revised Ed.). San Francisco, CA: Jossey-Bass.

Tourangeau, R., Rips, L. J., & Rasinski, K. (2000). *The psychology of survey response*. New York: Cambridge University Press.

Wertz, F. J., Charmaz, K., McMullen, L. M., Josselson, R., Anderson, R., & McSpadden, E. (2011). *Five ways of doing qualitative analysis: Phenomenological psychology, grounded theory, discourse analysis, narrative research and, intuitive inquiry*. New York, NY: Guilford Press.

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