

# Data Development

for TABI and ADRD

April 2024

An Informed Data Scan



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State of Alaska, Department of Health

**Kelda Barstad**, PROGRAM OFFICER,  
Alaska Mental Health Trust

**Brigit Barstad**, PROGRAM DIRECTOR, Access Alaska

**Matthew Baumgart**, VICE PRESIDENT OF HEALTH  
POLICY, Alzheimer's Association

**Elizabeth Bolling**, PUBLIC POLICY MANAGER,  
Alzheimer's Association, Alaska Chapter

**Carla Britton, PhD**, LEAD EPIDEMIOLOGIST,  
Alaska Native Epidemiology Center

**Michael Burke**, ASSOCIATE DIRECTOR OF PATIENT  
PROGRAMS, Concussion Legacy Foundation

**Lucy Cordwell**, BRAIN INJURY PROGRAM COORDINATOR,  
University of Alaska, Center for Human Development

**Daniella DeLozier**, HEALTH PROGRAM MANAGER,  
State of Alaska, Division of Public Health

**Gyulene Derry**, TRAUMATIC AND ACQUIRED BRAIN INJURY  
PROJECT COORDINATOR/CASE MANAGER, Daybreak Inc.

**Riley Fitting**, EPIDEMIOLOGY SPECIALIST,  
State of Alaska, Division of Public Health

**Jeanne Gerhardt-Cyrus**, COMMUNITY MEMBER  
AND ADVOCATE, President of Kobuk Valley Consulting,  
former member of Governor's Council of Disability &  
Special Education

**Sena Gilbert**, STATE COORDINATOR, Youth Brain Injury  
Program, Southeast Regional Resource Center

**Adam Grove, ND**, PRIVATE PRACTICE PHYSICIAN,  
Head to Toe Holistic Healthcare, LLC, Member of Alaska  
Traumatic and Acquired Brain Injury Council

**Eric Gurley**, EXECUTIVE DIRECTOR, Access Alaska

**Daniel Hartman, MD**, MEDICAL DIRECTOR,  
Southcentral Foundation

**Karen Heath**, CO-DIRECTOR, University of Alaska  
Anchorage, Center for Human Development

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Effective Health Design

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Maternal Child Health Services, Alaska Native Medical Center





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**Lanny Mommsen**, RESEARCH ANALYST, State of Alaska, Department of Health, Governor's Council on Disabilities and Special Education

**Sarah Moreau**, REGIONAL COORDINATOR, Youth Brain Injury Program, Southeast Regional Resource Center

**Tony Newman**, DIRECTOR, State of Alaska, Division of Senior and Disabilities Services

**Jessica Oswald**, ADMINISTRATOR, Providence St. Elias Specialty Hospital

**Jared Parrish, PhD**, PUBLIC HEALTH SCIENTIST, State of Alaska, Division of Public Health

**Patty Raymond Turner**, BRAIN INJURY COUNCIL OF ALASKA COORDINATOR, University of Alaska Anchorage, Center for Human Development

**Lisa Sauder**, EXECUTIVE DIRECTOR, Alzheimer's Resources of Alaska

**Stephanie Smith**, DEMENTIA EDUCATION AND PREVENTION PROGRAM MANAGER, State of Alaska, Division of Public Health

**Marcy Stalvey**, DIRECTOR OF REHABILITATION SERVICES, Providence St. Elias Specialty Hospital

**Mack Wood**, PUBLIC HEALTH INFORMATICIST, State of Alaska, Division of Public Health

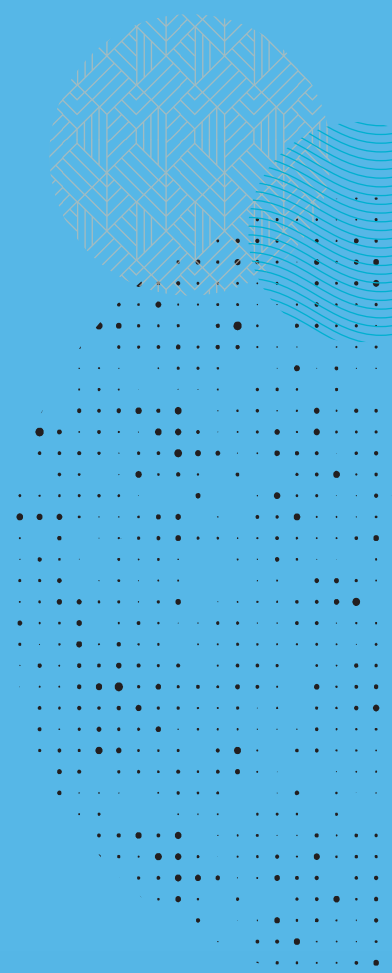


**DATA DEVELOPMENT  
FOR TABI AND ADRD**

# Executive Summary

## Background

Impaired brain function, including impairment associated with Traumatic and Acquired Brain Injuries (TABI) and Alzheimer's Disease and Related Dementias (ADRD), is significant with incredible harms and costs. Over the past several decades, awareness of the magnitude and consequences of TABI and ADRD has increased, advancing recognition as a public health and community priority.





## Purpose and Intent

The overarching purpose of the *Data Development for TABI and ADRD* data scan is to advance data development specific to TABI and ADRD and inform data driven decisions. There is an articulated need to specifically clarify what data is available, where it is located, and how it can be accessed.

### Study Scope

The data scan identifies and describes available data, state and national data sources, data gaps and limitations, and data development needs specific to TABI and ADRD. Recommendations and prioritized data development components to improve Alaska's system of care for Alaska Mental Health Trust Authority (AMHTA) beneficiaries experiencing TABI or ADRD are included.

## Methodology

The AMHTA contracted with McKinley Research Group, an Alaska-based research and consulting firm, to conduct this work. Several research methods were used for this study, including a document scan of applied and peer-reviewed literature to inform the data scan and assessment, secondary data set analysis, and executive interviews with 33 state and national subject matter experts and other stakeholders.

## Data Availability

This scan found two significant data systems capturing information that can provide insight into TABI and ADRD – public health surveillance and healthcare utilization. While not mutually exclusive, these two broad categories provide a useful framework for understanding Alaska's TABI and ADRD data. Other relevant data on TABI and ADRD may come from topic-specific surveys, screening tools, service providers, healthcare quality measures, and biomarkers.

**1** | Public health surveillance

**2** | Healthcare utilization



# Alaska's TABI and ADRD Data Landscape

## Data Sources

This data scan catalogs specific data sources with information on TABI and ADRD in Alaska. This includes detailed descriptions of data sets and TABI and ADRD indicators available through the data sets. Additional information about each source, such as the steward, collection methodology, schedule, timespan, access method, type of data, relevant beneficiary groups, population groups, and geographic regions associated with the data is included.

## Publications

The report references recent publications containing data on TABI and ADRD in Alaska. Publications include reports and briefs, as well as statewide plans.

## Data Development

### Framework for Data Development

Understanding how data is collected, managed, analyzed, and shared is crucial to developing and improving data systems. There is the opportunity to identify strengths, gaps, challenges, and opportunities at each state of data development. Stages of data development include:



Data Collection



Data Management



Data Analysis



Data Sharing

### Data Development Stakeholders and Users

Numerous entities invested in collecting, analyzing, sharing, and using TABI and ADRD data were identified. Common uses of TABI and ADRD data were described.



# Perspectives on Data Development

Interviewees provided insight into factors impacting the collection, management, analysis, and distribution of health-related data in Alaska.

## Data Collection

### HEALTHCARE UTILIZATION DATA

- Nature of conditions
- Condition definitions
- Provider knowledge
- Coding practices
- Software interface

### SURVEY DATA

- Survey continuity

## Data Management

- Privacy and security
- Data sharing across organizational lines
- Tribal authority and data sovereignty
- State all-payer claims databases

## Data Analysis

- Establishing incidence and prevalence
- Case definition challenges
- Going beyond morbidity and mortality
- Considering secondary diagnoses
- Analysis and reporting frequency

## Data Sharing

- Accessibility
- Quality of readily available data
- Adequate and timely data for specific population subgroups
- Desire for a definitive data source
- Potential data sets

# Factors Impacting Data Development

There are four primary factors impacting data development in Alaska: a unique composition of discrete health systems; diversity of stakeholders and various purposes; population trends and education among Alaska's workforce; data modernization initiatives.

# Continuum of Care

This data scan describes key data components associated with the continuum of care for beneficiaries experiencing TABI and ADRD. For the purposes of this study, these data components generally fall into two arenas: essential services data and fiscal and resource data. Essential services data includes trauma system, dementia care services, and workforce data. Fiscal and resource data includes reimbursement mechanisms, disability benefits, adult public assistance, condition-specific funding, and economic studies.



Essential Services Data

Fiscal and Resource Data



# Recommendations

## Foundational Considerations

Each entity committed to this work must consider foundational factors such as their capacity for impact. This study identified some points for the Trust's consideration as it engages with Alaska's TABI and ADRD data-development efforts. This includes a public health vs. population health perspective, Alaska's data-development landscape, and questions of consideration regarding the Trust's role and reach.

## Recommendations and Rationale

Recommendations and rationale for data development are based on study findings, including data and information obtained through executive interviews and a literature and practice review relevant to TABI and ADRD data development. The following table summarizes these recommendations. Rationales are described in the body of this report.

### DATA DEVELOPMENT RECOMMENDATIONS

#### STAGES OF DATA DEVELOPMENT

#### DATA COLLECTION

##### **Recommendation 1:** BRFSS Data Enhancement

- 1a.** Support efforts to ensure ongoing inclusion of and funding for BRFSS optional modules specific to Cognitive Decline and Caregiving per established schedule.
- 1b.** Support efforts to ensure inclusion of and funding for state-added questions related to TBI.

##### **Recommendation 2:** TABI and ADRD Registry Development

- 2a.** Identify a role the Trust may have, if any, in the development of an operational TABI registry as per statute 47.80.50.
- 2b.** Assess the benefits and challenges associated with developing and maintaining an ADRD registry to propel data development.

##### **Recommendation 3:** Data Modernization and Information Exchange Development

- 3a.** Monitor Alaska's data modernization and health information exchange development efforts.
- 3b.** Identify emerging opportunities to leverage and integrate data collection specific to TABI, ADRD, and known comorbidities.

#### DATA MANAGEMENT

##### **Recommendation 4:** Legislative and Regulatory Infrastructure Development

- 4a.** Conduct a comparative review of federal, state, and tribal public health legislation, agency regulations, and protocols integral to public health data management infrastructure development.
- 4b.** Monitor statewide legislation regarding all-payer claims database (APCD) development and its potential utility as a public health surveillance tool for conditions such as TABI and ADRD.

## DATA ANALYSIS

### **Recommendation 5:** Data Analysis Expansion

- 5a.** Identify opportunities to expand condition-specific analysis beyond common surveillance indicators.
- 5b.** Conduct comprehensive economic impact analyses of TABI and ADRD.

## DATA SHARING

### **Recommendation 6:** Data Dissemination Development

- 6a.** Develop basic data products that appeal to most users.
- 6b.** Foster efforts to establish routine data dissemination.

## SERVICE AND PROVIDER TYPES

### **Recommendation 7:** Services Data Development

- 7a.** Develop data to better understand out-of-state care services received by beneficiaries.

## REIMBURSEMENT AND FUNDING MECHANISMS

### **Recommendation 8:** Cost of Care and Reimbursement Assessment

- 8a.** Assess the true costs of care and reimbursement mechanisms along the care continuum.





## DATA DEVELOPMENT FOR TABI AND ADRD

# Introduction

## Background

Impaired brain function, including impairment associated with Traumatic and Acquired Brain Injuries (TABI) and Alzheimer's Disease and Related Dementias (ADRD), is significant with incredible harms and costs. Over the past several decades, awareness of the magnitude and consequences of TABI and ADRD has increased, advancing recognition as a public health and community priority. Emerging evidence indicates health disparities associated with TABI and ADRD, known differences in health outcomes and their causes among groups of people based on factors such as race, ethnicity, sex, education, income, disability, geographic location, and rural or urban status.



## Conditions of Focus

### TRAUMATIC AND ACQUIRED BRAIN INJURIES

Acquired Brain Injuries (ABI) are brain injuries unrelated to congenital, hereditary, or degenerative conditions, or trauma during delivery. These can be categorized as either non-traumatic brain injuries (NTBI) or traumatic brain injuries (TBI). However, it is common for entities to use ABI terminology as a general substitute for NTBI. The State of Alaska defines Traumatic and Acquired Brain Injuries (TABI) as an “injury that occurs from physical force or internal damage to the brain or its coverings, not of a degenerative or congenital nature, that produces an altered mental state and that results in a decrease in cognitive, behavioral, or physical functioning.”<sup>1</sup> Where noted in this report, TBI refers exclusively to traumatic brain injuries; ABI refers solely to non-traumatic brain injuries; TABI refers inclusively to both TBI and ABI.

ABI represents a wide variety of conditions that can be caused by a range of incitements, including aneurysm, metabolic disorder, near-drowning experience, heart attack or other disease. For example, cardiovascular disease conditions like hypertension (high blood pressure), atherosclerosis (narrowing of blood vessels), and heart disease can impact blood flow to the brain. These conditions can increase the risk of stroke, resulting in ABI. Infectious disease that affects the brain (i.e., meningitis, encephalitis) can cause ABI. Any event that causes oxygen to be cut off from the brain, such as carbon monoxide poisoning, overdoses, and near drowning, may result in an ABI. ABI may also be caused by metabolic disorders associated with kidney and/or liver failure, among others. Certain research indicates that ABI are at least as common as TBI.<sup>2</sup>

The universe of TBI is vast and complex, encompassing the life span and everyday occurrences such as falls and injuries during recreational and sports activities, as well as motor vehicle crashes, violence, and military armed conflict. TBI are a major cause of death and disability in the United States. Alaska has one of the highest number

of people experiencing TBI in the nation. From 2012-2016, about one out of every five reported injuries in Alaska included a brain injury. The most common causes of Alaska’s TBI are falls, assault, ATV/snowmachines, and motor vehicle accidents.<sup>3</sup> Data suggests that some groups are at a greater risk for getting a TBI or having worse health outcomes after injury – including older adults, racial and ethnic minorities, service members and Veterans, people who experience homelessness, individuals in correctional and detention facilities, survivors of intimate partner violence, and people living in rural areas.<sup>4</sup> Emerging evidence suggests that experiencing a TBI in early or midlife is associated with an increased risk of dementia later in life.

### ALZHEIMER’S DISEASE AND RELATED DEMENTIAS

Major neurocognitive disorder, also known as dementia, is a group of conditions characterized by loss of memory, language, problem-solving and other thinking abilities that are severe enough to interfere with daily life.<sup>5</sup> Dementia likely affects more than 6 million people in the U.S. and more than 55 million people worldwide.<sup>6</sup> While Alzheimer’s disease is the most common dementia diagnosis, related dementias share many cognitive and pathological features and can be difficult to distinguish from Alzheimer’s disease. According to research, the U.S. burden of ADRD will double by 2060. In 2020, there were about 8,500 Alaskans aged 65 and older with Alzheimer’s disease. Estimates indicate that this number will rise to about 11,000, an increase of 29.4%, in just five years.<sup>7</sup>

Among people ages 65 and older, African Americans have the highest prevalence of Alzheimer’s disease and related dementias (13.8%), followed by Hispanics (12.2%), and non-Hispanic whites (10.3%), Alaska Natives and American Indians (9.1%), and Asian and Pacific Islanders (8.4%). The increases are a result of fewer people dying from other chronic diseases and surviving into older adulthood when the risk for ADRD increases.<sup>8</sup>

# Purpose and Intent

The overarching purpose of the *Data Development for TABI and ADRD* data scan is to advance data development specific to TABI and ADRD and inform data driven decisions. There is an articulated need to specifically clarify what data is available, where it is located, and how it can be accessed. Stakeholders have questions around the incidence and prevalence of TABI and ADRD, Alaska-specific data sources, and data central to monitoring and evaluation of program outcomes, including those associated with the Alaska Department of Health's *Strengthening the System: Alaska's Comprehensive Integrated Mental Health Program Plan (2020-2024)* and the Alaska Scorecard.

## Study Scope

The data scan identifies and describes available data, state and national data sources, data gaps and limitations, and data development needs specific to TABI and ADRD. Available data associated with Alaska's prevalence or incidence of TABI and ADRD is detailed, as well as data associated with the needs or demands for services, prevention and intervention, or service utilization. Recommendations and prioritized data development components to improve Alaska's system of care for AMHTA beneficiaries experiencing TABI or ADRD are included.

## Methodology

The AMHTA, also known as the Trust, contracted with McKinley Research Group, an Alaska-based research and consulting firm, to conduct this work. Several research methods were used for this study, including a document scan of applied and peer-reviewed literature to inform the data scan and assessment, secondary data set analysis, and executive interviews with 33 state and national subject matter experts and other stakeholders.





# Data Availability

## Overview

Recognizing and understanding currently available data is essential for pursuing data development for TABI and ADRD in Alaska. This scan found two significant data systems capturing information that can provide insight into TABI and ADRD – public health surveillance and healthcare utilization. While not mutually exclusive, these two broad categories provide a useful framework for understanding Alaska’s TABI and ADRD data.

**1**

**Public health surveillance is the ongoing, systematic collection, analysis, and interpretation of health-related data essential to planning, implementing, and evaluating public health practice.<sup>9</sup>**

**2**

**Healthcare utilization data is collected as part of service delivery when patients receive care from medical providers through hospitals, primary care, specialty clinics, long-term care, home health agencies, and hospices.<sup>10</sup>**

While these two broad categories cover much of the data available on TABI and ADRD in Alaska, public health surveillance and healthcare utilization data are not the only relevant data sources. Other data on TABI and ADRD may come from topic-specific surveys, screening tools, service providers, healthcare quality measures, and biomarkers.

This chapter describes and lists data available on TABI and ADRD. A detailed inventory of data identified through this scan is presented in *Appendix A*.



# Public Health Surveillance Data Systems

Public health surveillance data relevant to TABI and ADRD are collected through surveys, registries, and vital records.<sup>11</sup>

## Surveys

In Alaska, two significant public health surveillance surveys include the Behavioral Risk Factor Surveillance System (BRFSS) and the Youth Risk Behavior Surveillance System (YRBS) surveys. The BRFSS is a survey of adults, and the YRBS is a survey of high school students. Both surveys cover a wide range of health experiences. Specific to TABI and ADRD, the Alaska BRFSS questionnaire has historically included questions related to experience of cognitive disability, confusion or memory loss, and stroke. In 2022, the questionnaire included questions related to traumatic brain injury. The Alaska YRBS includes questions about risk and protective factors associated with injury prevention, including traumatic brain injury. The Alaska BRFSS and YRBS are part of national surveillance systems coordinated by the Centers for Disease Control and Prevention.

## Registries

A registry is an organized system for collecting, storing, retrieving, analyzing, and disseminating information on persons with a particular disease or factors known or suspected to be associated with adverse health effects.<sup>12</sup> In public health and medicine, there are many uses for the information collected in registries. These include estimating the scale of a problem, determining incidence, examining trends over time, assessing service delivery, identifying high-risk groups, and conducting research.

Significant Alaska-based registries relevant to TABI include the Alaska Trauma Registry, Alaska Native Tumor Registry, and the Alaska Cancer Registry.

## Vital Records

Vital records provide data on births and deaths. In Alaska, the Alaska Department of Health manages vital records data through the Health Analytics and Vital Records section of the Division of Public Health. National comparatives are available through the National Vital Statistics System.

# Healthcare Utilization Data Systems

Healthcare utilization data on visits to primary care, emergency care, inpatient care, and outpatient care helps monitor the use of healthcare resources, forecast future healthcare expenditures, and anticipate future healthcare needs. Healthcare utilization data relevant to TABI and ADRD are collected as part of the healthcare billing cycle and through patients' electronic health records. Currently, key sources of healthcare utilization data in Alaska include Medicaid and Medicare enrollee and reimbursement data, and data on outpatient and inpatient visits shared with public health surveillance systems.

## Claims Data

Claims-related data from public payers such as Medicare and Medicaid are available through the Centers for Medicare & Medicaid Services (CMS) and the Alaska Medicaid program. CMS issues public use files for Medicare claims, and Alaska Medicaid reimbursement data are available by request from the Alaska Department of Health. Other major public payers in Alaska include TRICARE, Veterans Affairs, and the Indian Health Service.

While data from public payers such as Medicare and Medicaid are available, claims data from private payers is inaccessible in Alaska, as the state does not have an all-payer claims database. All-payer claims databases (APCDs) are large state databases that include healthcare claims and other information collected from private and public payers.<sup>13</sup> While Alaska does not currently have an APCD, legislation is proposed to establish such a database.

## Electronic Health Record Data

An electronic health record (EHR) is a digital version of a patient's medical chart.<sup>14</sup> It is a real-time, patient-centered record that makes information available to authorized users. EHRs can contain a patient's medical and treatment histories, diagnoses, medications, treatment plans, radiology images, and laboratory and test results. They enable authorized providers to digitally create, manage, and share health information across multiple healthcare organizations.

Data captured through electronic health records are reported to public health surveillance systems such as the Health Facilities Discharge Reporting Program and the Syndromic Surveillance Program. However, not all data collected by healthcare providers through electronic health records are reported to these programs. Individual facilities and healthcare systems may analyze EHR data in-house for monitoring and planning.







## Other Data

### Topic-Specific Surveys

Data relevant to TABI and ADRD have been collected through topic-specific surveys coordinated by service providers, advocacy groups, and research centers. Recent surveys identified through this data scan include the following:

**UAA Center for Human Development, Brain Injury Needs Assessment Survey<sup>15</sup>**

**AMHTA and Concussion Foundation, Medical Provider Survey<sup>16</sup>**

**UAA Justice Center, Alaska Victimization Survey<sup>17</sup>**

One interviewee shared that a statewide ADRD survey is planned as part of the Alaska Dementia Education and Prevention Program's federal BOLD grant. The BOLD grant, referencing the federal Building Our Largest Dementia Infrastructure for Alzheimer's Act, Public Law 115-406, among other things, provides funding to increase data analysis related to dementia and timely reporting.<sup>18</sup>

### Screening Data

Interviewees expressed interest in screening data. Individuals are screened for TABI and ADRD by multiple types of service providers. Screening results may be collected and stored by service providers, but the assessment team believes that the results are not routinely and systematically analyzed and shared. Service providers with screening data related to TABI and ADRD may include those from the following sectors:

**Education • Youth sports • Mental and behavioral health  
Primary care • Family medicine • Senior living services  
Domestic violence services • Sexual assault treatment services**

## Service Provider Data

As shared by interviewees, data on TABI and ADRD are not solely captured by the public health and healthcare sectors. Various service providers in education, corrections, juvenile justice, and homeless services specifically collect data about service provision to clients or participants experiencing TABI and ADRD. Depending on the entity, these data may be accessed by request or viewed through publicly available presentations, reports, and dashboards. While service provider data certainly could provide insight into TABI and ADRD, pathways to accessing this data are not often clear, and many entities, particularly non-governmental organizations, may view the information as proprietary.

### HOMELESSNESS SERVICES

Homeless services providers in Alaska participating in the Alaska Homeless Management Information System submit data on the number of clients reporting conditions of AMHTA focus, including TABI and ADRD.<sup>19</sup>

### EDUCATION SERVICES

Students with a diagnosed traumatic brain injury may be eligible for an individualized education plan (IEP) as part of special education services, and this information is reported to the Alaska Department of Education and Early Development.

## Healthcare Quality Measures

Quality measures help measure or quantify healthcare processes, outcomes, patient perceptions, and the organizational structure and systems associated with providing high-quality healthcare.<sup>20</sup> They are often used for quality improvement and public accountability. The National Committee for Quality Assurance's Healthcare Effectiveness Data and Information Set (HEDIS) is used by more than 90% of U.S. health plans to measure performance on important dimensions of care and service.<sup>21</sup> HEDIS measures include a range of health issues. Indicators relevant to TABI and ADRD comorbidities include measures of high blood pressure, comprehensive diabetes care, mental health care, behavioral health screening, medication management, fall risk management, and smoking cessation.<sup>22</sup>

## Medical Research and Biomarker Data

At least one interviewee noted that, while there is not a medical school in Alaska, there is the potential for medical research and analysis of biomarker data in Alaska through research departments at the Alaska Native Tribal Health Consortium, Southcentral Foundation, or the Oregon Health & Science University's Alaska Native Health and Wellness Research Center.

Biomarkers are characteristics of the body that can be measured.<sup>23</sup> They are indicators of normal biological processes, disease, and exposure. Medical providers use biomarker data to track body processes, identify health risks, diagnose diseases and other health conditions, and monitor treatment.<sup>24</sup> Researchers can also use data to improve the detection of diseases and health conditions, understand risk factors, identify candidates for clinical trials and studies, and track responses to intervention.

Biomarker data useful for detecting, diagnosing, monitoring, and researching TABI and ADRD can be obtained through various brain imaging technologies, cerebrospinal fluid tests, saliva tests, blood tests, genetic testing, and other such means.<sup>25,26</sup>

# Alaska's TABI and ADRD Data Landscape

## Data Sources

Specific data sources with information on TABI and ADRD in Alaska are cataloged below. Detailed descriptions of data sets and TABI and ADRD indicators available through the data sets are presented in *Appendix A*. The appendix contains additional information about each source, such as the steward, collection methodology, schedule, timespan, access method, type of data, relevant beneficiary groups, population groups, and geographic regions associated with the data.

## Data Systems



### PUBLIC HEALTH SURVEILLANCE

- ● Alaska Behavioral Risk Factor Surveillance System
- Alaska Cancer Registry
- Alaska Native Tumor Registry
- Alaska Trauma Registry
- Alaska Youth Risk Behavior Survey
- ● Health Analytics & Vital Records
- ● Syndromic Surveillance
- ● Health Facilities Data Reporting

### HEALTHCARE UTILIZATION

- ● Medicaid
- ● Medicare

### OTHER

- Alaska School Activities Association
- ● Alaska Homeless Management Information System
- ● Health Effectiveness Data and Information Set

## Publications

Recent publications containing data on TABI and ADRD in Alaska follow. Publications include reports and briefs, as well as statewide plans. Data in these publications are sourced from various data systems. Additional information about the data summarized in these publications is summarized in *Appendix A*.

## Publication Title

### REPORTS AND BRIEFS



- Alaska Native Injury Atlas, Third Edition (2020)
- Alaska Alzheimer's Facts and Figures (2023)
- Long-Term Forecast of Medicaid Enrollment and Spending in Alaska: FY2023-FY2043 (2023)
- The Alaska Health Systems Collaboration Unit Chronic Disease Infographic
- The Burden of Heart Disease and Stroke in Alaska (2019)
- Traumatic and Acquired Brain Injury Legal Needs Assessment (2019)
- UAA Center for Human Development Brain Injury Needs Assessment (2019)

### PLANS

- ● Alaska Division of Public Health Strategic Plan: 2020-2025
- Alaska Division of Senior and Disabilities Services Strategic Plan: Fiscal Years 2024-2027
- Alaska State Plan for Brain Injury: July 2020-June 2025
- A Call for Action: Alaska's 10-Year Map to Address Alzheimer's Disease and Related Dementia
- Healthy Alaskans 2030: State Health Improvement Plan
- ● Healthy Brain Initiative Road Map for Indian Country
- Healthy and Equitable Communities: Strategic Plan 2022-2025
- ● Strengthening the System: Alaska's Comprehensive Integrated Mental Health Program Plan
- Take Heart Alaska: Heart Disease and Stroke Prevention Program 2020-2025



## DATA DEVELOPMENT FOR TABI AND ADRD

# Data Development

## Framework for Data Development

### Stages of Data Development

Understanding how data is collected, managed, analyzed, and shared is crucial to developing and improving data systems. At each stage, there is the opportunity to identify strengths, gaps, challenges, and opportunities.



#### Data Collection

Data collection involves many methods of generation and gathering. Data relevant to TABI and ADRD can be collected as part of administering screeners, applying for services, documenting service delivery, collecting surveys, and more.



#### Data Management

Data management encompasses processing, validating, protecting, and storing data. Health data are managed following federal, tribal, and state policies that govern data privacy, security, sovereignty, and institutional protocols for protecting and handling data.



#### Data Analysis

Data analysis involves assessing raw data, interpreting analysis results, and documenting findings. Data are generally analyzed to garner insights and generate useful information. With TABI and ADRD, data analysis may be done to identify prevalence and incidence, explore risk and protective factors and comorbidities, inform prevention and early intervention initiatives, assess service utilization, and examine healthcare expenditures.



#### Data Sharing

Data can be distributed to various audiences for various purposes. TABI and ADRD data users and audiences can include healthcare system leadership, public health practitioners, service agencies, advocates, and the general population. Data are often used to forecast service needs, inform decision-making and policy development, obtain funding, develop programs and service lines, build awareness, and more.

## Data Development Stakeholders

In addition to considering the data lifecycle, it is essential to consider the stakeholders collecting, managing, analyzing, sharing, and using data. The data scan identified numerous entities invested in collecting, analyzing, sharing, and using TABI and ADRD data. While likely not inclusive of all stakeholders, the following depicts major stakeholders identified through the assessment.

### State of Alaska

Alaska Mental Health Trust Authority  
Alaska State Legislature  
Alaska Department of Health

- Division of Public Health
- Division of Public Assistance
- Division of Behavioral Health
- Division of Healthcare Services
- Division of Senior and Disabilities Services

Alaska Department of Family and Community Services

- Alaska Psychiatric Institute
- Alaska Pioneer Homes
- Office of Children's Services

Alaska Department of Corrections  
Alaska Department of Education & Early Development

### Alaska Tribal Health System

Tribal Health Organizations

- Alaska Native Epidemiology Center
- Alaska Native Tribal Health Consortium
- Alaska Native Medical Center
- Southcentral Foundation

### Military Health System

Department of Defense  
Department of Veterans Affairs

### University of Alaska

Center for Human Development  
Institute of Social and Economic Research  
College of Health  
Institute for Circumpolar Health Studies

### Private healthcare providers

### Hospital Systems

Public hospitals  
Private hospital networks

### Non-Profits

Alzheimer's Association  
Brain Injury Association  
Center for Safe Alaskans  
healthEconnect Alaska

## Data Uses

Various stakeholders use data for many purposes. Common uses of TABI and ADRD data are listed below.





# Perspectives on Stages of Data Development

Interviewees provided insight into factors impacting the collection, management, analysis, and distribution of health-related data in Alaska. The following describes factors associated with data development, as identified by interviewees.

## Data Collection

### FACTORS IMPACTING THE COLLECTION OF HEALTHCARE UTILIZATION DATA

Healthcare utilization data are primarily collected through electronic health records and claims data. Interviewees pointed to various factors impacting TABI and ADRD healthcare utilization data collection.

**NATURE OF CONDITIONS:** Depending on the presentation of symptoms for TABI and ADRD, the conditions may go undiagnosed or underdiagnosed, meaning that all potential healthcare utilization associated with them is not documented.

**CONDITION DEFINITIONS:** Definitions impact the data collected on a condition. For traumatic brain injury, in particular, a key limitation is the variation in diagnostic and case definitions among organizations such as the American Academy of Neurology Centers for Disease Control and Prevention, Department of Defense/Department of Veterans Affairs, World Health Organization, and others.

**PROVIDER KNOWLEDGE:** Several interviewees remarked that the quality of healthcare utilization data is impacted by provider knowledge of TABI and ADRD and the degree to which they have been trained to screen for, recognize, diagnose, and treat the conditions.

**CODING PRACTICES:** The level of detail captured through diagnostic coding and the extent to which comorbidities are detailed may vary. Policies and procedures regarding diagnostic coding may differ within different healthcare settings, facilities, and systems. Similarly, individual providers' diagnostic coding practices may vary based on their training and experience.

**SOFTWARE INTERFACE:** Electronic health record interfaces can impact data quality. For example, some electronic health record platforms may not have the appropriate code lists built into the system to code TABI and ADRD diagnoses adequately.

### SURVEY CONTINUITY

Ongoing surveys provide the opportunity to assess trends over time. The Behavioral Risk Factor Surveillance System (BRFSS) survey questionnaire changes yearly, though core questions are asked each year. For many reasons, including budget, length of survey, and utility of data, it is not reasonable to include questions about all possible dimensions of health each year. Fortunately, questions regarding stroke and cognitive disability have been continuously asked for at least a decade, and questions regarding confusion or memory loss have been asked every few years between 2013 and 2020. While these provide some indication of acquired brain injury and dementia, questions about traumatic brain injury have not historically been included on the BRFSS questionnaire. The 2022 Alaska BRFSS questionnaire included questions about traumatic brain injury. While positive, these questions are not part of the core survey, limiting the ability to monitor trends.



## Data Management

### PRIVACY AND SECURITY

When handling health data, the privacy and security of personally identifiable data are of great concern. The privacy and exchange of health information are regulated by laws at the federal, tribal, and state levels, depending on the source of the information and the entity entrusted with the information.<sup>27</sup> Two examples of federal laws that regulate privacy and the exchange of information are the Family Educational Rights and Privacy Act (FERPA) and the Health Insurance Portability and Accountability Act of 1996 (HIPAA). FERPA protects the privacy of student education records, which may include health-related data, and HIPAA protects patient health information. In addition to establishing protections for these data, these laws outline acceptable use of data.

Privacy laws are significant considerations for data management and set the stage for what can and cannot be shared. While essential to uphold privacy protections, some data stewards may go above and beyond what the law requires to guard datasets, preventing data users from accessing valuable insights. A few interviewees described experiences encountering restrictive legal and cybersecurity guidelines stemming from various interpretations of policies. Without a consistent understanding of access policies, some stewards may err toward safeguarding data from any use.

### SHARING DATA ACROSS ORGANIZATIONAL LINES

At the state level, data are generated and managed by various departments, divisions, and sections, creating barriers to data access. Historically, sharing data across organizational lines within the state system has required navigating complicated legal and information technology security landscapes.

#### CONSIDER

Positively, several interviewees noted that internal data sharing is getting easier thanks to efforts to establish memoranda of agreements between departments, divisions, and sections. This facilitates data access for programs within the Department of Health.

### TRIBAL PUBLIC HEALTH AUTHORITY AND DATA SOVEREIGNTY

Tribal public health authority and data sovereignty are significant components of data management in Alaska. Tribes and Tribal Epidemiology Centers hold public health authority, as established through the Indian Health Care Improvement Act, to engage in public health activities, including surveillance.<sup>28,29,30</sup> Data sovereignty refers to “the right of a nation to govern the collection, ownership, and application of its data.”<sup>31</sup> It underpins data management for data collected on Alaska Native and American Indian people.

#### CONSIDER

Several interviewees spoke of successful collaborations between the state health department and tribal health organizations for managing data. For example, Healthy Alaskans 2030, Alaska’s health improvement plan, is led by a partnership between the Alaska Department of Health and the Alaska Native Tribal Health Consortium and is the only health improvement plan in the nation developed through a state and tribal partnership. Likewise, the Alaska BRFSS Data Center, a web-based tool for accessing BRFSS data, is a collaborative project of the Alaska Department of Health and the Alaska Native Tribal Health Consortium.

### STATE ALL-PAYER CLAIMS DATABASES

All-payer claims databases (APCDs) are large state databases that include medical claims, pharmacy claims, dental claims, and eligibility and provider files collected from private and public payers.<sup>32</sup> For states with an APCD, insurers report data to states directly as part of a state mandate. They are distinct from discharge data systems, as they include information on care for patients across care sites, beyond just hospitalizations and emergency department visits. Alaska does not have an all-payer claims database, limiting the information collected about healthcare utilization for individuals with commercial insurance plans.





## Data Analysis

### ESTABLISHING INCIDENCE AND PREVALENCE

Establishing the true incidence and prevalence of TABI and ADRD is challenging in the current data landscape.

The incidence of TABI is often based on healthcare data describing the number of hospitalizations, emergency department visits, and deaths.<sup>33</sup> These estimates do not include people not seeking care or persons seeking care at a physician's office, urgent care center, or other non-emergency outpatient department.<sup>34</sup>

A known challenge with establishing prevalence is the lack of ongoing surveillance of TBI-related disability<sup>35</sup> and the limited consideration of ABI-related data within TABI prevalence data. State legislation provides a foundation for establishing a statewide registry of individuals with TABI for longitudinal data collection and evaluation of service delivery (AS 47.80.500).<sup>36</sup> However, due to challenges with capacity, little progress has been made toward operationalizing the registry.

### CASE DEFINITION CHALLENGES

One challenge associated with analyzing TABI data is assessing mild traumatic brain injury due to a lack of case definition from the Council of State and Territorial Epidemiologists. A surveillance case definition "is a set of uniform criteria used to define a disease for public health surveillance."<sup>37</sup> Surveillance case definitions enable public health officials to classify and count reports in a standardized way.

### GOING BEYOND MORBIDITY AND MORTALITY

Several interviewees felt Alaska has only "skimmed the surface" of its ability to analyze TABI and ADRD data, as most reporting has focused on morbidity and mortality. Stakeholders working in TABI and ADRD are interested in research and analyses that enumerate the connection

## INCIDENCE

refers to the number of new cases of a condition during a set period.

## PREVALENCE

refers to the number of people in a population affected by a condition at a particular moment in time. Prevalence data are useful for understanding the extent to which a condition is present in a population.

between TABI and ADRD and social determinants of health, risk and protective factors, and comorbidities. Interviewees see opportunities for these kinds of analyses based on knowledge of data already captured in existing data systems, such as the social determinants of health-related Z codes, and through linking datasets.

Interviewees indicated that TABI data development efforts should align with and represent the care continuum. Regarding ADRD, there is an expanding national focus on prevention, early diagnosis, and interventional treatment. Data development considerations should include these aspects.

### CONSIDERING SECONDARY DIAGNOSES

A few interviewees highlighted limitations with the presentation of TBI patients with multiple injuries and how traumatic brain injuries might be diagnosed and coded. As documented in the literature on assessing the prevalence of traumatic brain injury, routine analyses may rely on just the primary diagnosis in a record or the diagnosis requiring the most care.<sup>38</sup> Should a traumatic brain injury be recorded as a secondary code, the incidence of traumatic brain injury may not be identified through analysis.

### ANALYSIS AND REPORTING FREQUENCY

There is no consistent analysis and reporting schedule for health issue-specific data reports at the state level. Topical reports are generated based on funding availability, workforce capacity, stakeholder interest, leadership priorities, and other factors. For traumatic brain injury, some interviewees remarked that injury prevention has historically been under-resourced for the magnitude of the problem, further impacting the frequency with which data are analyzed and reported.

## Data Sharing

Analyzed data are publicly shared through reports, infographics, dashboards, and query tools. Aggregate and raw data may also be shared by request, with access granted on a case-by-case basis. In some circumstances, access to data may be predicated on or facilitated by a relationship with data stewards.

### ACCESSIBILITY

Currently, healthcare utilization data requires considerable knowledge and experience to access. Neither Health Facilities Discharge Reporting program data nor Medicaid data are publicly available through the State, and readily available documentation regarding what is available in the datasets and the mechanism for accessing the data is limited. Furthermore, there may be a significant cost associated with accessing data from these datasets, depending on the type of data requested and the amount of time and effort the request requires.



## CONSIDER

Several interviewees cited the inability to pay these costs as a barrier to obtaining essential data.



### QUALITY OF READILY AVAILABLE DATA

Some stakeholders seek easily accessible and readily available data on TABI and ADRD. When up-to-date data on a health condition from a trusted entity is not immediately available, users may seek out data through web searches or social media. While not necessarily the case, this can lead to unreliable, misrepresented, or inaccurate data being used and shared.

### ADEQUATE AND TIMELY DATA FOR SPECIFIC POPULATION GROUPS

Some data users may need data for specific population groups, communities, and regions. Due to the small population of Alaska and the state's demographics, health outcome data must often be suppressed for distinct population groups or communities to meet state-mandated privacy protection thresholds for small populations. This means that data users often cannot find or access data on the populations of interest to them. Combining data across multiple years may be possible to meet data suppression thresholds. However, users may feel like combining data across multiple years impacts the data's recency, timeliness, and relevancy.

### DESIRE FOR A DEFINITIVE DATA SOURCE

Many data users may be looking for a “one-stop-shop” for accessing data on a topic and be overwhelmed by the number of sources of data that can be consulted. While understandable, expecting one data system or resource to be the definitive data source is unrealistic.

### POTENTIAL DATA SETS

There is interest in learning from information collected by various service providers and other entities. For example, a few interviewees referenced the potential of analyzing student athlete concussion protocol documentation collected by the Alaska School Activities Association. Others mentioned interest in accessing various service providers' TABI and ADRD screening data. While potential data sources, there is no well-known mechanism for accessing these data.



# Factors Impacting Data Development

## Discrete Health Systems

While an oversimplification, Alaska's healthcare landscape comprises three general systems – the tribal health system, the military health system, and all other health systems serving the general population. Notably, compared to all other states, Alaska has the highest share of Alaska Native and American Indian residents and the highest share of veteran residents, meaning that the tribal and military health systems each serve a larger proportion of the state's population than in other states.<sup>39</sup>

### Tribal Health System

### The Military System

### All Other Health Systems

Each of the three broad systems described is complex, and each system is enmeshed with and siloed from the others in ways that complicate data development. A complete picture of health status, the continuum of care, and data development in Alaska requires consideration of each system.

## Stakeholders

Many stakeholders are invested in addressing the needs associated with TABI and ADRD and use data to inform their work. Considering the diversity of stakeholders and the various purposes for which they use data is significant for data development.

## Workforce

Interviewees highlighted strengths and challenges associated with Alaska's workforce and how they impact data collection and analysis.

### POPULATION TRENDS

Shifts in the number of working-aged people in the state may impact health data analytic capacity. The number of working-age people in Alaska between ages 18 and 64 has declined in the past decade.<sup>40</sup> Factors contributing to the decline include trends in net migration, an aging population, and an increase in the number of deaths among the working-age population during the COVID-19 pandemic. In 2022, the Alaska Department of Labor projected that Alaska's population growth will be the slowest in the state's history through 2050.<sup>41</sup>

### EDUCATION

Education and training may also impact workforce availability for health analytics and healthcare. A few interviewees noted the lack of an epidemiology track through the University of Alaska Anchorage's Master of Public Health Program or a university-based medical research facility in the state. In contrast, one interviewee noted that while there is no master's level epidemiology program in the state, Alaska has many programs and organizations that attract epidemiologists from around the country to the state. These include the Alaska Native Epidemiology Center, the Centers for Disease Control and Prevention's Arctic Investigations Program, and the Council of State and Territorial Epidemiologists' Applied Fellowship program.

## Data Modernization Initiatives

The Centers for Disease Control and Prevention is leading a multi-year, billion-plus-dollar effort to modernize core data and surveillance infrastructure across the federal and state public health landscapes.<sup>42</sup> The initiative is focused on ensuring the right people, processes, and policies are in place to provide real-time, high-quality information on health conditions of interest. Related efforts to modernize the public health data system are underway in Alaska.



## DATA DEVELOPMENT FOR TABI AND ADRD

# Continuum of Care

Continuum of care commonly refers to care that follows an individual's changing healthcare needs over time. Depending on condition-specific factors, continuum-of-care needs vary among individuals. For beneficiaries experiencing TABI or ADRD, there are distinct needs along the continuum of care associated with each condition as well as overlapping with known comorbidities.

For beneficiaries with a TABI, the continuum of care may include emergency services, acute neurosurgical and rehabilitative care in a trauma center environment, comprehensive rehabilitation services in an inpatient rehabilitation facility, and long-term interdisciplinary follow-up and outpatient rehabilitation services.<sup>43</sup> Depending on the age at which the TABI was incurred, the continuum of care may extend across the lifespan. Because the increased risk of dementia is higher among individuals experiencing a TBI, care needs may eventually extend past rehabilitation services. It is recognized that those with a mild to moderate TABI may be undiagnosed or

underdiagnosed, resulting in a care continuum different from the one described. For example, undiagnosed TBI can have long-term effects on mental wellness and cognitive ability. Psychiatric disorders such as anxiety, depression, and substance use can occur and worsen drastically if a brain injury goes untreated. This may lead to receiving care services that are not appropriate or are ineffective or not seeking care at all.

The care needs, settings, and continuum for beneficiaries with ADRD typically align with the early and advancing stages of the condition. Families may provide care in a home setting with or without augmentation of home- and community-based care services. Outside of the home setting, long-term care (LTC) may be provided in places such as an assisted living home, residential care community, or memory care community. Nursing homes, also known as skilled nursing facilities, provide care for ongoing medical needs, and hospice supports end-of-life care.<sup>44</sup>



# Data Components

This section describes key data components associated with the continuum of care data landscape. For the purposes of this study, these data components generally fall into two arenas: essential services data and fiscal and resource data.



## Essential Services Data

Essential services data, optimally rooted in and integrated throughout the whole delivery system of care, is critical to assessing service needs, identifying opportunities for improvement, and evaluating anticipated care outcomes. This includes data aligned with an established state trauma system, dementia care services, and the essential services workforce, among others.

### TRAUMA SYSTEM

A trauma system is an organized multidisciplinary response to managing treatment of severely injured people, and it spans the full spectrum of prevention and emergency care to recovery and rehabilitation. There are four major components to this system.<sup>45</sup>

- 1 Injury Prevention Education**
- 2 Pre-Hospital care**
- 3 Acute Care Facility care**
- 4 Post-Hospital care**

The system should address all injured patients, with special attention paid to pediatric, geriatric, and other vulnerable populations.

Alaska's Trauma System is administered through the Department of Health, Division of Public Health, Section of Rural and Community Health Systems. The Alaska Trauma System leads in trauma designations and maintains the Alaska Trauma Registry. The State's most recent *Trauma System Consultation Report (2018)* details the System's assets and advantages, challenges, and priorities. The report findings align with the twelve essential trauma system elements.<sup>46</sup> Multiple findings have implications for service provision data development along the care continuum.

The State has made substantial progress in the last 15 years, focusing primarily on trauma center development, facility participation, and developing a comprehensive *State Trauma System Plan: 2018-2020*.<sup>47</sup> However, trauma centers do not equal a Trauma System. There is little knowledge of the Trauma System Plan and limited participation in system-level functions in the state's remote areas. The chosen metrics have focused on individual trauma center function, not the overall Trauma System. Foundational data infrastructure is recommended, along with integrating available sources data to improve the Trauma System.

Opportunities for data development were described within Alaska's Trauma System Consultation Report. Select examples are noted below. The reader is encouraged to read the report in its entirety.





### Injury Prevention Education

As cited in the report, the Trauma Registry has been used extensively to describe Alaskan injuries. While injury epidemiologic resources are robust, they do not appear to have a direct relationship with the trauma program. Injury trends and patient outcomes are not studied with the goal of improving the Trauma System as a whole. There is little use of the data to advocate for the Trauma System to the public at large, or the State legislature.

There is an identified opportunity for a trauma epidemiologist to study both significant injury trends, as well as trauma patient outcomes as well as their relationship to the Trauma System. This would incorporate all traumatic events and phases of care, including medical examiner, pre-hospital, and rehabilitation into injury prevention.

### Pre-Hospital Care

Emergency Medical Services (EMS) has come to be recognized as the prehospital care component of the larger emergency health care system. It is a complex system that not only transports patients, but also includes public access, communications, personnel, triage, data collection, and quality improvement activities. EMS ground services in Alaska include both basic life support (BLS) and advanced life support (ALS) services. Most isolated communities have Community Health Aides (CHA) working in Community Health Centers (CHC) who are trained and function as the primary care provider either under the distant supervision of a Physician or the direct supervision of a Nurse Practitioner or Physician Assistant located in the community. CHAs are First Responders or EMTs trained, with many at the EMT-I level or higher.

EMS is not well integrated into Alaska's Trauma System. There are no statewide standards for EMS protocols. There is an opportunity to establish the infrastructure to allow bidirectional health information exchange between emergency medical services and health care facilities for performance improvement activity. EMS data is captured in the AURORA database. Support is needed to ensure all emergency medical service agencies submit data to the AURORA database in a timely fashion.

### CONSIDER

Some interviewees noted that the absence of data from Community Health Clinics is a critical gap.





## Acute Care Facility

### Trauma Centers

All levels of trauma centers (Levels I-IV) cooperate in the care of injured patients to improve patient care and outcomes, effectively utilize limited resources, and minimize variations in care provided in all locations. According to the Alaska Department of Health, Alaska has two Level II Adult and Pediatric designated trauma centers: Alaska Native Medical Center and Providence Alaska Medical Center.<sup>48</sup> A Level II trauma center can initiate definitive care for all injured patients, including 24-hour immediate coverage by general surgeons as well as coverage by the specialties of orthopedic surgery, neurosurgery, anesthesiology, emergency medicine, radiology, and critical care. There are eleven Level IV designated trauma centers located throughout the state. A Level IV trauma center can provide advanced trauma life support before transferring patients to a higher-level trauma center. All hospitals in the state submit data to the trauma registry, including two military facilities.

There is an opportunity to establish a regular reporting structure that facilitates a data-driven decision-making process for the Trauma System Review Committee (TSRC) and the State. It is recommended to begin with process measures already being captured, including those associated with established trauma centers.

### Rehabilitation Hospitals

As an integral component of the trauma system, rehabilitation services in acute care and rehabilitation centers provide coordinated care for trauma patients who have sustained severe or catastrophic injuries resulting in long-standing or permanent impairments. There are reportedly twenty designated adult rehabilitation beds in Alaska: ten beds each at Providence Alaska Medical Center and Alaska Regional Hospital. Both facilities have robust programs and maintain an emphasis on the traumatically injured. Both demonstrated quality metrics that met or exceeded national standards. These included high patient satisfaction, low readmission rates, high return to the community at discharge, and improved Functional Independence Measures. Pediatric inpatient rehabilitation beds do not exist in the State.

Providence St. Elias Specialty Hospital is the only Long-Term Acute Care Hospital in Alaska and provides rehabilitation services. The 59-bed hospital maintains physical therapy, occupational therapy, speech, physical medicine, and rehabilitation services, as well as a Certified Brain Injury Specialist and Physical Therapy Neurologic Clinical Specialist for TBI and spinal cord injured (SCI) patients. TBI patients are accepted into the Alaska facilities on a case-by-case basis, depending on the rehabilitation staff's comfort and expertise level, the funding source, and bed availability.

Severe TBI patients who require long-term rehabilitative care (>30 days anticipated) are sent out of Alaska to specialty rehabilitation centers. The University of Washington in Seattle and Craig Hospital in Denver were the two most frequently utilized out-of-state facilities.

### CONSIDER

Based on interview data, at least 50% of patients at Providence St. Elias Specialty Hospital present with an ABI or TBI as a primary diagnosis.

Some interviewees report that the lack of continuity-of-care data, including out-of-state transfer and reentry data, makes it difficult to expand services in a fiscally sound, sustainable manner.





## Acute Care Facility (continued)

### *Post-Hospital Care*

Patients with less severe injuries may also benefit from outpatient rehabilitative programs that enhance recovery and speed return to function and productivity.

Rehabilitation centers and outpatient rehabilitation services should provide data on trauma patients to the central trauma system registry, including final disposition, functional outcome, and rehabilitation costs, and participate in performance improvement processes. However, no state Trauma System policies and procedures exist for rehabilitation facilities. Due to a lack of inclusion within the state Trauma System, it is more difficult to determine if adequate rehabilitation resources exist within Alaska.

Within the Alaska Trauma Registry, rehabilitation outcomes can be tracked, such as functional outcome at discharge from rehabilitation, additional days spent at Alaska acute care facilities while waiting for a rehabilitation bed (including Long-Term Acute care facilities), and the number of patients recommended for inpatient and outpatient rehabilitation but never receive it.

It is important to note that the Alaska Trauma Registry does not track non-traumatic brain injuries.







## Dementia Care Services

Due to the neurodegenerative process, caring for a beneficiary experiencing dementia is often complex and challenging.

### **Provider Continuity**

Patients diagnosed with dementia often have comorbidities that complicate treatment plans, placing them at higher risk of polypharmacy and potentially inappropriate prescribing, and are more dependent on healthcare services. Research indicates high continuity of general practitioner care (i.e., consulting the same doctor consistently) can improve doctor-patient relationships, result in safer prescribing and lower rates of major adverse events, such as an emergency admission to hospital.<sup>49</sup>

Alaska presents unique challenges for accessing and delivering primary care services, most notably because of the state's vast size and the number of isolated and medically underserved communities. In larger communities, finding primary care providers who will accept Medicare, the typical funding source for this population and individuals age 65+, is difficult. Furthermore, a limited number of primary care providers specialize in geriatrics.<sup>50</sup>

### **Family Caregivers**

The need for a caregiver often starts early in the disease process. Family caregivers are the primary source of support for people with ADRD. Caregivers of individuals with Alzheimer's or dementia are more likely to be women (66%), have household incomes of \$50K or less (41%) and suffer from depression (30-40%).<sup>51</sup> In 2022, Alaska had 25,000 unpaid caregivers, 39 million total hours of unpaid care, and \$795 million total value of unpaid care.

### **Home-and Community-Based Services**

Home-and Community-Based Services (HCBS) provide types of person-centered care delivered in the home and community. This includes health services that meet medical needs and human services care that supports daily living. Health services are provided through Home Health Agencies (HHA) that are state-licensed and federally certified. There are 17 HHAs in Alaska, primarily in urban areas. Common funding sources for Health Services are Medicare, Veterans Affairs, and tribal and private funding.

Human services are typically funded through Medicaid waivers, federal and state grant programs, and private funding; allowable services are billed through noted funding sources or paid through private funds. In fiscal year (FY) 2022, about 19,000 Alaskans age 60+ were served through state and federal grants at an average cost of \$925 per individual. In FY 2021, 1,575 individuals 65+ received Medicaid's Alaskans Living Independently (ALI) waiver support; 2,495 individuals 60+ received Medicaid's Personal Care Services and Community First Choice waiver support.<sup>52</sup>





## Dementia Care Services (continued)

### Long-term Care and Nursing Home Care

Long-term care (LTC) encompasses a range of senior support services and can be offered in various settings, including assisted living, residential care homes, and memory care communities. LTC helps with activities of daily living (ADLs), such as bathing, dressing, and grooming. Nursing homes provide skilled nursing services in addition to assistance with ADLs. They serve individuals who need a high degree of medical attention and do not require hospital admission.

As neurodegeneration advances, beneficiaries may need care provided in a licensed Assisted Living Home (ALH). As of September 2022, there were 693 ALHs in Alaska with 224 single occupancy beds (SS), 417 double-occupancy or multi-occupancy beds (DD/MH), and 53 beds serving a dual population. There were 11,185 intakes in fiscal year in FY 2022.<sup>53</sup> The State of Alaska Department of Health, Division of Health Care Services, Assisted Living Licensing maintains a current list of licensed ALHs. Prior authorization by the Department of Health is needed to access the list. Routinely published reports or publicly available ALH data on capacity, admission wait times, and length of stay are not readily available.

Alaska Pioneer Homes is a system of state-owned and -operated assisted living residences beneficial to state residents, including those with Alzheimer’s disease. There are six Alaska Pioneer Homes located throughout the state in Fairbanks, Palmer, Anchorage, Sitka, Juneau, and Ketchikan with 497 licensed beds.<sup>54</sup> These homes are under the administration of the Alaska Department of Family and Community Services, Division of Alaska Pioneer Homes. The Alaska Pioneer Homes Advisory Board’s most recent annual report (2019) includes data on the average resident age, number of elders served, active and inactive waitlist info, and other indicators. The Board’s FY 2023 recommendations to the Governor referenced facility adaptations needed to support the change of care required with ADRD care.<sup>55</sup>

Alaska has among the fewest skilled nursing beds per capita and one of the fastest-growing elderly populations. There are 20 licensed nursing homes in Alaska with a bed capacity of 834. All facilities accept Medicare and Medicaid as payment sources.<sup>56</sup> The State of Alaska Department of Health, Division of Health Services provides facility inspection reports of state-licensed nursing homes on its website.<sup>57</sup> Data on resident experience of TABI and ADRD are not readily available, as each nursing home is a private entity.

Alaska Psychiatric Institute (API) is the only public psychiatric hospital in Alaska. API provides acute, inpatient mental health services for anyone in Alaska requiring hospitalization for a psychiatric crisis. In addition, API serves as the safety net and crisis-stabilization facility for adults with developmental disabilities as well as seniors with dementia whose behavior and/or level of illness prevents them from remaining in their current placement. These patients often require intensive evaluation and innovative behavioral interventions to stabilize them and return them to a less restrictive environment in the community. The facility has 80 beds; the Alaska Department of Family and Community Services publicly posts data on current bed availability.<sup>58</sup>

### CONSIDER

Data obtained through executive interviews indicated that on January 1, 2024, API had four patients with either a primary or secondary diagnosis of dementia.







## Essential Services Workforce

### Healthcare Services

A healthcare workforce essential to caring for both child and adult beneficiaries experiencing TABI or ADRD commonly includes the following:



There is an increasing demand for healthcare workforce at all levels. Alaska’s workforce needs and challenges along the care continuum is well documented. Examples of recent and relevant publications and resources include the *2023 Alaska Healthcare Workforce Analysis*; *Alaska’s Physician Workforce in 2021*; *Trends in Alaska’s Workforce and Economy: Three Broad Points*, and the U.S. Physician Workforce Data Dashboard.<sup>59,60,61,62</sup> These resources include detailed data such as jobs by health sector components, earnings and wages, growth projections, growth projections, workforce by geography, demographics, and residence status, among others.

Registered Nurses comprise the largest group of workers in Alaska’s healthcare sector. Hospital-based registered nurses had a vacancy rate of 21%, and it took an average of 118 days to fill a vacant position. Recent survey findings indicate that facilities’ top priorities for nurse specialties are as follows:<sup>63</sup>

- CRITICAL ASSESS HOSPITALS:** ER/Trauma
- ACUTE CARE HOSPITALS:** Psychiatric and ER/Trauma
- LONG-TERM CARE:** Wound Care

### Support Services

The support services essential workforce includes in-home support care providers, vocational rehabilitation specialists, resource specialists, peer support, care coordinators, legal aides, and classroom educators with TBI training.

Interviewees noted resource specialists and care coordinators’ essential role in supporting beneficiaries who experience TABI and ADRD.

Oversight and quality of care are especially an issue for those paying privately, as the quality controls from grant and Medicaid waiver-funded services are not in place for private pay services. Agency direct care staff are sometimes not trained or certified to provide in-home care. The direct care workforce often does not have the appropriate training to work with people with ADRD.



## Fiscal and Resource Data

Fiscal and resource data from multiple sources can be utilized to better understand financial implications along the continuum of care. Data associated with reimbursement mechanisms, disability benefits, adult public assistance, condition-specific funding, and detailed economic studies should be considered. General descriptions of these data sources are provided below. Additional analysis is needed to identify and map those data tied to articulated data-development priorities. This section concludes with an example of how benefit application and denial data were used to describe financial implications for beneficiaries experiencing TABI.

### Reimbursement Mechanisms

Reimbursement methods are used for services rendered or equipment obtained. Common reimbursement mechanisms include Medicaid, Medicare, Veteran's benefits, employment-related insurance (either the recipient's or a family member's), and other sources such as long-term care insurance.

#### *Alaska Medicaid*

Medicaid is a joint federal and state program that pays for medical costs for certain individuals and families with low incomes. Eligible groups include low-income children, pregnant women, families, adults without dependent children between the ages of 19 and 64, the elderly, the blind, and the permanently disabled. Alaska Medicaid-covered services are outlined in the Alaska Medicaid Recipient Handbook.<sup>64</sup> The Office of Rate Review (ORR) establishes Medicaid payment rates and works with tribal providers and various divisions and units throughout the Alaska Department of Health on rate setting. Most rate schedules include adjusted service rates to reflect regional differences in the cost of doing business.

The State of Alaska publishes current Medicaid reimbursement rates for all included services. For example, the Division of Health Care Services publishes current Medicaid payment rates for Alaska Hospitals, Freestanding Nursing Facilities, Federally Qualified Health Centers (FQHC), out-of-state intermediate care facilities/developmental

disabilities providers, and ambulatory surgical centers.<sup>65</sup> The 2024 swing bed rate is provided through the ORR.<sup>66</sup> A swing bed is a service that rural hospitals and Critical Access Hospitals (CAHs) with a Medicare provider agreement provide that allows a patient to transition from acute care to Skilled Nursing Facility (SNF) care without leaving the hospital. This allows a patient to continue receiving services in the hospital even though acute care is no longer required. Behavioral health services and rates, including those applicable to 1115 Medicaid Waiver services, are publicly available through the Division of Behavioral Health.<sup>67</sup> The Department of Health publishes reimbursement rates for home and community-based personal care services, including the Community First Choice Program.<sup>68</sup>

Reimbursement rates for specific Waiver Programs, including Alaskans Living Independently (ALI), Adults with Physical and Developmental Disabilities (APDD), Children with Complex Medical Conditions (CCMC), Intellectual and Developmental Disabilities (DD), and Intellectual and Developmental Disabilities – Individualized Supports Waiver (IDD-ISW) are published through the Division of Senior and Disabilities Services.<sup>69</sup>

On an annual basis, the Indian Health Service (IHS) calculates calendar year reimbursement rates and publishes them in the Federal Register. The rates are often referred to as the All-Inclusive Rates (AIRs), Office of Management and Budget (OMB) rates, or encounter rates. The Centers for Medicare & Medicaid Services (CMS) contractor and State Medicaid agencies are notified when the rates are published. Rate categories for Alaska and the Lower 48 States include: Inpatient Hospital Per Diem Rate (excludes physician/practitioner services), Outpatient Per Visit Rate (excluding Medicare), Outpatient Per Visit Rate (Medicare), and Medicare Part B Inpatient Ancillary Per Diem Rate.<sup>70</sup>

As of December 2023, about 241,000 Alaskans were covered by Medicaid, including about 69,400 covered through Medicaid expansion.<sup>71</sup>

Alaska Medicaid and IHS reimbursement rates can be found in *Appendix B*.





## Reimbursement Mechanisms (continued)

### **Medicare**

Medicare is health insurance for people 65 or older and certain people under 65 with disabilities. Different parts of Medicare cover specific services (i.e., hospital insurance, medical insurance, and prescription drug coverage). Medicare is the most common funding source for home health care services. Medicare Part A (hospital insurance) and/or Medicare Part B (medical insurance) covers eligible home health services for as long as the patient needs part-time or intermittent skilled services and as long as the patient is homebound. Medicare does not pay for 24-hour-a-day care at home, meal delivery, personal services (e.g., shopping, cleaning, laundry), and custodial or personal care such as bathing, dressing, etc., when this is the only care needed.

Medicare enrollment in Alaska stands at over 114,000 residents, about 15% of the population.<sup>72</sup>

Medicare reimbursement rates are complex and detailed. Rate reporting is beyond the scope of this study.

### **Long-term Care Insurance**

Long-term care (LTC) refers to a broad range of medical and personal services for individuals who need assistance with daily activities for an extended period. This includes day-to-day care that a patient receives in a nursing facility or at home, following an illness or injury, or in old age. LTC insurance is costly and usually does not cover all of an individual's long-term care needs. Only 3 to 4% of Americans 50 or older pay for a LTC policy, which is in stark contrast to federal estimates that 70% of people 65 and older will need critical services.<sup>73</sup>

The State of Alaska offers a voluntary LTC Plan as part of state employee retirement benefit recipients from the Public Employees', Teachers', Judicial, or Elected Public Officers' Retirement Systems. Certain limitations apply.<sup>74</sup>

Covered services and rates of reimbursement vary significantly and are plan specific.

## Disability Benefits

### **Social Security Disability**

The Social Security Administration (SSA) has added Younger/Early Onset Alzheimer's to the list of conditions under its Compassionate Allowances (CAL) initiative, giving those with the disease expedited access to Social Security Disability Insurance (SSDI) and Supplemental Security Income (SSI). This can be a critical financial resource for a person younger than age 65 with the diagnosis of Alzheimer's Disease. Early-onset Alzheimer's Disease accounts for approximately 5-10% of all cases.<sup>75</sup>

### **Veteran's Disability**

Disability compensation is a tax-free monetary benefit paid to Veterans with disabilities that result from a disease or injury incurred or aggravated during active military service, including physical and mental health conditions resulting from military sexual trauma. Compensation may also be paid for disabilities considered related or secondary to disabilities occurring in service, even though they may arise after service. A special monthly compensation allowance for aide and attendance may also be available for veterans and survivors who need the aid and attendance of another person or are housebound.<sup>76</sup>





## Adult Public Assistance

Alaska's Adult Public Assistance (APA) program provides cash assistance to needy aged, blind, and disabled Alaskans to help them remain independent. The APA program provides cash to SSI recipients and those who have income and resources within APA income and resource limits. APA recipients are also eligible for Medicaid benefits. Alaska's Division of Public Assistance publishes APA need and maximum payment standards.<sup>77</sup>

## Condition-Specific funding

### *Outpatient and Agency-Based Resources*

Certain entities within Alaska receive designated state grant funding to bolster outpatient treatment and community-based care. Funds support specific behavioral health, finance and management services, public assistance, public health, and senior and disabilities services programs and resources. Due to the potential complexities and continuum of care needs associated with beneficiaries experiencing TABI or ADRD, individuals may need multiple services funded through these grants. A comprehensive listing of recipient entities and funding amounts is provided in the *State of Alaska, Department of Health Operating Grants, Fiscal Year 2024*.<sup>78</sup>

**TABI:** The TABI grant program includes resource facilitation and peer-support services. TABI resource facilitation includes coordinating resources and care, modeling, and teaching independent living skills. It supports individuals living with brain injury with accessing a comprehensive array of services, including medical, rehabilitative, social, educational, vocational, in-home, and other needed services to improve quality of life and maintain independence. TABI peer support involves individuals with a brain injury receiving support from trained individuals with lived experience with a brain injury or a family member of an individual with a brain injury. Agencies providing TABI resource facilitation, peer support, and supplemental services are responsible for conducting outreach to educate the community about the availability of services offered through this grant and other community resources. These agencies complete person-centered intakes on individuals needing services through the grant. About \$547,000 in grant funding was awarded to four agencies in FY 2024, including Access Alaska, Daybreak, Maniilaq Association, and Southeast Alaska Independent Living (SAIL).

**ADRD:** Education and Support funding provides statewide education and support services to people with ADRD. Services help families and caregivers to maintain the Alzheimer's Disease and Related Disorders client at home, forestalling or preventing institutionalization. The scope of work includes educating and disseminating information about ADRD to the public, healthcare professionals, professional caregivers, agencies, and organizations to increase awareness of ADRD. Additionally, the program links caregivers and agencies with resources available in their area to continue caring for individuals with ADRD in their homes and communities. In FY 2024, about \$382,000 in grant funding was awarded to the Alzheimer's Disease Resource Agency of Alaska.



**Personal Mini-Grants**

Trust beneficiaries experiencing a TABI or ADRD may apply for mini-grants.

**TABI:** Aligned with Alaska Statute (AS) 47.80.500 Traumatic and Acquired Brain Injury Program; 7 Alaska Administrative Code (ACC) 78. Grant Programs, the State of Alaska Division of Senior and Disabilities Services administers the TABI mini-grant program. The TABI mini-grant program is funded annually by legislative appropriation. Mini-grants can fund unmet medical, vision, hearing, therapeutic or dental needs, housing needs for individuals who are homeless or facing eviction, employment-related services and supports, and other equipment and services that improve health, safety, or independent functioning and are directly related to the applicant's TABI.<sup>79</sup> TABI mini-grant funds are available to individuals statewide up to a maximum of \$2,500 per FY. Individuals may not receive more than \$5,000 in TABI mini-grant awards within a five-year period.

**ADRD:** The Trust offers mini-grants to beneficiaries with ADRD up to an annual limit of \$2,500 per person. The mini-grant program funds a broad range of equipment, supplies, and services to improve the quality of life, increase independent functioning, and help Trust beneficiaries attain and maintain healthy and productive lifestyles.<sup>80</sup> The grant program is administered through Alzheimer's Resource of Alaska.





### Economic Studies

Studies with an economic focus, such as spending forecasts and economic impact studies, are important data sources to educate lawmakers and other decision-makers on issues central to the continuum of care. These study types can inform Medicaid reimbursement funding strategies over time, serve as benchmarks for evaluating the impacts of initiatives, and provide critical perspectives on economic factors related to the care continuum. These include anticipated capacity and infrastructure needs and costs across the home and community-based services spectrum.

#### Medicaid Forecast

A recent study conducted by Evergreen Economics, *Long-term Forecast of Medicaid Enrollment and Spending in Alaska: FY2023-FY2043*, details long-term enrollment forecasts of enrollment in and spending on services provided by the Alaska Medicaid program.

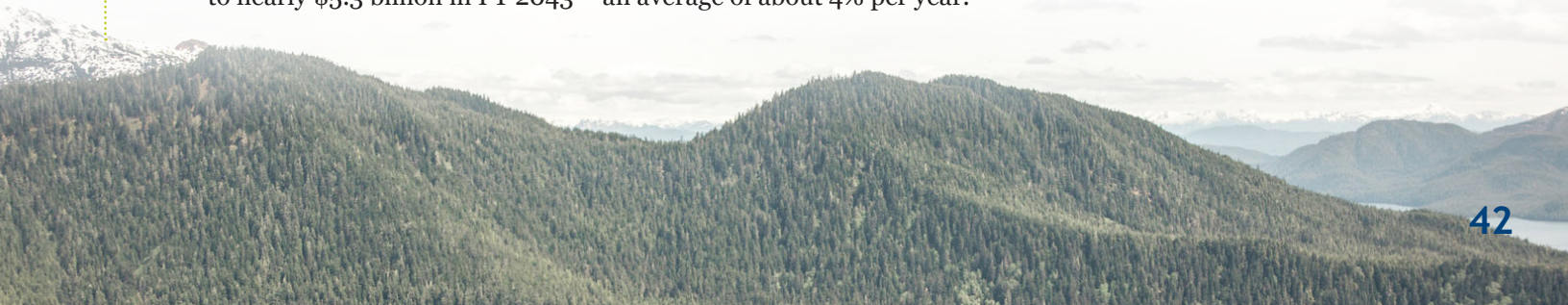
Service category designations used in the long-term Medicaid forecast include the following service groups.

Behavioral health services	Long-term care services	Healthcare services
Includes inpatient psychiatric and residential psychiatric and behavioral rehabilitation centers, outpatient mental health, and 1115 Waiver services.	Includes nursing home, home health/hospice, personal care, home and community-based waiver services (HCBS) state plan services, and HCBS 1915(c) waivers.	Includes inpatient and outpatient hospital, health clinic, and physician or practitioner services.

The prevalence of chronic conditions increases with age, which is the primary reason why average spending per Medicaid recipient increases with age. About 10% of Medicaid recipients under 15 had a diagnosed chronic condition. This rate doubles for recipients 15 to 24 years of age (19%) and continues to increase through the 55 to 64 age group (47%). Chronic conditions considered in long-term forecasting include conditions directly related to TABI, ADRD, and potential comorbidities. For TABI, relevant chronic conditions include traumatic brain injury, stroke, and transient ischemic attack. Potential comorbidities include hypertension, diabetes, tobacco use, drug and alcohol use disorders, mental health disorders, and more.

Average Medicaid spending per recipient with a diagnosed chronic condition was about \$34,500 in FY 2022, compared with about \$3,600 for recipients without a diagnosed chronic condition. An estimated 82% of spending on Medicaid Services in FY 2043 will be for recipients with one or more diagnosed chronic conditions; currently, it is about 77%.

Due primarily to Medicaid expansion, the study projects that nearly 30% of Alaska adults will be Medicaid recipients by FY 2033, and about 31% will be recipients by FY 2043. The proportion of seniors receiving Medicaid services will grow from 13% in FY 2023 to 17% in FY 2043. As Alaska’s population ages, its Medicaid population also ages. Even without any increase in the number of persons enrolled in Medicaid, the cost of providing Medicaid services will rise due to the positive relationship between age and spending on healthcare services. The projected spending on Medicaid services will increase from \$2.57 billion in FY 2023 to nearly \$5.3 billion in FY 2043 – an average of about 4% per year.<sup>81</sup>







### Economic Impact

Economic impact analysis is sometimes called a cost-of-illness (COI) analysis. In the public health model for prevention, COI often falls within measuring the burden of disease, illness, or condition along with known comorbidities. COI analysis typically includes the value of medical care resources used to treat a disease and the losses in productivity caused by the condition. Other non-medical costs associated with the condition are sometimes included as well. Non-medical costs may include child or adult care, travel expenses associated with treatment, and education or work training costs if the illness impairs cognitive function.<sup>82</sup>

Organizations such as the Alzheimer's Association have estimated the value of unpaid care in Alaska at \$795 million, report \$76 million in Medicaid costs associated with caring for people with Alzheimer's, and cite \$27,793 per capita Medicare spending on people with dementia.<sup>83</sup> The Trust has also done Alaska-specific economic cost studies within the last five years with a specific focus on alcohol and drug misuse, a risk factor associated with traumatic brain injury.<sup>84,85,86</sup>

However, these economic data and studies are not comprehensive and condition-specific to TABI or ADRD. COI analysis considering the many-faceted costs and related fiscal implications specific to the Alaskan context would advance understanding of the economic burden associated with TABI and ADRD.

### Example: Benefit Application Data

In 2019, the University of Alaska Anchorage Center for Human Development conducted a TABI legal needs assessment. Part of this work examined why people with brain injuries are not receiving the benefits and services they need. The focus included benefit application and denial rates. The denial rates for benefits were examined to identify which benefits are the most challenging for participants to obtain. Denial of services is a significant barrier for survivors of TABI. Many people with TABI, roughly one-third of the assessment sample, applied more than once for benefits and were denied services initially but obtained them upon re-application.<sup>87</sup> Social Security, Adult Public Assistance, and Medicaid were the three most common types of benefits denied at any point in time to individuals with TABI.<sup>88</sup>

### TABI SURVIVORS: BENEFITS APPLICATION, INITIAL DENIAL, AND RECEPTION, 2019

BENEFIT TYPE	# OF RESPONDENTS WHO APPLIED (% OF TOTAL SAMPLE)	# OF RESPONDENTS REPORTING INITIAL DENIAL OF BENEFITS	INITIAL DENIAL RATE* (TOTAL # INITIAL DENIED/TOTAL # APPLIED)	# OF RESPONDENTS WHO RECEIVED BENEFIT (% OF TOTAL APPLIED)
Social Security	44 (56.4%)	21	47.7%	25 (55.8%)
Adult Public Assistance	29 (38.2%)	12	41.4%	17 (58.6%)
Medicaid	39 (50.6%)	12	30.7%	29 (74.4%)
Medicare	31 (40.3%)	3	9.68%	27 (85.7%)
VA	7 (9.3%)	0	0.0%	7 (100%)

Source: University of Alaska Anchorage Center for Human Development

\*Initial denial rate represents reported denial of benefits on initial application.



**DATA DEVELOPMENT  
FOR TABI AND ADRD**

# Recommendations

This section provides data development recommendations for the Trust's consideration. Recommendations are based on study findings, including data and information obtained through executive interviews and a literature and practice review relevant to TABI and ADRD data development. Foundational considerations for the Trust are presented, followed by specific recommendations and rationale.

## Foundational Considerations

Intentional data development efforts can be complex and challenging. Each entity committed to this work must consider foundational factors such as their role, reach, and capacity for impact. This study identified some foundational factors for the Trust's consideration as it engages with Alaska's TABI and ADRD data development efforts.

### PUBLIC HEALTH VS. POPULATION HEALTH

Study findings suggest there is an opportunity for the Trust to examine how the differing concepts of public health and population health may impact their engagement and role in TABI and ADRD data development. Public health and population health are related but distinct concepts. In general terms, public health focuses on community-level health promotion and disease prevention, while population health examines health outcomes within specific groups. Public health is more general and broader, while population health is narrower and more focused on specific conditions. Population health is used mostly by the healthcare industry. Both approaches have points of intersect and overlap and are relevant to condition-specific data development.

State public health initiatives and plans are electing to prioritize data-driven decision-making that includes data sharing, data analysis, and management.<sup>89</sup> However, these data-focused efforts often have an exclusive public health focus and may not fully consider the potential of population health data in state-led data development and statewide data-driven decision-making.

Interviewees reflected that meaningful TABI and ADRD data development would integrate both public and population health indicators reflecting condition-specific surveillance and the continuum of care, including prevention, early intervention, treatment strategies, and health outcomes, among others. Public health data alone is not adequate to inform service expansion and/or systems of care enhancement decisions.

Interviewees voiced assumptions and uncertainties regarding the Trust's role in TABI and ADRD data development efforts for its beneficiaries. For example, interviewees with limited understanding of factors impacting Alaska's data development landscape assumed the Trust was well-positioned to lead statewide data development. Interviewees with an informed data development perspective did not perceive the Trust as a key influencer in statewide data development. While they affirmed the Trust's interest in this work, there was uncertainty regarding if and/or how the Trust could impact meaningful data development.

### DATA DEVELOPMENT LANDSCAPE

Most community partners and key stakeholders interviewed for this study expressed a desire for TABI and ADRD data development and indicated support for such efforts. However, there was limited awareness of factors impacting Alaska's data development landscape. As described in previous sections of this report, these factors include dual State of Alaska and Tribal public health authorities, data sovereignty, Alaska's unique mix of discrete health systems, and the myriad stakeholders engaged in public and population health services.

Study findings indicate that not all public, private, or community-based entities serving beneficiaries experiencing TABI or ADRD are positioned to engage in further data development due to varied organizational goals and objectives, competing priorities, capacity, and resources. Not all primary contributors to data development or data users are equally vested. While there is opportunity to improve coordination of data needs, align goals, and resources to advance incremental progress, underlying technology infrastructure needs must be addressed for overall success. Such factors should be considered by the Trust as it evaluates its next steps in data development.

### DIFFERENTIATED PERSPECTIVES

While the Trust may see TABI and ADRD aligned under the umbrella of brain-based conditions, this perspective is not universally shared among all stakeholders in the same way. For example, the Department of Health approaches TABI and ADRD through the lens of chronic disease prevention and health promotion. The State sees the response to traumatic injury, including the continuum of care for TABI, aligned with rural and community health. Study findings revealed interviewees had limited perspectives on TABI and the 'related dementias' associated with ADRD. These differentiated perspectives can impact prevention and early intervention messaging, how conditions are commonly understood and presented within a population health context, and influence the data development landscape.



## Role and Reach

AMHTA’s distinct mission, duties, and guiding principles are central to guiding the Trust’s position in TABI and ADRD data development efforts, including its role and reach. The following questions are grounded in study findings and offered for reflection as the Trust considers data development approaches.

- What data development opportunities is the Trust well-positioned to address?
- Where is the Trust’s primary sphere of influence?
- Is the Trust positioned to advance public health data development? Population health data integration specific to TABI and ADRD?
- Which data development needs are beyond the reach of the Trust? Why are they beyond reach?
- Considering the current capacity, where could the Trust have the most impact?
- What data developments could the Trust expect to initiate in the next three to five years?

# Recommendations

## Stages of Data Development

The recommendations and rationale provided below align with the stages of data development detailed in this report.

### DATA COLLECTION

#### Recommendation 1: BRFSS Data Enhancement

- 1a.** Support efforts to ensure ongoing inclusion of and funding for BRFSS optional modules specific to Cognitive Decline and Caregiving per established schedule.
- 1b.** Support efforts to ensure inclusion of and funding for state-added questions related to TBI.

**Rationale:** Optional modules are sets of Centers for Disease Control and Prevention (CDC) supported questions on a specific topic that can be selected by individual states. They cannot be modified. States may also choose to design their own state-added questions. In Alaska, optional modules and state-added questions are proposed and paid for by partners and chosen by a committee of epidemiologists in late summer to early fall each year. The core, optional modules, and state-added questions are year-specific, and may change each calendar year.

Alaska BRFSS included the Cognitive Decline module in 2016 and 2020; the Caregiver module in 2017 and 2021. States such as North Carolina and Ohio have developed state questions/modules for TBI, utilizing the data to calculate descriptive statistics.<sup>90</sup> Alaska added two injury questions related to TBI in 2022. When funding is uncertain or insufficient, health departments may face challenges in maintaining consistent use of optional modules and state-added questions. This contributes to data gaps and missed surveillance opportunities. Unstable funding affects the quality and breadth of information available for analysis and policy formulation. States such as Georgia, New York, and Oregon have mitigated this risk by securing ongoing funding for select optional modules, including Cognitive Decline and Caregiver, through legislative action. A few interviewees, including a national policy advisor, indicated this approach has also driven further legislative action and support as legislators “now have skin in the game.”





## Recommendation 2: TABI and ADRD Registry Development

- 2a.** Identify a role the Trust may have, if any, in the development of an operational TABI registry as per AS 47.80.500.
- 2b.** Assess the benefits and challenges associated with developing and maintaining an ADRD registry to propel data development.

**Rationale:** Medical registries have evolved from calculating basic epidemiological data (incidence, prevalence, mortality) to diverse applications in disease prevention, early diagnosis and screening programs, treatment response, health care planning, decision making and disease control programs.<sup>91</sup> Registry development, by design, relies on integrating data from multiple sources. The registry development process can be used to inform data development efforts relative to specific conditions, including TABI and ADRD. Interviewees tasked with making data-informed program and service-related decisions expressed interest in registry development.

According to the National TBI Registry Coalition about 14 states have some form of TABI registry, such as Tennessee.<sup>92</sup> Some state registries are framed to include TABI; others are exclusive to TBI. Registries focus on obtaining data from a population with a common diagnosis of TABI/TBI, including epidemiological data, information on TABI/TBI mechanisms, risk factors, level of care, treatments and outcomes, organizational and cost-effectiveness aspects, and many more.<sup>93</sup> Within the Alaskan context, University of Alaska Anchorage, Center for Human Development is the managing entity of the advisory board for the State of Alaska, Senior and Disabilities Services Traumatic and Acquired Brain Injury (TABI) Program. The Center for Human Development's Brain Injury State Partnership Program FY22-26 program objectives include facilitated implementation of Alaska's 5-year State Plan for Brain Injury. This plan details essential activities for advancing TABI registry development.<sup>94</sup> However it is unclear if the State has allocated adequate resources to support AS 47.80.500 and what advancements have been made in registry development to date. Developing, implementing, and maintaining a medical registry represents a complex task and is one of the major barriers in widespread use of registries.

Several states have developed comprehensive, population-based Alzheimer's Disease registries, most notably South Carolina, Georgia, and West Virginia. For reference purposes, South Carolina's most recent annual Alzheimer's Disease Registry Report outlines the history of registry development, goals, registry partners, data sources, ADRD classification by ICD-10-CM codes, and includes registry-based data.<sup>95</sup>

### Recommendation 3: Data Modernization and Information Exchange Development

- 3a.** Monitor Alaska’s data modernization and health information exchange development efforts.
- 3b.** Identify emerging opportunities to leverage and integrate data collection specific to TABI, ADRD, and known comorbidities.

**Rationale:** While infrequent data users desired to create and collect new indicator data, interview findings revealed that routine data users would prefer to effectively leverage and integrate the use of existing indicator data. They prioritized focus on current statewide data development and integration activities, primarily Alaska’s data modernization and health information exchange development efforts.

In 2020, the CDC launched its Data Modernization Initiative (DMI), a multi-year, billion-plus-dollar effort to modernize core data infrastructure across the federal and state public health landscape. The CDC’s DMI is at the heart of a national effort to create modern, integrated, and real-time public health data and surveillance. Alaska’s Department of Health received CDC DMI grant funding. Alaska’s initial efforts focused on planning and building groundwork before modernization. Planning efforts provided a clear picture of systems, goals, and actions.<sup>96</sup> As part of the DMI assessment, a comprehensive gap analysis identified 32 unique information systems across Alaska Division of Public Health, siloed systems, and workforce opportunities to improve data exchange. Ongoing efforts include building public, private, and tribal partnerships.<sup>97</sup> Several interviewees noted the significance and promise of this work, specifically regarding the potential for integrated data collection between Medicaid, public health, public assistance, behavioral health services and programs, and senior disability supports and services — each with relevance to TABI and/or ADRD data. HealthConnect Alaska is the State of Alaska’s official Health Information Exchange (HIE). Created in Alaska State Statute, the organization offers services that help healthcare providers share and receive important patient health information. Alaska’s HIE connects healthcare providers on a statewide basis including primary care, specialty care, hospitals, and public health. HealthEconnect Alaska is an unbiased, non-profit organization, entrusted by the Alaska Department of Health to implement services and technologies to ensure every Alaskan gets the right care at the right time.<sup>98</sup>

Although participation in the HIE is voluntary it recently experienced extensive growth, more than doubling its user base from 2021 to 2022. The number of participating organizations also increased by 40% in that time. In April 2023, healthEconnect Alaska was awarded a new state contract with the Department of Health to further expand HIE and data services across Alaska.<sup>99</sup>

Some interviewees noted expanded use of healthEconnect Alaska will enhance electronic data collection, especially in underserved Alaskan communities. This capacity to exchange healthcare information among providers affords benefit in the continuity and quality of care for beneficiaries experiencing TABI and ADRD.

## Recommendation 4: Legislative and Regulatory Infrastructure Development

- 4a. Conduct a comparative review of federal, state, and tribal public health legislation, agency regulations, and protocols integral to public health data management infrastructure development. Include information specific to Alaska's current data management context.
- 4b. Monitor statewide legislation regarding all-payer claims database (APCD) development and its potential utility as a public health surveillance tool for conditions such as TABI and ADRD.

**Rationale 4a:** Data is the currency of the digital age – creating both unprecedented opportunities and unignorable challenges. Data development, modernization, technology, and policy must evolve hand in hand. Policies, laws, and regulations can have major and lasting effects on the resources and direction of modernization efforts.<sup>100</sup> Federal, tribal, and state legislation and regulation govern and manage data privacy, security, sovereignty, and institutional protocols for protecting and handling data. Sharing across entities assists agencies in addressing social determinants of health, environmental needs, and risk factors; in better aligning services that support individuals; and in enhanced public health surveillance.<sup>101</sup> This includes services and supports for beneficiaries experiencing TABI and ADRD.

Tribal governments are public health jurisdictions with inherent legal authorities and powers equal to or greater than state and local governments.<sup>102</sup> Tribal public health systems exercise sovereignty through intergovernmental agreements with local, state, and federal public health systems as well as with other Tribes and inter-Tribal organizations, such as Tribal Epidemiology Centers, to define and communicate public health authority on public health functions and data responsibilities. As Tribal public health systems reclaim Tribal data sovereignty and exert data governance, they are developing culturally centered indicators to be integrated with all public health data systems.<sup>103</sup>

Study findings suggest there are opportunities to further develop, strengthen, and align Alaska's public health data management legislative and regulatory infrastructure. Several interviewees noted that essential, supporting legislation seems to lag advancing data management technologies and expanding resource needs. According to the National Conference of State Legislatures, no legislation related to public health information and reporting functions such as data sharing, information technology, health information exchanges, and interoperability has been introduced to the Alaska legislature during the period 2021-2024.<sup>104</sup>

Multiple interviewees indicated that data management conversations between state and tribal public health entities are evolving for the better, although there is agreement more work needs to be done. While not anchored in state legislation or regulation, there appears to be a growing acknowledgment of and respect for tribal data sovereignty and the use of tribal data in state reporting.

Interviewees noted that, unlike some states, Alaska legislation lacks specific language on how to share data between state divisions, departments, other public health entities such as tribal public health. This determination is largely left to individual data stewards with varying levels of experience. While some public health data sharing agreements have been secured between state departments and divisions, these appear to be project-specific and dependent on personal initiative and not foundational legislative infrastructure, including legislation that facilitates data sharing and collaboration among state agencies and public health entities. Multiple interviewees indicated that access to public health data remains largely dependent on the "mercy of data stewards" and "who you know."

In addition, some interviewees discussed how ongoing efforts to collaborate between state, tribal, and federal (i.e. Department of Defense; Veterans Affairs) health entities could further inform Alaska's data management infrastructure development.



**Rationale 4b:** There is national and local momentum to establish and implement APCDs. To date, 18 States have legislation mandating the creation and use of APCDs or are actively establishing APCDs, and more than 30 states maintain, are developing, or have a strong interest in developing an APCD.<sup>105</sup> APCD's potential as a new and important data source for public health was realized over ten years ago. Public health surveillance typically relies on population-based surveys, disease registries, and hospital discharge data to monitor and assess health outcomes and trends. APCDs provide additional information to fill the public health data gap by capturing health care service use across care settings (e.g., primary care, specialty care, outpatient services, laboratory testing, pharmacy data) and across payers. As the analytical capabilities of APCDs evolve, they offer opportunity and application to enhance the understanding of our population's health, changing patterns of medical care, and link health outcomes to health care utilization.<sup>106,107</sup>

Alaska does not currently have an APCD. In 2013, the Alaska Health Care Commission investigated the development of an APCD for the State of Alaska. In 2020, the Alaska Healthcare Transformation Project released a report about the feasibility of an APCD for Alaska.<sup>108</sup> In 2021, HB 113 was introduced; it relates to the establishment of an APCD. SB 93 was also introduced in 2021 and is the companion bill of HB 113. Both HB 113 and SB 93 have not passed. There remains ongoing interest in the development of an Alaska APCD. The 2023 Alaska State or Reform Health Policy Conference held a panel discussion on APCD development efforts, as providers and others have expressed concern about barriers to establishing this database and improving care coordination through data sharing.<sup>109</sup> This sentiment was expressed by multiple interviewees associated with this study.

## DATA ANALYSIS

### Recommendation 5: Data Analysis Expansion

- 5a.** Identify opportunities to expand condition-specific analysis beyond common surveillance indicators.
- 5b.** Conduct comprehensive economic impact analyses of TABI and ADRD.

**Rationale 5a:** Although common measures of disease frequency and condition burden are central to health surveillance, data analysis relevant to TABI and ADRD should extend beyond indices such as incidence, prevalence, morbidity, and mortality. Study findings indicate expanding data analysis to include focus on the continuum of care is warranted. This would include essential services and fiscal and resource data. Cross-tabulation analysis of known risk factors and comorbidities is central to condition prevention. A more holistic, or whole person, approach could better inform and evaluate prevention and early intervention strategies, the delivery of care, and resource mechanisms.

Prevention and early intervention of ADRD is a new and emerging field of science.<sup>110</sup> Federally funded initiatives, such as Alaska's BOLD grant to prevent and address dementia, focus efforts on increasing data analysis related to dementia.<sup>111</sup> There is an opportunity to do cross-tabulation analysis between variables of interest within established data sets, as accessed through the Alaska BRFSS Data Center. For TABI and ADRD this could include variables associated with indicators of risk factors and comorbidities.

To explore data analysis expansion opportunities within TABI's care continuum, consider Southcentral Foundation's (SCF) current capacity building efforts to support identification, intervention, continued assessment, and intervention services for Trust beneficiary customer-owners with TABI. The integrated use of data analysis is central to SCF's approach for building person-centered, high quality, systems-based and fiscally sustainable services. Their data development strategy includes developing and analyzing indices of care as well as indices critical to short-and long-term resource planning. SCF's TABI Rehabilitation Program is a recipient of AMHTA grant funding.



**Rationale 5b:** Several interviewees expressed the need for comprehensive economic impact analysis specific to both TABI and ADRD. Cost-of-illness analysis provides decision makers with information on the economic burden of a disease or condition, which offers a sense of how big a problem is. This can, in turn, inform priority setting.<sup>112</sup>

Multiple organizations have published Alaska-specific fact sheets with select information on the economic impact (aka cost of illness) of ADRD.<sup>113</sup> Other publications, such as the recent State of Alaska Epidemiology Bulletin on Traumatic Brain Injury in Alaska, cite Medicaid expenditures associated with TBI.<sup>114</sup> However, a comprehensive economic impact analyses considering the many-faceted costs and related fiscal implications specific to the Alaskan context would advance understanding of the economic burden associated with TABI and ADRD.

#### DATA SHARING

### Recommendation 6: Data Dissemination Development

- 6a.** Develop basic data products that appeal to most users.
- 6b.** Foster efforts to establish routine data dissemination.

**Rationale:** Survey findings indicate most end data users are not interested in “figuring it all out.” While topic-specific research and epidemiology reports are appreciated, interviewees reflected a strong desire for basic data that is easily accessible and meaningful. Numerous interviewees desire condition-specific data that is disseminated in a definitive place in a routine manner.

There is an opportunity to develop basic data products that offer utility to many users, including the Trust’s community partners and key stakeholders. One option offered for consideration is a data dashboard. Data dashboards typically provide an overview of the most current data available. They are an efficient way to visualize multiple data sources and provide a central location for topic-related information. Data dashboard examples include thread’s Alaska Early Care and Learning Dashboard<sup>115</sup> and the state’s Alaska Substance Use Dashboard.<sup>116</sup>

Dashboards make the most complex data easy to read and interpret, and provide on-demand visibility and insight. They can save individual time and resources typically spent seeking data from multiple sources and/or running individual reports. Dashboards can improve decision making. There’s no need to request data, wait for the data, receive the report, and then attempt to act. However, there are dashboard challenges. Dashboard reporting needs meaningful metrics. This requires an understanding of the right TABI and ADRD metrics to select and the relevant data sources. Compatibility and interface with multiple data sources is a common challenge. Within the Alaska context, this might include data from the state, tribal entities, community partners, and others. Dashboard scalability and associated costs can be challenging.<sup>117</sup>

## Service and Provider Types

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### Recommendation 7: Services Data Development

- 7a. Develop data to better understand out-of-state care services received by beneficiaries.

**Rationale:** Alaska is not currently positioned to meet all complex care needs. Study findings suggest that some beneficiaries seek care outside of Alaska. However, information is limited, and data siloed. Contributing factors include Alaska's multiple healthcare data systems (i.e., state, private, community, tribal, and federal) with limited data integration; gaps in continuum of care data persist. Missing statewide data includes how many beneficiaries leave the state for care; type(s) of care received and for how long; reentry status; additional care services needed; and additional in-state services provided. For entities contemplating service expansion, this type of data is needed to inform sound business development planning.

## Reimbursement and Funding Mechanisms

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### Recommendation 8: Cost of Care and Reimbursement Assessment

- 8a. Assess the true costs of care and reimbursement mechanisms along the care continuum.

**Rationale:** While data is available on reimbursement mechanisms (i.e., types, rates), there is work to be done to estimate true costs of care, comparatively analyze reimbursement resources, and identify correlation of impacts on service availability and provision, if any.

Study findings suggest that access to care may be impacted by these factors. For example, beneficiaries with Medicare as a primary reimbursement mechanism reportedly have difficulty obtaining care if the provider does not accept Medicare or limits the number of patients they take with Medicare. Research in Alaska notes Medicare reimbursement rates are significantly behind Medicaid and private insurance.<sup>118</sup> This is a critical factor for consideration as Alaska's population age 65+ grows and has implications for Medicare-insured beneficiaries disabled by TABI or ADRD.

In addition to the cost of care, cost drivers, and reimbursement mechanisms in distinct clinical care settings, the analysis of service costs and resource analysis for ongoing support such as HCBS, legal assistance, care coordination, resource facilitation, and vocational education training should be included.



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## Appendix A

# Data Source Details

# Appendix A

This appendix is comprised of three sections. A brief description of each section follows.

1. **Data Sources:** Description of state and national data sources containing information on ADRD and TABI. It details indicators of ADRD, TABI, and, where applicable, comorbidities and risk factors.
2. **Matrix:** Inventory of data sources presented in a matrix, with a series of fields to categorize data sources for comparative purposes.
3. **Publications:** Inventory of recent publications featuring TABI and ADRD data indicating which datasets are referenced.

## Data Sources

The following describes state and national data sources containing information on ADRD and TABI. Indicators of ADRD, TABI, and, where applicable, comorbidities and risk factors are detailed. In many cases, indicators available through data sources were identified by reviewing recent reports and briefs on ADRD or TABI. Data sources reviewed and detailed include:

- Alzheimer's Association
- Alaska Behavioral Risk Factor Surveillance System
- Alaska Cancer Registry
- Alaska Homeless Management Information System
- Alaska School Activities Association
- Alaska Native Tumor Registry
- Alaska Trauma Registry
- Alaska Youth Risk Behavior Survey
- CDC WISQARS
- CDC WONDER
- Health Analytics and Vital Records
- Healthcare Effectiveness Data and Information Set
- Health Facilities Data Reporting
- Medicaid
- Medicare
- Syndromic Surveillance

## Alzheimer's Association

The Alzheimer's Association aims to end Alzheimer's disease and all other dementias through conducting research, promoting risk reduction and early detection, and ensuring quality care.<sup>1</sup> With research, advocacy, care, and support at the forefront, the Association is committed to providing necessary resources and education to all communities, endorsing inclusivity and integrity. Research supported by

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<sup>1</sup> Alzheimer's Association, 2024. About. <https://www.alz.org/about>

the Alzheimer’s Association includes Alzheimer’s prevalence estimates based on data from the 2020 Behavioral Risk Factor Surveillance System (BRFSS) and the Chicago Health and Aging Project.<sup>2</sup>

## ADRD Indicators

In 2023, the Alzheimer’s Association published several infographics on Alzheimer’s disease and cognitive decline in Alaska, including data about Alzheimer’s disease, cognitive decline, risk factors, and county-level Alzheimer’s prevalence.<sup>3</sup> Data included within the materials include the following:

Indicator
Prevalence of Alzheimer’s dementia in Alaska (age 65+), by county (2020)
Number of Alzheimer’s dementia cases in Alaska (age 65+), by county (2020)
Number of people aged 65 and older with Alzheimer’s in Alaska
Number of people in hospice with a primary diagnosis of dementia in Alaska (2017)
Hospice residents with a primary diagnosis of dementia in Alaska
Number of emergency department visits per 1,000 people with dementia in Alaska (2018)
Dementia patient hospital readmission rate in Alaska
Number of deaths from Alzheimer’s disease in Alaska 2000-2019 (2019)
Percent of those aged 45+ with subjective cognitive decline in Alaska
Percent of those aged 45+ with subjective cognitive decline in Alaska, by sex
Percent of those aged 45+ with subjective cognitive decline in Alaska, by age
Percent of those aged 45+ with subjective cognitive decline in Alaska, by education
Percent with memory problems who live alone in Alaska
Percent with memory problems who have at least one other chronic condition in Alaska
Prevalence of six risk factors in Alaska: midlife hypertension (age 45-64), physical inactivity, midlife obesity (age 45-64), diabetes, smoking (age 45 and older), poor sleep (<6 hours/night)
Percent with at least one of five risk factors (excluding sleep) in Alaska, by race
Percent with any of five risk factors (excluding sleep) in Alaska

## Alaska Behavioral Risk Factor Surveillance System

The Behavioral Risk Factor Surveillance System (BRFSS) is a national health-related telephone survey system that collects state data about U.S. residents regarding their health-related risk behaviors, chronic health conditions, and use of preventive services.<sup>4</sup> Established by the Centers for Disease Control and Prevention (CDC) in 1984 with 15 states, BRFSS now collects data in all 50 states, the District of Columbia, and three U.S. territories. BRFSS completes more than 400,000 adult interviews each year, making it the largest continuously conducted health survey system.

The Alaska BRFSS is coordinated by the Alaska Department of Health, Division of Public Health.<sup>5</sup> The survey is conducted year-round and is designed to reach adults across the entire state. The survey questionnaire changes annually.<sup>6</sup> At a high level, Alaska’s survey questionnaire comprises core questions, optional modules, and state-added questions. Optional modules and state-added questions are proposed by partners and selected by a committee of epidemiologists. Partners pay for their proposed module to

<sup>2</sup> Dhana K., et al. Beck T, Desai P, Wilson RS, Evans DA, Rajan KB. Prevalence of Alzheimer’s disease dementia in the 50 US states and 3142 counties: A population estimate using the 2020 bridged-race postcensal from the National Center for Health Statistics. *Alzheimer’s Dement.* 2023; 19: 4388-4395. <https://doi.org/10.1002/alz.13081>

<sup>3</sup> Alzheimer’s Association, 2024. Alaska. <https://www.alz.org/professionals/public-health/state-overview/alaska>

<sup>4</sup> Centers for Disease Control and Prevention, 2024. Behavioral Risk Factor Surveillance System. <https://www.cdc.gov/brfss/index.html>

<sup>5</sup> Alaska Department of Health, 2023. Alaska Behavioral Risk Factor Surveillance System. <https://health.alaska.gov/dph/Chronic/Pages/brfss/default.aspx>

<sup>6</sup> Alaska Department of Health, 2023. Questionnaires. <https://health.alaska.gov/dph/Chronic/Pages/brfss/questionnaires.aspx>



be added if selected for inclusion. The core, optional modules, and state-added questions are year-specific and may change each calendar year.

Organizations and groups across Alaska use BRFSS data to guide public health programs, support federal grants, ensure the effective use of limited public health resources, evaluate the impact of services and programs, and improve Alaskans' health.

## TABI Indicators

In 2022, the Alaska BRFSS questionnaire included two questions about the experience of traumatic brain injury.<sup>7</sup> A partner proposed and paid for these questions.<sup>8</sup>

Indicator Title	Indicator Description	Survey Question	Years Available
Knocked out or lost consciousness	Adults who have ever been knocked out or lost consciousness	Thinking about any injuries you have had in your lifetime, were you ever knocked out or did you lose consciousness?	2022
Longest time unconscious (ever knocked out)	Longest time ever knocked out or unconscious among adults who ever lost consciousness	What was the longest time you were knocked out or unconscious?	2022

Between 2011 and 2022, the Alaska BRFSS questionnaire included a question about lifetime stroke diagnosis. These questions are a part of the CDC fixed core.

Indicator Title	Indicator Description	Survey Question	Years Available
Stroke	Adults who report ever being diagnosed with a stroke.	Has a doctor, nurse, or other health professional ever told you that you had a stroke?	2011-2022

## Cognitive Disability

Between 2013 and 2022, the Alaska BRFSS questionnaire included questions about the experience of cognitive disability. These questions are a part of the CDC fixed core.

Indicator Title	Indicator Description	Survey Question	Years Available
Cognitive disability	Adults who report difficulty concentrating, remembering, or making decisions because of a physical, mental, or emotional condition	Because of a physical, mental, or emotional condition, do you have serious difficulty concentrating, remembering, or making decisions?	2013-2022

<sup>7</sup> Centers for Disease Control and Prevention, 2021. Behavioral Risk Factor Surveillance System (BRFSS) 2022 Alaska Questionnaire. [https://health.alaska.gov/dph/Chronic/Documents/brfss/pubs/2022BRFSS\\_questionnaire.pdf](https://health.alaska.gov/dph/Chronic/Documents/brfss/pubs/2022BRFSS_questionnaire.pdf)

<sup>8</sup> Interview with University of Alaska Anchorage Center for Human Development staff, January 2024.

## Confusion or Memory Loss Indicators

The Alaska BRFSS questionnaire included a question about confusion or memory loss in 2013, 2016, and 2020. In 2013, this was a state-added question; in 2016 and 2020, it was part of a state-added cognitive decline module sourced from the CDC optional cognitive decline module.

Indicator Title	Indicator Description	Survey Question	Years Available
Confusion or memory loss (45+)	Adults who reported experiencing confusion or memory loss that is happening more often or is getting worse in the past year. This does not refer to occasionally forgetting your keys or the name of someone you recently met, which is normal. This refers to confusion or memory loss that is happening more often or getting worse, such as forgetting how to do things you've always done or forgetting things that you would normally know.	During the past 12 months, have you experienced confusion or memory loss that is happening more often or is getting worse?	2013, 2016, 2020

## Caregiver Indicators

In 2017 and 2021, the Alaska BRFSS questionnaire included questions about caregiving. These questions were state-added and sourced from the CDC optional modules in 2017 and 2021.

Indicator Title	Indicator Description	Survey Question	Years Available
Provision of regular care or assistance	Adults who report providing regular care or assistance to a friend or family member who has a health problem or disability in the past 30 days.	During the past 30 days, did you provide regular care or assistance to a friend or family member who has a health problem or disability?	2017, 2021
Care recipient with cognitive impairment (caregivers)	Caregivers who report providing care to someone with a cognitive impairment among adults who provided regular care or assistance to someone with health problems or a disability in past 30 days.	Composite indicator based on two questions: During the past 30 days, did you provide regular care or assistance to a friend or family member who has a health problem or disability? What is the main health problem, long-term illness, or disability that the person you care for has?	2021
Time providing care (caregivers)	Hours per week spent providing regular care among adults who provided regular care or assistance to someone with health problems or a disability in past 30 days.	Composite indicator based on two questions: During the past 30 days, did you provide regular care or assistance to a	2017, 2021

Indicator Title	Indicator Description	Survey Question	Years Available
		friend or family member who has a health problem or disability? In an average week, how many hours do you provide care or assistance?	
Duration of care provision (caregivers)	Duration of care provision among adults who provided regular care or assistance to someone with health problems or a disability in past 30 days.	Composite indicator based on two questions: During the past 30 days, did you provide regular care or assistance to a friend or family member who has a health problem or disability? For how long have you provided care for that person?	2017, 2021
Relationship to care recipient (caregivers)	Relationship of care recipient among adults who provided regular care or assistance to someone with health problems or a disability in past 30 days.	Composite indicator based on two questions: During the past 30 days, did you provide regular care or assistance to a friend or family member who has a health problem or disability? What is his or her relationship to you?	2017, 2021

## Other Indicators

The BRFSS survey captures data on many health topics, which can be useful for identifying comorbidities and risk and protective factors. Data are collected on the following topics:

Health Topics
Adverse Childhood Experiences (ACES)
Body Mass Index (BMI)
Cancer & Cancer Screening
Caregiving
Chronic Health Indicators
Demographics
Diabetes
Disability
General Health
Health Care Access & Coverage
Infectious Disease
Injury
Mental Health



<b>Health Topics</b>
Nutrition & Physical Activity
Oral Health
Safety
Social Determinants of Health (SDoH)
Substance Use

## Alaska Cancer Registry

The Alaska Cancer Registry (ACR) is a population-based cancer surveillance system funded by the Centers for Disease Control and Prevention (CDC), which collects data on newly diagnosed cases of cancer (including benign brain cancer) for the State of Alaska.<sup>9</sup> The collected data determines cancer incidence, mortality, treatment, and survival. ACR aims to use the data to monitor early detection and trends, compare with national levels, and serve as a resource for medical professionals and others concerned about cancer.

ACR has been collecting data for over 24 years, receiving the highest certification available (Gold Standard) from the North American Association of Central Cancer Registries (NAACR) for 23 of those years, and has been awarded the Registry of Distinction certification from the CDC.

### TABl Indicators

In 2023, ACR published a series of reports on the frequency of cancers based on incidence and mortality rates. Their most recent report includes data from cancer cases diagnosed from 1996-2020.<sup>10, 11</sup> Brain cancer data within the reports include:

<b>Indicator</b>
Alaska cancer incidence rates by diagnosis year, 1996-2020 (brain and other nervous system)
Incidence rates by diagnosis year by sex, 1996-2020
Incidence rates by diagnosis year and race, 1996-2020
Incidence rates by diagnosis year, race, and sex, 1996-2020
Incidence rates by diagnosis year and borough, 1996-2020
Incidence rates by diagnosis year, borough, and sex (1996-2007; 2008-2020)
Mortality rates by death year, 1996-2020 (brain and other nervous system)
Mortality rates by death year and sex, 1996-2020
Mortality rates by death year and race, 1996-2020
Mortality rates by death year, race, and sex, 1996-2020
Mortality rates by death year and borough, 1996-2020
Mortality rates by death year, borough, and sex (1996-2007; 2008-2020)

## Alaska Homeless Management Information System

Alaska Homeless Management Information System data are publicly available through the Alaska Communities Dashboard, developed by the Institute for Community Alliances on behalf of the Anchorage Coalition to End Homelessness and the Alaska Coalition of Housing and Homelessness. Demographic data for individuals receiving housing and homelessness services are available at the state and community levels for participating communities, which include Anchorage, Bethel, Fairbanks, Juneau, Kenai,

<sup>9</sup> Alaska Department of Health, 2024. Alaska Cancer Registry.

<https://health.alaska.gov/dph/VitalStats/Pages/cancer/registry.aspx>

<sup>10</sup> Alaska Department of Health, 2024. Cancer Incidence Rates for Alaska, 1996 to 2020.

<https://health.alaska.gov/dph/VitalStats/Pages/cancer/incidence.aspx>

<sup>11</sup> Alaska Department of Health, 2024. Cancer Mortality Rates for Alaska, 1996 to 2020.

<https://health.alaska.gov/dph/VitalStats/Pages/cancer/data.aspx>

Ketchikan, Kodiak, Mat-Su Valley, Nome, and Sitka. Demographic data self-reported by individuals receiving homelessness services are presented on the dashboard, including indicators of ADRD and TABI.

## ADRD Indicators

Indicators
Alaska Mental Health Trust Condition, Percent of individuals receiving homelessness services self-reporting Alzheimer’s Disease and Related Dementias

## TABI Indicators

Indicators
Alaska Mental Health Trust Condition, Percent of individuals receiving homelessness services self-reporting Traumatic and Acquired Brain Injury

## Alaska School Activities Association

The Alaska School Activities Association (ASAA) is a statewide nonprofit organization established to direct, develop, and support Alaska’s high school interscholastic sports, academic and fine arts activities. ASAA is a member of the National Federation of State High School Associations. Within ASAA, the Sports Medicine Advisory Committee endeavors to gather current data on health and safety-related issues, among other objectives.

ASAA has developed concussion guidelines, fact sheets, and protocols. This includes a form collecting information on concussions among student-athletes. The *Healthcare Provider Release Concussion Return to Play Protocol* is a form to be filled in by a qualified healthcare provider when a student is removed from participation in a practice or game for suspicion of concussion.

## TABI Indicators

Information Collected
Student has sustained a concussion and is not ready to begin the Return to Play Protocol.
Student is cleared to begin ASAA’s Return to Play Protocol with any modifications noted below. This clearance is no longer effective if student’s symptoms return and persist.
Student is entirely free of concussion symptoms and has completed the ASAA Return to Play Protocol as described above. The athlete is medically eligible to return to competition.

## Alaska Native Tumor Registry

The Alaska Native Tribal Health Consortium (ANTHC) is an independent Tribal health organization that offers health services and research for Alaska Native and American Indian (AN/AI) populations.<sup>12</sup> ANTHC aims to optimize the health and well-being of AN/AI people through a comprehensive approach, which includes collaborative partnerships and services via the Alaska Tribal Health System, Alaska Native Medical Center, and Southcentral Foundation.

The Alaska Native Tumor Registry (ANTR), which has been collecting cancer surveillance since 1974 (with information going back to 1969), publishes a report on cancer every five years, to benefit the Alaska Native people.<sup>13</sup> In collecting special population data, ANTR has also contributed to the National Cancer Institute’s Surveillance, Epidemiology, and End Results program since 1999. The 50-year report,

<sup>12</sup> Alaska Native Tribal Health Consortium, 2024. Overview. <https://www.anthc.org/who-we-are/overview/>

<sup>13</sup> Alaska Native Epidemiology Center, 2024. The Alaska Native Tumor Registry. <http://anthctoday.org/epicenter/antr.html>

published in 2021, delves into the incidence and mortality trends, detailing data for various age groups, cancer sites, and regions of residence and further analyzing data by sex.

Cancer data collected incorporates information on AN/AI people (including individuals reporting AN/AI identity alone or in combination with another racial identity) residing in Alaska at the time of their diagnosis. This includes brain cancer, which may have connections between traumatic brain injuries and glioblastoma formation, as supported by some large-scale epidemiological studies.<sup>14</sup>

## TABI Indicators

In 2021, ANTHC and the ANTR published a report on cancer data among Alaska Native people over a 50-year period that included brain cancer data. Brain cancer data within the report include the following.

Indicators
Five-year Incidence: Average annual age-adjusted cancer incidence rate by site, men and women combined, 2014-2018 (brain and other nervous system)
Fifty-year Incidence: Average annual age-adjusted cancer incidence rate by site, men and women combined, 1969-2018
Five-year Incidence: Average annual age-adjusted cancer incidence rate by site, men, 2014-2018
Fifty-year Incidence: Average annual age-adjusted cancer incidence rate by site, men, 1969-2018
Five-year Incidence: Average annual age-adjusted cancer incidence rate by site, women, 2014-2018
Fifty-year Incidence: Average annual age-adjusted cancer incidence rate by site, women, 1969-2018
Five-year Cancer Mortality: Average annual age-adjusted cancer mortality rate by cause of death, men and women combined, 2014-2018 (brain and other nervous system)
Twenty-five-year Cancer Mortality: Average annual age-adjusted cancer mortality rate by cause of death, men and women combined, 1994-2018
Twenty-five-year Cancer Mortality: Average annual age-adjusted cancer mortality rate by cause of death, men, 1994-2018
Twenty-five-year Cancer Mortality: Average annual age-adjusted cancer mortality rate by cause of death, women, 1994-2018

## Alaska Trauma Registry

The Alaska Trauma Registry (ATR) collects information from Alaska’s 24 acute care hospitals, recording data on the most seriously injured patients in Alaska since 1991.<sup>15</sup> The registry evaluates the quality of patient care for trauma patients, in addition to injury prevention programs, including injuries that met the criteria and sought care within 30 days of the injury occurrence. The criterion includes the admission of injured patients to an Alaska hospital, transferred to another acute care hospital, held for observation, or declared deceased in the emergency department.

Funded by the State of Alaska, ATR data is confidential and can only be accessed by request, provided in summary form. Non-summary data may be requested only for special research, also by request via application. The trauma registry does not include patient, clinical staff, or transportation identifiers.

## TABI Indicators

The Department of Health publishes injury surveillance charts on the leading causes of fatal and non-fatal hospitalized injuries. Hospitalization and emergency department visit data within the charts include the following.

<sup>14</sup> Tyagi, V., et al., 2016. Traumatic brain injury and subsequent glioblastoma development: Review of the literature and case reports. *Surgical Neurology International*, 7, 78. <https://doi.org/10.4103/2152-7806.189296>

<sup>15</sup> Alaska Trauma Registry, 2023. Alaska Trauma Registry Data Requests. <https://dhss.alaska.gov/health/dph/Emergency/Pages/trauma/registry.aspx>



Indicator
Leading causes of fatal hospitalized injuries by age group, Alaska residents 2016-2020
Leading causes of non-fatal hospitalized injuries by age group, Alaska residents 2016-2020

In 2019, the UAA Center for Human Development published TBI data from ATR and the Alaska Health Facilities Data Reporting Program (HFDR).<sup>16</sup> TBI data from the registry and reporting program included the following.

Indicators
TBI rate by region (ATR, 2010-2013)
TBI frequency by type of place (ATR, 2010-2013)
TBI rate by gender (ATR, 2010-2013)
TBI rate by Native and non-Native (ATR, 2010-2013)
TBI rate by age group (ATR, 2010-2013)
TBI rate by activity (ATR, 2010-2013)
Alaska Native/American Indian TBI frequency by activity for each age group (ATR, 2010-2013)
Alaska Native/American Indian TBI rate per 100,000 by activity for each age group (ATR, 2010-2013)
TBI rate ER visits compared to inpatient (HFDR, 2016-2017)

## Alaska Youth Risk Behavior Survey

The Youth Risk Behavior Surveillance System, established by the Centers for Disease Control and Prevention, is a set of surveys conducted by jurisdictions across the United States that tracks behaviors that can lead to poor health in high school students. The surveys are conducted every other year in odd-numbered years. Some health-related behaviors and experiences monitored are student demographics, health behaviors and conditions, substance use behaviors, and student experiences.

The Alaska Youth Risk Behavior Survey (YRBS) is administered by the Alaska Department of Health, Division of Public Health. The survey is administered every other year in odd-numbered years in Alaska’s traditional and alternative high schools. Participation in the YRBS is anonymous, voluntary, and requires written parental consent. The Alaska YRBS questionnaire is based on a standard survey instrument developed by the CDC.<sup>17</sup> The CDC permits modifications to the survey tool, and survey administrators can add or delete questions based on local needs and interests.

Alaska YRBS results are published as statewide prevalence estimates for youth behaviors in traditional and alternative high schools. District-level results are released when there are enough student responses in a school district to protect student privacy and ensure data quality.

## Injury Prevention

Indicator Title	Indicator Description	Survey Question	Years Available
Access to a loaded gun	Percentage of students who could get and be ready to fire a loaded gun	How long would it take you to get and be ready to fire a loaded gun?	2019

<sup>16</sup> UAA Center for Human Development, 2019. TBI data from the Alaska Trauma Registry and the Alaska Health Facilities Reporting Program. [https://www.uaa.alaska.edu/academics/college-of-health/departments/center-for-human-development/brain-injury-partnership-program/\\_documents/TBI\\_Data\\_AK\\_Trauma\\_and\\_HFDR\\_accessible.pdf](https://www.uaa.alaska.edu/academics/college-of-health/departments/center-for-human-development/brain-injury-partnership-program/_documents/TBI_Data_AK_Trauma_and_HFDR_accessible.pdf)

<sup>17</sup> Mpofu JJ, et al. (2023). Overview and Methods for the Youth Risk Behavior Surveillance System – United States, 2021. *MMWR Suppl*;72(Suppl-1):1-12. DOI: <http://dx.doi.org/10.15585/mmwr.su7201a1>.

Indicator Title	Indicator Description	Survey Question	Years Available
Drove after drinking alcohol	Among the students who drove a car or other vehicle, the percentage who drove when they had been drinking alcohol (one or more times during the past 30 days)	During the past 30 days, how many times did you drive a car or other vehicle when you had been drinking alcohol?	2013, 2015, 2017, 2019
Drove after using marijuana	Among the students who drove a car or other vehicle, the percentage who drove when they had been using marijuana (one or more times during the past 30 days)	During the past 30 days, how many times did you drive a car or other vehicle when you had been using marijuana (also called pot, weed, or cannabis)?	2017, 2019
Rarely or never work a bicycle helmet	Among students who rode a bicycle, the percentage who rarely or never wore a bicycle helmet (during the past 12 months)	When you rode a bicycle during the past 12 months, how often did you wear a helmet?	2007, 2009, 2011, 2013, 2015, 2017, 2019
Rarely or never wore a seat belt	Percentage of students who rarely or never wore a seat belt (when riding in a car driven by someone else)	How often do you wear a seat belt when riding in a car driven by someone else?	2007, 2009, 2011, 2013, 2015, 2017, 2019
Rode with a driver who had been drinking	Percentage of students who rode with a driver who had been drinking alcohol (in a car or other vehicle, one or more times during the past 30 days)	During the past 30 days, how many times did you ride in a car or other vehicle when you had been drinking alcohol?	2007, 2009, 2011, 2013, 2015, 2017, 2019
Talked on a cell phone while driving	Among students who drove a car or other vehicle, the percentage of students who talked on a cell phone while driving (one or more times during the past 30 days)	During the past 30 days, on how many days did you talk on a cell phone while driving a car or other vehicle?	2017, 2019
Texted or emailed while driving	Among students who drove a car or other vehicle, the percentage who texted or emailed while driving (one or more days during the past 30 days)	During the past 30 days, on how many days did you text or e-mail while driving a car or other vehicle?	2013, 2015, 2017, 2019
Experienced physical dating violence	Percentage of students who experience physical dating violence (being physically hurt on purpose by someone they were dating or going out with [count such things as being hit, slammed into something, or injured with an object or weapon], one or more times during the past 12 months)	During the past 12 months, how many times did someone you were dating or going out with physically hurt you on purpose? (Count such things as being hit, slammed into something, or injured with an object or weapon)	2013, 2015, 2017, 2019
Physical fight on school property	Percentage of students who were in a physical fight on school property (one or more times during the past 12 months)	During the past 12 months, how many times were you in a physical fight on school property?	2007, 2009, 2011, 2015, 2017, 2019

## Other Indicators

The YRBS survey captures data on many health topics. Data are collected on the following topics:

Health Topics
Physical activity and nutrition
Tobacco, alcohol, and drug use
Injury prevention
Violence and bullying
Suicide
Sexual behaviors
Connections with peers, adults, and community

## CDC WISQARS

CDC’s Web-based Injury Statistics Query and Reporting System (WISQARS) is an online database that includes an assortment of interactive data, inclusive of fatal and nonfatal injury, violent death, and cost of injury.<sup>18</sup> WISQARS is utilized by researchers, public health professionals, the media, and the public to gain knowledge from a public health and economic perspective surrounding unintentional and violence-related injuries in the U.S.

## TABI Indicators

CDC WISQARS generated data for a few intents related to fatal and nonfatal injury, providing statewide and national data originally from the National Center for Health Statistics (NCHS) and the National Electronic Injury Surveillance System (NEISS). Injury data within the database include:

Indicators
Number of all intents all injury deaths and rates per 100,000: 2001-2021 (Alaska)
Estimated number of all intents all causes nonfatal emergency department visits and rates per 100,000, 2001-2021 (U.S.)
Leading causes of nonfatal emergency department visits, 2001-2022 (U.S.)
All intents deaths due to all injury among all ages, 2017-2021 (Alaska)
All intents deaths due to all injury among all ages, 2012-2021 (Alaska)
Leading causes of death, 2001-2021 (Alaska)
Provisional and final fatal injury data by month, all unintentional injuries, 2018-2023 (U.S.)
Provisional and final fatal injury data by month, traumatic brain injury, 2018-2023 (U.S.)
Provisional and final fatal injury data by month, unintentional older adult falls (age 65 and older), 2018-2023 (U.S.)
Number of injuries and associated costs, 2021 (Alaska)

## CDC WONDER

CDC WONDER is an online database that utilizes a query system that focuses on the analysis of public health data, in addition to providing reports.<sup>19</sup> WONDER has numerical data available on deaths, which can be queried by all ages, environments, and population. WONDER has compiled numerical data on topics surrounding chronic conditions, injury prevention, and nationally notifiable conditions, among others. We have reason to believe that the data is applicable; however, it is important to note that some categories may be unreliable due to low datasets.

<sup>18</sup> Centers for Disease Control and Prevention, 2023. WISQARS Injury Data. <https://www.cdc.gov/injury/wisqars/index.html>

<sup>19</sup> Centers for Disease Control and Prevention, 2023. CDC WONDER. <https://wonder.cdc.gov/>

## ADRD Indicators

CDC WONDER generated data for the underlying cause of death, which is comprised of data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. The underlying cause of death data for ADRD within the database includes:

Indicators
Underlying cause of death, 2018-2021, single race results for Alzheimer's disease with late onset (Alaska)
Underlying cause of death, 2018-2021, single race results for Alzheimer's disease, unspecified (Alaska)
Underlying cause of death, 2018-2021, single race results for vascular dementia, unspecified (Alaska)
Underlying cause of death, 2018-2021, single race results for unspecified dementia (Alaska)
Underlying cause of death, 2018-2021, single race results for senile degeneration of brain, not elsewhere classified (Alaska)
Underlying cause of death, 1999-2020, bridged race results for Alzheimer's disease with late onset (Alaska)
Underlying cause of death, 1999-2020, bridged race results for Alzheimer's disease, unspecified (Alaska)
Underlying cause of death, 1999-2020, bridged race results for multi-infarct dementia (Alaska)
Underlying cause of death, 1999-2020, bridged race results for vascular dementia, unspecified (Alaska)
Underlying cause of death, 1999-2020, bridged race results for unspecified dementia (Alaska)
Underlying cause of death, 1999-2020, bridged race results for delirium superimposed on dementia (Alaska)

## TABI Indicators

CDC WONDER generated data for cancer, providing statewide and national data originally from the U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, and the National Cancer Institute. Generated data for the underlying cause of death is comprised of data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Brain cancer data and underlying cause of death data within the database include the following.

Indicators
United States and Puerto Rico Cancer Statistics, 1999-2020 incidence results for brain and other nervous system (Alaska)
United States and Puerto Rico Cancer Statistics, 1999-2020 mortality results for brain and other nervous system (Alaska)
United States and Puerto Rico Cancer Statistics, 1999-2020 mortality incidence rate ratios results for brain and other nervous system (Alaska)
Leading cancer cases and deaths for brain and other nervous system cancer, all races and ethnicities, male and female, 2016-2020 (U.S.)
Rate of new cancers in the United States for brain and other nervous system, 2016-2020 (Alaska)
Rate of cancer deaths in the United States for brain and other nervous system, 2016-2020 (Alaska)
Number of new cancers in the United States for brain and other nervous system, 2016-2020 (Alaska)
Rate of cancer deaths in the United States for brain and other nervous system, 2016-2020 (Alaska)
Underlying cause of death, 2018-2021, single race results circumscribed brain atrophy (Alaska)
Underlying cause of death, 2018-2021, single race results for anoxic brain damage, not elsewhere classified (Alaska)
Underlying cause of death, 2018-2021, single race results for brain, unspecified - malignant neoplasms (Alaska)
Underlying cause of death, 2018-2021, single race results for cerebrovascular disease, unspecified (Alaska)
Underlying cause of death, 2018-2021, single race results for sequelae of other and unspecified cerebrovascular diseases (Alaska)



<b>Indicators</b>
Underlying cause of death, 2018-2021, single race results for infantile cerebral palsy, unspecified (Alaska)
Underlying cause of death, 2018-2021, single race results for intracerebral hemorrhage, unspecified (Alaska)
Underlying cause of death, 2018-2021, single race results for cerebral infarction due to embolism of cerebral arteries (Alaska)
Underlying cause of death, 2018-2021, single race results for cerebral infarction, unspecified (Alaska)
Underlying cause of death, 2018-2021, single race results for cerebrovascular disease, unspecified (Alaska)
Underlying cause of death, 2018-2021, single race results for stroke, not specified as hemorrhage or infarction (Alaska)
Underlying cause of death, 2018-2021, single race results for sequelae of stroke, not specified as hemorrhage or infarction (Alaska)
Underlying cause of death, 1999-2020, bridged race results for anoxic brain damage, not elsewhere classified (Alaska)
Underlying cause of death, 1999-2020, bridged race results for compression of brain (Alaska)
Underlying cause of death, 1999-2020, bridged race results for disorder of brain, unspecified (Alaska)
Underlying cause of death, 1999-2020, bridged race results for other reduction deformities of brain (Alaska)
Underlying cause of death, 1999-2020, bridged race results for secondary malignant neoplasm of brain and cerebral meninges - malignant neoplasms (Alaska)
Underlying cause of death, 1999-2020, bridged race results for infantile cerebral palsy, unspecified (Alaska)
Underlying cause of death, 1999-2020, bridged race results for intracerebral hemorrhage in brain stem (Alaska)
Underlying cause of death, 1999-2020, bridged race results for intracerebral hemorrhage in cerebellum (Alaska)
Underlying cause of death, 1999-2020, bridged race results for intracerebral hemorrhage, intraventricular (Alaska)
Underlying cause of death, 1999-2020, bridged race results for intracerebral hemorrhage, unspecified (Alaska)
Underlying cause of death, 1999-2020, bridged race results for cerebral infarction due to unspecified occlusion or stenosis of precerebral arteries (Alaska)
Underlying cause of death, 1999-2020, bridged race results for cerebral infarction due to thrombosis of cerebral arteries (Alaska)
Underlying cause of death, 1999-2020, bridged race results for cerebral infarction due to embolism of cerebral arteries (Alaska)
Underlying cause of death, 1999-2020, bridged race results for cerebral infarction, unspecified (Alaska)
Underlying cause of death, 1999-2020, bridged race results for cerebral aneurysm, non-ruptured (Alaska)
Underlying cause of death, 1999-2020, bridged race results for cerebral atherosclerosis (Alaska)
Underlying cause of death, 1999-2020, bridged race results for cerebrovascular disease, unspecified (Alaska)
Underlying cause of death, 1999-2020, bridged race results for sequelae of cerebral infarction (Alaska)
Underlying cause of death, 1999-2020, bridged race results for sequelae of other and unspecified cerebrovascular diseases (Alaska)
Underlying cause of death, 1999-2020, bridged race results for stroke, not specified as hemorrhage or infarction (Alaska)
Underlying cause of death, 1999-2020, bridged race results for sequelae of stroke, not specified as hemorrhage or infarction (Alaska)

## Health Analytics & Vital Records

The Health Analytics & Vital Records (HAVRS) section of the Alaska Department of Health oversees vital records of events that occur in-state.<sup>20</sup> These include births, deaths, fetal deaths, marriages, and divorces, in addition to events related to adoption, paternity, and amendments. All vital records are kept confidential for 50-100 years, depending on the event, until becoming public records. HAVRS aims to accurately maintain and manage essential information pertaining to life events for all Alaska residents.

### TABI Indicators

In May 2023, the Alaska Section of Epidemiology published an epidemiology bulletin on traumatic brain injury in Alaska, which included an analysis of traumatic brain injury-related mortality data.<sup>21</sup> Mortality data within the report include the following.

Indicators
Age-adjusted rates of TBI-related deaths, 2016-2021 (Alaska and U.S.)
Age-adjusted TBI-related mortality rates by sex, 2016-2021 (Alaska)
Age-adjusted TBI-related mortality rates by region, 2016-2021 (Alaska)
Age-adjusted TBI-related mortality rates by race, 2016-2021 (Alaska)
Rate of TBI-related mortality, by age and injury mechanism, 2016-2021 (Alaska)
Rate of TBI-related mortality, by sex and injury mechanism, 2016-2021 (Alaska)
Rate of TBI-related mortality, by region and injury mechanism, 2016-2021 (Alaska)
Rate of TBI-related mortality attributed to suicide, by age group, 2016-2021 (Alaska)
Age-adjusted rate of TBI-related mortality by race and injury mechanism, 2016-2021 (Alaska)

### Stroke Indicators

In 2022, the Alaska Department of Health published its annual report on vital statistics, which included an analysis of cerebrovascular disease (stroke) mortality data.<sup>22</sup> Mortality data within the report include:

Indicators
Age-adjusted rates of cerebrovascular disease deaths by year (2018-2022)
Age-adjusted rates of cerebrovascular disease deaths by sex (2018-2022)
Age-adjusted rates of cerebrovascular disease deaths by race (2018-2022)
Age-adjusted rates of cerebrovascular disease deaths by age (2018-2022)
Age-adjusted rates of cerebrovascular disease deaths by (region of) residence (2018-2022)

## Healthcare Effectiveness Data and Information Set

The National Committee for Quality Assurance aims to improve healthcare quality and offers tools for measuring performance for quality improvement.<sup>23</sup> The Healthcare Effectiveness Data and Information Set (HEDIS) is used by more than 90% of U.S. health plans to measure performance on important dimensions of care and service.<sup>24</sup> HEDIS measures address a range of health issues. Indicators relevant to TABI and ADRD include measures of high blood pressure, comprehensive diabetes care, mental health care, behavioral health screening, medication management, fall risk management, and smoking

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<sup>20</sup> Alaska Department of Health, 2024. Health Analytics & Vital Records.

<https://health.alaska.gov/dph/VitalStats/Pages/default.aspx>

<sup>21</sup> Alaska Department of Health, 2023. Traumatic Brain Injury in Alaska. [https://epi.alaska.gov/bulletins/docs/rr2023\\_02.pdf](https://epi.alaska.gov/bulletins/docs/rr2023_02.pdf)

<sup>22</sup> Alaska Department of Health, 2022. Alaska Vital Statistics 2022 Annual Report.

[https://health.alaska.gov/dph/VitalStats/Documents/PDFs/VitalStatistics\\_Annualreport\\_2022.pdf](https://health.alaska.gov/dph/VitalStats/Documents/PDFs/VitalStatistics_Annualreport_2022.pdf)

<sup>23</sup> National Committee for Quality Assurance. <https://www.ncqa.org/>

<sup>24</sup> U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion, Healthy People 2030.

*Healthcare Effectiveness Data and Information Set (HEDIS)*. <https://health.gov/healthypeople/objectives-and-data/data-sources-and-methods/data-sources/healthcare-effectiveness-data-and-information-set-hedis>

cessation.<sup>25</sup> Because of their widespread use, HEDIS can be used to make comparisons among health plans.

NCQA collects HEDIS survey results directly from health plans and Preferred Provider Organizations through the Healthcare Organization Questionnaire and collects non-survey data through the Interactive Data Submission System. Submission formats are defined for each type of health plan and data provider group.

## ADRD Indicators

Indicators	Definition
Care for older adults	The percentage of adults 66 years and older who had each of the following during the measurement year: medication review, functional status assessment, and pain assessment
Controlling high blood pressure	The percentage of members 18-85 years of age who had a diagnosis of hypertension (HTN) and whose blood pressure (BP) was adequately controlled (<140/90 mm Hg) during the measurement year
Statin therapy for patients with cardiovascular disease	The percentage of males 21-75 years of age and females 40-75 years of age during the measurement year, who were identified as having clinical atherosclerotic cardiovascular disease (ASCVD) and met the following criteria. The following rates are reported: <ol style="list-style-type: none"> <li>1. Received Statin Therapy. Members who were dispensed at least one high-intensity or moderate-intensity statin medication during the measurement year</li> <li>2. Statin Adherence 80%. Members who remained on a high-intensity or moderate-intensity statin medication for at least 80% of the treatment period</li> </ol>
Glycemic status assessment for patients with diabetes	The percentage of members 18-75 years of age with diabetes (types 1 and 2) whose most recent glycemic status (hemoglobin A1c [HbA1c] or glucose management indicator [GMI]) was at <8.0% and >9.0% during the measurement year
Blood pressure control for patients with diabetes	The percentage of members 18-75 years of age with diabetes (types 1 and 2) whose blood pressure (BP) was adequately controlled (<140/90 mm Hg) during the measurement year
Statin therapy for patients with diabetes	The percentage of members 40-75 years of age during the measurement year with diabetes who do not have clinical atherosclerotic cardiovascular disease (ASCVD) who met the following criteria. Two rates are reported: <ol style="list-style-type: none"> <li>1. Received Statin Therapy. Members who were dispensed at least one statin medication of any intensity during the measurement year</li> <li>2. Statin Adherence 80%. Members who remained on a statin medication of any intensity for at least 80% of the treatment period</li> </ol>
Potentially harmful drug-disease interactions in older adults	The percentage of Medicare members 65 years of age and older who have evidence of an underlying disease, condition or health concern and who were dispensed an ambulatory prescription for a potentially harmful medication, concurrent with or after the diagnosis. Report each of the three rates separately and as a total rate: <ol style="list-style-type: none"> <li>1. A history of falls and a prescription for antiepileptics, antipsychotics, benzodiazepines, nonbenzodiazepine hypnotics or antidepressants (SSRIs, tricyclic antidepressants and SNRIs)</li> <li>2. Dementia and a prescription for antipsychotics, benzodiazepines, nonbenzodiazepine hypnotics, tricyclic antidepressants, or anticholinergic agents</li> </ol>

<sup>25</sup> National Committee for Quality Assurance, 2024. *HEDIS Measures and Technical Resources*.  
<https://www.ncqa.org/hedis/measures/>

Indicators	Definition
	<p>3. Chronic kidney disease and prescription for Cox-2 selective NSAIDs or non-aspirin NSAIDs</p> <ul style="list-style-type: none"> <li>Total rate (the sum of the three numerators divided by the sum of the three denominators)</li> <li>Members with more than one disease or condition may appear in the measure multiple times (i.e., in each indicator for which they qualify)</li> </ul>
Medical assistance with smoking and tobacco use cessation	<p>The following components of this measure assess different facets of providing medical assistance with smoking and tobacco use cessation:</p> <ul style="list-style-type: none"> <li>Advising Smokers and Tobacco Users to Quit: A rolling average represents the percentage of members 18 years of age and older who were current smokers or tobacco users and who received advice to quit during the measurement year</li> <li>Discussing Cessation Medications: A rolling average represents the percentage of members 18 years of age and older who were current smokers or tobacco users and who discussed or were recommended cessation medications during the measurement year</li> <li>Discussing Cessation Strategies: A rolling average represents the percentage of members 18 years of age and older who were current smokers or tobacco users and who discussed or were provided cessation methods or strategies during the measurement year</li> </ul>
Adults' access to preventive/ambulatory health services	<p>The percentage of members 20 years of age and older who had an ambulatory or preventive care visit. The organization reports three separate percentages for each product line:</p> <ul style="list-style-type: none"> <li>Medicaid and Medicare members who had an ambulatory or preventive care visit during the measurement year</li> <li>Commercial members who had an ambulatory or preventive care visit during the measurement year or the 2 years prior to the measurement year</li> </ul>
Unhealthy alcohol use screening and follow-up	<p>The percentage of members 18 years of age and older who were screened for unhealthy alcohol use using a standardized instrument and, if screened positive, received appropriate follow-up care:</p> <ul style="list-style-type: none"> <li>Unhealthy Alcohol Use Screening. The percentage of members who had a systematic screening for unhealthy alcohol use</li> <li>Follow-Up Care on Positive Screen. The percentage of members receiving brief counseling or other follow-up care within 60 days (2 months) of screening positive for unhealthy alcohol use</li> </ul>

## TABI Indicators

Indicators	Definition
Diagnosed mental health disorders	The percentage of members 1 year of age and older who were diagnosed with a mental health disorder during the measurement year
Follow-up after emergency department visit for mental illness	<p>The percentage of emergency department (ED) visits for members 6 years of age and older with a principal diagnosis of mental illness or intentional self-harm, who had a follow-up visit for mental illness. Two rates are reported:</p> <ol style="list-style-type: none"> <li>The percentage of ED visits for which the member received follow-up within 30 days of the ED visit (31 total days)</li> <li>The percentage of ED visits for which the member received follow-up within 7 days of the ED visit (8 total days)</li> </ol>



Indicators	Definition
Diagnostic substance use disorders	<p>The percentage of members 13 years of age and older who were diagnosed with a substance use disorder during the measurement year. Four rates are reported:</p> <ol style="list-style-type: none"> <li>1. The percentage of members diagnosed with an alcohol disorder</li> <li>2. The percentage of members diagnosed with an opioid disorder</li> <li>3. The percentage of members diagnosed with a disorder for other or unspecified drugs</li> <li>4. The percentage of members diagnosed with any substance use disorder</li> </ol>
Follow-Up After High-Intensity Care for Substance Use Disorder	<p>The percentage of acute inpatient hospitalizations, residential treatment or withdrawal management visits for a diagnosis of substance use disorder among members 13 years of age and older that result in a follow-up visit or service for substance use disorder. Two rates are reported:</p> <ol style="list-style-type: none"> <li>1. The percentage of visits or discharges for which the member received follow-up for substance use disorder within the 30 days after the visit or discharge</li> <li>2. The percentage of visits or discharges for which the member received follow-up for substance use disorder within the 7 days after the visit or discharge</li> </ol>
Follow-up after emergency department visit for substance use	<p>The percentage of emergency department (ED) visits among members age 13 years and older with a principal diagnosis of substance use disorder (SUD), or any diagnosis of drug overdose, for which there was follow-up. Two rates are reported:</p> <ol style="list-style-type: none"> <li>1. The percentage of ED visits for which the member received follow-up within 30 days of the ED visit (31 total days)</li> <li>2. The percentage of ED visits for which the member received follow-up within 7 days of the ED visit (8 total days)</li> </ol>
Fall risk management	<p>The two components of this measure assess different facets of fall risk management:</p> <ol style="list-style-type: none"> <li>1. Discussing Fall Risk. The percentage of Medicare members 65 years of age and older who were seen by a practitioner in the past 12 months and who discussed falls or problems with balance or walking with their current practitioner</li> <li>2. Managing Fall Risk. The percentage of Medicare members 65 years of age and older who had a fall or had problems with balance or walking in the past 12 months, who were seen by a practitioner in the past 12 months and who received a recommendation for how to prevent falls or treat problems with balance or walking from their current practitioner</li> </ol>
Depression screening and follow-up for adolescents and adults	<p>The percentage of members 12 years of age and older who were screened for clinical depression using a standardized instrument and, if screened positive, received follow-up care:</p> <ul style="list-style-type: none"> <li>• Depression Screening. The percentage of members who were screened for clinical depression using a standardized instrument</li> <li>• Follow-Up on Positive Screen. The percentage of members who received follow-up care within 30 days of a positive depression screen finding</li> </ul>

## Health Facilities Data Reporting

The Alaska Health Facilities Data Reporting Program (HFDR) collects and manages health-related inpatient and outpatient discharge data from participating healthcare facilities, which include the

Anchorage, Gulf Coast, Interior, Matanuska-Susitna, Northern, Southeast, and Southwest regions.<sup>26</sup> The inpatient database includes information on patients who have been admitted to hospitals, while outpatient data includes data on patients treated in healthcare facilities but are not hospitalized.

The discharge data allows information on treatment conditions and patient characteristics to become available while keeping identifiable information confidential. HFDR data is utilized for several purposes, including public health planning, injury and disease surveillance, health services research, community health status assessments, performance improvement, and national comparison.

HFDR was established in 2001, starting with the reporting of inpatient discharge data. In 2008, outpatient discharges, which included emergency department and ambulatory surgery, were added to the databases. In 2014, the program expanded to include more facilities statewide, and regulations were set to mandate reporting.

## TABI Indicators

In May 2023, the Alaska Section of Epidemiology published an epidemiology bulletin on traumatic brain injury in Alaska that included an analysis of data on traumatic brain injury-related emergency department visits.<sup>27</sup> Emergency department visit data within the report include:

Indicators
Rate of non-fatal TBI emergency department visits, 2016-2021
Rate of non-fatal TBI emergency department visits by age and injury mechanism, 2016-2021
Rate of non-fatal TBI emergency department visits by sex and injury mechanism, 2016-2021
Rate of non-fatal TBI emergency department visits by region of residence, 2016-2021
Rate of non-fatal TBI emergency department visits by race, 2016-2021

## Stroke Indicators

In 2018, the Alaska Department of Health and Social Services published its annual report on vital statistics, which included an analysis of acute cerebrovascular diseases (strokes) inpatient discharges.<sup>28</sup> Inpatient discharge data within the report include the following.

Indicators
Percent of acute cerebrovascular disease inpatient discharges by sex (2016-2018)
Percent of acute cerebrovascular disease inpatient discharges by race (2016-2018)
Percent of acute cerebrovascular disease inpatient discharges by ethnicity (2016-2018)
Percent of acute cerebrovascular disease inpatient discharges by age group (2016-2018)
Percent of acute cerebrovascular disease inpatient discharges by primary payer (2016-2018)
Percent of acute cerebrovascular disease inpatient discharges by public health region (2016-2018)

## Medicaid

Medicaid provides medical coverage to low-income children and adults.<sup>29</sup> Eligible groups include low-income children, pregnant women, families, adults without dependent children between the ages of 19 and 64, the elderly, the blind, and the permanently disabled. The Alaska Department of Health, Division of Public Assistance administers the Alaska Medicaid program. The Medicaid claims data allow for

<sup>26</sup> Alaska Department of Health, 2023. Health Facilities Data Reporting General FAQs. <https://dhss.alaska.gov/health/dph/VitalStats/Pages/HFDR/FAQ.aspx>

<sup>27</sup> Alaska Department of Health, 2023. Traumatic Brain Injury in Alaska. [https://epi.alaska.gov/bulletins/docs/rr2023\\_02.pdf](https://epi.alaska.gov/bulletins/docs/rr2023_02.pdf)

<sup>28</sup> Alaska Department of Health and Social Services, 2018. Alaska Health Facilities Data Reporting Program 2018 Annual Report. [https://health.alaska.gov/dph/VitalStats/Documents/HFDR/2018\\_HFDR\\_AnnualReport.pdf](https://health.alaska.gov/dph/VitalStats/Documents/HFDR/2018_HFDR_AnnualReport.pdf)

<sup>29</sup> Alaska Department of Health, 2023. Medicaid. <https://health.alaska.gov/dpa/Pages/medicaid/default.aspx>

assessing health services delivery among Medicaid beneficiaries, and data can be queried by ICD-10-CM codes.

## ADRD Indicators

In February 2023, Evergreen Economics published the Long-Term Forecast of Medicaid Enrollment and Spending in Alaska: FY2023-2043, which included an Analysis of Medicaid on individuals with chronic conditions (e.g., dementia/Alzheimer’s).<sup>30</sup> Medicaid data included within the forecast include:

Indicators
Distribution of Medicaid recipients by age and diagnosis of one or more chronic conditions, FY2022
Prevalence of chronic conditions for Medicaid recipients who are seniors (65-74)
Prevalence of chronic conditions for Medicaid recipients who are seniors (75-84)
Prevalence of chronic conditions for Medicaid recipients who are seniors (85+)
Prevalence of a diagnosed chronic condition by age of recipient, FY2022
Spending per recipient on Medicaid services and incremental cost of chronic conditions, FY2022
Distribution of Medicaid recipients and the cost of providing Medicaid services by the number of diagnosed chronic conditions, FY2022

## TABI Indicators

In May 2023, the Alaska Section of Epidemiology published an epidemiology bulletin on traumatic brain injury in Alaska that included an analysis of Medicaid data on individuals who have experienced a TABI.<sup>31</sup> Medicaid data included within the report include:

Indicators
Number of TBI-related Medicaid claims, 2017-2021
Number of Medicaid enrollees with TBI-related claims, 2017-2021
Dollar value of TBI-related Medicaid expenditures in Medicaid enrollees, 2017-2021
Average TBI Medicaid claim expenditure, by service utilize, 2017-2021

## Stroke Indicators

In 2019, the Alaska Department of Health published a report on the burden of heart disease and stroke in Alaska, that included an analysis of Medicaid data on beneficiaries who have experienced a stroke.<sup>32</sup> Medicaid data included within the report include the following.

Indicators
Prevalence of heart disease and stroke among working-age (18-64) and older (65+) adults who were Medicaid-eligible
Prevalence of heart disease and stroke among working-age (18-64) and older (65+) adults who were not Medicaid-eligible
Self-reported prevalence of stroke among Medicaid-eligible working-age adults
Self-reported prevalence of stroke among Medicaid-eligible older age adults
Dollar value in expenditures for Medicaid beneficiaries with stroke alone
Dollar value in expenditures for Medicaid beneficiaries with stroke in combination with other chronic diseases
Prevalence of heart disease and stroke among adults (2012-2016)
Prevalence of heart disease and stroke among adults by sex (2012-2016)
Prevalence of heart disease and stroke among adults by race (2012-2016)

<sup>30</sup> Evergreen Economics. Long-Term Forecast of Medicaid Enrollment and Spending in Alaska: FY2023-FY2043.

<https://health.alaska.gov/fms/Documents/Medicaid-Forecast/AK-Long-Term-Medicaid-Forecast-FY2023-FY2043.pdf>

<sup>31</sup> Alaska Department of Health, 2023. Traumatic Brain Injury in Alaska. [https://epi.alaska.gov/bulletins/docs/rr2023\\_02.pdf](https://epi.alaska.gov/bulletins/docs/rr2023_02.pdf)

<sup>32</sup> Alaska Department of Health and Social Services, 2019. The Burden of Heart Disease and Stroke in Alaska.

[https://health.alaska.gov/dph/Chronic/Documents/Cardiovascular/pubs/2019HDSP\\_BurdenReport.pdf](https://health.alaska.gov/dph/Chronic/Documents/Cardiovascular/pubs/2019HDSP_BurdenReport.pdf)

Indicators
Prevalence of heart disease and stroke among adults by socioeconomic status (2012-2016)
Prevalence of heart disease and stroke among adults in rural Alaska (2012-2016)
Prevalence of heart disease and stroke among adults by age group (2012-2016)

## Medicare

Medicare is a federally funded insurance program that provides medical coverage for people 65 years or older, and for those who have qualifying disabilities, end-stage renal disease (ESRD), or ALS (Lou Gehrig’s disease), regard.<sup>33</sup> Medicare is comprised of four parts: Part A (hospital insurance), Part B (Medicare insurance), Part C (Medicare Advantage Plus), and Part D (drug coverage). Most Medicare-eligible individuals receive Part A, which covers inpatient health care services, while Part B requires monthly payments to receive outpatient health care services. Part C includes an optional plan that private insurance companies offer, while Part D is a supplemental plan that covers prescription drugs and medication. The State Health Insurance Assistance Program (SHIP) and Senior Medicare Patrol (SMP) are federally funded through the Administration for Community Living.<sup>34</sup>

## Stroke Indicators

In November 2020, the Centers for Medicare & Medicaid Services published a spreadsheet on specific chronic conditions, including an analysis of Medicare data by state.<sup>35</sup> Medicare data within the report include the following.

Indicators
Prevalence of stroke for Medicare beneficiaries in Alaska
Prevalence of stroke for Medicare beneficiaries aged 65+ with Medicare only
Prevalence of stroke for Medicare beneficiaries aged <65 with Medicare only
Prevalence of stroke for Medicare beneficiaries with Medicare only
Prevalence of stroke for Medicare beneficiaries aged 65+ with Medicare and Medicaid
Prevalence of stroke for Medicare beneficiaries aged <65 with Medicare and Medicaid
Prevalence of stroke for Medicare beneficiaries with Medicare and Medicaid
Prevalence of stroke for female Medicare beneficiaries aged 65+
Prevalence of stroke for female Medicare beneficiaries aged <65
Prevalence of stroke for female Medicare beneficiaries
Prevalence of stroke for male Medicare beneficiaries aged 65+
Prevalence of stroke for male Medicare beneficiaries aged <65
Prevalence of stroke for male Medicare beneficiaries
Prevalence of stroke for Medicare beneficiaries aged 65+, by race
Prevalence of stroke for Medicare beneficiaries aged <65, by race
Prevalence of stroke for Medicare beneficiaries, by race
Prevalence of stroke for Medicare beneficiaries, by county

<sup>33</sup> U.S. Department of Health and Human Services, 2024. Who’s eligible for Medicare? <https://www.hhs.gov/answers/medicare-and-medicare/who-is-eligible-for-medicare/index.html>

<sup>34</sup> Alaska Department of Health, 2024. Medicare Information Office.

<https://health.alaska.gov/dsds/Pages/medicare/default.aspx>

<sup>35</sup> Centers for Medicare & Medicaid Services. Specific Chronic Conditions. <https://data.cms.gov/medicare-chronic-conditions/specific-chronic-conditions>



## ADRD Indicators

In November 2020, the Centers for Medicare & Medicaid Services released a spreadsheet on specific chronic conditions, including an analysis of Medicare data by state.<sup>36</sup> Medicare data within the spreadsheet include the following.

Indicators
Prevalence of Alzheimer's disease/dementia for Medicare beneficiaries in Alaska
Prevalence of Alzheimer's disease/dementia for Medicare beneficiaries aged 65+ with Medicare only
Prevalence of Alzheimer's disease/dementia for Medicare beneficiaries aged <65 with Medicare only
Prevalence of Alzheimer's disease/dementia for Medicare beneficiaries with Medicare only
Prevalence of Alzheimer's disease/dementia for Medicare beneficiaries aged 65+ with Medicare and Medicaid
Prevalence of Alzheimer's disease/dementia for Medicare beneficiaries aged <65 with Medicare and Medicaid
Prevalence of Alzheimer's disease/dementia for Medicare beneficiaries with Medicare and Medicaid
Prevalence of Alzheimer's disease/dementia for female Medicare beneficiaries aged 65+
Prevalence of Alzheimer's disease/dementia for female Medicare beneficiaries aged <65
Prevalence of Alzheimer's disease/dementia for female Medicare beneficiaries
Prevalence of Alzheimer's disease/dementia for male Medicare beneficiaries aged 65+
Prevalence of Alzheimer's disease/dementia for male Medicare beneficiaries aged <65
Prevalence of Alzheimer's disease/dementia for male Medicare beneficiaries
Prevalence of Alzheimer's disease/dementia for Medicare beneficiaries aged 65+, by race
Prevalence of Alzheimer's disease/dementia for Medicare beneficiaries aged <65, by race
Prevalence of Alzheimer's disease/dementia for Medicare beneficiaries, by race
Prevalence of Alzheimer's disease/dementia for Medicare beneficiaries, by county

## Syndromic Surveillance

Syndromic surveillance is a system that uses up-to-date emergency department and urgent care visit data so that public health officials can monitor communities' health in real-time.<sup>37</sup> By monitoring symptoms and preliminary diagnoses, syndromic surveillance can quickly identify possible outbreaks and problems, help public health keep track of ongoing issues, and provide a point-in-time snapshot of acute and emergent health issues in a community.

Alaska's syndromic surveillance system comprises data on hospital emergency department and urgent care visits. Healthcare providers collect these data and send them to the syndromic surveillance data processing system via healthEconnect, Alaska's health information exchange. Once routed to the syndromic surveillance system, epidemiologists from entities such as the Alaska Section of Epidemiology and the Alaska Native Epidemiology Center can monitor and review emergency department and urgent care visit data for public health purposes.

## TABI Indicators

The data scan did not identify any publicly available Alaska-based reports featuring an analysis of syndromic surveillance data on TABI and ADRD; however, the scan did identify an assessment of National Syndromic Surveillance Program data specific to stroke, which illustrates the types of indicators that may be available through syndromic surveillance. A brief description and a list of indicators illustrate the types of analyses possible with syndromic surveillance data.

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<sup>36</sup> Centers for Medicare & Medicaid Services. Specific Chronic Conditions. <https://data.cms.gov/medicare-chronic-conditions/specific-chronic-conditions>

<sup>37</sup> Alaska Department of Health, 2024. [https://health.alaska.gov/dph/Epi/id/Pages/synd\\_surv/default.aspx](https://health.alaska.gov/dph/Epi/id/Pages/synd_surv/default.aspx)

In 2020, the Centers for Disease Control and Prevention (CDC) assessed trends in emergency department visits immediately before and during the early COVID-19 pandemic, using data from its National Syndromic Surveillance Program (NSSP).<sup>38</sup> While the CDC data did not publish state-specific stroke data, Alaska healthcare facilities contributed to the data, comprising 47 states (all but Hawaii, South Dakota, and Wyoming) and the District of Columbia. Stroke data within the reports include the following.

<b>Indicators</b>
Number of emergency department visits for stroke
Number of emergency department visits and percentage change for stroke immediately before and during the early COVID-19 pandemic
Number of emergency department visits and percentage change for stroke immediately before and during the early COVID-19 pandemic by sex
Number of emergency department visits and percentage change for stroke immediately before and during the early COVID-19 pandemic by age group
Absolute decreases in the number of emergency department visits for stroke between COVID-19 pre-pandemic and early pandemic periods, by sex and age group

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<sup>38</sup> Lange, S. J., et al., 2020. Potential Indirect Effects of the COVID-19 Pandemic on Use of Emergency Departments for Acute Life-Threatening Conditions - United States, January-May 2020. *MMWR. Morbidity and Mortality Weekly Report*, 69(25), 795-800. <https://doi.org/10.15585/mmwr.mm6925e2>

# Matrix

The following matrix summarizes data sources based on a series of fields to categorize data sources. Information about each source was identified through a review of state and national websites, as well as through a review of ADRD and TABI specific publications. Data fields include:

- Data owners and stewards
- Data collection methodology
- Data collection schedule and release frequency
- Likelihood of data collection in the future
- Timespan for which data are available
- Method for accessing data (e.g., data request, query systems, dashboards, published reports, etc.)
- Data type (e.g., rate, count, percent, etc.)
- Beneficiary groups for whom data is relevant (TABI, ADRD, both)
- Population groups for whom data are available
- Geographic regions available (Local, state, national, etc.)

## Data Matrix

Data Source	Owners and Stewards	Collection Methodology	Collection Schedule	Future Collection	Timespan	Access	Type	Beneficiary groups	Population groups	Geographic Regions	Notes
Alzheimer's Association	CDC's Behavioral Risk Factor Surveillance System; Rush University Medical Center	Multiple state and national surveillance systems and databases	Continuous	Data sourced from multiple systems; data analysis and sharing schedule unknown	Dependent on indicator	Infographics	Percent; Count	ADRD	Age groups (45+, 45-64, 65+); Sex; Race; Education level	Statewide; County	
Alaska Behavioral Risk Factor Surveillance System	State of Alaska; Alaska Native Tribal Health Consortium	Survey	Survey administered year-round; Data released annually	Dependent on the survey module schedule and acceptance of partner-suggested questions	Dependent on indicator	Query system	Percent	TABI; ADRD	Sex; Race (Alaska Native, White, and Other); Age group (18-34, 35-49, 50-64, 65+); Education level; Children under 18 in the household	Statewide; Public health regions; Tribal health regions; Behavioral health regions	National comparatives available through the CDC
Alaska Cancer Registry	Alaska Department of Health; Alaska Cancer Registry	Multiple statewide surveillance systems and databases	Continuous	Stable	1996-2020	Report	Rate; Counts (cancer diagnoses and mortalities)	TABI	Cancer sites; Sex; Race; Borough	Census boroughs	Tables include information on a multitude of cancer sites, with a row on brain and other nervous system
Alaska Native Tumor Registry	Alaska Native Tribal Health Consortium; Alaska Native	Multiple statewide surveillance	Continuous	Stable	1969-2018	Report	Counts (cancer diagnoses and	TABI	Sex; Cancer sites; Race (Alaska Native	Tribal health regions	Tables include information on a multitude of cancer sites,

Data Source	Owners and Stewards	Collection Methodology	Collection Schedule	Future Collection	Timespan	Access	Type	Beneficiary groups	Population groups	Geographic Regions	Notes
	Tumor Registry; Alaska Native Epidemiology Center	systems and databases					mortalities); Rate		people, US White people)		with a row on brain and other nervous system
Alaska Trauma Registry	Alaska Department of Health	Multiple statewide surveillance systems and databases	Continuous	Stable	2016-2020	Request	Rate	TABI	Age group; Type of place; Sex; Race (non-Native, Alaska Native/American Indian); Activity (motor vehicle, falls, assault, etc.); Hospital status (ER, inpatient)	Statewide; Regional	
Alaska Youth Risk Behavior Survey	Centers for Disease Control and Prevention	Survey	Survey administered every other year in odd-numbered years	Stable, though dependent on participation rates at the student, school, and district levels	Dependent on indicator	Dashboard	Percent	TABI	Age group (≤15, 16-17, 18+); Grade (9 <sup>th</sup> -12 <sup>th</sup> ); Race/Ethnicity; Sex	Statewide	Sample includes students in public traditional high schools (excluding boarding, correspondence, home student, alternative, and correctional schools) with enrollments of at least ten students.
Health Analytics & Vital Records	State of Alaska Epidemiology; Alaska Department of Health	Multiple statewide surveillance systems and databases	Continuous	Stable	1930-Present	By request; Published reports	Rate; Percent	TABI; ADRD	Sex; Race; Injury mechanism; Age; Region of residence	Statewide; Regional	National comparatives are available through the National Vital Statistics System
Healthcare Effectiveness Data and Information Set	National Committee for Quality Assurance (NCQA)	Administrative; Electronic health record; Survey	Annual	Stable	2001-Present	Use of data requires a license agreement with NCQA	Percent; Composite scores	TABI; ADRD	Persons enrolled in health plans that report quality results using HEDIS	National	
Health Facilities Data	Alaska Department of Health; Alaska	Multiple discharge data statewide	Continuous	Stable	2001-Present	By request; Published reports	Rate; Count (inpatient discharges);	TABI; ADRD	Age; Injury mechanism; Region of	Statewide; Regional	Inpatient discharges for acute CVD



Data Source	Owners and Stewards	Collection Methodology	Collection Schedule	Future Collection	Timespan	Access	Type	Beneficiary groups	Population groups	Geographic Regions	Notes
	Health and Social Services	systems and databases; Inpatient and outpatient					(total charges)		and ethnicity; Primary payer; Public health region		total days and charges associated with each indicator
Medicaid	Alaska Department of Health	Administrative data	Continuous	Stable	2017-2021	By request; Published reports	Counts (claim counts and enrollee counts); Dollar value (expenditures); Percent	TABI; ADRD	Medicaid enrollees; Services utilized; Sex; Race; Socioeconomic status (low SES, higher SES); Age group	Statewide; Rural Alaska	Other injuries without TBI-related ICD-10 codes that may have occurred simultaneously (polytrauma cases), or because of a TBI were not included in expenditure estimation
Medicare	Centers for Medicare & Medicaid Services; CMS Chronic Conditions Data Warehouse	CMS administrative enrollment; Claims data for Original Medicare beneficiaries	Continuous	Stable	Data publicly available for 2007-2018	Publicly available spreadsheets for download	Rate	TABI; ADRD	Dual status (Medicare & Medicaid); Age group; Sex; Race	Statewide; County	The spreadsheet includes over 236,000 rows of data, with applicable data for Alaska appearing multiple times
Syndromic Surveillance	Alaska Department of Health; Centers for Disease Control and Prevention; National Syndromic Surveillance Program	Multiple nationwide and statewide surveillance systems and databases	Continuous	Stable	2014-Present	By request; Journal articles	Visit counts	TABI	Sex; Age group	Regional; State; National	Hemorrhagic and ischemic stroke data was classified under "stroke" but used distinguishing ICD-10 codes
CDC WISQARS	National Electronic Injury Surveillance System (NEISS); National Center for Health Statistics (NCHS)	Multiple nationwide surveillance systems and databases	Continuous	Stable	2001-2022	Database	Rate; Count (deaths)	TABI	Intent; Mechanism; Age; Sex	National; Statewide	

Data Source	Owners and Stewards	Collection Methodology	Collection Schedule	Future Collection	Timespan	Access	Type	Beneficiary groups	Population groups	Geographic Regions	Notes
CDC WONDER	U.S. Department of Health and Human Services; Centers for Disease Control and Prevention; National Cancer Institute	Multiple nationwide surveillance systems and databases	Continuous	Stable	1999-2020	Database	Counts (disease incidence, deaths); Rate	TABI; ADRD	Age group; race; ethnicity; sex; childhood cancers; cancer site classifications	National; Statewide	Deaths of persons of unknown age are not included in this data sets; Some categories may be unreliable due to low counts

## Publications

The following table presents a list of reports, briefs, and state plans containing data on TABI and ADRD, and indicates which dataset the data are sourced from.

Publication	Author	Year	Jurisdiction	ATR	BRFSS	HAVRS	HFDR	YRBS	Medicaid	Alzheimer's Association	Other
<i>Reports and Briefs</i>											
Alaska Alzheimer's Facts and Figures	Alzheimer's Association	2023	State							X	
Alaska Native Injury Atlas, Third Edition	Alaska Native Tribal Health Consortium	2020	Tribal	X		X	X				
The Alaska Health Systems Collaboration Unit Chronic Disease Infographic	Alaska Department of Health, Division of Public Health	2023	State		X						
Brain Injury Needs Assessment	University of Alaska Anchorage, Center for Human Development	2019	State	X			X				One-time survey
The Burden of Heart Disease and Stroke in Alaska	Alaska Department of Health, Division of Public Health, Section of Chronic Disease Prevention and Health Promotion	2019	State		X	X					
Long-Term Forecast of Medicaid Enrollment and	Alaska Department of Health;	2023	State						X		

Publication	Author	Year	Jurisdiction	ATR	BRFSS	HAVRS	HFDR	YRBS	Medicaid	Alzheimer's Association	Other
Spending in Alaska: FY2023-FY2043	Evergreen Economics										
Traumatic and Acquired Brain Injury Legal Needs Assessment	University of Alaska Anchorage, Center for Human Development	2019	State								One-time survey
Traumatic Brain Injury in Alaska	Alaska Section of Epidemiology	2023	State	X		X	X		X		
<i>Plans</i>											
Alaska Division of Public Health Strategic Plan: 2020-2025	Alaska Department of Health, Division of Public Health	2020	State								
Alaska Division of Senior and Disabilities Services Strategic Plan: Fiscal Years 2024-2027	Alaska Department of Health, Division of Senior and Disabilities Services	2023	State								
Alaska State Plan for Brain Injury: July 2020-June 2025	Alaska Traumatic and Acquired Brain Injury Advisory Council	2020	State	X			X				Alaska Division of Behavioral Health
A Call for Action: Alaska's 10-Year Map to Address Alzheimer's Disease and Related Dementia	Alaska Mental Health Trust Authority	2021	State	X		X				X	Alaska Commission on Aging; Alaska Division of Insurance; Alaska Division of Retirement and Benefits
Healthy Alaskans 2030: State Health Improvement Plan	Alaska Department of Health; Alaska Native Tribal Health Consortium	2020	State			X					
Healthy Brain Initiative: Road Map for Indian Country	Alzheimer's Association; Centers for Disease Control and	2019	Tribal							X	

Publication	Author	Year	Jurisdiction	ATR	BRFSS	HAVRS	HFDR	YRBS	Medicaid	Alzheimer's Association	Other
Healthy and Equitable Communities: Strategic Plan 2022-2025	Alaska Department of Health	2021	State			X					
Strengthening the System: Alaska's Comprehensive Integrated Mental Health Program Plan	Alaska Mental Health Trust Authority	2019	State		X	X					
Take Heart Alaska: Heart Disease and Stroke Prevention Program 2020-2025	Alaska Department of Health, Division of Public Health; Take Heart Alaska	2020	State		X	X					





**Appendix B**

**Reimbursement Rates**

TO: Jennifer Ritchie  
Division of Health Care Services

FROM: Christine Goetz, Audit Supervisor *Cg*  
Office of Rate Review

DATE: January 1, 2024

SUBJECT: Current Medicaid Payment Rates

Effective payment rates as of January 1, 2024 for Alaska Hospitals (combined & acute care), Freestanding Nursing Facilities, Federally Qualified Health Centers (FQHC), Out of State Intermediate Care Facilities/Developmental Disabilities (ICF/DD) Medicaid Providers and Ambulatory Surgical Centers.

**Rates for Combined Facilities**

Facility Name	Location	Inpatient Rate	Outpatient Rate	Long Term Care Rate	Time Frame	Temporary
Cordova Community Medical Center <sup>2,3</sup>	Cordova	\$9,007.48	70.69%	\$1,070.26	01/01/2024 - 12/31/2024	No
PeaceHealth Ketchikan Medical Center/New Horizons Long Term Care <sup>2,3</sup>	Ketchikan	\$5,393.95	44.55%	\$1,377.56	07/01/2023 - 06/30/2024	No
Norton Sound Regional Hospital/Quayana Care Center <sup>2,3</sup>	Nome	\$5,789.46	82.01%	\$1,943.59	10/01/2023 - 09/30/2024	No
Petersburg Medical Center <sup>2,3</sup>	Petersburg	\$8,087.98	73.23%	\$897.17	07/01/2023 - 06/30/2024	Yes
Providence Kodiak Island Medical Center <sup>2,3</sup>	Kodiak	\$8,545.57	46.49%	\$1,278.76	01/01/2024 - 12/31/2024	No
Providence Seward Medical Center/Seward Mountain Haven <sup>2,3</sup>	Seward	\$14,885.59	39.12%	\$1,193.20	01/01/2024 - 12/31/2024	No
Providence Valdez Medical Center <sup>2,3</sup>	Valdez	\$13,839.43	65.95%	\$1,491.14	01/01/2024 - 12/31/2024	No
South Peninsula Hospital <sup>2,3</sup>	Homer	\$6,732.86	39.88%	\$1,486.18	07/01/2023 - 06/30/2024	No
Wrangell Medical Center (SEARHC) <sup>2,3</sup>	Wrangell	\$10,410.43	86.98%	\$963.13	10/01/2023 - 09/30/2024	No

1=Sole Community Hospital 2=Critical Access Hospital 3= Small Facility Agreement

Note: Inpatient and Long Term care rates are expressed as a per day rate. Outpatient rate is expressed as a percentage of charges.

**Rates for DRG Facilities**

Facility Name	Location	DRG Bate Rate	Cost-To-Charge Ratio	Outpatient Rate	Long Term Care Rate	Time Frame
Alaska Regional Hospital	Anchorage	\$18,484.00	0.2032	8.37%	N/A	01/01/2024 - 12/31/2024
Bartlett Regional Hospital / Wildflower Court <sup>1</sup>	Juneau	\$20,686.00	0.5796	47.43%	\$820.14	07/01/2023 - 06/30/2024
Central Peninsula General Hospital/Heritage Place <sup>1</sup>	Soldotna	\$23,522.00	0.4691	33.27%	\$556.64	07/01/2023 - 06/30/2024
Fairbanks Memorial Hospital/Denali Center <sup>1</sup>	Fairbanks	\$17,190.00	0.4416	35.32%	\$879.54	01/01/2024 - 12/31/2024
Mat-Su Regional Medical Center <sup>1</sup>	Palmer	\$16,110.00	0.2173	10.72%	N/A	01/01/2024 - 12/31/2024
Providence Alaska Medical Center	Anchorage	\$18,580.87	0.2065	17.96%	N/A	01/01/2024 - 12/31/2024

1=Sole Community Hospital 2=Critical Access Hospital 3= Small Facility Agreement

Note: Inpatient and Long Term care rates are expressed as a per day rate. Outpatient rate is expressed as a percentage of charges.

**Rates for Acute Care Facilities**

Facilities Names	Location	Inpatient Rate	Outpatient Rate	Time Frame	Temporary
Alaska Psychiatric Institute	Anchorage	\$1,736.79	N/A	07/1/2023 - 06/30/2024	No
Arctic Slope Native Assn dba Samuel Simmonds Memorial Hospital <sup>2</sup>	Utqiagvik	\$22,387.46	86.49%	10/01/2023 - 9/30/2024	No
North Star Hospital	Anchorage	\$1,425.67	N/A	01/01/2024 - 12/31/2024	No
St. Elias Specialty Hospital (LTCH)	Anchorage	\$3,421.56	N/A	01/01/2024 - 12/31/2024	No

1=Sole Community Hospital 2=Critical Access Hospital

Note: Inpatient rates are expressed as a per day rate. Outpatient rate is expressed as a percentage of charges.

**Rates for Freestanding Nursing Facilities**

Facility Name	Location	Long Term Care Rate	Time Frame	Temporary
Maple Springs of Palmer	Palmer	\$783.06	01/01/2024 - 12/31/2024	No
Maple Springs of Wasilla	Wasilla	\$624.42	01/01/2024 - 12/31/2024	No
Prestige Care & Rehabilitation Center of Anchorage	Anchorage	\$520.02	01/01/2024 - 12/31/2024	No
Providence Extended Care	Anchorage	\$783.33	01/01/2024 - 12/31/2024	No
Providence Transitional Care Center	Anchorage	\$1,034.29	01/01/2024 - 12/31/2024	No
Sitka Long Term Care (SEARHC)	Sitka	\$987.16	10/01/2023 - 09/30/2024	No
Utuganaat Inaat dba Manilaq Association	Kotzebue	\$1,524.49	10/01/2023 - 09/30/2024	No
Yukon Kuskokwim Elder's Home	Bethel	\$1,116.11	10/01/2023 - 09/30/2024	No

Note: Long Term Care rates are expressed as a per day rate.

**Rates for Swing Beds**

Swing Bed Rate for the period 1/1/2024 - 12/31/2024 is \$848.11 per day

**Rates for Federally Quailified Health Center Facilites (FQHC)**

Facility Name	Location	Encounter Rate	Time Frame	Temporary
Anchorage Neighborhood Health <sup>1</sup>	Anchorage	\$369.82	07/01/2023 - 06/30/2024	Yes
Bethel Family Clinic <sup>1</sup>	Bethel	\$413.93	01/01/2024 - 12/31/2024	Yes
Camai Community Health Center <sup>2</sup>	Naknek	\$276.14	07/01/2023 - 06/30/2024	No
Crossroad Medical Center <sup>1</sup>	Glennallen	\$616.31	04/01/2022 - 03/31/2023	Yes
Dahl Memorial Clinic <sup>2</sup>	Skagway	\$264.08	07/01/2023 - 06/30/2024	No
Eastern Aleutian Tribes - Whittier Medical Clinic <sup>2</sup>	Whittier	\$259.20	01/01/2024 - 12/31/2024	No
Girdwood Health Clinic <sup>1</sup>	Girdwood	\$450.88	01/01/2024 - 12/31/2024	Yes
Iliulik Family & Health Services <sup>2</sup>	Unalaska	\$255.71	07/01/2023 - 06/30/2024	No
Interior Community Health Center <sup>1</sup>	Fairbanks	\$322.68	07/01/2023 - 06/30/2024	Yes
Juneau Alliance for Mentally Ill <sup>2</sup>	Juneau	\$373.01	07/01/2023 - 06/30/2024	No
Kodiak Community Health Clinic <sup>1</sup>	Kodiak	\$347.85	01/01/2024 - 12/31/2024	Yes
Mat-Su Health Services <sup>2</sup>	Wasilla	\$253.29	07/01/2023 - 06/30/2024	No

Peninsula Community Health Services of Alaska <sup>1</sup>	Soldotna	\$358.95	01/01/2024 - 12/31/2024	Yes
Seward Community Health Center Inc. <sup>2</sup>	Seward	\$334.53	01/01/2024 - 12/31/2024	No
Sunshine Health Center <sup>1</sup>	Talkeetna	\$490.78	07/01/2023 - 06/30/2024	Yes

1=Alternative Payment Methodology (APM) 2=Perspective Payment System (PPS)

NOTE: FQHC payment rates are on a per visit basis.

### Rates for ICF/DD Facilities

Facility Name	Location	Per Day Rate	Time Frame	Temporary
Belmont Care Center - 5th Street	Pocatello, ID	\$652.57	7/01/2023 - 6/30/2024	No
Belmont Care Center - Vaughn Street	Pocatello, ID	\$645.68	7/01/2023 - 6/30/2024	No
ResCare California Inc. - RCCA La Almendra	Sacramento, CA	\$843.69	7/01/2023 - 6/30/2024	No
Springfield #1	Idaho Falls, ID	\$637.11	7/01/2023 - 6/30/2024	No

### Ambulatory Surgical Centers and Location

Facility Name	Location	Rate Type Group
Alaska Cardiovascular Surgery Center	Anchorage	Groups Rates listed Below
Alaska Digestive Center, LLC	Anchorage	Groups Rates listed Below
Alaska Eye Surgery and Laser Center	Anchorage	Groups Rates listed Below
Alaska Spine Center	Anchorage	Groups Rates listed Below
Alaska Surgery Center	Anchorage	Groups Rates listed Below
Alpine Surgery Center	Anchorage	Groups Rates listed Below
Anchorage Endoscopy Center	Anchorage	Groups Rates listed Below
Anchorage Surgicenter, LLC	Anchorage	Groups Rates listed Below
Aurora Surgery Center (Alaska Medical Center, LLC)	Anchorage	Groups Rates listed Below
Creekside Surgery Center	Anchorage	Groups Rates listed Below
Geneva Woods Surgical Center	Anchorage	Groups Rates listed Below
Southeast Alaska Surgery Ctr (Juneau Spine & Pain Ctr)	Juneau	Groups Rates listed Below
Pacific Cataract & Laser Institute	Anchorage	Groups Rates listed Below
South Anchorage Surgery Center, LLC	Anchorage	Groups Rates listed Below
Surgery Center of Wasilla, LLC	Palmer	Groups Rates listed Below
Susitna Surgery Center	Wasilla	Groups Rates listed Below
The Surgery Center of Fairbanks	Fairbanks	Groups Rates listed Below

NOTE: Ambulatory Surgical Center payment rates are on a per group basis. Group rates listed in the table below.

### Ambulatory Surgical Center Rates by Group

Group Rates 7/01/2023 - 6/30/2024	Rate	Temporary
Group 1 -	\$714.15	No
Group 2 -	\$986.11	No
Group 3 -	\$1,127.64	No
Group 4 -	\$1,392.16	No
Group 5 -	\$1,584.74	No
Group 6 -	\$1,958.94*	No
Group 7 -	\$2,201.91	No
Group 8 -	\$2,283.80*	No
Group 9 -	\$2,283.80*	No

\*Rate Includes \$150 Intraocular Lens Allowance



**MEMORANDUM**

**To:** All Interested Parties

**From:** Christine Goetz  
Audit Supervisor

**Date:** December 6, 2023

**Subject:** Medicaid Swing Bed Rate for Calendar Year 2024

Swing beds are acute care beds used for nursing facility care as the need arises. The swing bed rate is calculated in accordance with the methodology established in 7 AAC 150.160(i).

The methodology for determining payments is based on the state-wide average long term care rate paid by Medicaid for the previous calendar year. The 2023 swing bed rate was \$820.13. The 2024 swing bed rate is established at \$848.11.

A breakdown of the rate is shown below.

SWING BED RATE SUMMARY

Component	2023	2024	% Change
Non-Capital	\$729.28	\$757.43	3.9%
Capital	90.85	90.68	-0.2%
TOTAL	\$820.13	\$848.11	3.4%

The above figures are based on the best available data.

cc: Jamie Walker, Divisions Operations Manager, HCS  
Kristin Delfino, Health Program Manager, HCS



Chart of 1115 Medicaid Waiver  
 Services Effective: 2 / 2 / 2024  
 Version date: December 15, 2022

Unit	SUD Service Description	Procedure Code/Modifier	Rate
15 minutes	Outpatient Services ASAM 1.0 Individual	H0007 V1	\$ 26.79
15 minutes	Outpatient Services ASAM 1.0 - Group (Adolescent)	H0007 HQ HA V1	\$ 8.81
15 minutes	Outpatient Services ASAM 1.0 - Group (Adult)	H0007 HQ HB V1	\$ 8.81
15 minutes	Intensive Outpatient ASAM 2.1- Individual	H0015 V1	\$ 30.94
15 minutes	Intensive Outpatient ASAM 2.1- Group	H0015 HQ V1	\$ 10.21
Daily	Partial Hospitalization	H0035 V1	\$ 522.50
Daily	SUD Residential 3.1 (Adolescent age 12-17)	H2036 HA V1	\$ 369.96
Daily	SUD Residential 3.1 (Adolescent age 18-21)	H2036 CG HA V1	\$ 369.96
Daily	SUD Residential 3.1 (Adult)	H2036 HF V1	\$ 418.87
Daily	SUD Residential 3.3 (Adult)	H0047 HF V1	\$ 643.66
Daily	SUD Residential 3.5 (Adolescent age 12-17)	H0047 HA V1 TF	\$ 521.06
Daily	SUD Residential 3.5 (Adolescent age 18-21)	H0047 CG V1 HA TF	\$ 521.06
Daily	SUD Residential 3.5 (Adult)	H0047 TG V1	\$ 475.78
Daily	Medically Monitored Intensive Inpatient Services 3.7 (Adolescent age 12-17)	H0009 TF HA V1	\$ 940.50
Daily	Medically Monitored Intensive Inpatient Services 3.7 (Adolescent age 18-21)	H0009 CG V1 HA TF	\$ 940.50
Daily	Medically Monitored Intensive Inpatient Services 3.7 (Adult)	H0009 TF V1	\$ 940.50
Daily	Medically Managed Intensive Inpatient Services 4.0	H0009 TG V1	\$ 1,567.50
15 minutes	Ambulatory Withdrawal Management without Extended Monitoring	H0014 V1	\$ 31.35
15 minutes	Ambulatory Withdrawal Management with Extended Monitoring	H0014 CG V1	\$ 31.35
Daily	Clinically Managed Residential Withdrawal Management 3.2 WM	H0010 V1	\$ 315.85
Daily	Medically Monitored Inpatient Withdrawal Management 3.7 WM	H0010 TG V1	\$ 940.50
Daily	Medically Managed Intensive Inpatient Withdrawal Management 4.0 WM	H0011 V1	\$ 1,567.50
15 minutes	Community & Recovery Support Services - Individual	H2021 V1	\$ 22.43
15 minutes	Community & Recovery Support Services - Group	H2021 HQ V1	\$ 5.88
Monthly	SUD Care Coordination	H0047 V1	\$ 313.50
15 minutes	Intensive Case Management	H0023 V1	\$ 29.33
15 minutes	Peer-Based Crisis Services	H0038 V1	\$ 21.38
Hourly	23 Hour Crisis Stabilization Observation	S9484 V1	\$ 121.43
Per Call Out	Mobile Outreach and Crisis Response Services	T2034 V1	\$ 183.54
15 minutes	Crisis Intervention Service - Follow-Up	H2011 TS V1	\$ 21.38
Daily	Crisis Residential Stabilization	S9485 V1	\$ 940.50
Per Assessment	Treatment Plan Development/Review	T1007 V1	\$ 141.52

Chart of 1115 Medicaid Waiver  
 Services Effective: 2 / 2 / 2024  
 Version date: December 15, 2022

Unit	BH Service Description	Procedure Code/Modifier	Rate
15 minutes	Home-Based Family Treatment Level 1	H1011 V2	\$ 25.25
15 minutes	Home-Based Family Treatment Level 2	H1011 TF V2	\$ 25.74
15 minutes	Home-Based Family Treatment Level 3	H1011 TG V2	\$ 28.41
Daily	Therapeutic Treatment Homes	H2020 V2	\$ 307.91
Daily	Children's Residential Treatment Level 1	T2033 V2	\$ 319.77
Daily	Children's Residential Treatment Level 2	T2033 TF V2	\$ 444.51
15 minutes	Intensive Case Management	H0023 V2	\$ 29.33
15 minutes	Community & Recovery Support Services - Individual	H2021 V2	\$ 22.43
15 minutes	Community & Recovery Support Services - Group	H2021 HQ V2	\$ 5.88
15 minutes	Assertive Community Treatment	H0039 V2	\$ 32.01
15 minutes	Intensive Outpatient 2.1 - Individual	H0015 V2	\$ 30.94
15 minutes	Intensive Outpatient 2.1 - Group	H0015 HQ V2	\$ 10.21
Daily	Partial Hospitalization	H0035 V2	\$ 522.50
Daily	Adult MH Residential Treatment Level 1	T2016 V2	\$ 628.68
Daily	Adult MH Residential Treatment Level 2	T2016 TG V2	\$ 501.87
15 minutes	Peer-Based Crisis Services	H0038 V2	\$ 21.38
Hourly	23 Hour Crisis Stabilization Observation	S9484 V2	\$ 121.43
Per Call Out	Mobile Outreach and Crisis Response Services	T2034 V2	\$ 183.54
15 minutes	Crisis Intervention Service - Follow-Up	H2011 TS V2	\$ 21.38
Daily	Crisis Residential Stabilization	S9485 V2	\$ 940.50
Per Assessment	Treatment Plan Development/Review	T1007 V2	\$ 141.52

FEE SCHEDULE Community Behavioral Health and Mental Health Physician Clinic\*

Note: MHPC may only bill for services marked with \*

Effective: July 1, 2023

Adult or child A=Adult C=Child	Procedure Code/ Modifier	Service Description	Duration	Service Limit & Service Authorization Unit of measure	Unit Payment	Limits- per State Fiscal Year (SFY) unless otherwise indicated	Can or Cannot be extended with Service Authorization	Department Program Approval Category	Telemed Y/N
A/C	T1023	Behavioral Health Screen	1 screening	N/A	\$ 46.15	1 per admission to program	Cannot	All program approval types	Y
A/C	H0001	Alcohol and/or Drug Assessment	1 assessment	1 assessment	\$ 250.28	1 assessment every 6 months	Can	Rehab	Y
A/C	H0031*	Mental Health Intake Assessment	1 assessment	1 assessment	\$ 471.38	1 assessment every 6 months	Can	Clinic	Y
A/C	H0031-HH*	Integrated Mental Health & Substance Use Intake Assessment	1 assessment	1 assessment	\$ 542.09	1 assessment every 6 months	Can	Clinic	Y
A/C	90791*	Psychiatric Assessment - Diag Eval	1 assessment	1 assessment	\$ 618.02	4 assessments	Can	Clinic	Y
A/C	96136-HO*	Psychological Testing	30 minutes	1 unit	\$ 73.01	Limit any combination of psychological testing is 6 hours	Can	Clinic	Y
A/C	96137-HO*	Psychological Testing	30 minutes	7 units	\$ 73.01	Limit any combination of psychological testing is 6 hours	Can	Clinic	Y
A/C	96130-HO*	Psychological Testing	60 minutes	1 unit	\$ 146.12	Limit any combination of psychological testing is 6 hours	Can	Clinic	Y
A/C	96131-HO*	Psychological Testing	60 minutes	1 unit	\$ 146.12	Limit any combination of psychological testing is 6 hours	Can	Clinic	Y
A/C	96136-HP*	Neuropsychological Testing	30 minutes	1 unit	\$ 85.79	Limit any combination of neuropsychological testing is 12 hours	Can	Clinic	Y
A/C	96137-HP*	Neuropsychological Testing	30 minutes	1 unit	\$ 85.79	Limit any combination of neuropsychological testing is 12 hours	Can	Clinic	Y
A/C	96132-HP*	Neuropsychological Testing	60 minutes	1 unit	\$ 171.54	Limit any combination of neuropsychological testing is 12 hours	Can	Clinic	Y
A/C	96133-HP*	Neuropsychological Testing	60 minutes	3 units	\$ 171.54	Limit any combination of neuropsychological testing is 12 hours	Can	Clinic	Y
A/C	90832*	Psychotherapy, Individual	16-37 minutes	30 minutes	\$ 70.38	Limit any combination of psychotherapy services; 30 hours	Can	Clinic or Rehab	Y
A/C	90834*	Psychotherapy, Individual	38-52 minutes	45 minutes	\$ 105.58	Limit any combination of psychotherapy services; 30 hours	Can	Clinic or Rehab	Y
A/C	90837*	Psychotherapy, Individual	53-60 minutes	60 minutes	\$ 140.77	Limit any combination of psychotherapy services; 30 hours	Can	Clinic or Rehab	Y
A/C	90846*	Psychotherapy, Family (w/o patient present)	60 minutes	60 minutes	\$ 148.07	Limit any combination of psychotherapy services; 30 hours	Can	Clinic or Rehab	Y
A/C	90846-U7*	Psychotherapy, Family (w/o patient present)	30 minutes	30 minutes	\$ 74.03	Limit any combination of psychotherapy services; 30 hours	Can	Clinic or Rehab	Y
A/C	90847*	Psychotherapy, Family (with patient present)	60 minutes	60 minutes	\$ 143.85	Limit any combination of psychotherapy services; 30 hours	Can	Clinic or Rehab	Y
A/C	90847-U7*	Psychotherapy, Family (with patient present)	30 minutes	30 minutes	\$ 71.83	Limit any combination of psychotherapy services; 30 hours	Can	Clinic or Rehab	Y
A/C	90849*	Psychotherapy, Multi-family group	60 minutes	60 minutes	\$ 57.55	Limit any combination of psychotherapy services; 30 hours	Can	Clinic or Rehab	Y
A/C	90849-U7*	Psychotherapy, Multi-family group	30 minutes	30 minutes	\$ 28.76	Limit any combination of psychotherapy services; 30 hours	Can	Clinic or Rehab	Y
A/C	90853*	Psychotherapy, Group	60 minutes	60 minutes	\$ 56.31	Limit any combination of psychotherapy services; 30 hours	Can	Clinic or Rehab	Y
A/C	90853-U7*	Psychotherapy, Group	30 minutes	30 minutes	\$ 28.15	Limit any combination of psychotherapy services; 30 hours	Can	Clinic or Rehab	Y
A/C	H2010*	Comprehensive Medication Services	1 visit	1 visit	\$ 156.40	1 visit per month thereafter unless more frequent monitoring is required	Document clinical record with necessity for more frequent monitoring	Clinic or Rehab	Y
A/C	S9484*	Short-term Crisis Intervention Service	1 hour	1 hour	\$ 138.34	Limit any combination of intervention services; 22 hours	Can	Clinic or Rehab	Y
A/C	S9484-U6*	Short-term Crisis Intervention Service	15 minutes	15 minutes	\$ 34.59	Limit any combination of intervention services; 22 hours	Can	Clinic or Rehab	Y
A/C	H2011	Short-term Crisis Stabilization Service	15 minutes	15 minutes	\$ 27.83	22 hours	Can	Clinic or Rehab	Y
A/C	T1016	Case Management	15 minutes	15 minutes	\$ 27.17	180 hours	Can	Rehab	Y
C	H2019	Therapeutic BH Services - Individual	15 minutes	15 minutes	\$ 24.84	Limit any combination of individual to 100 hours	Can	Rehab	N
C	H0038	Peer Support Services - Individual	15 minutes	15 minutes	\$ 23.94	Limit any combination of individual to 100 hours	Can	Rehab	N
C	H2019-HQ	Therapeutic BH Services - Group	15 minutes	15 minutes	\$ 9.93	140 hours	Can	Rehab	N
C	H2019-HR	Therapeutic BH Services - Family (with patient present)	15 minutes	15 minutes	\$ 24.84	Limit any combination of family; 180 hours	Can	Rehab	N
C	H2019-HS	Therapeutic BH Services - Family (w/o patient present)	15 minutes	15 minutes	\$ 24.84	Limit any combination of family; 180 hours	Can	Rehab	N
C	H0038-HR	Peer Support Services - Family (with patient present)	15 minutes	15 minutes	\$ 23.94	Limit any combination of family; 180 hours	Can	Rehab	N
C	H0038-HS	Peer Support Services - Family (w/o patient present)	15 minutes	15 minutes	\$ 23.94	Limit any combination of family; 180 hours	Can	Rehab	N
A	H0038	Peer Support Services - Individual	15 minutes	15 minutes	\$ 23.94	240 hours	Can	Rehab	N
C	H2012	Day Treatment for Children (combined mental health & school district resources)	1 hour	1 hour	\$ 21.30	180 hours	Can	Day treatment	N

Adult or child A=Adult C=Child	Procedure Code/ Modifier	Service Description	Duration	Service Limit & Service Authorization Unit of measure	Unit Payment	Limits- per State Fiscal Year (SFY) unless otherwise indicated	Can or Cannot be extended with Service Authorization	Department Program Approval Category	Telemed Y/N
A/C	T1007	Treatment Plan Review for Methadone Recipient	1 review	N/A	\$ 95.14	1 per admission to program	Cannot	Rehab or Detox or Residential substance use Tx	N
A/C	H0033	Oral Medication Administration, direct observation; on premises	1 day	N/A	\$ 75.37	1 billable service per day; no annual limit	Cannot	Rehab or Detox or Residential substance use Tx	N
A/C	H0033-HK	Oral Medication Administration, direct observation; off premises	1 day	N/A	\$ 87.41	1 billable service per day; no annual limit	Cannot	Rehab or Detox or Residential substance use Tx	N
A/C	H0020	Methadone Administration and/or service	administration episode	N/A	\$ 22.60	As prescribed by a physician	N/A	Rehab or Detox or Residential substance use Tx	N
A/C	H0014	Ambulatory Detoxification	15 minutes	N/A	\$ 38.12	No annual limit	N/A	Detox	N
A/C	H0010	Clinically Managed Detoxification	1 day	N/A	\$ 340.82	1 billable service per day; no annual limit	N/A	Detox	N
A/C	H0011	Medically Managed Detoxification	1 day	N/A	\$ 544.49	1 billable service per day; no annual limit	N/A	Detox	N
A/C	H0002	Medical Evaluation for Recipient NOT Receiving Methadone Treatment	1 evaluation	N/A	\$ 494.23	1 per admission to program	Cannot	Rehab or Detox or Residential substance use Tx	N
A/C	H0002-HF	Medical Evaluation for Recipient Receiving Methadone Treatment	1 evaluation	N/A	\$ 614.06	1 per admission to program	Cannot	Rehab or Detox or Residential substance use Tx	N
A/C	99408*	Screening, Brief Intervention, and Referral for Treatment (SBIRT)	15 to 30 minute episode	N/A	\$ 44.19	No annual limit	N/A	Clinic or Rehab	Y
A/C	H0047	Residential Substance Use Disorder Treatment - Clinically Managed; Low Intensity	1 day	N/A	\$ 226.47	1 billable service per day; no annual limit	N/A	Residential substance use Tx	N
A/C	H0047-TF	Residential Substance Use Disorder Treatment - Clinically Managed; Medium Intensity	1 day	N/A	\$ 309.00	1 billable service per day; no annual limit	N/A	Residential substance use Tx	N
A/C	H0047-TG	Residential Substance Use Disorder Treatment - Clinically Managed; High Intensity	1 day	N/A	\$ 483.35	1 billable service per day; no annual limit	N/A	Residential substance use Tx	N

Services that are provided via telemedicine require a procedure code modifier "GT" to designate that the service was not performed in person. When applicable, providers should report multiple procedure code modifiers with a single procedure code as appropriate. For example, report both modifier U7 and GT with procedure code 90847 if the family psychotherapy with the patient present was provided for 30 minutes via telemedicine (90847-U7-GT)



FEE SCHEDULE - Independent Psychologists

Effective: July 1, 2023

Adult or child A=Adult C=Child	Procedure Code/ Modifier	Service Description	Duration	Service Limit & Service Authorization Unit of measure	Unit Payment	Limits- per State Fiscal Year (SFY) unless otherwise indicated	Can or Cannot be extended with Service Authorization	Telemed Y/N
A/C	T1023	Behavioral Health Screen	1 screening	1 screening	\$ 46.15	No annual limit	N/A	Y
A/C	H0031	Mental Health Intake Assessment	1 Assessment	1 Assessment	\$ 471.38	No annual limit	N/A	Y
A/C	H0031-HH	Integrated Mental Health & Substance Use Intake Assessment	1 Assessment	1 Assessment	\$ 542.09	No annual limit	N/A	Y
A/C	90791	Psychiatric Assessment - Diag Eval	1 Assessment	1 Assessment	\$ 618.02	No annual limit	N/A	Y
A/C	90832	Psychotherapy, Individual	16-37 minutes	30 minutes	\$ 70.38	No annual limit	N/A	Y
A/C	90834	Psychotherapy, Individual	38-52 minutes	45 minutes	\$ 105.58	No annual limit	N/A	Y
A/C	90837	Psychotherapy, Individual	53-60 minutes	60 minutes	\$ 140.77	No annual limit	N/A	Y
A/C	90846	Psychotherapy, Family (w/o patient present)	60 minutes	60 minutes	\$ 148.07	No annual limit	N/A	Y
A/C	90846-U7	Psychotherapy, Family (w/o patient present)	30 minutes	30 minutes	\$ 74.03	No annual limit	N/A	Y
A/C	90847	Psychotherapy, Family (with patient present)	60 minutes	60 minutes	\$ 143.85	No annual limit	N/A	Y
A/C	90847-U7	Psychotherapy, Family (with patient present)	30 minutes	30 minutes	\$ 71.83	No annual limit	N/A	Y
A/C	90849	Psychotherapy, Multi-family group	60 minutes	60 minutes	\$ 57.55	No annual limit	N/A	Y
A/C	90849-U7	Psychotherapy, Multi-family group	30 minutes	30 minutes	\$ 28.76	No annual limit	N/A	Y
A/C	90853	Psychotherapy, Group	60 minutes	60 minutes	\$ 56.31	No annual limit	N/A	Y
A/C	90853-U7	Psychotherapy, Group	30 minutes	30 minutes	\$ 28.15	No annual limit	N/A	Y
A/C	99408	Screening, Brief Intervention, and Referral for Treatment (SBIRT)	15 to 30 minute episode	15 to 30 minute episode	\$ 44.19	No annual limit	N/A	Y
A/C	96105	Assessment of Aphasia	60 minutes	60 minutes	\$ 155.04	No annual limit	N/A	Y
A/C	96110	Developmental Test, Limited	60 minutes	60 minutes	\$ 13.76	No annual limit	N/A	Y
A/C	96112	Developmental Test Physician/Qualified Health Professional 1st Hour	60 minutes	60 minutes	\$ 204.92	No annual limit	N/A	Y
A/C	96113	Developmental Test Physician/Qualified Health Professional Each Additional Hour	60 minutes	60 minutes	\$ 95.68	No annual limit	N/A	Y
A/C	96116	Neurobehavioral Status Exam	60 minutes	60 minutes	\$ 151.53	No annual limit	N/A	Y
A/C	96121	Neurobehavioral Status Exam Physician/Qualified Health Professional Each Additional Hour	60 minutes	60 minutes	\$ 128.71	No annual limit	N/A	Y
A/C	96130	Psychological Test Evaluation Physician/Qualified Health Professional 1st Hour	60 minutes	60 minutes	\$ 195.22	No annual limit	N/A	Y
A/C	96131	Psychological Test Evaluation Physician/Qualified Health Professional Each Additional Hour	60 minutes	60 minutes	\$ 145.86	No annual limit	N/A	Y
A/C	96132	Neuropsychological Testing Evaluation Physician/Qualified Health Professional 1st Hour	60 minutes	60 minutes	\$ 209.63	No annual limit	N/A	Y

**FEE SCHEDULE - Independent Psychologists**  
**Effective: July 1, 2023**

Adult or child A=Adult C=Child	Procedure Code/ Modifier	Service Description	Duration	Service Limit & Service Authorization Unit of measure	Unit Payment	Limits- per State Fiscal Year (SFY) unless otherwise indicated	Can or Cannot be extended with Service Authorization	Telemed Y/N
A/C	96133	Neuropsychological Testing Evaluation Physician/Qualified Health Professional Each Additional Hour	60 minutes	60 minutes	\$ 162.28	No annual limit	N/A	Y
A/C	96136	Neuropsychological Testing Evaluation Physician/Qualified Health Professional 1st 30 minutes	30 minutes	30 minutes	\$ 66.19	No annual limit	N/A	Y
A/C	96137	Neuropsychological Testing Evaluation Physician/Qualified Health Professional Each Additional	30 minutes	30 minutes	\$ 59.36	No annual limit	N/A	Y
A/C	96146	Neuropsychological Testing Evaluation Physician/Qualified Health Professional Automated Result	1 test	1 test	\$ 2.50	No annual limit	N/A	Y

Services that are provided via telemedicine require a procedure code modifier "GT" to designate that the service was not performed in person. When applicable, providers should report multiple procedure code modifiers with a single procedure code as appropriate. For example, report both modifier U7 and GT with procedure code 90847 if the family psychotherapy with the patient present was provided for 30 minutes via telemedicine (90847-U7-GT)

FEE SCHEDULE - LCSW

Effective: July 1, 2023

Adult or child A=Adult C=Child	Procedure Code/ Modifier	Service Description	Duration	Service Limit & Service Authorization Unit of measure	Unit Payment	Limits- per State Fiscal Year (SFY) unless otherwise indicated	Can or Cannot be extended with Service Authorization	Telemed Y/N
A/C	T1023	Behavioral Health Screen	1 screening	1 screening	\$ 46.15	No annual limit	N/A	Y
A/C	H0031	Mental Health Intake Assessment	1 assessment	1 assessment	\$ 471.38	No annual limit	N/A	Y
A/C	H0031-HH	Integrated Mental Health & Substance Use Intake Assessment	1 assessment	1 assessment	\$ 542.09	No annual limit	N/A	Y
A/C	90832	Psychotherapy, Individual	16-37 minutes	30 minutes	\$ 70.38	No annual limit	N/A	Y
A/C	90834	Psychotherapy, Individual	38-52 minutes	45 minutes	\$ 105.58	No annual limit	N/A	Y
A/C	90837	Psychotherapy, Individual	53-60 minutes	60 minutes	\$ 140.77	No annual limit	N/A	Y
A/C	90846	Psychotherapy, Family (w/o patient present)	60 minutes	60 minutes	\$ 148.07	No annual limit	N/A	Y
A/C	90846-U7	Psychotherapy, Family (w/o patient present)	30 minutes	30 minutes	\$ 74.03	No annual limit	N/A	Y
A/C	90847	Psychotherapy, Family (with patient present)	60 minutes	60 minutes	\$ 143.85	No annual limit	N/A	Y
A/C	90847-U7	Psychotherapy, Family (with patient present)	30 minutes	30 minutes	\$ 71.83	No annual limit	N/A	Y
A/C	90849	Psychotherapy, Multi-family group	60 minutes	60 minutes	\$ 57.55	No annual limit	N/A	Y
A/C	90849-U7	Psychotherapy, Multi-family group	30 minutes	30 minutes	\$ 28.76	No annual limit	N/A	Y
A/C	90853	Psychotherapy, Group	60 minutes	60 minutes	\$ 56.31	No annual limit	N/A	Y
A/C	90853-U7	Psychotherapy, Group	30 minutes	30 minutes	\$ 28.15	No annual limit	N/A	Y
A/C	99408	Screening, Brief Intervention, and Referral for Treatment (SBIRT)	15 to 30 minute episode	15 to 30 minute episode	\$ 44.19	No annual limit	N/A	Y

Services that are provided via telemedicine require a procedure code modifier "GT" to designate that the service was not performed in person. When applicable, providers should report multiple procedure code modifiers with a single procedure code as appropriate. For example, report both modifier U7 and GT with procedure code 90847 if the family psychotherapy with the patient present was provided for 30 minutes via telemedicine (90847-U7-GT)

**FEE SCHEDULE - LMFT**  
**Effective: July 1, 2023**

Adult or child A=Adult C=Child	Procedure Code/ Modifier	Service Description	Duration	Service Limit & Service Authorization Unit of measure	Unit Payment	Limits- per State Fiscal Year (SFY) unless otherwise indicated	Can or Cannot be extended with Service Authorization	Telemed Y/N
A/C	T1023	Behavioral Health Screen	1 screening	1 screening	\$ 46.15	No annual limit	N/A	Y
A/C	H0031	Mental Health Intake Assessment	1 assessment	1 assessment	\$ 471.38	No annual limit	N/A	Y
A/C	H0031-HH	Integrated Mental Health & Substance Use Intake Assessment	1 assessment	1 assessment	\$ 542.09	No annual limit	N/A	Y
A/C	90832	Psychotherapy, Individual	16-37 minutes	30 minutes	\$ 70.38	No annual limit	N/A	Y
A/C	90834	Psychotherapy, Individual	38-52 minutes	45 minutes	\$ 105.58	No annual limit	N/A	Y
A/C	90837	Psychotherapy, Individual	53-60 minutes	60 minutes	\$ 140.77	No annual limit	N/A	Y
A/C	90846	Psychotherapy, Family (w/o patient present)	60 minutes	60 minutes	\$ 148.07	No annual limit	N/A	Y
A/C	90846-U7	Psychotherapy, Family (w/o patient present)	30 minutes	30 minutes	\$ 74.03	No annual limit	N/A	Y
A/C	90847	Psychotherapy, Family (with patient present)	60 minutes	60 minutes	\$ 143.85	No annual limit	N/A	Y
A/C	90847-U7	Psychotherapy, Family (with patient present)	30 minutes	30 minutes	\$ 71.83	No annual limit	N/A	Y
A/C	90849	Psychotherapy, Multi-family group	60 minutes	60 minutes	\$ 57.55	No annual limit	N/A	Y
A/C	90849-U7	Psychotherapy, Multi-family group	30 minutes	30 minutes	\$ 28.76	No annual limit	N/A	Y
A/C	90853	Psychotherapy, Group	60 minutes	60 minutes	\$ 56.31	No annual limit	N/A	Y
A/C	90853-U7	Psychotherapy, Group	30 minutes	30 minutes	\$ 28.15	No annual limit	N/A	Y
A/C	99408	Screening, Brief Intervention, and Referral for Treatment (SBIRT)	15 to 30 minute episode	15 to 30 minute episode	\$ 44.19	No annual limit	N/A	Y

Services that are provided via telemedicine require a procedure code modifier "GT" to designate that the service was not performed in person. When applicable, providers should report multiple procedure code modifiers with a single procedure code as appropriate. For example, report both modifier U7 and GT with procedure code 90847 if the family psychotherapy with the patient present was provided for 30 minutes via telemedicine (90847-U7-GT)



**FEE SCHEDULE - LPC**  
**Effective: July 1, 2023**

Adult or child A=Adult C=Child	Procedure Code/ Modifier	Service Description	Duration	Service Limit & Service Authorization Unit of measure	Unit Payment	Limits- per State Fiscal Year (SFY) unless otherwise indicated	Can or Cannot be extended with Service Authorization	Telemed Y/N
A/C	T1023	Behavioral Health Screen	1 screening	1 screening	\$ 46.15	No annual limit	N/A	Y
A/C	H0031	Mental Health Intake Assessment	1 assessment	1 assessment	\$ 471.38	No annual limit	N/A	Y
A/C	H0031-HH	Integrated Mental Health & Substance Use Intake Assessment	1 assessment	1 assessment	\$ 542.09	No annual limit	N/A	Y
A/C	90832	Psychotherapy, Individual	16-37 minutes	30 minutes	\$ 70.38	No annual limit	N/A	Y
A/C	90834	Psychotherapy, Individual	38-52 minutes	45 minutes	\$ 105.58	No annual limit	N/A	Y
A/C	90837	Psychotherapy, Individual	53-60 minutes	60 minutes	\$ 140.77	No annual limit	N/A	Y
A/C	90846	Psychotherapy, Family (w/o patient present)	60 minutes	60 minutes	\$ 148.07	No annual limit	N/A	Y
A/C	90846-U7	Psychotherapy, Family (w/o patient present)	30 minutes	30 minutes	\$ 74.03	No annual limit	N/A	Y
A/C	90847	Psychotherapy, Family (with patient present)	60 minutes	60 minutes	\$ 143.85	No annual limit	N/A	Y
A/C	90847-U7	Psychotherapy, Family (with patient present)	30 minutes	30 minutes	\$ 71.83	No annual limit	N/A	Y
A/C	90849	Psychotherapy, Multi-family group	60 minutes	60 minutes	\$ 57.55	No annual limit	N/A	Y
A/C	90849-U7	Psychotherapy, Multi-family group	30 minutes	30 minutes	\$ 28.76	No annual limit	N/A	Y
A/C	90853	Psychotherapy, Group	60 minutes	60 minutes	\$ 56.31	No annual limit	N/A	Y
A/C	90853-U7	Psychotherapy, Group	30 minutes	30 minutes	\$ 28.15	No annual limit	N/A	Y
A/C	99408	Screening, Brief Intervention, and Referral for Treatment (SBIRT)	15 to 30 minute episode	15 to 30 minute episode	\$ 44.19	No annual limit	N/A	Y

Services that are provided via telemedicine require a procedure code modifier "GT" to designate that the service was not performed in person. When applicable, providers should report multiple procedure code modifiers with a single procedure code as appropriate. For example, report both modifier U7 and GT with procedure code 90847 if the family psychotherapy with the patient present was provided for 30 minutes via telemedicine (90847-U7-GT)

Alaska Psychiatric Residential Treatment Facility Rates  
In-State Rates for Level V and VI Providers  
**Effective Date: July 1, 2023**

<b>Level</b>	<b>Rate</b>
Level V	\$802.69
Level VI	\$807.25

**Department of Health**  
**Chart of Personal Care Services and**  
**Community First Choice Services Rates**

**With 7.9% increase (3.7% inflation and 4.2% legislative adjustment) effective July 1, 2023**

Note: Regulatory payment restrictions such as payment limits, coverage limitation, or mutually exclusive restrictions are not addressed in this rate chart.

<b>The following are Medicaid payment rates for Personal Care Services</b>				
<b>Personal Care Services: 7AAC 125.010-7AAC 125.199 &amp; 7 AAC 145.500-7AAC 145.520</b>				
<b>Service</b>	<b>Service Unit</b>	<b>Service Rate</b>	<b>Procedure Code</b>	<b>Program</b>
Personal Care – Agency Based	Per 15 Minute	\$8.15	T1019	Personal Care Services
Personal Care – Consumer Directed	Per 15 Minute	\$8.15	T1019 U3	Personal Care Services

<b>The following are Medicaid payment rates for Community First Choice Services</b>				
<b>Community First Choice Services: 7 AAC 127.010-7 AAC 127.990 &amp; 7 AAC 145.500-520</b>				
<b>Service</b>	<b>Service Unit</b>	<b>Service Rate</b>	<b>Procedure Code</b>	<b>Program</b>
Personal Care- Agency Based	Per 15 Minute	\$8.15	S5125	Community First Choice
Personal Care – Consumer Directed	Per 15 Minute	\$8.15	S5125 SE	Community First Choice
Skill Building – Personal Care <sup>1</sup>	Per 15 Minute	\$10.55	S5108	Community First Choice
Chore	Per 15 Minute	\$8.53	S5120 SE	Community First Choice

<sup>1</sup> Skill Building Personal Care-Community First Choice can only be billed as noted in 7 AAC 127.040(a)(3)

Service rates on this chart will be adjusted to reflect regional differences in the cost of doing business based on the region in which the provider is located. These regional factors are based upon the designated planning regions described in Table I-1 of the *Alaska Geographic Differential Study, Dated April 30, 2009*. Rate adjustments are as follows:

Anchorage Region	No adjustment	1.00
Fairbanks	3%	1.03
Parks/Elliott/Steese Highways	No adjustment	1.00
Glennallen Region	N/A	1.00
Delta Junction/Tok Region	4%	1.04
Roadless Interior	31%	1.31
Mat-Su	N/A	1.00
Kenai Peninsula	1%	1.01
Prince William Sound	8%	1.08
Kodiak	12%	1.12
Arctic Region	48%	1.48
Bethel/Dillingham	49%	1.49
Aleutian Region	50%	1.50
Southwest Small Communities	44%	1.44
Juneau	9%	1.09
Ketchikan/Sitka	9%	1.09
Southeast Mid-Size Communities	9%	1.09
Southeast Small Communities	9%	1.09



## Chart of Waiver Services Rates Effective May 1, 2023

**The following are Medicaid payment rates for specified Waiver Services**

**Notes:** This Chart does not cover all services reimbursed by Medicaid for Waiver Services. For services not covered here, the controlling regulation should be consulted (example: Specialized Medical Equipment, Environmental Modifications, or Specialized Private Duty Nursing). Regulatory payment restrictions such as payment limits, coverage limitation, or mutually exclusive restrictions are not address in this rate chart.

**Waiver Programs**

Alaskans Living Independently	<b>ALI</b>
Adults with Physical and Developmental Disabilities	<b>APDD</b>
Children with Complex Medical Conditions	<b>CCMC</b>
Intellectual and Developmental Disabilities	<b>IDD</b>
Intellectual and Developmental Disabilities-Individualized Supports Waiver	<b>IDD-ISW</b>

**The following are Medicaid payment rates for Care Coordination: 7 AAC 130.240 & 7 AAC 145.520**

Service	Service Unit	Service Rate	Procedure Code	Waiver Program
Care Coordination On-Going	Per Month	\$337.36	T2022	ALI, APDD, CCMC, IDD
Care Coordination On-Going	Per Month	\$337.36	T2022CG	IDD-ISW

**The following are Medicaid payment rates for Residential Supported Living (RSL):  
7 AAC 130.255 & 7 AAC 145.520**

Service	Service Unit	Service Rate	Procedure Code	Waiver Program
RSL State Government Owned/Operated	Per Day	\$187.30	T2031 CG	ALI, APDD
RSL-5 or fewer beds per EIN <sup>1</sup> Non-State Gov't Owned & Operated	Per Day	\$186.96	T2031 UR	ALI, APDD
RSL-6-16 beds per EIN <sup>1</sup> Non-State Gov't Owned & Operated	Per Day	\$186.96	T2031 US	ALI, APDD
RSL-17 or more beds per EIN <sup>1</sup> Non-State Gov't Owned & Operated	Per Day	\$187.30	T2031	ALI, APDD
RSL-Acuity Add-on <sup>2</sup> Non-State Gov't Owned & Operated	Per Day	\$413.94	T2031TG	ALI, APDD

<sup>1</sup> EIN is the provider's Employer Identification Number as issued by the Internal Revenue Service. The provider's licensed assisted living beds (for all locations) must be added together to determine the code used for billing the service.

<sup>2</sup> Per 7 AAC 130.267, Acuity Add-on requires the recipient receive dedicated 1 to 1 staffing care 24 hours per day.

**The following are Medicaid payment rates for Intensive Active Treatment 7 AAC 130.275 & 7 AAC 145.520**

Service	Service Unit	Service Rate	Procedure Code	Waiver Program
Time limited intervention, treatment or therapy	Per 15 Minutes - Local <sup>3</sup>	\$27.73	H2011 CG	APDD, CCMC, IDD, IDD-ISW
Time limited intervention, treatment, or therapy	Per 15 Minutes Non-Local <sup>4</sup>	\$55.46	H2011 TN	APDD, CCMC, IDD, IDD-ISW

Note: Intensive Active Treatment does not include training of staff to address behaviors or services related to administration of care.

<sup>3</sup> Local means provider travels up to 200 miles to provide service to the recipient

<sup>4</sup> Non-local means the provider must travel greater than 200 miles to provide service to the recipient



The following are Medicaid payment rates for **Residential Habilitation:** 7 AAC 130.265 & 7 AAC 145.520

Service	Service Unit	Service Rate	Procedure Code	Waiver Program
Family Home Habilitation- Adult Must be 18 or over	Per Day	\$163.56	S5140	APDD, CCMC, IDD
Family Home Habilitation-Child Must be 17 or younger	Per Day	\$177.00	S5145	CCMC, IDD
Group Home Habilitation Must be 18 or over	Per Day	\$392.57	T2016	APDD, CCMC, IDD
Group Home Habilitation Acuity Add-on <sup>2</sup>	Per Day	\$413.94	T2016 TG	APDD, CCMC, IDD
Supported Living Habilitation Must be 18 or over	Per 15 Minutes	\$12.57	T2017	APDD, CCMC, IDD, IDD-ISW
In-Home Supports Habilitation Must be 17 or younger	Per 15 Minutes	\$12.57	T2017 U4	CCMC, IDD, IDD-ISW

<sup>2</sup> Per 7 AAC 130.267, Acuity Add-on requires the recipient receive dedicated 1 to 1 staffing care 24 hour per day.

The following are Medicaid payment rates for **Respite:** 7 AAC 130.280 & 7 AAC 145.520

Service	Service Unit	Service Rate	Procedure Code	Waiver Program
Respite	Per 15 Minutes	\$7.39	S5150	ALI, APDD, CCMC, IDD, IDD-ISW
Respite Family-Directed	Per 15 Minutes	\$6.82	S5150 U2	CCMC, IDD, IDD-ISW
Respite	Per Day	\$382.12	S5151	ALI, APDD, CCMC, IDD, IDD-ISW
Respite Family-Directed	Per Day	\$382.12	S5151 U2	CCMC, IDD, IDD-ISW

The following are Medicaid payment rates for **Nursing Oversight and Care Management:**  
7 AAC 130.235 & 7 AAC 145.520

Service	Service Unit	Service Rate	Procedure Code	Waiver Program
Nursing Oversight and Care Management	Per 15 Minutes - Local <sup>3</sup>	\$27.73	T1016 CG	CCMC, IDD
Nursing Oversight and Care Management	Per 15 Minutes - Non-Local <sup>4</sup>	\$110.21	T1016 TN	CCMC, IDD

<sup>3</sup> Local means provider travels up to 200 miles to provide service to the recipient

<sup>4</sup> Non-local means the provider must travel 200 miles or more to provide service to the recipient

The following are Medicaid payment rates for **Private Duty Nursing:** 7 AAC 130.285

Service	Service Unit	Service Rate	Procedure Code	Waiver Program
Specialized Private Duty Nursing Must be 21 or over	Per 15 Minutes Registered Nurse	Per 7 AAC 145.250	T1002 U2	ALI, APDD, IDD
Specialized Private Duty Nursing Must be 21 or over	Per 15 Minutes LPN/LVN	Per 7 AAC 145.250	T1003 U2	ALI, APDD, IDD

The following are Medicaid payment rates for **Other Waiver Services** 7 AAC 145.520 & as listed

Service	Service Unit	Service Rate	Procedure Code	Waiver Program
Day Habilitation–Individual 7 AAC 130.260	Per 15 Minutes	\$13.45	T2021	APDD, CCMC, IDD, IDD-ISW
Day Habilitation–Group 7 AAC 130.260	Per 15 Minutes	\$8.86	T2021 HQ	APDD, CCMC, IDD, IDD-ISW
Supported Employment–Individual 7 AAC 130.270	Per 15 Minutes	\$15.46	T2019	APDD, CCMC, IDD, IDD-ISW
Supported Employment–Group 7 AAC 130.270	Per 15 Minutes	\$10.02	T2019 HQ	APDD, CCMC, IDD, IDD-ISW
Pre-Employment–Individual 7 AAC 130.270	Per 15 Minutes	\$15.46	T2019 CG	APDD, CCMC, IDD, IDD-ISW
Pre-Employment–Group 7 AAC 130.270	Per 15 Minutes	\$10.02	T2019 TT	APDD, CCMC, IDD, IDD-ISW
Adult Day 7 AAC 130.250	Per Half Day <sup>5</sup>	\$99.24	S5101	ALI, APDD
Adult Day 7 AAC 130.250	Per 15 Minutes	\$6.91	S5100	ALI, APDD
Meals–Home Delivered 7 AAC 130.295	Per Meal	\$26.97	S5170	ALI, APDD, CCMC, IDD
Meals–Congregate 7 AAC 130.295	Per Meal	\$26.21	T2025	ALI, APDD, CCMC, IDD
Transportation 7 AAC 130.290	Per Trip <u>up to 20 miles-</u> Recipient	\$19.27	T2003	ALI, APDD, CCMC, IDD, IDD-ISW
Transportation 7 AAC 130.290	Per Trip <u>greater than</u> <u>20 miles</u> Recipient	\$38.54	T2003 TN	ALI, APDD, CCMC, IDD, IDD-ISW
Transportation 7 AAC 130.290	Per Trip Attendant or Escort	\$19.27	T2001 SE	ALI, APDD, CCMC, IDD, IDD-ISW
Transportation Paratransit Provider <sup>6</sup> 7 AAC 130.290	Per Trip Recipient	\$38.54	T2003 CG	ALI, APDD, CCMC, IDD, IDD-ISW

<sup>5</sup> Service period must be at least one hour with coverage up to four hours per day. This service unit is limited to one unit per day. Adult Day services in excess of one Per Half Day unit must be billed using the 15 minute service unit.

<sup>6</sup> Paratransit providers defined under 49 CFR 37 Subpart F

Service rates on this chart will be adjusted to reflect regional differences in the cost of doing business based on the region in which the provider is located. These regional factors are based upon the designated planning regions described in Table I-1 of the *Alaska Geographic Differential Study, Dated April 30, 2009*. Rate adjustments are as follows:

Anchorage Region	No adjustment	1.00
Fairbanks	3%	1.03
Parks/Elliott/Steese Highways	No adjustment	1.00
Glennallen Region	N/A	1.00
Delta Junction/Tok Region	4%	1.04
Roadless Interior	31%	1.31
Mat-Su	N/A	1.00
Kenai Peninsula	1%	1.01
Prince William Sound	8%	1.08
Kodiak	12%	1.12
Arctic Region	48%	1.48
Bethel/Dillingham	49%	1.49
Aleutian Region	50%	1.50
Southwest Small Communities	44%	1.44
Juneau	9%	1.09
Ketchikan/Sitka	9%	1.09
Southeast Mid-Size Communities	9%	1.09
Southeast Small Communities	9%	1.09

State of Alaska  
Department of Health  
Division of Public Assistance

**ADULT PUBLIC ASSISTANCE (APA) NEED AND MAXIMUM PAYMENT STANDARDS**

HOUSEHOLD TYPE	1/1/2021 NEED STD/ MAX PYMT***	1/1/2022 NEED STD/ MAX PYMT***	1/1/2023 NEED STD/ MAX PYMT***	1/1/2024 NEED STD/ MAX PYMT***
A Individual (A1E)	\$1,156	\$1,203	\$1,276	\$1,305
B Individual (B1E)	\$897	\$929	\$977	\$997
ALH* Individual (H1E)	\$894	\$941	\$1,014	\$1,043
A Couple, 1 Elig. (A2S)	\$1,315	\$1,362	\$1,435	\$1,464
B Couple, 1 Elig. (B2S)	\$993	\$1,025	\$1,073	\$1,093
ALH* Couple, 1 Elig. (H2S)	\$894	\$941	\$1,014	\$1,043
A Couple, Both Elig. (A2C)	\$1,719	\$1,789	\$1,899	\$1,943
B Couple, Both Elig. (B2C)	\$1,337	\$1,384	\$1,457	\$1,486
ALH* Couple, Both Elig. (H2C)	\$1,391	\$1,461	\$1,571	\$1,615
Eligible Institution (NHP)	\$200	\$200	\$200	\$200
Nursing Home Regular (NHR)	\$1,474	\$1,561	\$1,697	\$1,751
NH 300%** (NH3)	\$2,382	\$2,523	\$2,742	\$2,829
Waiver in Assisted Living (ASL)	\$2,382	\$2,523	\$2,742	\$2,829
HCW Waiver (WAV)	\$2,382	\$2,523	\$2,742	\$2,829
Disabled Kids at Home (DKH)	\$2,382	\$2,523	\$2,742	\$2,829

\*ALH means living in an assisted living home

\*\* The Nursing Home Special LTC Income (300%) Standard that was frozen in 2003 was again tied to the prevailing SSI income standard beginning September 1, 2010

\*\*\*The Need Standard and Payment Standard are the same beginning January 1, 2020. (The need standard is displayed as "APA payment standard" on the APAS screen in EIS)

**SUPPLEMENTAL SECURITY INCOME (SSI) ELIGIBILITY/PAYMENT STANDARDS**

SSI COLA	1.3%	5.9%	8.7%	3.2%
HOUSEHOLD TYPE	1/1/2021	1/1/2022	1/1/2023	1/1/2024
A Individual	\$794	\$841	\$914	\$943
B Individual	\$529.34	\$560.67	609.34	\$628.67
A Couple, Both Elig.	\$1,191	\$1,261	\$1,371	\$1,415
B Couple, Both Elig.	\$794.00	\$841	\$914	\$943.34
D Eligible Institution	\$30	\$30	\$30	\$30

**2023 - 2024 FEDERAL POVERTY GUIDELINES FOR ALASKA**

Effective 4/1/2023

Family size	1	2	3	4	5	6	7	8	Ea. Additional
Monthly Income	\$1,518	\$2,054	\$2,590	\$3,125	\$3,661	\$4,197	\$4,733	\$5,269	\$536
Annual Income	\$18,210	\$24,640	\$31,070	\$37,500	\$43,930	\$50,360	\$56,790	\$63,220	\$6,430

Revised 12/23



**Sherrette A. Funn,**

*Paperwork Reduction Act Reports Clearance Officer, Office of the Secretary.*

[FR Doc. 2023–27868 Filed 12–18–23; 8:45 am]

**BILLING CODE 4150–45–P**

## DEPARTMENT OF HEALTH AND HUMAN SERVICES

### Indian Health Service

**RIN 0917–AA23**

#### Reimbursement Rates for Calendar Year 2024

**AGENCY:** Indian Health Service, HHS.

**ACTION:** Notice.

**SUMMARY:** Notice is provided that the Director of the Indian Health Service (IHS) has approved the rates for inpatient and outpatient medical care provided by the IHS facilities for Calendar Year 2024.

#### SUPPLEMENTARY INFORMATION:

##### Background

The Director of the Indian Health Service (IHS), under the authority of sections 321(a) and 322(b) of the Public Health Service Act (42 U.S.C. 248 and 249(b)), Public Law 83–568 (42 U.S.C. 2001(a)), and the Indian Health Care Improvement Act (25 U.S.C. 1601 *et seq.*), has approved the following rates for inpatient and outpatient medical care provided by IHS facilities for Calendar Year 2024 for Medicare and Medicaid beneficiaries, beneficiaries of other federal programs, and for recoveries under the Federal Medical Care Recovery Act (42 U.S.C. 2651–2653). The inpatient rates for Medicare Part A are excluded from the table below. That is because Medicare inpatient payments for IHS hospital facilities are made based on the prospective payment system, or (when IHS facilities are designated as Medicare Critical Access Hospitals) on a reasonable cost basis. Since the inpatient per diem rates set forth below do not include all physician services and practitioner services, additional payment shall be available to the extent that those services are provided.

*Inpatient Hospital Per Diem Rate (Excludes Physician/Practitioner Services)*

Calendar Year 2024

Lower 48 States: \$5,083.  
Alaska: \$4,326.

*Outpatient per Visit Rate (Excluding Medicare)*

Calendar Year 2024

Lower 48 States: \$719.  
Alaska: \$1,060.

*Outpatient per Visit Rate (Medicare)*

Calendar Year 2024

Lower 48 States: \$667.  
Alaska: \$961.

*Medicare Part B Inpatient Ancillary Per Diem Rate*

Calendar Year 2024

Lower 48 States: \$963.  
Alaska: \$1,341.

*Outpatient Surgery Rate (Medicare)*

Established Medicare rates for freestanding Ambulatory Surgery Centers.

Effective Date for Calendar Year 2024 Rates

Consistent with previous annual rate revisions, the Calendar Year 2024 rates will be effective for services provided on or after January 1, 2024, to the extent consistent with payment authorities, including the applicable Medicaid State plan.

**Roselyn Tso,**

*Director, Indian Health Service.*

[FR Doc. 2023–27815 Filed 12–18–23; 8:45 am]

**BILLING CODE 4166–14–P**

## DEPARTMENT OF HOMELAND SECURITY

### Coast Guard

[Docket Number: USCG–2023–0922]

#### Designation of the New England Commission of Higher Education as a Designated Entity and Appointment of Dr. Amy Donahue as a Member of the Commission

**AGENCY:** Coast Guard, Department of Homeland Security (DHS).

**ACTION:** Notice.

**SUMMARY:** The Coast Guard announces the designation of the New England Commission of Higher Education (NECHE) as a designated non-federal entity for the purposes of participation in its management by an authorized Coast Guard employee. Dr. Amy Donahue, the Provost of the Coast Guard Academy, has been authorized to serve as a member of NECHE to provide oversight of, advice to, and coordination with, NECHE. Dr. Donahue will not participate in the day-to-day operations of NECHE.

**DATES:** The designation and authorization are effective on November 21, 2023.

**ADDRESSES:** To view documents mentioned in this preamble as being available in the docket, go to <https://www.regulations.gov>, type USCG–2023–0922 in the search box and click “Search.” Next, in the Document Type column, select “Supporting & Related Material.”

**FOR FURTHER INFORMATION CONTACT:** If you have questions on this notice, call or email Commander Jeffrey G. Janaro, Coast Guard Academy, telephone 860–444–8255, email [jeff.g.janaro@uscg.mil](mailto:jeff.g.janaro@uscg.mil).

**SUPPLEMENTARY INFORMATION:** The Coast Guard announces the designation of the New England Commission of Higher Education (NECHE) as a “designated entity” under 10 U.S.C. 1589 and 1033. The Coast Guard also announces the participation of the Coast Guard Academy Provost Dr. Amy Donahue in the management of the entity as a Commissioner. Sections 1589 and 1033 allow the Secretary of the Department of Homeland Security to specify certain non-federal entities as “designated entities” in which a member of the armed forces or a civilian employee may be authorized to participate in a specific capacity. The Secretary delegated this authority to the Commandant of the Coast Guard through the Department of Homeland Security Delegation No. 00170.1, Revision No. 01.3 (paragraph II.14).

A “designated entity” must meet the requirements of 10 U.S.C. 1033. In relevant part, section 1033 requires an entity to be a non-profit organization and perform one of the statutorily enumerated functions, including accreditation of service academies and other schools of the armed forces. NECHE is a voluntary non-government association that provides accreditation to the U.S. Coast Guard Academy. Therefore, NECHE is an entity that may be designated under 10 U.S.C. 1033 and, in turn, 10 U.S.C. 1589.

Section 1589 also allows the Secretary concerned to authorize an employee, including a civilian officer, to participate, without compensation, in the management of a designated entity for the purposes of oversight, advice to, and coordination with that designated entity. An employee’s participation may not extend to the day to day operations of the entity. The Coast Guard Academy announces the authorization of Dr. Amy Donahue, the Provost of the Coast Guard Academy, to participate in the management of NECHE within limits of 10 U.S.C. 1033 and 10 U.S.C. 1589. Specifically, and in



**McKINLEY RESEARCH**  
GROUP, LLC

# Trust

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Alaska Mental Health  
Trust Authority

3800 Centerpoint Drive, Suite 1100 • Anchorage, AK 99503 • (907) 274-3200  
801 West 10th Street, Suite 100B • Juneau, AK 99801 • (907) 586-6126

[info@mckinleyresearch.com](mailto:info@mckinleyresearch.com) • [mckinleyresearch.com](http://mckinleyresearch.com)

