Statewide Emergency Department Needs Assessment for Addressing Alaska's Opioid Epidemic

Part One: Needs Assessment

PREPARED FOR:

State of Alaska Department of Health & Social Services

April 2020

McDowell GROUP

Statewide Emergency Department Needs Assessment for Addressing Alaska's Opioid Epidemic

Part One: Needs Assessment

PREPARED FOR:

State of Alaska Department of Health & Social Services

April 2020

McDowell Group Anchorage Office
1400 W. Benson Blvd., Suite 510
Anchorage, Alaska 99503

McDowell Group Juneau Office
9360 Glacier Highway, Suite 201
Juneau, Alaska 99801

Website: www.mcdowellgroup.net

Table of Contents

List of Tables

List of Figures

Executive Summary

States throughout the nation are working collaboratively across public, private, and tribal sectors to implement prevention and treatment interventions to address a nationwide opioid epidemic. The State of Alaska (SOA) can help integrate interventions using a socioecological approach that assesses existing efforts, statewide needs, and potential supports within interpersonal, organizational, and community levels. State policy interventions, support for community collaboration, technical assistance to organizations, and training are possible areas for leadership and support. To identify the most efficacious potential actions, the state sought a formal needs assessment.

In October 2019 Alaska's Department of Health and Social Services, Division of Public Health (DHSS/DPH) Office of Substance Misuse and Addiction Prevention (OSMAP) contracted with McDowell Group to conduct a statewide Emergency Department (ED) needs assessment. The multi-faceted scope of work included four primary focal areas: development or identification of an ED-specific opioid response framework, collection of quantitative and qualitative data, data analysis and development of recommendations, and comprehensive legislative and policy review.

Strengths

Alaska brings many strengths and resources to its opioid crisis, including those specifically related to ED practice and care.

Operational Context

- EDs provide emergency medical care to Alaskans throughout the state in a variety of organizational, regional, cultural, resource, and clinical contexts.
- Among Alaska's tribal health, public, private, and military health systems, 24 hospitals have dedicated EDs including 14 critical-access hospitals, four rural or sole community hospitals, four acute-care hospitals, and two military hospitals.
- Several EDs collaborate closely with the Department of Corrections (DOC) to provide emergency care and support to Alaska's correctional facilities.
- Multiple EDs deliver emergency medical care and linked support to the state's 150+ Community Health Centers in remote and isolated locales.

Utilization and Cost

- Based on the reported data, opioid-related emergency department discharges account for less than one percent of all emergency department discharges. Between 2016 and 2018, there were an annual average of 2,088 opioid-related discharges from EDs in Alaska and 307,755 total ED discharges.
- Approximately two percent of Medicaid beneficiaries (n=4,521) were diagnosed with opioid disorder or poisoning in state fiscal year 2018. Of those beneficiaries, 2,662 visited the emergency department.
- Medicaid spending for emergency department visits among beneficiaries with a recent history of opioid disorder or poisoning accounted for less than one percent of total Medicaid spending in state fiscal

year 2018. Emergency department costs for beneficiaries with history of opioid disorder or poisoning accounted for just $4.3 million of the $2 billion total Medicaid spending in SFY 2018.

ED Opioid Response Framework

Upstream Prevention

- Many EDs are trained in trauma-informed or relationship-based approaches to care.
- A few hospitals have prioritized, through institutional policy and practice, a patient-centered approach to care.
- Some providers report feeling increasingly positive and optimistic about the potential of partnering with patients.

Reducing Substance Misuse & Addiction

- Many hospitals and EDs continue to explore, develop, and use non-opioid pain management resources.
- Prescription Drug Monitoring Program (PDMP) use has improved among providers whose Electronic Health Records (EHR) system is well-integrated with the PDMP and where PDMP access is streamlined.
- Most EDs have safe prescribing policies and/or protocols. Much work is being done to monitor individual prescribing practices. Most, if not all EDs, monitor and/or review individual prescribing practices. A few EDs have advanced processes for systematic monitoring and reporting indicators or measures of prescriptive practice.
- There has been movement in some EDs to provide more information to the patient at discharge, including availability of outpatient and community services, and dangers of opioid usage.
- Most EDs have policies or protocols that mitigate the opportunity for opioid diversion.

Harm Reduction

- A few EDs have a naloxone distribution policy specific to ED services and patient care.
- EDs have protocols, processes, and resources in place to screen for human immunodeficiency virus (HIV) and hepatitis C virus (HCV).
- A few EDs have taken steps to reduce stigma, bias and harm when working with patients using substances, including opioids
- Needle exchange services are available in Anchorage, Juneau, Fairbanks, and Homer; EDs provide linkage to these services.

Screening, Referral, Treatment, & Overall Care Coordination

- Several EDs are well-positioned to provide timely treatment and effectively coordinate transitional care.
- The number of x-waivered providers — those permitted to prescribe the opioid-treatment drug Suboxone (buprenorphine/naloxone) — is gradually increasing statewide. X-waivered training is easy to obtain. Some EDs use Medication Assisted Treatment (MAT) in the ED and bridge care to community-based MAT providers.
- Several EDs in Alaska have implemented Screening, Brief Intervention, and Referral Treatment (SBIRT) as a standard screening protocol; at least one other has active plans to do so soon.
- A few EDs have established ready access to addiction medicine specialists, either onsite or via telemedicine.

- Overall, ED providers remain interested in ongoing education to identify and treat addiction, provide appropriate pain management, and facilitate recovery.

Relapse Prevention

- Overall, EDs report stable staffing among ED providers with little reliance on locum tenens. Stability of staffing allows providers to develop relationships with patients and may be a factor in relapse prevention.
- Many Alaska EDs operate in small communities where providers report knowledge of patient substance abuse history, including opioid dependence or addiction.

Surveillance & Information Exchange

- Alaska has invested in foundational data collection and information exchange systems such as the Health Facilities Data Reporting Program (HFDR), PDMP and Emergency Department Information Exchange (EDIE). Integration of these systems is key to enhancing care coordination and improving quality of care.

Challenges

ED Opioid Response Framework

Upstream Prevention

- There is marked variation and inconsistency among staff attitudes and individual clinical attitudes toward addiction, trauma-informed care, and the ED's role in meeting the needs of opioid-impacted patients.
- Some EDs have inconsistency in how providers and nursing staff relate to patients with opioid use disorder (OUD). This can impact departmental culture and cause departmental divide in approaches to care.
- Findings reflect a prevailing attitude against the ED doing extensive psychosocial screening, including adverse childhood experiences (ACEs) and trauma screening.

Reducing Substance Misuse & Addiction

- Patient access to certain methods of non-opioid pain management may be limited by cost, reimbursement, and transportation.
- Providers working with poorly integrated PDMP-EHR platforms consistently identify this as a significant barrier to PDMP use.
- There is marked variation among providers in the how useful or important they consider the PDMP. Consistent PDMP use appears to be influenced by multiple factors, including provider pre-existing knowledge of most patients.
- Many hospitals do not have the internal data collection and reporting capacity to formally monitor specific measures associated with prescribing practices.

Harm Reduction

- Most EDs do not have a policy regarding naloxone distribution. There is reported ED staff cultural or ethical bias against distribution of naloxone when other life-saving resources are not provided to those in need (i.e. take-home insulin to poorly managed diabetics).
- Most EDs report ongoing stigma associated with a bias towards patients with substance use disorders, including OUD.
- Community syringe program resources vary and are limited statewide.

Screening, Referral, Treatment, & Overall Care Coordination

- Organizations and providers have varied commitment to and capacity to provide MAT, in part because Alaska communities have not been uniformly impacted by the opioid epidemic. Organizations acknowledge their limitations in providing therapeutic programming critical to patient treatment. A few rural-based medical directors expressed significant challenges and difficulties working with Anchorage-based (or other urban) MAT programs.
- Access to outpatient MAT providers presents a unique challenge in many rural communities. In most instances, the healthcare organization operating the ED also operates all outpatient services. In organizations that have not elected to implement MAT, this effectively results in no local outpatient MAT providers.
- Organization-wide approaches to effectively managing the multi-disciplinary aspects of MAT, associated continuity of care, and changing corporate culture are time consuming and costly.
- Most EDs describe their referral practices as haphazard and random. There is dedicated effort to coordinate care with primary care and behavioral health providers. However, these efforts are not systemic and consistent.
- Most EDs do not standardize substance use screening; findings indicate OUD-specific screening rarely occurs.

Relapse Prevention

- Most EDs do not screen for previous opioid dependence or addiction, relying on patient self-disclosure.
- ED providers report challenges in obtaining accurate or complete medication information on patients who are in outpatient MAT programs. This information is not available in the PDMP.
- Underlying mental illness contributes to relapse. Findings suggests a statewide need for more mental health resources and quick access to mental health care.

Surveillance & Information Exchange

- ED providers are likely to diagnostically code for opioid withdrawal or opioid-related overdose but under-code for OUD.
- While the HFDR Program compiles data, analysis and standard reporting are limited. Not all facilities consistently meet state data submission requirements.
- Very few EDs statewide have developed a core set of meaningful indicators making EDs better and more efficient to support improved outcomes, including those associated with OUD.
- Data analytics sophistication within EDs varies based on organizational capacity and data systems infrastructure. This limits the overall potential and utility associated with established measures.

ED Opioid Response Framework

The ED Opioid Response Framework incorporates strategies that are equitable, feasible, and sustainable in most Alaska EDs. Reflecting six strategic public health components, the framework design uses a two-phased approach to address gaps demonstrated in the needs assessment. These phases reflect common practice, policy support, linkages to available community services, population size and density served, organizational capacity, and ED culture.

The first phase identifies **core strategies** applicable within most ED settings in Alaska. The second phase identifies **enhanced strategies** for EDs with expanded access to resources, advanced system capacities, and organizational support for continuous quality improvement efforts.

Table 1. ED Opioid Response Framework Core and Enhanced Strategies

ED protocols, organizational policies, and essential infrastructure	Framework Component
Core Strategies	
Trauma-informed approach to care	Upstream Prevention
Availability of non-opioid pain management	Reducing Substance Misuse & Addiction
PDMP utilization	
PDMP-EHR integration	
"Safe prescribing" policies	
Prescribing practices	
Patient, family & caregiver education	
Opioid diversion policy	
Naloxone distribution policy	Harm Reduction
HIV/HCV screening: suspected IV drug use	
Buprenorphine-waivered providers: ED & community	Screening, Treatment Referral & Substance Use Care Coordination
Screening, referral, treatment & substance use care coordination processes	
Provider training & education (addiction/treatment, pain management, recovery)	
Care coordination with primary care physician, behavioral health providers, DOC	
Screening for previous dependence or addiction	Relapse Prevention
Provider training: OUD coding	Surveillance & Information Exchange
HFDR data submission	
Enhanced Strategies	
ACEs screening for trauma	Upstream Prevention
Community syringe program	Harm Reduction
Addressing stigma	
ED care coordination: Children's Services	
Availability of outpatient medication providers for OUD	Screening, Treatment Referral & Substance Use Care Coordination
Addiction medicine specialist consultation access	
Community opioid treatment program and providers	
Hospital or community bridge programs	
Linkages to care (peer support)	
Recovery & supports	Relapse Prevention
Development of ED process measures & data reporting	Surveillance & Information Exchange

ED Snapshots: What's Working Well in Alaska

EDs throughout Alaska are working to address the consequences of opioid misuse and provide quality care to those impacted. Highlighted below are snapshot examples of collaborative approaches and effective strategies.

Changing ED Culture, Practice, and Connections (Bartlett Regional Hospital)

Table 2. Bartlett Regional Hospital: Changing ED Culture, Practice, and Connections

Overview	Approaches and Strategies
The ED at Juneau's Bartlett Regional Hospital has dedicated resources to changing ED culture and capacity and advancing patient-centered care to better serve patients impacted by opioid use. The ED has prioritized networking with community resources and actively bridging to the next steps of care.	• **Patient-centered care:** Organizational priority to advance patient-centered approaches to care throughout the hospital, including the ED. *"Meeting patients in the moment with respect."* • **Expanded ED staffing:** Registered nurse case manager and social worker dedicated to case management and care coordination. Work directly with patients to educate, assess treatment readiness, facilitate next steps of care, and provide follow-up. • **OUD identification:** Engaging in meaningful patient conversation to identify OUD; not relying solely on PDMP to provide this information. • **MAT:** ED providers positioned to start or continue MAT including buprenorphine, if appropriate. • **Individualized harm reduction education:** One-to-one conversations on useful harm reduction strategies and direct links to services (i.e. syringe exchange program). Narcan provided at bedside. • **MVP program:** Targeted monitoring of patients frequently seen in the ED. Includes tracking engagement in other services post-discharge. • **Network of care:** Engagement with greater medical community to create a substantial network of community-based x-waivered providers for continuity of care. • **Bridging care:** Operational premise emphasizes bringing patients and resources together. • **Making it local**: ED engaged with local opioid taskforce, coalitions, and workgroups to further inform the culture of care, foster community resource relationships, and develop local resources.

Improving Prescribing Practices (Norton Sound Regional Hospital)

Table 3. Norton Sound Regional Hospital: Monitoring and Improving ED Provider Prescribing Practices

Overview	Approaches and Strategies
Nome's Norton Sound Regional Hospital ED has a robust approach to monitoring and improving provider prescribing practices. Opioid prescriptions are down about 75% from previous levels.	• **Proactive assessment:** Organizational assessment of opioid prescribing practices before apex of opioid epidemic (2015). • **Active controlled-substance stewardship team (CSST):** Multi-disciplinary team (ED, pharmacy, behavioral health, physical therapy, psychiatry, neurology, etc.) reviews prescribing and polypharmacy trends. • **ED policies and protocols:** Including *CDC Guidelines for Prescribing Opioids for Chronic Pain.* • **Ongoing Professional Practice Evaluation (OPPE):** Twice-yearly review of provider prescribing patterns, PDMP usage, and opioid use agreement. • **Pharmacy oversight and involvement:** Pharmacy routinely performs chart audits, alerts CSST of concerns. • **Individual provider education:** Includes HealthStream online narcotics training and Alaska continuing medical education (CME) requirements. • **Community education:** Change long-standing expectations of prescriptive outcomes (i.e., high quantity of pills)**.**

Improving Collaboration with Department of Corrections

Table 4. Alaska EDs: Improving collaboration with Department of Corrections

Overview	Approaches and Strategies
Alaska's Department of Corrections (DOC) serves an ever-changing and dynamic population with concentrated health problems including problems with OUD. As recently as five years ago, 25% of DOC deaths were from OUD. While no policy mandates ED coordination with DOC, Alaska's EDs and DOC are collaborating to better meet the substance use treatment needs of individuals incarcerated or held on pre-trial basis. DOC changes in policy and practice have advanced care coordination with EDs and significantly reduced overdose deaths while incarcerated. There is a concerted effort to provide a compendium of care, including MAT for those with OUD. EDs meet a critical need in this treatment effort.	• **Strengthened relationships:** Increased intentional interface with EDs in communities with major DOC facility. • **Cross-sector education:** Teams from major EDs educated on DOC's approach to care for incarcerated individuals with OUD and MAT re-entry program protocols. • **Improved practice:** Ongoing collaboration between EDs and DOC to identify and improve intersecting patient care and processes. • **Expanded MAT and continuity of care:** EDs provide critical OUD treatment support to DOC. EDs are positioned to meet treatment needs at key times, such as during DOC's intake and risk-assessment process. • **MAT induction:** ED may provide starting course of buprenorphine. While DOC providers can administer buprenorphine, DOC does not stock the medication. Treatment is continued via a network of community-based MAT providers. • **Prompt treatment for pregnant women:** EDs are positioned to initiate prompt MAT for those most at risk, including pregnant women. • **Uninterrupted treatment:** For newly incarcerated individuals on MAT, EDs can provide MAT to maintain treatment continuity.

Key Terms, Acronyms & Abbreviations

Key Terms

Working definitions of key terms used in this assessment follow:

Equitable	Fully and equally applicable with respect to culture, demographics, social standing, race, or ethnicity
Feasible	Capable of being realized; doable and achievable
Opioids	Substances that act on opioid receptors to produce morphine-like effects; medically used primarily for pain relief
Provider	Healthcare professional recognized under Alaska Statute with medical practice and prescriptive authority; includes medical or osteopathic doctors, nurse practitioners, and physician assistants
Sustainable	Maintainable regarding cost or availability
X-waiver	DATA 2000 waiver permitting qualified providers to treat opioid addiction with Schedule III, IV, and V opioid medications

Acronyms and Abbreviations

ACEP	American College of Emergency Physicians, Alaska Chapter
ACEs	Adverse Childhood Experiences
ASHNHA	Alaska State Hospital & Nursing Home Association
CCS	Clinical Classifications Software
CDC	Centers for Disease Control and Prevention
CMS	Centers for Medicare & Medicaid Services
DHSS	Alaska Department of Health & Social Services
DOC	Alaska Department of Corrections
DPH	Division of Public Health
ED	Emergency Department
EDIE	Emergency Department Information Exchange
EHR	Electronic Health Record

HCV	Hepatitis C Virus
HFDR	Health Facilities Data Reporting Program
HIE	Health Information Exchange
HIV	Human Immunodeficiency Virus
ICD	International Classification of Diseases
MAT	Medication Assisted Treatment
OSMAP	Office of Substance Misuse and Addiction Prevention
OUD	Opioid Use Disorder
SBIRT	Screening, Brief Intervention, Referral to Treatment
SOA	State of Alaska

Background

The current opioid epidemic is the deadliest drug crisis in American history. It has taken a toll on people from all walks of life; no area of the United States is exempt. Nationwide agencies, families, and friends continue an ongoing fight with opioid overdoses and other harms from using opioids. Although the crisis is national, states bear the brunt of its burden. States pay the enormous expenses of untreated addiction in costs related to criminal justice, health care, education, social welfare, public safety, and lost productivity.

When people experience complications or overdose from opioid and other substance misuse, the emergency department (ED) may be the only care system they encounter during their episode. A recent study estimates there were 267,020 ED visits annually between 2016 and 2017 for prescription opioid harms.[1] The study found that in addition to overdose, one-third of ED visits related to cardiorespiratory failure, altered mental status, and gastrointestinal effects demonstrated complications from opioid use. A recent Premier analysis indicates patients who experience an overdose resulted in $1.94 billion in annual hospital costs across 647 healthcare facilities nationwide. ED visits made up the brunt of these costs, with 100,000 opioid overdose patients and 430,000 total visits.[2] EDs are at the front lines of opioid misuse and addiction.

States throughout the nation are working collaboratively across public, private, and tribal sectors to implement prevention and treatment interventions to address the opioid epidemic. The Alaska Office of Substance Misuse and Addiction Prevention (OSMAP), established in July 2017, uses a public health approach to prevent and reduce substance use disorders, prevent harms caused by substance use, and support community-based activities across Alaska. Current OSMAP activities focus on opioid misuse and addition prevention and data and evaluation – including program and system changes to mitigate harms.

The principles of public health provide a useful framework for understanding and addressing causes and consequences of substance misuse and addiction, including opioid misuse. Within this framework, multiple interventions can occur across the continuum of care, including care provided in the ED. National frameworks describe and support such interventions.

The State of Alaska (SOA) is positioned to help through state policy interventions, support for community collaboration, technical assistance to organizations, and training. To identify the most efficacious potential actions, the state sought a formal needs assessment. In September 2019 Alaska's Department of Health and Social Services, Division of Public Health (DHSS/DPH) issued an informal request for proposals for a *Statewide Emergency Department Needs Assessment for Addressing Alaska's Opioid Epidemic.*

[1] Lovegrove, M., Dowell, D., Geller, A., Goring, S., Rose, K., …Budntz, D. (2019). "US emergency department visits for acute harms from prescription opioid use, 2016-2017." American Journal of Public Health, 109: 784-791.
[2] Premier Inc. (2019). "Opioid overdoses costing US hospitals an estimated $11 billion annually". Retrieved 28 Aug 2019 from: https://www.premierinc.com/newsroom/press-releases/opioidoverdoses-costing-u-s-hospitals-an-estimated-11-billion-annually

Purpose

The overarching purpose of this statewide ED needs assessment is to better understand the needs within EDs as part of an effective statewide response to Alaska's opioid epidemic. Using a socioecological lens, the needs assessment seeks to identify equitable, feasible, and sustainable methods to support EDs and those using the ED. The needs assessment will:

- Identify policies from other states that could be implemented in Alaska,
- Identify existing effective organizational policies and procedures to support EDs and provider groups, and
- Assess interventions occurring between provider, patient, and community organizations.

The state's underlying vision for this assessment includes, but is not limited to, the following potential products:

- An Alaska Emergency Department guide for EDs and provider groups that will be used by existing academic detailers to inform EDS across Alaska
- Introduction of policies to support emergency departments in their response to opioid misuse and addiction
- A sub-action plan to the Statewide Opioid Action Plan for addressing opioids within the emergency medical system.
- Guidance for funding decisions.

Scope of Work

In October 2019, DHSS contracted with McDowell Group to conduct a statewide hospital-based ED assessment, not including community-based emergency medical services.

The multi-faceted scope of work included four primary focal areas:

1. ED Response Framework

Identification of an ED-specific operational opioid response framework that considers strategies aligned with six pre-identified core components:

- *Upstream prevention*
- *Reducing substance misuse and addiction*
- *Harm reduction*
- *Screening, brief intervention, referral, treatment and overall substance use care coordination*
- *Relapse prevention*
- *Surveillance and information exchange*

2. Evaluation of Data Collection and Use

Evaluation of indicators designed to monitor, inform, and support evaluation of a recommended framework. Using qualitative and quantitative methods, data measures currently or ideally collected from a spectrum of key stakeholders, health systems, and geographical regions were reviewed. Criteria considered were relevance, plausibility (if not currently collected), consistency, sustainability, and meaningful purpose for assessing existing efforts, strengths (i.e. what is working), barriers (including statutory and regulatory), and opportunities (for instance, cost-savings around care coordination) within ED settings.

3. Data Analysis and Report

Comprehensive analysis of quantitative and qualitive needs assessment data and reporting on relevant findings and implications. Data indicators designed to monitor and evaluate a recommended ED response and examples of EDs with effective interventions along the identified framework are recommended.

4. Policy Review

Policy analysis pertaining to opioid misuse and addiction prevention and treatment response related to ED utilization. Descriptions of existing legislation and policy across the United States plus recommendation for policies that may be implemented within Alaska's context are presented.

Methodology

This study identified ED needs and assets through comprehensive evaluation of information from key stakeholders and state data. The assessment consisted of:

1. Primary research stakeholder engagement through key stakeholder interviews and facilitated group discussions.
2. Project team engagement at relevant statewide professional conferences and topic-related meetings.
3. Secondary research through data collection and analysis of Alaska ED discharges, demographics, diagnosis, charges and costs, and other indicators.

Primary Research

McDowell Group conducted key stakeholder interviews and facilitated discussion groups with subject matter experts over a five-month period from November 2019 through March 2020. The main purpose of this effort was to assess existing efforts, bright spots, challenges, and opportunities within ED settings – essentially telling the story of what is currently happening in Alaska's EDs.

To obtain statewide perspectives, McDowell Group collaborated with OSMAP to identify key stakeholders and organizational entities in the Alaska Tribal Health System, public and private health systems, the military, and Alaska Department of Corrections (DOC). McDowell Group received input from 59 individuals with varied roles and areas of expertise from urban, rural and frontier settings.

Figure 1. Stakeholder Location Map

Source: McDowell Group

KEY STAKEHOLDER INTERVIEWS

One-on-one interviews were typically conducted by phone and ranged in length from 30 minutes to one hour.

Recognizing the critical role of information and data systems, initial interviews focused on subject-matter experts in Alaska's health information technology integration and health information and policy. This purpose of this approach was, in part, to gather information on data collection systems, further inform secondary data requests, and guide further development of an executive interview protocol. Information and insights were collected from 15 individuals during the first phase of interviews.

The second, broader phase of stakeholder interviews focused on ED providers, nurse case managers and nurses, care coordinators, pharmacists, prevention and treatment managers, behavioral health providers, social workers, and administrative leaders. Also included were individuals from DOC, DHSS, Alaska State Hospital & Nursing Home Association (ASHNHA), and American College of Emergency Physicians (ACEP) Alaska Chapter. McDowell Group worked closely with OSMAP to develop an executive interview protocol and meaningful questions targeted to meet the project objectives. Twenty-five individuals were interviewed during this phase.

The interview protocol is found in Appendix A and a list of interviewees in Appendix B.

FACILITATED GROUP DISCUSSIONS

Three facilitated in-person discussion groups were held during a three-month period from December 2019 through February 2020. The discussion with the Acute Behavioral Health Workgroup also allowed telephonic participants. Discussions typically lasted one hour; the project team was available for additional input following each facilitated discussion.

- *ED Clinical Management Team:* Comprised of eight individuals including clinical nursing director of emergency services, a charge nurse, an ED clinical manager, pharmacists, and licensed clinical social workers/case managers, providing care within the ED at Providence Health & Services Alaska, Alaska's largest ED.

- *Acute Behavioral Health Workgroup:* Comprised of 13 professionals with expertise in ED transitions and continuity of care for substance abuse and behavioral health services. Participants represented multiple entities including public, private, and tribal health hospitals; primary care centers; and inpatient and outpatient behavioral health treatment organizations. The workgroup generally operates under the auspices of ASHNHA.

- *Health Information Workgroup:* Comprised of four subject-matter experts in Alaska's health information technology. Participants included individuals from the DHSS Commissioner's Office and healtheConnect Alaska, Alaska's Health Information Exchange (HIE).

A list of group discussion participants is found in Appendix B.

PROJECT TEAM ENGAGEMENT

Early in the project, McDowell Group project team members attended an ACEP Leadership Summit in Anchorage on November 7, 2019. This opportunity to engage directly with ED providers throughout the state and to connect with national experts in the field of OUD care in the ED provided a foundation for executive interviews and qualitative data collection.

McDowell Group also connected with stakeholders at a November 7, 2019 forum with ED opioid management subject matter experts hosted by OSMAP. Attendees included representatives from state government, healthcare and tribal health, military, university, and private for-profit and non-profit service providers.

During a February 2020 Centers for Disease Control and Prevention (CDC) crisis grant site visit to Alaska, McDowell Group engaged with key stakeholders representing areas such as information technology, continuity of care and peer support, medication-assisted treatment (MAT), and wellness coalitions.

DATA ANALYSIS

Primary research data were analyzed per CDC Guidelines on Analyzing Qualitative Data for Evaluation.[3] Qualitative data analysis employs non-standardized measurement. It recognizes that not all respondents answer all questions and there is a wide variety of respondent types (i.e. providers, administrators, program managers, nurses, and ancillary and support staff). Language chosen to describe responses is designed for readability. The following descriptive analysis terminology should be considered in broad regard:

- ***Many/Most**:* represents responses from 6-11 respondents or the majority by respondent type
- ***Some/Several:*** represents responses from 3-4 respondents or the minority by respondent type
- ***Few:*** represents responses from 1-2 respondents or minority by respondent type

Secondary Research

McDowell Group collaborated with OSMAP to obtain quantitative data integral to the needs assessment. Data requests were submitted to OSMAP for review and approval. OSMAP advanced these requests to the respective entities within DHSS. The requested data files on select indicators, in Excel format, were forwarded to McDowell Group for analysis.

DATA SOURCES

Data related to ED visits and services was gathered from the following sources:

Health Facilities Data Reporting: The Alaska Health Facilities Data Reporting Program (HFDR) system is maintained by DHSS, Division of Public Health, Health Analytics and Vital Records Section. The program collects inpatient and outpatient data from Alaska health care facilities. Alaska HFDR datasets provide information on admissions, length of stay, hospital charges, expected source of payment, and patient characteristics. HFDR does not include Alaska's two military hospitals.

[3]CDC. (2018). "Analyzing qualitative data for evaluation." Evaluation Briefs, 19. Retrieved 1 Dec from: https://www.cdc.gov/healthyyouth/evaluation/pdf/brief19.pdf

HFDR data include primary and secondary patient diagnoses using the *International Classification of Diseases, 10th Revision, Clinical Modification* (ICD-10-CM). Diagnosis information associated with ED visits was obtained using the Clinical Classifications Software (CCS) for ICD-10-CM. ICD-10-CM primary and secondary diagnosis codes were used to identify opioid related discharges.

Medicaid Claims Data is collected by DHSS, Division of Finance and Management Services, Office of Medicaid, Allocation, and Audit Services. Medicaid is a program created by the federal government and administered by the state that pays for medical services for low-income Alaskans. Requested Medicaid claims data used opioid-related ICD-10 and CCS diagnostic categories in alignment with HFDR-requested data. Data were compiled by region, age, and gender.

Data Analysis

Secondary research data were vetted for inaccuracies and outliers and analyzed per descriptive statistic methodology. This approach provides absolute numbers to summarize individual variables and find patterns.

Data Notes

Time Frame

Unless otherwise stated, quantitative data reflect the most recent available data, usually 2018. Trend data span a three-year time frame from 2016 through 2018.

Race

Secondary research data include race categories currently recognized and reported by DHSS.

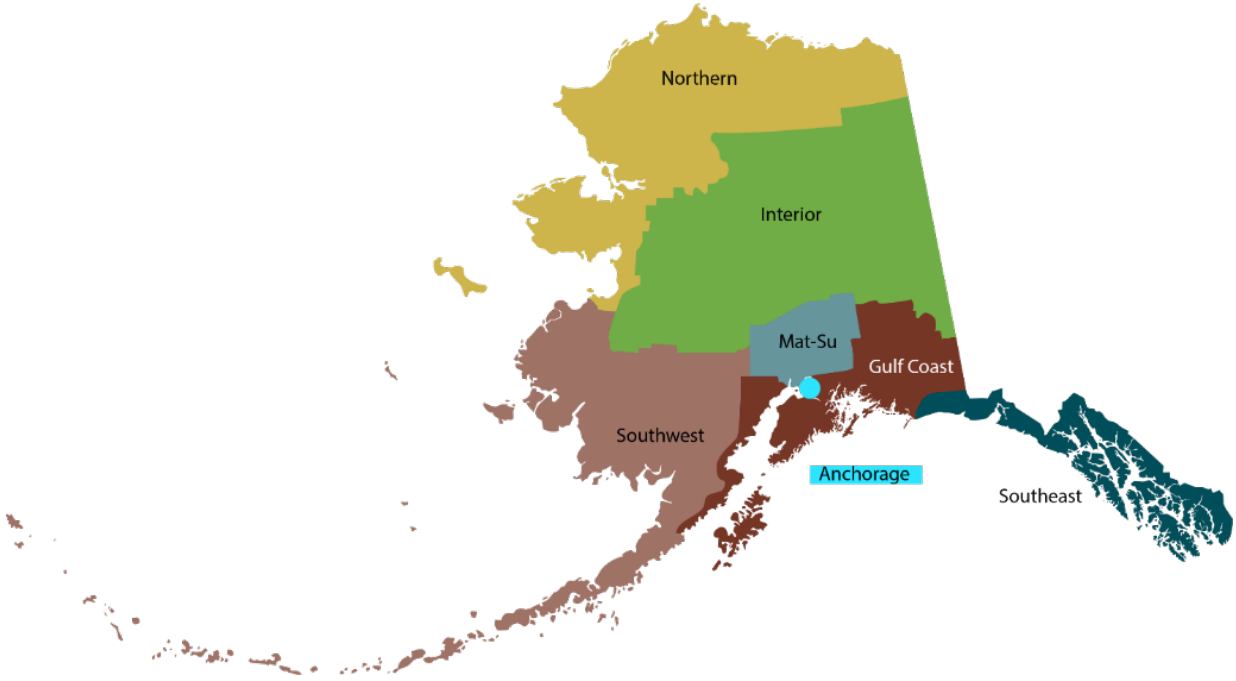
Age

Secondary research data age groupings reflect recognized Centers for Medicare & Medicaid Services (CMS) categories.

Regions

Where represented, regional data are broken into Alaska's Public Health Regions, which correspond to the Alaska Department of Labor and Workforce Development's six economic regions: Anchorage and Mat-Su, Gulf Coast, Interior, Northern, Southeast, and Southwest *(see map on next page)*. For public health purposes, the Matanuska-Susitna Borough is reported separately from the Municipality of Anchorage.

Figure 2. Public Health Regions of Alaska



Source: State of Alaska & McDowell Group

DATA LIMITATIONS

HFDR relies on reporting from the following facilities: private, municipal, state, or federal hospitals; hospitals operated by Alaska Native organizations; psychiatric hospitals; and others. Data sets may be incomplete due to facility failure to report. Where applicable, these limitations are referenced in the report's data tables. The payer listed in the HFDR data is the expected payer and may not be the actual payer. Likewise, charges may not represent actual payments.

Medicaid claims data reflect actual payments on submitted Medicaid claims. Medicaid claims data are limited in that they do not include other third-party payments for billed services.

Alaska Opioid Data Dashboard incorporates multiple indicators including ED visits, mortality, and Neonatal Abstinence Syndrome. Known data limitations associated with these indicators are described in Appendix C.

ED provider codification for OUD as a primary or secondary diagnosis may not be fully realized. Data reflecting OUD diagnostic categorization can be limited by this factor.

Non-participating entities include several hospital EDs; not all entities contacted elected to participate in the executive interview process. A representative sample was sought with focus on entities OSMAP deemed high- or medium-priority.

Report Organization

The report contains an Executive Summary, Emergency Department Snapshots, Background and Purpose, Scope of Work and Methodology, eight chapters, and seven appendices organized as follows:

- **Chapter 1: ED Service-Delivery Context & Utilization** provides an overview of Alaska's emergency departments and statewide ED utilization.
- **Chapter 2: ED Opioid Response Framework** describes framework assessment, development, and design.
- **Chapters 3-8** describe and discuss each framework component and present key findings including successes (or bright spots), challenges, and opportunities and recommendations for core and enhanced response strategies.
    - **Chapter 3: Upstream Prevention**
    - **Chapter 4: Reducing Substance Misuse & Addiction**
    - **Chapter 5: Harm Reduction**
    - **Chapter 6: Screening, Referral, Treatment, & Overall Care Coordination**
    - **Chapter 7: Relapse Prevention**
    - **Chapter 8: Surveillance & Information Exchange**
- **Appendix A: Executive Interview Protocol** outlines the structure and content guiding executive interviews.
- **Appendix B: Interviewee & Discussion Participants** lists all individuals who participated in executive interviews and facilitated discussion groups, and each individual's role and affiliate organization.
- **Appendix C: Alaska Opioid Data Dashboard Data Limitations** outlines data limitations identified by the State of Alaska for measures associated with ED visits, mortality, and neonatal abstinence syndrome (NAS).
- **Appendix D: Health Facilities Data Reporting (HFDR)** provides data tied to opioid-related ED visits such as patient demographics, admission hour, admissions by month, discharges, intake and discharge status, primary payer source, total hours in ED, top Clinical Classifications Software diagnosis, and regional service characteristics.
- **Appendix E: Medicaid Claims Data** provides payment data on claims associated with opioid-related ED visits. Patient demographics, diagnosis, chronic condition, and other payment data are included.
- **Appendix F: Assessment of Opioid-related ED Frameworks for Data Collection** presents comparative analysis of multiple response frameworks.
- **Appendix G: Indicators & Measures** presents ED Opioid Response Framework indicators (or strategies) and aligned data measures.

Chapter 1: ED Service-Delivery Context and Utilization

Service Delivery Context

Alaska's EDs serve on the front lines in responding to the opioid epidemic, providing care and support to those impacted by opioid use disorder (OUD). While the epidemic affects communities and EDs in varied ways, the impact has not been uniform. As result, hospitals, EDs, and providers have responded with unique approaches that reflect the extent of local need, clinical resources, organizational priorities, information system capacities, and availability of internal and community-based resources.

Alaskans receive emergency medical services through EDs operating in varied organizational, regional, cultural, and clinical contexts. Among Alaska's tribal health, public, private and military health systems, 24 hospitals have dedicated EDs (including14 critical-access hospitals, four rural or sole community hospitals, four acute-care hospitals, and two military hospitals). Several EDs collaborate closely with the Department of Corrections (DOC) to provide emergency care and support to Alaska's correctional facilities. Multiple EDs deliver emergency medical care and linked support to the state's 150+ Community Health Centers in remote and isolated locales.

ED providers and health system leaders describe the ED as a "bellwether" environment, reflecting the population at large. ED patients' emergent, chronic, and critical medical and behavioral health needs mirror the local service community, including needs associated with opioid misuse. Through their patients, ED providers have a window into how well local systems provide access to primary medical care, housing, food, etc.

Alaska's ED providers report evolving roles and expectations. While the provider's primary role remains to treat patients needing lifesaving measures and care, the reality is that ED providers help coordinate ongoing care and follow-up. ED providers increasingly function at the interface between outpatient and inpatient care for a growing spectrum of patient needs – not just those with grave or critical conditions. While a few EDs have internal resources such as social workers and case managers to help coordinate continued care, many do not.

ED managers and providers note growing expectations for EDs to provide patient services typically provided by primary care, public health, and social service entities. These include, for example, providing patient and family education and implementing standardized screening protocols (i.e. universal screening) to identify adverse childhood experiences (ACEs), historical trauma, previous addiction, food security and housing needs. While expected to fill the role of "one-stop-shop," most EDs do not have the staff, resources, training, and organizational support to meet these expectations.

ED Utilization and Costs

The following presents a selection of emergency department utilization and cost data. Additional data is in *Appendix D: Health Facilities Reporting Data* and *Appendix E: Medicaid Claims Data*.

Health Facilities Data Reporting

Health facilities discharge data show utilization of health services and provide evidence of the conditions for which people receive treatment. Health facilities data provides information for monitoring health issues, as well as identifying service and facility needs. McDowell Group requested opioid-related ED discharge data for years 2016, 2017, and 2018 from the Alaska Division of Public Health, Health Analytics and Vital Records Section, Health Facilities Data Reporting Program (HFDR). HFDR data are included in this report to establish recent trends in ED utilization for opioid-related conditions.

EMERGENCY DEPARTMENT DISCHARGES

Between 2016 and 2018, there were an annual average of 2,088 opioid-related discharges and 307,755 total ED discharges from Alaska emergency departments. In the same time period, opioid-related visits comprised less than 1% of ED visits.

Table 5. Emergency Department Discharges, Opioid-Related and All, 2016-2018

Calendar Year	Opioid	All	% Opioid
2016	2,113	316,056	0.7%
2017	2,108	305,573	0.7%
2018	2,044	301,637	0.7%
Three-Year Average	**2,088**	**307,755**	**0.7%**

Source: HFDR

EMERGENCY DEPARTMENT DISCHARGES BY DEMOGRAPHIC

Gender

Between 2016 and 2018, more females were discharged from the ED compared to men.

Table 6. Emergency Department Discharges, Opioid-Related and All, by Gender, 2016-2018

Gender	2016		2017		2018	
	Count	Percent (%)	Count	Percent (%)	Count	Percent (%)
Opioid-Related ED Discharges						
Female	1,107	52.4	1,058	50.2	1,091	53.4
Male	1,006	47.6	1,049	49.8	952	46.6
Total	**2,113**	**100%**	**2,107**	**100%**	**2,043**	**100%**
All ED Discharges						
Female	172,387	54.5	165,340	54.1	163,622	54.2
Male	143,646	45.5	140,227	45.9	138,010	45.8
Total	**316,033**	**100%**	**305,567**	**100%**	**301,632**	**100%**

Source: HFDR
Note: Discharges of unknown gender are not displayed and were removed from the total count.

Race

A greater percentage of opioid-related ED discharges are comprised of White people compared to all ED discharges. White people comprised 63.3% of opioid-related ED discharges between 2016 and 2018; in comparison, 42.2% of all ED discharges were White. Conversely, a smaller percentage of opioid-related ED

discharges are comprised of Alaska Native people compared to all ED discharges. Between 2016 and 2018, Alaska Native people comprised 25.5% of opioid-related discharges and 38.3% of all ED discharges.

Table 7. Emergency Department Discharges, Opioid-Related and All, by Race, 2016-2018

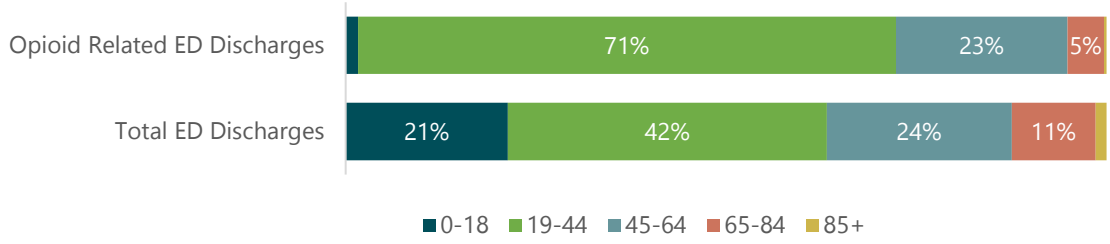
Race/Ethnicity	2016		2017		2018	
	Count	Percent (%)	Count	Percent (%)	Count	Percent (%)
Opioid-Related ED Discharges						
White	1,307	61.9	1,352	64.1	1,308	63.9
American Indian/Alaska Native	569	26.9	543	25.8	485	23.7
Black	76	3.6	73	3.5	95	4.7
Native Hawaiian/Pacific Islander	13	0.6	9	0.4	14	0.7
Asian	39	1.9	24	1.1	28	1.3
Other	38	1.8	33	1.6	58	2.8
Unknown	71	3.4	74	3.5	56	2.7
Total	**2,113**	**100%**	**2,108**	**100%**	**2,044**	**100%**
All ED Discharges						
White	135,179	42.8	130,248	42.6	124,441	41.3
American Indian/Alaskan Native	121,851	38.6	118,504	38.8	113,633	37.7
Black	15,684	5.0	13,597	4.5	13,132	4.4
Native Hawaiian/Pacific Islander	13,811	4.4	9,806	3.2	9,945	3.3
Asian	11,849	3.8	8,161	2.7	7,866	2.6
Other	9,560	3.0	13,666	4.5	12,690	4.2
Unknown	8,122	2.6	11,591	3.8	19,930	6.6
Total	**316,056**	**100%**	**305,573**	**100%**	**301,637**	**100%**

Source: HFDR

Age

There is a large difference between the proportion of all ED discharges and opioid-related discharges by age, particularly for the 0-18, 19-44, and 65-84-year-old age groups. From 2016-2018, people 18 and younger accounted for about two percent of opioid-related ED discharges in comparison to 21% of all ED discharges. Most opioid-related ED discharges are comprised of people aged 19-44 (71%). A smaller proportion of older adults, or adults 65-84 or 85+ were discharged from the ED for opioid-related issues compared to all ED discharges.

Figure 3. Emergency Department Discharges, Opioid-Related and All, by Age, 2016-2018



Source: HFDR

Emergency Department Discharges by Facility Location

By facility location, Anchorage reported the most opioid-related and total ED discharges between 2016 and 2018. A total of 2,951 opioid-related emergency discharges, and 431,584 total ED discharges were reported by Anchorage facilities during this time.

By facility location, opioid-related visits comprised a greater percentage of reported emergency department visits for Matanuska-Susitna facilities (1.5%) compared to other facility location regions.

Table 8. Emergency Department Discharges by Facility Location, 2016-2018

Region	Total 2016-2018 Emergency Department Discharges		
	Opioid ED Discharges	All ED Discharges	% Opioid
Anchorage	2,951	431,584	1.0%
Gulf Coast	729	79,473	1.3%
Interior	660	96,452	1.0%
Matanuska-Susitna	810	80,391	1.5%
Northern	142	70,369	0.3%
Southeast	750	83,095	1.3%
Southwest	223	81,902	0.4%

Source: HFDR

Health facilities data from 2016-2018 shows that most ED visits are made in a patient's home region. This is true for both opioid-related and all ED visits. Data for patient residence by facility shows that from 2016 to 2018 between 82-100% of facility visits were made within a patient's region of residence. Anchorage had the highest percentage of out-of-home-region visits with 82-85% of both opioid-related and all ED visit discharges comprised of patients not residing in Anchorage.

Table 9. Emergency Department Discharges Comprised of Region Residents, 2016-2018

Region	Opioid ED Discharges			All ED Discharges		
	2016	2017	2018	2016	2017	2018
Anchorage	82%	85%	85%	84%	84%	85%
Gulf Coast	90%	90%	91%	87%	88%	88%
Interior	93%	94%	94%	93%	93%	93%
Matanuska-Susitna	94%	93%	94%	92%	92%	93%
Northern	96%	100%	95%	96%	97%	97%
Southeast	96%	96%	94%	93%	93%	92%
Southwest	97%	93%	91%	98%	98%	98%

Source: HFDR

Emergency Department Discharges by Primary Payer & Billed Charges

The primary payer associated with ED discharges between 2016 and 2018 was Medicaid. A greater proportion of opioid discharges were associated with Medicaid compared to all ED discharges. The proportion of opioid-related ED visits with Medicaid named as the primary payer increased each year between 2016 and 2018. Medicaid was the primary payer for 49.9% of opioid-related discharges in 2016, 58.2% of opioid-related discharges in 2017, and 65.5% of opioid discharges in 2018.

Table 10. Emergency Department Discharges, Opioid-Related and All, by Primary Payer, 2016-2018

Primary Payer Type	2016		2017		2018	
	Count	Percent (%)	Count	Percent (%)	Count	Percent (%)
Opioid-Related ED Discharges						
Medicaid	1,055	49.9	1,227	58.2	1,339	65.5
Self-Pay	351	16.6	289	13.7	206	10.1
Medicare	253	12.0	233	11.1	215	10.5
Commercial Insurance	284	13.4	228	10.8	177	8.7
Other Government	47	2.2	52	2.5	41	2.0
Indian Health Services	47	2.2	34	1.6	26	1.3
Other Miscellaneous	31	1.5	20	0.9	20	1.0
CHAMPUS/VA	45	2.1	25	1.2	20	1.0
Total	**2,113**	**100%**	**2,108**	**100%**	**2,044**	**100%**
All ED Discharges						
Medicaid	120,360	38.1	126,842	41.5	126,377	41.9
Self-Pay	40,716	12.9	33,230	10.9	30,562	10.1
Medicare	44,003	13.9	45,010	14.7	45,276	15.0
Commercial Insurance	77,676	24.6	70,855	23.2	71,865	23.8
Other Government	5,064	1.6	5,829	1.9	5,385	1.8
Indian Health Services	4,849	1.5	3,950	1.3	3,180	1.1
Other Miscellaneous	15,384	4.9	12,988	4.3	12,037	4.0
CHAMPUS/VA	8,004	2.5	6,869	2.3	6,955	2.3
Total	**316,056**	**100%**	**305,573**	**100%**	**301,637**	**100%**

Source: HFDR

The average billed charges per ED discharge was higher for opioid-related patients compared to all ED patients between 2016 and 2018. Billed charges for opioid-related discharges between 2016 and 2018 totaled $22,881,365. There were 6,255 discharges made during this time period for an average billed charges per discharge of $3,658. In comparison, the average billed charges per discharge for all ED discharges was $3,068. There was a total of 921,747 total ED discharges reported between 2016 and 2018 and approximately $2.8 billion dollars in associated billed charges.

Table 11. Average Billed Charges Per ED Discharge, Opioid-Related and All, 2016-2018

	Opioid			All Emergency Department		
	2016	2017	2018	2016	2017	2018
Discharges	2,110	2,104	2,041	315,596	305,017	301,134
Billed Charges	$7,188,986	$7,568,119	$8,124,260	$884,962,590	$939,842,161	$1,003,378,242
Average Billed Charges Per Discharge	**$3,407**	**$3,597**	**$3,981**	**$2,804**	**$3,081**	**$3,332**

Source: HFDR

EMERGENCY DEPARTMENT DISCHARGES BY DIAGNOSIS GROUP

The Clinical Classifications Software (CCS) is a tool developed at the Agency for Healthcare Research and Quality (AHRQ) for grouping patient diagnoses and procedures from the International Classification of Diseases, 9th Revision, Clinical Modification (IDC-9-CM) into reportable categories. The top CCS diagnosis group for opioid emergency department discharges is substance-related disorders, followed by skin and subcutaneous tissue infections. The top CCS diagnosis group for all emergency department discharges is other upper respiratory infections), followed by abdominal pain.

Table 12. Top 10 CCS Diagnosis Groups for Opioid ED Discharges, 2016-2018

CCS Diagnosis Group	2016	2017	2018
Substance-related disorders	842	866	732
Skin and subcutaneous tissue infections	131	148	177
Poisoning by other medications and drugs	91	113	77
Abdominal pain	62	77	63
Alcohol-related disorders	59	45	58
Nausea and vomiting	49	43	63
Suicide and intentional self-inflicted injury	64	45	46
Other nervous system disorders	47	33	33
Nonspecific chest pain	*	37	44
Other gastrointestinal disorders	44	34	*
Residual codes, unclassified	*	*	42
Spondylosis, intervertebral disc disorders, other back problems	39	*	*

Source: HFDR
* Indicates that this category is not in the top ten CCS diagnosis group for that year.

Table 13. Top 10 CCS Diagnosis Groups for All ED Discharges, 2016-2018

CCS Diagnosis Group	2016	2017	2018
Other upper respiratory infections	17,900	17,657	16,694
Abdominal pain	15,360	14,679	14,543
Superficial injury, contusion	12,838	11,919	11,718
Nonspecific chest pain	10,781	11,197	11,508
Skin and subcutaneous tissue infections	12,081	10,994	10,304
Sprains and strains	11,730	10,520	10,043
Alcohol-related disorders	10,415	10,677	11,085
Spondylosis, intervertebral disc disorders, other back problems	9,570	8,919	8,192
Open wounds of extremities	8,390	7,904	7,697
Other injuries and conditions due to external causes	*	7,473	7,520
Urinary tract infections	7,399	*	*

Source: HFDR
* Indicates that this category is not in the top ten CCS diagnosis group for that year.

Medicaid

HFDR data are included in this report to establish recent trends in ED utilization for opioid-related conditions. Medicaid data are included in this report to provide information about emergency department utilization among Medicaid beneficiaries experiencing opioid use disorder or poisoning in SFY2018.

MEDICAID BENEFICIARIES & EMERGENCY DEPARTMENT VISITS

Of the 4,521 Medicaid beneficiaries diagnosed with opioid disorder or poisoning in SFY2018, 59% (n=2,662) visited the emergency department in the same time frame. In comparison, 33% of all other Medicaid beneficiaries visited the emergency department in SFY2018.

Table 14. Medicaid Beneficiary ED Visits, Opioid and All Other, SFY2018

	Beneficiaries Diagnosed with Opioid Disorder/Poisoning	All Other Beneficiaries
Total Medicaid Beneficiaries	4,521	187,518
Total Medicaid Beneficiaries with ED Visit	2,662	61,253
% of Beneficiaries with One or More ED visits	**59%**	**33%**

Source: State of Alaska, Medicaid Claims Data

Medicaid beneficiaries diagnosed with opioid disorder or poisoning visited the emergency department an average of three times in SFY2018; beneficiaries without an opioid-related diagnosis visited the emergency department an average of two times.

Table 15. Medicaid Beneficiary ED Claims, Opioid and All Other, SFY2018

	Beneficiaries Diagnosed with Opioid Disorder/Poisoning	All Other Beneficiaries
Total Medicaid Beneficiaries with ED Visit	2,662	61,253
Total Medicaid ED Claims	9,003	138,261
Average Number of ED Visits per Beneficiary	**3.38**	**2.26**

Source: State of Alaska, Medicaid Claims Data

In SFY2018, there were 2,662 Medicaid beneficiaries diagnosed with opioid disorder or opioid poisoning that visited an emergency department at any point during SFY2018. Medicaid spending for beneficiaries diagnosed with opioid disorder or opioid poisoning at any point during SFY2018 was $4,298,329 across 9,003 claims. In comparison, the average spending per beneficiary for all other beneficiaries was $323.

Table 16. Medicaid Beneficiary ED Spending, Opioid and All Other, SFY2018

	Beneficiaries Diagnosed with Opioid Disorder/Poisoning	All Other Beneficiaries
Total Medicaid Beneficiaries	4,521	187,518
Total Medicaid ED Spending	$4,298,329	$60,526,247
Average ED Spending per Beneficiary	**$951**	**$323**

Source: State of Alaska, Medicaid Claims Data

MEDICAID CLAIMS AND SPENDING BY DEMOGRAPHIC

Gender

In SFY2018, a smaller number of male Medicaid beneficiaries (n=1,175) were diagnosed with opioid disorder or poisoning at any point in the year compared to females (n=1,487). Similarly, among beneficiaries without an opioid disorder or poisoning, more female visited the emergency department (n=33,512) compared to male Medicaid beneficiaries (n=27,741).

Table 17. Medicaid Beneficiary ED Visits, Opioid-Related and All, by Gender, SFY2018

	Beneficiaries Diagnosed with Opioid Disorder/Poisoning	All Other Beneficiaries
Female		
Total Beneficiaries	1,487	33,512
Total Claims	5,292	77,228
Total Spending	$2,617,200	$33,914,570
Male		
Total Beneficiaries	1,175	27,741
Total Claims	3,711	61,033
Total Spending	$1,681,129	$26,611,677

Source: State of Alaska, Medicaid Claims Data

Age

By age group, Medicaid beneficiaries 19-44 years of age comprise the largest age group of beneficiaries diagnosed with opioid disorder or poisoning. Among all other beneficiaries, children under 19 years of age are the second largest group of beneficiaries behind adults aged 19-44 years of age; however, children under 19 are the second smallest age group of beneficiaries diagnosed with opioid disorder or poisoning.

Table 18. Medicaid Beneficiary ED Visits, Opioid-Related and All, by Age, SFY2018

	Beneficiaries Diagnosed with Opioid Disorder/Poisoning	All Other Beneficiaries	% Opioid-Related
Child Under 19			
Total Beneficiaries	27	21,344	0.1%
Total Claims	84	36,660	0.2%
Total Spending	$46,957	$16,418,169	0.3%
Adult 19-44			
Total Beneficiaries	1,959	22,798	7.9%
Total Claims	6,184	56,385	9.9%
Total Spending	$3,040,468	$27,092,822	10.1%
Adult 45-64			
Total Beneficiaries	636	12,629	4.8%
Total Claims	2,578	33,952	7.1%
Total Spending	$1,176,704	$15,087,019	7.2%
Adult 65-84			
Total Beneficiaries	39	3,955	1.0%
Total Claims	155	10,153	1.5%
Total Spending	$33,969	$1,762,403	1.9%
Adult 85+			
Total Beneficiaries	*	527	*
Total Claims	*	1,111	*
Total Spending	$231	$165,833	0.1%

Source: State of Alaska, Medicaid Claims Data
* Denotes data suppressed where there are fewer than six cases.

MEDICAID CLAIMS AND SPENDING BY REGION

The three public health regions with the greatest number of Medicaid beneficiaries, claims, and total spending are Anchorage, Mat-Su, and Gulf Coast regions.

Table 19. Medicaid Beneficiary Emergency Department Visits, Opioid-Related and All, by Age, SFY2018

	Beneficiaries Diagnosed with Opioid Disorder/Poisoning	All Other Beneficiaries	% Opioid-Related
Anchorage			
Total Beneficiaries	1,134	27,356	4.0%
Total Claims	4,347	67,084	6.1%
Total Spending	$2,001,650	$26,539,041	7.0%
Gulf Coast			
Total Beneficiaries	377	5,972	5.9%
Total Claims	937	11,345	7.6%
Total Spending	$569,432	$6,191,470	8.4%
Interior			
Total Beneficiaries	251	6,060	4.0%
Total Claims	950	13,978	6.4%
Total Spending	$478,750	$7,466,637	6.0%
Mat-Su			
Total Beneficiaries	541	7,932	6.4%
Total Claims	1,565	14,723	9.6%
Total Spending	$696,024	$5,783,395	10.7%
Northern			
Total Beneficiaries	23	3,409	0.7%
Total Claims	103	8,247	1.2%
Total Spending	$55,500	$4,355,445	1.3%
Southwest			
Total Beneficiaries	46	4,942	0.9%
Total Claims	126	9,820	1.3%
Total Spending	$57,241	$4,606,921	1.2%
Southeast			
Total Beneficiaries	276	5,156	5.1%
Total Claims	913	12,220	7.0%
Total Spending	$403,999	$5,236,538	7.2%

Source: State of Alaska, Medicaid Claims Data

Chapter 2: ED Opioid Response Framework

Identification and Development

A central purpose of this needs assessment is to identify or develop an ED opioid response framework that makes sense for Alaska. The initial assessment task identified and reviewed response frameworks developed by national organizations and federal and state entities that use a public health approach to the opioid epidemic.

Framework Assessment

McDowell Group identified and reviewed multiple frameworks for opioid-related prevention and treatment response in the ED setting. Frameworks reflected varying rationales, implementation strategies, and data collection roles. This analysis focused on frameworks aligned with six core components:

1. Upstream prevention
2. Reducing substance misuse and addiction
3. Harm reduction and screening
4. Referral, treatment and overall substance use care coordination
5. Relapse prevention
6. Surveillance and information exchange

The assessed frameworks are described and summarized in McDowell Group's interim report *Assessment of Opioid-Related ED Frameworks for Data Collection* found in Appendix F.

Framework Development

The ED Opioid Response Framework incorporates strategies that are equitable, feasible, and sustainable in most Alaska EDs. The framework is rooted in analysis of existing frameworks and their applicability to Alaska, information system capacities, and primary and secondary data. Framework strategies address the six core components listed above. The framework recognizes opportunities in the ED as well as needs, challenges, and limitations EDs face.

Framework Design

The framework design uses a two-phased approach. These phases reflect common practice, policy support, linkages to available community services, population size and density served, organizational capacity, and ED culture. It recognizes that each ED setting and community served is unique. The first phase identifies **core strategies** applicable within most ED settings in Alaska. The second phase identifies **enhanced strategies** for EDs with expanded access to resources, advanced system capacities, and organizational support for continuous quality improvement efforts. Alignment with each of the six core components is identified by color coding.

Response Framework

Each framework strategy (also known as an indicator) is aligned with a process or outcome measure. Indicators and measures are described in detail in Appendix G.

Table 20. ED Opioid Response Framework Core and Enhanced Strategies

ED protocols, organizational policies, and essential infrastructure	Framework Component
Core Strategies	
Trauma-informed approach to care	Upstream Prevention
Availability of non-opioid pain management	Reducing Substance Misuse & Addiction
PDMP utilization	
PDMP-EHR integration	
"Safe prescribing" policies	
Prescribing practices	
Patient, family & caregiver education	
Opioid diversion policy	
Naloxone distribution policy	Harm Reduction
HIV/HCV screening: suspected IV drug use	
Buprenorphine-waivered providers: ED & community	Screening, Treatment Referral & Substance Use Care Coordination
Screening, referral, treatment & substance use care coordination processes	
Provider training & education (addiction/treatment, pain management, recovery)	
Care coordination with primary care physician, behavioral health providers, DOC	
Screening for previous dependence or addiction	Relapse Prevention
Provider training: OUD coding	Surveillance & Information Exchange
HFDR data submission	
Enhanced Strategies	
ACEs screening for trauma	Upstream Prevention
Community syringe program	Harm Reduction
Addressing stigma	
ED care coordination: Children's Services	
Availability of outpatient medication providers for OUD	Screening, Treatment Referral & Substance Use Care Coordination
Addiction medicine specialist consultation access	
Community opioid treatment program and providers	
Hospital or community bridge programs	
Linkages to care (peer support)	
Recovery & supports	Relapse Prevention
Development of ED process measures & data reporting	Surveillance & Information Exchange

Chapters 3 through 8 describe and discuss each framework component and key findings including successes (or bright spots), challenges, and opportunities and recommendations for core and enhanced response strategies.

Chapter 3: Upstream Prevention

Upstream prevention refers to strategies that promote health and well-being of individuals, families and their environments; increase protective factors to develop resiliency; and reduce risks factors for trauma experienced throughout the lifespan and community history.

Rationale

The opioid epidemic is dynamic; it moves and changes all the time. ED providers must continually seek ways to advance prevention, relate to patients with OUD, and promote patient well-being through effective patient engagement.

Key Findings

Bright Spots

Many EDs across Alaska are trained in trauma-informed or relationship-based approaches to care. Findings indicate training is generally considered useful in creating awareness of trauma and related approaches to patient care.

> *We are slowly moving away from an "oppositional" attitude and beginning to see ourselves as partners with patients.*
> **--ED Medical Director**

A few hospitals have prioritized, through institutional policy and practice, a patient-centered approach to care. This organizational perspective extends to the ED and is shifting staff perspectives on patient engagement. Some providers report feeling positive and optimistic about the potential to partner with patients. This is a contrast to a self-described adversarial approach and attitude of just trying not to prescribe.

> *Our focus is creating a culture of meeting people where they are at and not demeaning them.*
> **--ED Provider**

In select instances where trauma-informed, patient-centered care has been prioritized, ED medical directors report a reduction in patient complaints related to staff attitudes and interface.

Challenges

Several EDs are interested in employing more open and effective patient engagement approaches but are unsure how to proceed. Many ED providers say they could do better at welcoming and creatively engaging patients with OUD.

There is marked variation and inconsistency among staff attitudes and individual clinical bias regarding addiction, trauma-informed care, and the ED's role in meeting the needs of patients impacted by the opioid epidemic.

A few EDs describe their departmental culture as antiquated when relating to substance use disorders, addiction and engagement with OUD patients. OUD patients may be perceived as a recurrent bother; staff has limited patience for, tolerance of, or interest in changing approaches to patient engagement.

Changing staff attitudes and shifting ED culture is an ongoing challenge. The shift is a slow process. Not everyone is on board or has the same mindset.
--ED Medical Director

There can be noted differences between providers and nursing staff in how they relate to patients with OUD. Nursing staff often fill the stressful interface between providers and difficult patients. This can impact departmental culture and cause departmental divide in approaches to care.

Learning about trauma-informed care is not enough. Greater organizational buy-in to patient-centered care is key.
--Hospital Leadership

Findings reflect a prevailing attitude against the ED doing extensive psychosocial screening, including ACEs trauma screening. Given limited staff resources, EDs question whether this is central to their primary role.

Nurses are caught in the middle of patients demanding opioids and providers prescribing ibuprofen.
--ED Department Manager

Opportunities and Recommendations

CORE STRATEGY

- **Trauma-informed training:** Findings indicate EDs recognize the need for a broader understanding of trauma-informed care. Almost all EDs described a need for this type of training and information on the ever-changing nature of the opioid epidemic. Trainings should prioritize professional and departmental development activities.

ENHANCED STRATEGY

- **Expanded coordination of trauma screening data:** While acknowledging the impact of ACEs on addiction, EDs may not be the best setting to screen for ACEs. Screening policy may be better suited to primary care and treatment settings. With improved data systems integration, ED providers could access patient ACEs screening conducted elsewhere. EDs with expanded internal capacities may elect to implement trauma screening protocols.

Chapter 4: Reducing Substance Misuse & Addiction

Reducing substance misuse and addiction focuses on strategies that limit, monitor, and reduce the occurrence of and potential for substance misuse and addiction.

Rationale

ED providers and pharmacists are uniquely positioned to identify nonmedical use of prescription drugs and take measures to prevent escalation of a patient's substance use to a substance use disorder.

Key Findings

Bright Spots

Many hospitals and EDs continue to explore, develop, and use non-opioid pain management resources. These includes, but are not limited to, acupuncture, manipulation performed by staff Doctors of Osteopathy, deep tissue massage provided by physical therapists, chiropractic care, nerve blocks and steroidal injections, and the Alternatives to Opioids (ALTO) pain management program.

Chronic pain is a common presenting problem for individuals with OUD. We must expand non-opioid alternatives to pain management as a tool in curbing the opioid epidemic.
--ED Provider

Findings suggest that provider PDMP use improves when the PDMP is well-integrated within the EHR and PDMP access has been streamlined to single-click access not requiring a separate log-in.

Once access to the PDMP was well-integrated into our EHR, PDMP use among our ED providers improved.
--ED Medical Director

Most EDs have safe prescribing policies and protocols. Providers are working to create a cohesive prescribing approach within their ED; they support pain management contracts for chronic pain.

It's all about the provider culture you create. We communicate to our community and patients that we prescribe from a position of like mindset.
--ED Director

Much work is being done to monitor individual prescribing practices in Alaska's EDs. Many hospitals have controlled substance review committees or stewardship teams that may review prescribing trends and atypical prescriptive practices. Findings indicate that most, if not all EDs, monitor or review individual prescribing practices. A few EDs have advanced processes for systematic monitoring and formally reporting data on specific indicators or measures of prescriptive practice.

Even though we operate in a large hospital setting, our ability to routinely receive provider prescribing scorecards has been dependent upon a single IT person. When that person left, we lost our ability to receive reports.
--ED Medical Director

There has been movement in some EDs to provide more information to the patient at discharge, including outpatient services, community services, and dangers of opioid usage, etc. At least one ED has developed a colorful opioid-specific patient education and information tool that is provided at discharge. Nursing staff report this tool is a helpful guide in providing patient education; patients report it contains useful information.

Findings suggest that most EDs have developed clinical policies or protocols to mitigate the opportunity for opioid diversion. Several have adopted the *Alaska ED Opioid & Controlled Substance Prescribing Guidelines*[4] which recommend ED providers decline to provide replacement prescriptions for controlled substances that were lost, destroyed, or stolen.

Challenges

Availability of alternative pain management resources varies across the state. Patient access to methods of non-opioid pain management may be limited by cost factors, reimbursement, and transportation.

> *A huge improvement is needed within EHR platforms to improve ease of access to the PDMP.*
> **--Medical Director**

Alaska does not mandate statewide use of a single PDMP integration platform, such as the state's health information exchange, healtheConnect Alaska. Each organization has its own EHR platform with varying capacities to support robust PDMP integration. Providers working with poorly integrated PDMP-EHR platforms consistently identify this as a barrier to PDMP use. Findings suggest that certain EHR platforms, such as EPIC, integrate well with the PDMP. Organizations that use Cerner collectively report limited and cumbersome PDMP interface and have to move through multiple screens to locate a link to the PDMP. Accessing the PDMP further requires the provider to log-in using a separate username and password. At least one hospital's EHR has no current PDMP integration capacity.

There is marked variation among ED providers' views of how useful or important the PDMP is. Some view the PDMP as less important than it once was, considering it an outdated approach. This contributes to inconsistent use among providers.

> *Let's be honest; it's much easier to access records from ANMC than get into the PDMP. We don't do much looking at the PDMP for prescribing history.*
> **--ED Provider**

Consistent PDMP use appears to be influenced by multiple factors, including pre-existing knowledge of most patients. Some ED providers in tribal health organizations in rural Alaska use the PDMP when they are treating unfamiliar "out-of-towners." Otherwise, they obtain prescription drug information from Alaska Native Medical Center (ANMC) or hospital pharmacy records, as the hospital pharmacy is the sole dispensing pharmacy in the region.

Many hospitals do not have internal data collection and reporting capacity to systematically monitor prescribing practices. In some hospitals, reporting capacities are fragile and depend on a single individual. EDs often rely on informal peer review and peer pressure to monitor and adjust prescribing practices.

[4] See ACEP Alaska Emergency Opioid and Controlled Substances Prescribing Guidelines. Available at https://alaskaacep.org/wp-content/uploads/2016/06/AK-Opioid-Guidelines.pdf

Opportunities and Recommendations

CORE STRATEGY

- **Support non-opioid pain management:** Actively support public and private health plan reimbursement for alternatives to narcotic pain management.
- **Improve PDMP-EHR integration:** Work with public, private, and tribal partners to further develop PDMP-EHR integration capacities for ease of access and utility. Provide technical assistance and fiscal support as needed.
- **Support safe prescribing and diversion policies:** Support ASHNHA and ACEP's collaborative efforts to advance formal adoption of *Alaska ED Opioid & Controlled Substance Prescribing Guidelines* throughout Alaska's EDs. Encourage EDs to routinely educate providers on safe prescribing and diversion protocols.
- **Ensure safe prescribing practices:** The prescribing practices of independent pain management specialists and community-based primary care providers may not be carefully monitored. The State Board of Medicine and Drug Enforcement Agency can develop enhanced surveillance and accountability for independent prescribers.
- **Encourage patient, family & caregiver education:** Encourage EDs to develop user-friendly education materials specific to opioid use and their local community; provide technical assistance as needed. Encourage EDs to explore additional ways of educating patients, families, and caregivers such as using signs and electronic message boards.

Chapter 5: Harm Reduction

Harm reduction is a set of practical strategies and ideas aimed at reducing negative consequences of drug use.

Rationale

Given the increasing frequency of drug-related ED visits, the ED provides an important opportunity implementation of evidence-based opioid harm reduction interventions.

Key Findings

Bright Spots

A few EDs report having a naloxone distribution policy specific to ED services and patient care.

> *Our ED's naloxone distribution policy has been updated to meet patient needs and provide staff guidance.*
> **--ED Department Manager**

EDs have protocols, processes, and resources in place to screen for human immunodeficiency virus (HIV) and hepatitis C virus (HCV). Screening is initiated based on patient need and clinical circumstance, including suspected intravenous drug use.

A few EDs have taken steps to reduce stigma, bias, and harm when working with patients using substances, including opioids. Priority has been given to train clinical and non-clinical staff on patient-centered approaches to care.

> *Having a care coordinator in the ED working with OUD patients has been instrumental in shifting ED culture and reducing stigma.*
> **--ED Provider**

Needle exchange services are available in Anchorage, Juneau, Fairbanks, and Homer; EDs link to these services.

Challenges

Findings suggest that most EDs do not have a policy regarding naloxone distribution. ED staff are unsure if they have nasal Narcan kits and do not know the distribution protocol, if one exists. There is reported ED staff bias around the distribution naloxone when other life-saving resources are not provided, such as free insulin to poorly managed diabetic patients. Liability concerns persist – if kits do not work due to poor handling and storage – creating a barrier across ED systems.

Most EDs report ongoing stigma associated with and bias towards patients with substance use disorders, including OUD. This varies among staff classifications and provider types.

> *Individuals in our treatment program report delaying visits to the ED due to fear of stigma and encountering judgmental attitudes within the ED.*
> **--Behavioral Health Director**

Community syringe program resources vary and are limited statewide. Programs are not available at EDs but through other agencies working with high risk HIV and HCV population. EDs' ability to coordinate with addiction medicine specialists depends on organizational or community resources. Most EDs do not currently have regular access to this clinical resource.

Opportunities and Recommendations

CORE STRATEGIES

- **Develop naloxone policies:** Encourage EDs to develop and implement a naloxone distribution policy that reflects the organization's position on naloxone distribution and provides clear guidance to the staff.
- **Ensure HIV/HCV screening in ED:** Continue to support HIV/HCV screening policies and processes, including rapid screening, when intravenous drug use is suspected.

ENHANCED STRATEGIES

- **Expand community syringe programs:** Identify ways to maintain or expand community-based needle distribution and exchange programs. Encourage EDs to educate and inform IV drug users about such resources.
- **Reduce stigma:** One significant barrier to addressing the opioid crisis is stigma. Encourage staff training on understanding and addressing the stigma of OUD and developing patient-centered, relationship-based approaches to care.
- **Ensure appropriate care of minors:** Encourage EDs to develop or identify age-appropriate substance use screening/evaluation, referral, and care coordination protocols for at-risk minors, including care coordination with Children's Services as needed.

Chapter 6: Screening, Referral, Treatment and Overall Care Coordination

Systematic screening enables healthcare professionals to help people who may not be seeking help for a substance use problem. Standardized screening, brief intervention, and referral to treatment (SBIRT) is an evidenced-based practice to identify, reduce, and prevent problematic use and abuse of alcohol and drugs. Access to timely treatment and coordinated care are essential elements in the continuum of care.

Rationale

In addition to its role providing critical access to the healthcare system, more recently the ED visit is seen as an opportunity to identify patients with substance use disorders, including OUD, and link patients to appropriate care including addition treatment. ED providers may also be positioned to initiate medication assisted treatment (MAT) for OUD.

Key Findings

Bright Spots

Findings indicate several EDs are well-positioned to provide timely treatment and effectively coordinate transitional care. These EDs have invested in internal staff resources, including ED case managers or care coordinators, and have access to resources such as outpatient MAT providers, hospital bridge and local treatment programs, and peer support networks.

People who work in the ED are fixers; they want to be able to do something. The more tools and community resources we have, the better we can care for patients.
--ED Provider

The number of x-waivered providers is gradually increasing statewide. X-waivered training is easy to obtain. Some EDs report beginning to do MAT inductions and bridging care to community-based MAT providers.

Thirty to 50 percent of our core provider staff are x-waivered. We are making a big push to initiate MAT in the ED and not just do symptomatic care.
--ED Medical Director

Several EDs in Alaska have implemented SBIRT as a standard screening protocol; at least one other has active plans to do so soon. In some hospitals SBIRT screening occurs if a patient is admitted for hospitalization.

Success is all about making it LOCAL. The ED can be a conduit for bringing OUD patients and other resources together.
--ED Director

A few EDs have invested in ready access to addiction medicine specialists, either onsite or via telemedicine. A few have 24/7 telepsychiatry and augment their staff with mid-level psychiatric practitioners.

Overall, ED providers remain interested in ongoing education to identify and treat addiction, provide appropriate pain management, and facilitate recovery.

ED care coordination with DOC has improved markedly in the last two years.
-- Chief Medical Officer, DOC

Challenges

Organizations and providers have varied commitment to and capacity to provide MAT, in part because Alaska communities have not been uniformly impacted by the opioid epidemic. While providers may have an x-waiver, their employing healthcare organization may not offer MAT services. Findings suggest some providers and pharmacists are uncomfortable substituting one drug for another. Organizations acknowledge their limitations in being able to provide the necessary therapeutic programming critical to patient treatment.

We have multiple outpatient clinic providers who are x-waivered. However, our organization has elected not to proceed with MAT at this time.
--ED Medical Director

Access to outpatient MAT providers may present a challenge in rural communities. In many instances, the healthcare organization operating the ED also operates all outpatient services. If organizations elect not to implement MAT, this effectively results in no local outpatient MAT providers.

As a rural healthcare organization, we have ethical concerns about starting MAT in the ED and not having the internal or community resources to continue therapeutic programming.
--Chief Medical Officer

Organization-wide approaches to effectively managing the multi-disciplinary aspects of MAT, associated continuity of care, and changing corporate culture are time consuming and costly. Simply getting x-waivered and having the option to start MAT inductions in the ED is not the only consideration.

The prevailing message we receive from Anchorage is "More MAT is better." However, individual follow-up and whole-program approach seems to be lacking.
--ED Provider

A few rural-based medical directors noted challenges working with Anchorage-based MAT programs. Individuals say there appears to be limited follow-up and ongoing medical management, and monitoring for drug diversion is weak.

Most EDs describe their referral practices as haphazard and random. Findings indicate this may be due to lack of defined referral processes, limited local resources, and no system for inventorying resources in each region throughout the state.

Our referral processes are fragmented and highly dependent upon the individual ED provider.
--ED Provider

Most EDs do not standardized substance use screening; findings indicate that OUD-specific screening rarely occurs.

We informally ask some questions about tobacco and alcohol use but not OUD; nothing structured, consistent, or standardized.
--ED Provider

Efforts are made by EDs to communicate and coordinate care with primary care and behavioral health providers, but such efforts are not systemic and consistent. Care coordination works best when EHRs are integrated.

Opportunities and Recommendations

CORE STRATEGIES

- **Expand MAT services:** Continue to support x-waiver training and expansion of MAT in EDs and organizations that prioritize this approach.

- **Improve MAT coordination statewide:** Improve coordination between Anchorage MAT providers and rural care, including candid discussion about what rural providers (including ED providers) can and cannot do when people return from Anchorage to their communities.
- **Expand SBIRT Screening:** Encourage implementation of SBIRT as standard ED protocol. Adapt EHR capacities to include screening tools and results in the EHR in real time. Explore use of mobile technology to expand interface and process efficiencies. Encourage organizations to share implementation tips and lessons learned.
- **Define referral protocols and EHR capacities**: Support development and implementation of defined referral protocols. Support state, local and tribal health efforts to evaluate resources in each region and communicate resource information statewide. Continue to prioritize full development of referral management systems in hospital EHRs.
- **Optimize EHR integration:** Explore opportunities to fully integrate health information systems statewide to improve referral processes and care coordination with primary care and behavioral health providers.

EXPANDED STRATEGIES

- **Support outpatient providers:** Provide ongoing training and technical assistance to outpatient MAT providers. Encourage outpatient MAT providers to provide ongoing medical management and monitoring for drug diversion.
- **Develop treatment infrastructure:** Work collaboratively with tribal, private, and community-based organizations to expand and maintain Alaska's substance use treatment infrastructure including bridge programs, residential treatment, and peer support linkages to care. Explore funding and reimbursement mechanisms to improve timely access to care for all in need.

Chapter 7: Relapse Prevention

Relapse prevention refers to strategies that lessen the chance for relapse among individuals with opioid use disorder.

Rationale

EDs are positioned to support patient treatment and recovery processes in ways that mitigate relapse.

Key Findings

Bright Spots

Many Alaska EDs operate in small communities where providers report personal knowledge of patient substance abuse history, including opioid dependence or addiction.

> *EDs statewide report relative stability in provider staffing with limited reliance on locum tenens. This affords opportunity to know and understand patients over time.*
> **--Medical Director**

Challenges

Most EDs do not screen for previous opioid dependence or addiction. SBIRT screening does not identify those in recovery. Most EDs rely on patient self-disclosure of prior dependence or addiction.

ED providers report challenges in obtaining accurate and complete medication information on patients in MAT programs. Lack of information may hinder appropriate ED care.

Underlying mental illness contributes to relapse. Findings suggests a statewide need for more mental health resources and quick access to mental health care.

> *Underlying mental illness contributes to relapse. Lack of timely access to mental health care is frustrating providers and compromising individual recovery.*
> **--ED Medical Director**

> *The absence of information in the PDMP about methadone or buprenorphine dispensed by opioid treatment programs complicates patient treatment.*
> **--ED Provider**

Opportunities and Recommendations

CORE STRATEGIES

- **Enhance screening:** EDs may benefit from incorporating a standardized screening tool to identify previous opioid dependence or addiction, particularly in EDs where patients may not be well-known or patient populations are transient. Organizations such as ASHNHA may be positioned to provide recommendations and resources on appropriate evidence-based screening tools.

ENHANCED STRATEGIES

- **Build mental health capacity**: Continue to build and support expanded mental health resources at the community level and reduce barriers to timely access.

- **Expand PDMP reporting**: Consider expanding the list of medications reportable to the PDMP to include methadone and buprenorphine from outpatient treatment programs. This recommendation aligns with *American Society of Addiction Recommendations on PDMPs*[5] issued April 2018.

[5] See ASAM Public Policy Statement on Prescription Drug Monitoring Programs (PDMPs). Available at https://www.asam.org/docs/default-source/public-policy-statements/2018-statement-on-pdmpsf406229472bc604ca5b7ff000030b21a.pdf?sfvrsn=63ba42c2_0

Chapter 8: Surveillance & Information Exchange

Surveillance and information exchange strategies are essential to informed decision making at individual, organizational, and statewide levels. Health information systems, information exchange platforms with effective operational interface, ease of access to data, and availability of routine data reports are foundational to quality patient care, resource management, strategic planning, and policy development.

Rationale

ED providers, administrators, and policy makers recognize the need to incorporate data from multiple sources for optimal decision making.

Key Findings

Bright Spots

Alaska has invested in foundational data collection and information exchange systems such as the Health Facilities Data Reporting Program (HFDR), PDMP, and Emergency Department Information Exchange (EDIE). These systems are integral to ongoing surveillance and information exchange.

When it comes to a PDMP, you get what you pay for. Building capacity requires progressive investment and support.
--Drugs System Director

The HFDR has become an effective means to track and report essential data. Most health facilitates participate. Alaska is well-positioned to expand analysis and develop meaningful reports for public use.

ED providers throughout Alaska are building "muscle memory" related to EDIE use, checking the EDIE report before they prescribe.
-- Subject Matter Expert, Health Information

Most ED providers in Alaska use the PDMP and find it a helpful tool in caring for patients with OUD. Alaska's current PDMP is comprised of modules with basic reporting capacities. Additional modules could be accessed to build infrastructure for enhanced utility and expanded data analysis.

Findings suggest most EDs have EDIE report capacities integrated into their EHRs. ED providers use EDIE's standard notification reports with increasing frequency; a few are customizing alerts to meet their needs. Some hospitals present good examples of optimized EDIE and EHR integration. Several organizations have created training materials and mapped workflows for internal use.

We have customized our EDIE alerts, lowering the alert trigger from 12 to 6 months ED visit history.
--ED Medical Director

Challenges

Findings suggest that OUD, as a distinct medical condition, may be under-represented in surveillance data. ED providers are likely to diagnostically code for active opioid withdrawal or opioid-related overdose but under-code for OUD. Providers say patients with OUD may visit the ED with complications associated with their substance use (i.e. fever, infections, abscesses), chronic

I know of very few providers who code for OUD. It's just not done much.
--ED Medical Director

pain or somatic symptom disorders. Providers usually code for these presenting problems and may refer to OUD only in the narrative portion of the patient's clinical record. Diagnostic coding associated with each patient visit is further reviewed and may be refined by a medical coding specialist in the hospital's billing department. Some providers expressed a desire to learn more about coding opportunities associated with OUD.

While the HFDR Program compiles data, analysis and standard reporting are limited. The public can submit a data request; there is an associated cost.

Not all facilities consistently meet state data submission requirements. This creates data gaps that complicate meaningful analysis and reporting. For example, Alaska's Opioid Data Dashboard provides data on multiple indicators, such as neonatal abstinence syndrome (NAS). NAS data is pulled from the HFDR, where incomplete information may yield an incomplete or misleading picture of NAS prevalence. More information on Alaska's Opioid Data Dashboard can be found in Appendix C.

> *Our organization's internal capacity to consistently collect and report data is very fragile. We have limited financial resources and technical expertise.*
> **--Chief Medical Officer**

Although some EDs have developed process measures around prescribing practices, few EDs statewide have developed a core set of meaningful indicators making EDs better and more efficient to support improved outcomes, including those associated with OUD. Furthermore, EDs' data analytics sophistication varies based on capacity and data systems infrastructure. This variation limits the overall potential and utility of established measures.

Opportunities and Recommendations

CORE STRATEGY

- **Improve diagnostic coding:** Support and expand provider training related to OUD diagnostic coding. Encourage healthcare organizations to coordinate training with their medical coding specialists.
- **Ensure HFDR data submission:** Encourage EDs and their hospitals to review internal processes to ensure timely collection and submission of state required HFDR data.

ENHANCED STRATEGY

- **Develop ED process measures & data analytics capacities:** Provide technical assistance and training on identifying and defining meaningful process measures. Support organizations' efforts to improve their data analytics capacities over time.

Appendix A: Executive Interview Protocol

Hospital/Organization: _____

Interviewee Name: _____

Title: _____

Email: _____

Phone: _____

Date: _____

Project Background

Hi, this is _____ with the McDowell Group. We have been contracted by the State of Alaska/Office of Substance Misuse and Addiction Prevention to conduct a statewide Emergency Department Needs Assessment related to Alaska's opioid epidemic. This project focuses on identifying methods to support Emergency Departments in their care and treatment of individuals with opioid use disorder (OUD).

As part of this project, we are talking with Emergency Department personnel and key stakeholders throughout Alaska. We want to learn more about specific Emergency Department strategies, approaches and capacities for meeting the needs of ED patients with OUD.

We would like to hear your perspective on the needs, gaps, and potentials to address the opioid epidemic through Emergency Department services. There will be some specific questions and opportunity for open-ended discussion. The results the from this discussion will be used in aggregate and not associated with either yourself or your organization.

ED Staffing and Professional Resources

- ☐ Department Manager
- ☐ ED Nurse Manager
- ☐ Hospital CMO
- ☐ Other

In your average working environments, does your ED staff for the following positions and/or professional resources? Would you describe each as Filled or Not Filled? Do patients have immediate access in the ED to these resources or are access provided through a referral process?

Staffing and Professional Resources				
	Position/Resource as part of ED Staff Y/N	**Filled Y/N**	**Immediate access in ED**	**Available Through Referral**
DATA Waivered Provider				
Addiction Medicine Specialist				
Behavioral Health Clinician				
Social Worker				
Psychiatrist				
Psychologist				
Case Manager/Care Coordinator				
Screening Staff				
OUD Peer Support				
Administrative Staff				

Does your ED typically rely on locum tenens? If so, please describe. [Probe: roles, extent/utilization of.]

Prescription Drug Monitoring Program, EHR Integration & Documentation

- ☐ Provider
- ☐ Department Manager
- ☐ ED Nurse Manager
- ☐ Hospital CMO
- ☐ Other

Now we would like to learn more about how your department uses the PDMP, EHR and documentation practices.

PDMP

1. Can you walk me through the process of using the PDMP when a patient presents at your ED?
    a. Who does the mandatory review of patient prescription history? When does this occur in the patient care process?
    b. Please describe critical junctures in your PDMP utilization and patient care processes. (i.e. pharmacy checking; transferring it back to ED provider).
    c. Who does the mandatory reporting and is it done in real time or uploaded at the end of shifts or other times?
2. We are interested in learning more about the strengths and challenges of the PDMP as it relates to Emergency Departments. In general, what can you share about successes of the PDMP and EDs? What about the challenges or potential areas of improvement?
3. How does the PDMP integrate with the Emergency Department Information Exchange (EDIE)? What are the strengths of the integration? What are the challenges?
4. Are you aware of any recommendations, or do you have any recommendations, to make the PDMP work better in Emergency Departments? What are those?

5. Are there other states implementing innovative policies and procedures with respect to the PDMP that you think would be important for us to look at?

6. As it relates to EDs, are there any common calls for policy change with the PDMP you hear about? What are those?

EHR INTEGRATION

These next questions concern your Electronic Health Record (EHR).

1. How easily does your EHR interface/integrate with the PDMP? What are the challenges, if any?
2. Does your ED EHR contain an alert to notify prescribers when a prescription exceeds the state opioid prescribing limit?
3. Does your ED have an EHR default prescribing limit as it relates to opioids?
    a. Have you changed this default in the last 5 years in response to the opioid epidemic?
    b. Who can override the default prescribing limit? What are some common scenarios where overrides are necessary?

4. Do you get notified in the EHR if a patient has been prescribed opioids:
    a. from an outpatient source?
    b. Do you get notified in the EHR if a patient has overdosed recently?

DOCUMENTATION

1. What would you say are the top three reasons individuals with OUD come to the ED?

2. Generally, even though you are diagnostically coding for the presenting medical problem (such as an abscess), how consistently are you coding for opioid dependence as a secondary diagnosis?

    a. What codes do you typically use to indicate opioid dependence?

    b. Can you describe any training you have had or is available for opioid dependence coding in the ED?

Additional Comments:_____

Training

- ☐ Provider
- ☐ Department Manager
- ☐ ED Nurse Manager
- ☐ Hospital CMO
- ☐ Other

These next questions focus on staff training.

TRAINING

1. From your perspective, are ED providers adequately trained in the use of the PDMP?

a. If your ED relies on locum tenens, are they adequately trained?

2. If the Emergency Department Information Exchange (EDIE) is used within your ED, do staff (including locum tenens) receive EDIE training?

3. To what extent has ED staff received training regarding various ways of approaching OUD patients (i.e. trauma-informed care, relationship-based care, approaches to reduce patient fear of stigma & shame)?

4. When you consider the ED care of OUD patients, what are the areas in which you feel are training is consistently lacking?

Additional Comments:_____

Screening, Care Coordination & Referrals

- ☐ Department Manager
- ☐ ED Nurse Manager
- ☐ Hospital CMO
- ☐ Other

In the following questions, we would like to learn more about patient screening practices, care coordination and referrals.

SCREENING

We would like to hear about patient screening practices within the ED and the documentation of screening results.

Does your ED have a policy and protocol to screen for the following:

Patient Screening within the ED		
	Y/N	**Screening results part of medical record in real-time Y/N**
Substance Abuse (i.e. SBIRT)		
Opioid Use Disorder (as distinct from general substance abuse)		
HIV (rapid screening for patients with suspected IV drug use)		
HCV (rapid screening for patients with suspected IV drug use)		
Previous addiction		
Trauma/ACES (for Substance abuse/Opioid Use Disorder patients)		
Emergent needs such as food security, housing, etc.		

CARE COORDINATION

1. Describe care coordination efforts which may occur within your ED.

   a. Who/what entity provides the care coordination?

   b. Describe the care coordination process.

REFERRALS, RESOURCES AND PATIENT EDUCATION

Please let us know if your ED routinely provides the following for individuals with OUD upon ED discharge:

Patient referrals, resources, and education	Y/N
Referral to treatment services	
Referral to syringe access program	
Referral to community resources (i.e. peer support network, support groups, etc.)	
Information on safe opioid storage and disposal	
Information on recovery services	
Education on overdose prevention and response	
Naloxone	

Additional Comments:_____

Practices, Policies & Protocols

- ☐ Providers
- ☐ Department Manager
- ☐ ED Nurse Manager
- ☐ Hospital CMO
- ☐ Other

The next few questions are about general practices, policies and protocols related to care of OUD patients in the ED.

1. Does your ED provide non-opioid alternatives to pain management for patients with OUD?

    a. If so, please describe. [probe: applicable process, protocol, necessary resources, etc.]. It not, describe barriers or challenges.

2. Does your ED have a "safe prescribing" policy (i.e. *AK ED Opioid & Controlled Substance Prescribing Guideline*)? If so, please identify/describe.

    a. How are providers trained on the policy? [probe: including training for locums].

3. Does your ED initiate and/or utilize patient pain management contracts?

    a. If so, in what manner or capacity?

    b. If not, describe barriers/challenges/limitations [possible probe: organizational practices around pain management contracts, EHR integration limitations]

4. Does your ED have clinical policies/protocols safeguarding against patient drug diversion?

5. Does your hospital have an active opioid review committee with ED representation?

6. Do you routinely use PDMP data to monitor ED utilization and performance?

7. Do you use Emergency Room Information Exchange (EDIE) data to monitor ED utilization and performance?

    a. Is there an EDIE utilization "gap" in that "only Providers have access"?

MEDICATION-ASSISTED TREATMENT (MAT)

8. Does your ED initiate MAT for OUD? {Note: differentiate from MAT initiated for alcohol abuse}

    a. If so, briefly describe your ED policy/protocol.

9. What happens if a patient presents in the ED already on MAT?

10. When you connect with other providers, what concerns do you have heard about regarding the provision of MAT in the ED for OUD? {probes may include administrative resistance, fear of ongoing responsibility, possibly breaking the law, etc.}

Additional
Comments:_____

ED Culture and Success

How would you describe/characterize the overall culture of your ED as it relates to caring for patients with OUD?

What is really working well in your ED for the care of OUD patients?

Last Question

If you had a magic wand and would change one thing with regards to care to ED OUD patients, what would that be?

Do you have any last thoughts you want to share with me?

Appendix B: Interviewees & Discussion Participants

Table 21. ED Opioid Needs Assessment, Executive Interviewees and Facilitated Discussion Participants

Individual	Stakeholder Role	Organization	Engagement
ED Providers			
David Scordino	Physician/ED Medical Director	Alaska Regional Hospital	Interview
Daniel Safranek	Physician/ED Medical Director	Providence Alaska Medical Center	Interview
Ashley Weisman	Physician	Maniilaq Health Center	Interview
Catherine Hyndman	Physician/Chief Medical Officer	Kanakanak Hospital	Interview
Nathan Peimann	Physician	Bartlett Regional Hospital	Interview
Mark Simon	Physician	Fairbanks Memorial Hospital	Interview
Mimi Benjamin	Physician/Medical Director for Hospitalist Group	Bartlett Regional Hospital	Interview
Lindy Jones	Physician/ED Director	Bartlett Regional Hospital	Interview
Mark Peterson	Physician/Medical Director	Norton Sound Regional Hospital	Interview
Tom Quimby	Physician/ED Director	Mat-Su Regional Medical Center	Interview
Chris Mickelson	Physician/ED Director	Central Peninsula Hospital	Interview
ED Staff			
Julie Fry	RN/ED Department Manager	Fairbanks Memorial Hospital	Interview
Col. Mary Floyd	FNP/ED Chief Nurse	Joint Base Elmendorf-Richardson Hospital	Interview
Claire Geldhof	RN/ED Nurse Case Manager	Bartlett Regional Hospital	Interview
Jamie Eggert	RN/Clinical Nursing Director Emergency Services	Providence Alaska Medical Center	Group Discussion
Lauren Anderson	LCSW/Case Management	Providence Alaska Medical Center	Group Discussion
Tess Larson	Pharmacy Resident	Providence Alaska Medical Center	Group Discussion
Elaine Reale	Pharmacy Manager	Providence Alaska Medical Center	Group Discussion
Liana Obedid	Assistant Clinical Manager, ED	Providence Alaska Medical Center	Group Discussion
Dyan Fleming	Pharmacist	Providence Alaska Medical Center	Group Discussion
Tami Todd	RN/ED Charge Nurse	Providence Alaska Medical Center	Group Discussion
Administrators/Health System Leadership			
Julius Goslin	Physician/ Medicaid Leadership	Health Authority for Children's Services & Juvenile Justice - Director	Interview
Matt Hirschfeld	Physician/Hospital Leadership	Southcentral Foundation/Alaska Native Medical Center	Interview
Peter Rice	Physician/Medical Director	PeaceHealth Ketchikan Medical Center	Interview
Shane Coleman	Physician/Medical Director for Behavioral Health	Alaska Native Medical Center	Interview
Robert Lawrence	Physician/Chief Medical Officer	Alaska Department of Corrections, Health & Rehabilitation Services	Interview
Adam Rutherford	Chief Mental Health Officer	Alaska Department of Corrections, Health & Rehabilitation Services	Interview
Renee Rafferty	Behavioral Health Outpatient Linkages	Providence Health Systems	Interview
Shari Conner	Intake Coordinator	Serenity House Treatment Center, Central Peninsula Hospital	Interview
Kristie Sellers	Psychologist/Director of Behavioral Health	Central Peninsula Hospital	Interview
Ann Kreitzer	Chief Operating Officer	Alaska Native Medical Center	Group Discussion
Denise Irizarry	DNP/ Chief Nursing Officer	Samuel Simmonds Memorial Hospital	Group Discussion
Anne Margaret Shuham	Clinical Bioethicist/Manager Palliative Care Team	PeaceHealth Ketchikan	Group Discussion
Lynn Cole	Consultant/Operational Management	Wellpath Recovery Solutions, Alaska Psychiatric Institute	Group Discussion

Individual	Stakeholder Role	Organization	Engagement
Kristie Sellers	Psychologist/Director of Behavioral Health	Central Peninsula Hospital	Group Discussion
Barb Jewell	Behavioral Health Program Manager	Cordova Community Medical Center	Group Discussion
Dave Wallace	Chief Executive Officer	Mat-Su Regional Medical Center	Group Discussion
Kurstin Svoboda	RN/Director Emergency Services	Mat-Su Regional Medical Center	Group Discussion
Julie Fry	RN/ED Department Manager	Fairbanks Memorial Hospital	Group Discussion
April Kyle	VP for Behavioral Services Division	Southcentral Foundation	Group Discussion
Noel Rea	Interim Chief Executive Officer	Alaska Psychiatric Institute	Group Discussion
Leigh Wright	Physician/ED Medical Director	Alaska Native Medical Center	Group Discussion
Debbie Lowenthal	Programs and Services Manager	Alaska State Hospital and Nursing Home Association	Group Discussion
Health Information and Policy			
Sarah Chambers	Division Director of PDMP	Commerce, Community & Economic Development, Corporations, Business & Professional Licensing	Interview
Sasha De Leon	Drug Systems Director	Health Systems and Quality Assurance, Washington State Department of Health	Interview
Rachel Leiber	Health Information Technology Integration	Collective Medical	Interview
Justin Keller	Policy Lead	Collective Medical	Interview
Laura Carillo	Data Owner/Health Information Technology Integration	Commerce, Community & Economic Development, Corporations, Business & Professional Licensing	Interview
Jessica Filley	Data Owner	Division of Public Health – Office of Substance Misuse and Prevention	Interview
Anna Frick	Data Owner	Division of Public Health - Epidemiology	Interview
Bridget Hanson	Grant Evaluator	Institute for Social and Economic Research – Center for Behavioral Health Research and Services	Interview
Deborah Hull-Jilly	Grant Manager/Data Owner	Division of Public Health - Epidemiology	Interview
Brian Ritchie	Data Owner	Division of Public Health – Rural and Community Health Systems Bureau	Interview
Heidi Lengdorfer	Chief Data Officer	DHSS – Commissioner's Office	Group Discussion
Laura Young	Executive Director	healtheConnect Alaska	Group Discussion
Robin Trush	Consultant	healtheConnect Alaska	Group Discussion
Bill Pearch	Chief Information Officer	healtheConnect Alaska	Group Discussion
Professional Organizations			
Nathan Peimann	Physician/Alaska Chapter President	American College of Emergency Room Physicians	Interview
Elizabeth King	Behavioral Health/State Director	Alaska State Hospital and Nursing Home Association	Interview

Appendix C: Alaska Opioid Data Dashboard Data Limitations

Table 22. Alaska Opioid Data Dashboard: Identified Data Limitations

Indicator	Measure	Data Source	Data Limitations
ED Visits	Overdose emergency department visits (per 10,000 visits)	AK Opioid Dashboard: Syndromic Surveillance	• Not all hospitals participate in syndromic surveillance. • Patient records may be misclassified by the search algorithms. • Data should be considered ballpark figures for tracking trends. • As new facilities are brought online, the number of visits is expected to increase.
	Number of opioid-related ED visits by public health region	Same as above	Same as above
	Rate of opioid-related ED visits by public health region	Same as above	Same as above
	Opioid-related ED visits by age-group, 3-month rolling average	Same as above	Same as above
	Opioid-related ED visits by gender, 3 month-rolling average	Same as above	Same as above
Mortality	Opioid overdose death rate	AK Opioid Dashboard: Mortality Data	• Current-year data are preliminary and subject to change. • Death reporting can lag by 2-8 weeks pending final ICD-10 cause of death coding. • Preliminary overdose deaths that do not have ICD-10 coding are identified using text in the cause of death section on a death certificate. Preliminary overdose deaths are defined as any death with overdose-related wording in the underlying cause of death field on the death certificate.
	Number of opioid-related overdose deaths by public health region	Same as above	Same as above
	Rate of opioid-related overdose deaths by public health region	Same as above	Same as above
	Rate of opioid-related overdose deaths by public health region	Same as above	Same as above
	Percentage of opioid-related deaths by gender	Same as above	Same as above
Neonatal Abstinence Syndrome (NAS)	Number of infants born with Neonatal Abstinence Syndrome	AK Opioid Dashboard: Health Facilities Data Reporting Program	• Diagnosis coding is occasionally not specific enough to report on current issues in public health. • Does not include military facilities. • Includes diagnosis and procedure codes but no other data.
	Rate per 1,000 of newborns diagnosed with NAS, 3 month-rolling average	Same as above	Same as above
	Percentage of newborns born with NAS by race/ethnicity	Same as above	Same as above
	Percentage of newborns born with NAS by gender	Same as above	Same as above

Appendix D: Health Facilities Reporting Data

McDowell Group requested emergency department discharge data for years 2016, 2017, and 2018 from the Alaska Division of Public Health, Health Analytics and Vital Records Section, Health Facilities Data Reporting Program. The data provided from the state represents counts for outpatient visits to the emergency department at non-military hospitals in Alaska. The data for 2018 does not include Wrangell Medical Center.

Emergency Department Discharges

Between 2016 and 2018, there were an annual average of 2,088 opioid-related discharges and 307,755 total emergency department discharges from Alaska Emergency departments. In the same time period, opioid-related visits comprised less than 1% of emergency department visits.

Table 23. Emergency Department Discharges, Opioid-Related and All, 2016-2018

Calendar Year	Opioid	All	% Opioid
2016	2,113	316,056	0.7%
2017	2,108	305,573	0.7%
2018	2,044	301,637	0.7%
Three-Year Average	**2,088**	**307,755**	**0.7%**

Source: HFDR

Emergency Department Discharges by Demographics

GENDER

Between 2016 and 2018, more females (54.3%, n=501,349) were discharged from the emergency department compared to men (45.7%, n=421,883). In the same time period, slightly over half (52.0%, n=3,256) of all opioid-related emergency department discharges were comprised of women, compared to 48% of men (n=3,007).

Table 24. Emergency Department Discharges, Opioid-Related and All, by Gender, 2016-2018

Gender	2016		2017		2018	
	Count	Percent (%)	Count	Percent (%)	Count	Percent (%)
Opioid-Related ED Discharges						
Female	1,107	52.4	1,058	50.2	1,091	53.4
Male	1,006	47.6	1,049	49.8	952	46.6
Total	**2,113**	**100%**	**2,107**	**100%**	**2,043**	**100%**
All ED Discharges						
Female	172,387	54.5	165,340	54.1	163,622	54.2
Male	143,646	45.5	140,227	45.9	138,010	45.8
Total	**316,033**	**100%**	**305,567**	**100%**	**301,632**	**100%**

Source: HFDR
Note: Discharges of unknown gender are not displayed and were removed from the total count.

RACE

A greater percentage of opioid-related ED discharges are comprised of White people compared to all ED discharges. White people comprised 63.3% of opioid-related ED discharges between 2016 and 2018; in comparison, 42.2% of all ED discharges were White. Conversely, a smaller percentage of opioid-related ED discharges are comprised of Alaska Native people compared to all ED discharges. Between 2016 and 2018, Alaska Native people comprised 25.5% of opioid-related discharges and 38.3% of all ED discharges.

Table 25. Emergency Department Discharges, Opioid-Related and All, by Race, 2016-2018

Race/Ethnicity	2016		2017		2018	
	Count	Percent (%)	Count	Percent (%)	Count	Percent (%)
Opioid-Related ED Discharges						
White	1,307	61.9	1,352	64.1	1,308	63.9
American Indian/Alaska Native	569	26.9	543	25.8	485	23.7
Black	76	3.6	73	3.5	95	4.7
Native Hawaiian/Pacific Islander	13	0.6	9	0.4	14	0.7
Asian	39	1.9	24	1.1	28	1.3
Other	38	1.8	33	1.6	58	2.8
Unknown	71	3.4	74	3.5	56	2.7
Total	**2,113**	**100%**	**2,108**	**100%**	**2,044**	**100%**
All ED Discharges						
White	135,179	42.8	130,248	42.6	124,441	41.3
American Indian/Alaskan Native	121,851	38.6	118,504	38.8	113,633	37.7
Black	15,684	5.0	13,597	4.5	13,132	4.4
Native Hawaiian/Pacific Islander	13,811	4.4	9,806	3.2	9,945	3.3
Asian	11,849	3.8	8,161	2.7	7,866	2.6
Other	9,560	3.0	13,666	4.5	12,690	4.2
Unknown	8,122	2.6	11,591	3.8	19,930	6.6
Total	**316,056**	**100%**	**305,573**	**100%**	**301,637**	**100%**

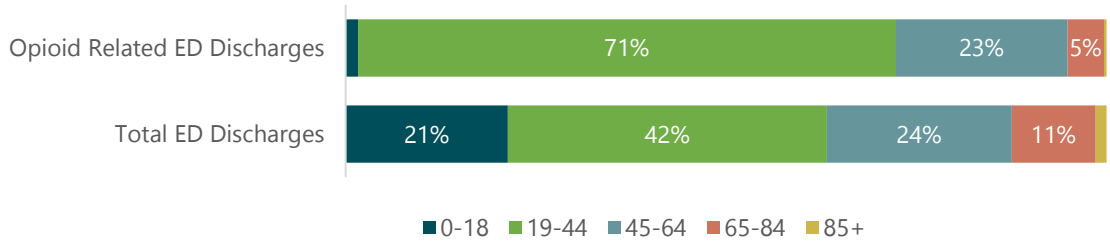
Source: HFDR

AGE

There is a large difference between the proportion of all ED discharges and opioid-related discharges by age, particularly for the 0-18, 19-44, and 65-84-year-old age groups. From 2016-2018, people 18 and younger accounted for about two percent of opioid-related ED discharges in comparison to 21% of all ED discharges. Most opioid-related ED discharges are comprised of people aged 19-44 (71%). A smaller proportion of older adults, or adults 65-84 or 85+ were discharged from the ED for opioid-related issues compared to all ED discharges.

(See figure next page.)

Figure 4. Emergency Department Discharges, Opioid-Related and All, by Age, 2016-2018



Source: HFDR

Table 26. Emergency Department Discharges, Opioid-Related and All, by Age Group, 2016-2018

Age Ranges (Years)	2016		2017		2018	
	Count	Percent (%)	Count	Percent (%)	Count	Percent (%)
Opioid-Related ED Discharges						
0-18	41	1.9	28	1.3	33	1.6
19-44	1,468	69.5	1,518	72.0	1,443	70.6
45-64	479	22.7	468	22.2	466	22.8
65-84	121	5.7	85	4.0	94	4.6
85+	4	0.2	9	0.4	8	0.4
Total	**2,113**	**100%**	**2,108**	**100%**	**2,044**	**100%**
All ED Discharges						
0-18	68,445	21.7	64,537	21.1	63,953	21.2
19-44	134,034	42.4	128,026	41.9	125,093	41.5
45-64	76,480	24.2	74,650	24.4	72,963	24.2
65-84	32,716	10.4	33,956	11.1	35,067	11.6
85+	4,366	1.4	4,402	1.4	4,552	1.5
Total	**316,041**	**100%**	**305,571**	**100%**	**301,628**	**100%**

Source: HFDR

Emergency Department Discharges by Facility Location

Anchorage facilities reported the most opioid-related and total emergency department discharges between 2016 and 2018. A total of 2,951 opioid-related emergency discharges, and 431,584 total emergency department discharges were reported by Anchorage facilities during this time.

By facility location, opioid-related visits comprised a greater percentage of reported emergency department visits for Matanuska-Susitna facilities (1.5%) compared to other facility location regions.

(See tables next page.)

Table 27. Emergency Department Discharges by Facility Location, 2016-2018

Region	Opioid ED Discharges			All ED Discharges		
	2016	2017	2018	2016	2017	2018
Anchorage	984	1,000	967	145,602	144,660	141,322
Gulf Coast	268	213	248	28,002	26,548	24,923
Interior	231	240	189	33,744	31,947	30,761
Matanuska-Susitna	213	283	314	27,219	26,635	26,537
Northern	50	32	60	24,365	19,694	26,310
Southeast	273	267	210	28,477	28,089	26,529
Southwest	94	73	56	28,647	28,000	25,255

Source: HFDR

Table 28. Emergency Department Discharges by Facility Location, 2016-2018

Region	Total 2016-2018 Emergency Department Discharges		
	Opioid ED Discharges	All ED Discharges	% Opioid
Anchorage	2,951	431,584	1.0%
Gulf Coast	729	79,473	1.3%
Interior	660	96,452	1.0%
Matanuska-Susitna	810	80,391	1.5%
Northern	142	70,369	0.3%
Southeast	750	83,095	1.3%
Southwest	223	81,902	0.4%

Source: HFDR

PATIENT RESIDENCE BY FACILITY REGION

Table 29. Emergency Department Discharges Comprised of Region Residents, 2016-2018

Region	Opioid ED Discharges			All ED Discharges		
	2016	2017	2018	2016	2017	2018
Anchorage	82%	85%	85%	84%	84%	85%
Gulf Coast	90%	90%	91%	87%	88%	88%
Interior	93%	94%	94%	93%	93%	93%
Matanuska-Susitna	94%	93%	94%	92%	92%	93%
Northern	96%	100%	95%	96%	97%	97%
Southeast	96%	96%	94%	93%	93%	92%
Southwest	97%	93%	91%	98%	98%	98%

Source: HFDR

Opioid-Related Discharges

The following tables present opioid-related discharges according to patient residence by facility region for years 2016, 2017, and 2018.

(See tables next page.)

Table 30. Opioid Related ED Discharges, Patient Residence by Facility Region, 2016-2018

	2016		2017		2018	
Patient Residence	**In Region**	**Out of Region**	**In Region**	**Out of Region**	**In Region**	**Out of Region**
Anchorage	811	30	851	28	821	31
Gulf Coast	242	32	191	42	225	39
Interior	215	12	226	16	177	10
Matanuska-Susitna	201	68	263	68	295	60
Northern	48	8	32	3	57	12
Southeast	262	15	256	7	198	13
Southwest	91	14	68	15	51	14
Total	1,870	179	1,887	179	1,824	179

Source: HFDR

All Discharges

The following tables present all emergency department discharges according to patient residence by facility region for years 2016, 2017, and 2018.

Table 31. All ED Discharges, Patient Residence by Facility Region, 2016-2018

	2016		2017		2018	
Patient Residence	**In Region**	**Out of Region**	**In Region**	**Out of Region**	**In Region**	**Out of Region**
Anchorage	121,652	3,519	122,221	2,769	119,723	2,840
Gulf Coast	24,354	3,205	23,233	2,832	22,033	2,814
Interior	31,238	1,920	29,765	1,738	28,663	1,590
Matanuska-Susitna	24,994	7,395	24,584	6,695	24,578	6,584
Northern	23,361	3,889	19,091	3,715	25,434	3,837
Southeast	26,392	1,111	26,030	1,131	24,408	1,012
Southwest	28,028	5,233	27,478	5,663	24,699	5,420
Total	**280,019**	**26,272**	**272,402**	**24,543**	**269,538**	**24,097**

Source: HFDR

Emergency Department Discharges by Month and Admission Hour

MONTH

By year and month, the greatest number (n=267) of opioid-related emergency department visits occurred in May 2017. A May 19, 2017 press release from the State of Alaska Department of Health and Social Services warns the public and providers that, "some heroin-containing drugs recently being distributed in Alaska have significant amounts of fentanyl, increasing the risk of overdose and death."[6] With the exception of May 2017, there were approximately 140-210 discharges from emergency departments each month from 2016-2018.

(See table next page.)

[6] State of Alaska, Department of Health and Social Services, 2017. Fentanyl found in three individuals who died from overdoses. http://dhss.alaska.gov/News/Documents/press/2017/Fentanyl-linked-overdose-deaths-PR-05192017.pdf

Table 32. Emergency Department Discharges, Opioid-Related and All, by Month, 2016-2018

Month	2016		2017		2018	
	Count	Percent (%)	Count	Percent (%)	Count	Percent (%)
Opioid-Related ED Discharges						
January	169	8.0	159	7.5	157	7.7
February	167	7.9	162	7.7	141	6.9
March	207	9.8	132	6.3	158	7.7
April	172	8.1	184	8.7	186	9.1
May	161	7.6	267	12.7	173	8.5
June	167	7.9	182	8.6	151	7.4
July	182	8.6	190	9.0	201	9.8
August	166	7.9	184	8.7	178	8.7
September	179	8.5	183	8.7	154	7.5
October	210	9.9	136	6.5	185	9.1
November	168	8.0	163	7.7	184	9.0
December	165	7.8	166	7.9	176	8.6
Total	**2,113**	**100%**	**2,108**	**100%**	**2,044**	**100%**
All ED Discharges						
January	26,763	8.5	25,919	8.5	25,940	8.6
February	25,530	8.1	23,279	7.6	25,106	8.3
March	28,908	9.2	26,285	8.6	28,082	9.3
April	26,321	8.3	26,130	8.6	24,624	8.2
May	26,680	8.4	26,496	8.7	25,155	8.3
June	25,496	8.1	25,188	8.2	23,757	7.9
July	27,590	8.7	27,454	9.0	26,471	8.8
August	27,801	8.8	26,516	8.7	25,412	8.4
September	26,419	8.4	25,137	8.2	24,776	8.2
October	25,168	8.0	24,858	8.1	24,778	8.2
November	24,361	7.7	23,464	7.7	23,494	7.8
December	25,019	7.9	24,847	8.1	24,042	8.0
Total	**316,056**	**100%**	**305,573**	**100%**	**301,637**	**100%**

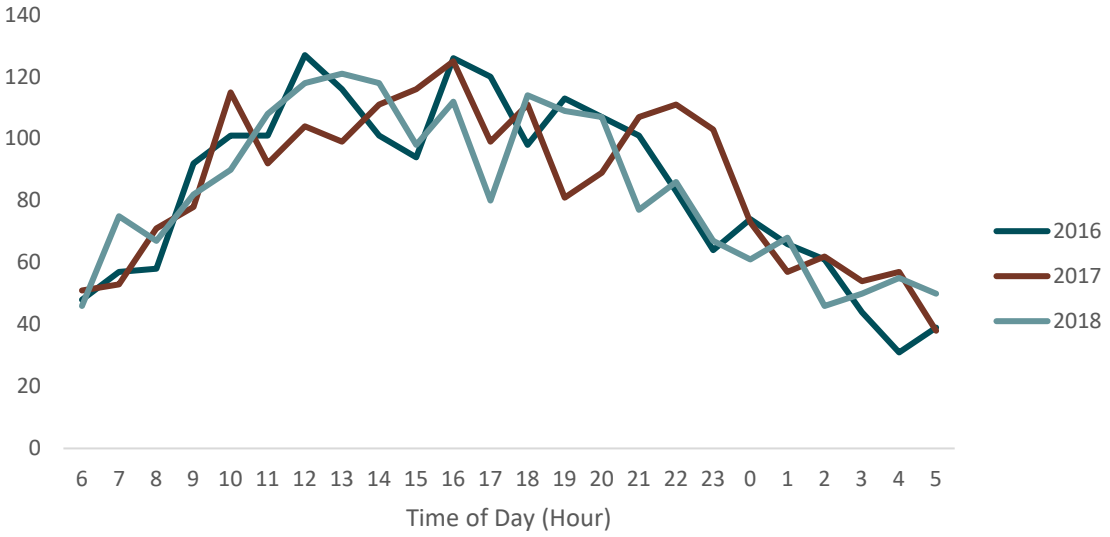
Source: HFDR

ADMISSION HOUR

The following charts and tables display discharge counts by the hour they were admitted to the emergency department for years 2016-2018. By year, the distribution of opioid-related discharges by admission hour is relatively similar. Like general emergency department admissions, there is an uptick in opioid-related admissions during daytime, business hours. Approximately half of all opioid-related emergency department patients are admitted between 8:00 AM and 6:00 PM.

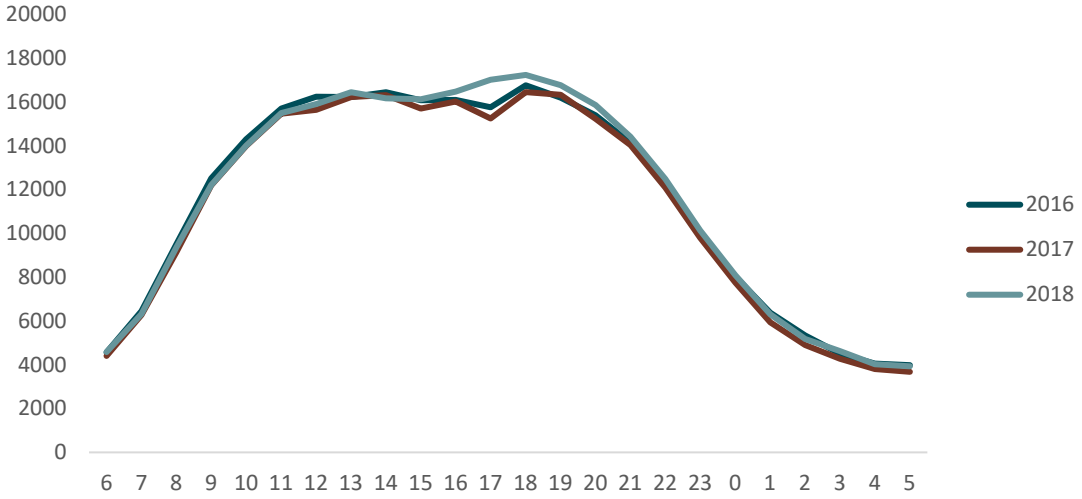
(See figures and tables next pages.)

Figure 5. Opioid-Related Emergency Department Discharges, by Admission Hour, 2016-2018



Source: HFDR

Figure 6. Emergency Department Discharges, by Admission Hour, 2016-2018



Source: HFDR

Table 33. Emergency Department Discharges, Opioid-Related, by Admission Hour, 2016-2018

	2016		2017		2018	
Admission Hour	**Count**	**Percent (%)**	**Count**	**Percent (%)**	**Count**	**Percent (%)**
00	74	3.5	73	3.5	61	3.0
01	66	3.1	57	2.9	68	3.3
02	61	2.9	62	2.9	46	2.3
03	44	2.1	54	2.6	50	2.5
04	31	1.5	57	2.7	55	2.7
05	39	1.9	38	1.8	50	4.5
06	48	2.3	51	2.4	46	2.3
07	57	2.7	53	2.5	75	3.7
08	58	2.7	71	3.4	67	3.3
09	92	4.4	78	3.7	82	4.0
10	101	4.8	115	5.5	90	4.4
11	101	4.8	92	4.4	108	5.3
12	127	6.0	104	4.9	118	5.8
13	116	5.5	99	4.7	121	6.0
14	101	4.8	111	5.3	118	5.8
15	94	4.5	116	5.5	98	4.8
16	126	6.0	125	5.9	112	5.5
17	120	5.7	99	4.7	80	3.9
18	98	4.6	111	5.3	114	5.6
19	113	5.4	81	3.8	109	5.3
20	107	5.1	89	4.2	107	5.2
21	101	4.8	107	5.1	77	3.7
22	83	3.9	111	5.3	86	4.2
23	64	3.0	103	4.9	67	3.3
Unknown	91	4.3	51	2.4	39	1.9
Total	**2,113**	**100%**	**2,108**	**100%**	**2,044**	**100%**

Source: HFDR

Table 34. Emergency Department Discharges, by Admission Hour, 2016-2018

	2016		2017		2018	
Admission Hour	**Count**	**Percent (%)**	**Count**	**Percent (%)**	**Count**	**Percent (%)**
00	7,953	2.5	7,677	2.5	8,027	2.6
01	6,307	2.0	5,877	1.9	6,232	2.1
02	5,276	1.7	4,846	1.6	5,130	1.7
03	4,466	1.4	4,225	1.4	4,578	1.5
04	4,024	1.3	3,752	1.2	3,969	1.3
05	3,944	1.3	3,642	1.2	3,881	1.3
06	4,516	1.4	4,362	1.4	4,532	1.5
07	6,400	2.0	6,222	2.0	6,251	2.1
08	9,452	3.0	9,065	3.0	9,299	3.1
09	12,425	3.9	12,116	4.0	12,130	4.0
10	14,202	4.5	13,879	4.5	13,914	4.6
11	15,607	4.9	15,374	5.0	15,385	5.1
12	16,117	5.1	15,536	5.1	15,789	5.2
13	16,120	5.1	16,135	5.3	16,330	5.4
14	16,345	5.2	16,209	5.3	16,050	5.3
15	15,997	5.1	15,592	5.1	16,037	5.3
16	15,972	5.1	15,898	5.2	16,363	5.4
17	15,638	5.3	15,156	5.3	16,935	5.6
18	16,668	5.3	16,344	5.4	17,126	5.7
19	16,089	5.1	16,248	5.3	16,659	5.5
20	15,289	4.8	15,148	5.0	15,756	5.2
21	14,046	4.4	13,930	4.6	14,338	4.8
22	12,129	3.8	11,982	3.9	12,402	4.1
23	9,994	3.2	9,702	3.2	10,066	3.3
Unknown	40,080	12.7	35,656	11.7	24,458	8.1
Total	**316,056**	**100%**	**305,573**	**100%**	**301,637**	**100%**

Source: HFDR

Emergency Department Discharges by Length of Visit

By year, the average hours per emergency department discharge for opioid-related discharges was between 3.8 hours and 4.1 hours per discharge. That is higher than the average hours per discharge for all emergency department discharges. For 2016 to 2018, the average hours per discharge for all emergency discharges was between 3.0- and 3.3-hours per discharge.

Table 35. Average Hours Per Emergency Department Discharge, Opioid-Related and All, 2016-2018

	Opioid			All Emergency Department		
	2016	**2017**	**2018**	**2016**	**2017**	**2018**
Discharges	1,669	1,674	1,647	224,705	219,414	213,970
Hours in Emergency Department	6,816	6,379	6,342	745,628	674,907	649,991
Average Hours Per Discharge	**4.1**	**3.8**	**3.9**	**3.3**	**3.1**	**3.0**

Source: HFDR
Note: This data should be interpreted with caution as not all facilities reporting to HFDR included information necessary to calculate hours in the emergency department.

Emergency Department Discharges by Diagnosis

The Clinical Classifications Software (CCS) is a tool developed at the Agency for Healthcare Research and Quality (AHRQ) for grouping patient diagnoses and procedures from the International Classification of Diseases, 10th Revision, Clinical Modification (IDC-10-CM) into reportable categories.

Opioid ED Discharges

The top CCS diagnosis group for opioid emergency department discharges is substance-related disorders, followed by skin and subcutaneous tissue infections.

Table 36. Top 10 CCS Diagnosis Groups for Opioid ED Discharges, 2016-2018

CCS Diagnosis Group	2016	2017	2018
Substance-related disorders	842	866	732
Skin and subcutaneous tissue infections	131	148	177
Poisoning by other medications and drugs	91	113	77
Abdominal pain	62	77	63
Alcohol-related disorders	59	45	58
Nausea and vomiting	49	43	63
Suicide and intentional self-inflicted injury	64	45	46
Other nervous system disorders	47	33	33
Nonspecific chest pain	*	37	44
Other gastrointestinal disorders	44	34	*
Residual codes, unclassified	*	*	42
Spondylosis, intervertebral disc disorders, other back problems	39	*	*

Source: HFDR
* Indicates that this category is not in the top ten CCS diagnosis group for that year.

All ED Discharges

The top CCS diagnosis group for all emergency department discharges is other upper respiratory infections), followed by abdominal pain.

Table 37. Top 10 CCS Diagnosis Groups for All ED Discharges, 2016-2018

CCS Diagnosis Group	2016	2017	2018
Other upper respiratory infections	17,900	17,657	16,694
Abdominal pain	15,360	14,679	14,543
Superficial injury, contusion	12,838	11,919	11,718
Nonspecific chest pain	10,781	11,197	11,508
Skin and subcutaneous tissue infections	12,081	10,994	10,304
Sprains and strains	11,730	10,520	10,043
Alcohol-related disorders	10,415	10,677	11,085
Spondylosis, intervertebral disc disorders, other back problems	9,570	8,919	8,192
Open wounds of extremities	8,390	7,904	7,697
Other injuries and conditions due to external causes	*	7,473	7,520
Urinary tract infections	7,399	*	*

Source: HFDR
* Indicates that this category is not in the top ten CCS diagnosis group for that year.

Emergency Department Discharges by Intake and Discharge Status

INTAKE

From 2016-2018, a greater percentage of opioid-related emergency department discharges (78.9%) arrived via a non-health care facility point of origin compared to emergency discharges overall (60.4%).

Table 38. Emergency Department Discharges, Opioid-Related and All, by Intake Status, 2016-2018

Intake Status	2016		2017		2018	
	Count	Percent (%)	Count	Percent (%)	Count	Percent (%)
Opioid-Related						
Non-Health Care Facility Point of Origin	1,668	78.9	1,647	78.1	1,631	79.8
Clinic	340	16.1	417	19.8	396	19.4
Unknown	36	1.7	19	0.9	8	0.4
All Other	69	3.3	25	1.2	9	0.4
Total	**2,113**	**100%**	**2,108**	**100%**	**2,044**	**100%**
All ED Discharges						
Non-Health Care Facility Point of Origin	180,479	57.1	182,315	59.7	195,102	64.7
Clinic	95,583	30.2	98,478	32.2	103,349	34.3
Unknown	14,907	4.7	11,914	3.9	2,586	0.9
All Other	25,087	7.9	12,866	4.2	600	0.2
Total	**316,056**	**100%**	**305,573**	**100%**	**301,637**	**100%**

Source: HFDR

DISCHARGE

Most emergency department discharges, opioid-related and otherwise, are released to home or self-care. A greater percentage of opioid-related discharges are made against medical advice compared to all emergency department discharges. Between 2016 and 2018, an average of 2.3% of opioid-related discharges were against medical advice compared to 1.0% of all emergency department discharges.

(See table next page.)

Table 39. Emergency Department Discharges, Opioid-Related and All, by Discharge Status, 2016-2018

Discharge Status	2016		2017		2018	
	Count	Percent (%)	Count	Percent (%)	Count	Percent (%)
Opioid Related ED Discharges						
Home/Self-Care	1,954	92.5	1,952	92.6	1,905	93.2
Invalid Patient Disposition Reported	35	1.7	15	0.7	6	0.3
Against Medical Advice (AMA)	49	2.3	50	2.4	44	2.2
To an Acute Care Facility	17	0.8	22	1.0	20	1.0
To Court/Law Enforcement	16	0.8	25	1.2	25	1.2
Other	42	2.0	44	2.1	44	2.2
Total	**2,113**	**100%**	**2,108**	**100%**	**2,044**	**100%**
All ED Discharges						
Home/Self-Care	290,365	91.9	284,347	93.1	290,264	96.2
Invalid Patient Disposition Reported	14,894	4.7	11,287	3.7	2,202	0.7
Against Medical Advice (AMA)	3,776	1.2	2,586	0.9	2,456	0.8
To an Acute Care Facility	1,579	0.5	1,819	0.6	1,928	0.6
To Court/Law Enforcement	1,519	0.5	1,472	0.5	1,395	0.5
Other	3,923	1.2%	4,062	1.3%	3,392	1.1%
Total	**316,056**	**100%**	**305,573**	**100**	**301,637**	**100%**

Source: HFDR

Emergency Department Billed Charges

The average billed charges per emergency department discharges was higher for opioid-related patients compared to all emergency department patients between 2016 and 2018. Billed charges for opioid-related discharges between 2016 and 2018 totaled $22,881,365. There were 6,255 discharges made during this time period for an average billed charges per discharge of $3,658. In comparison, the average billed charges per discharge for all emergency department discharges was $3,068. There was a total of 921,747 total emergency department discharges reported between 2016 and 2018 and approximately $2.8 billion dollars in associated billed charges.

Table 40. Average Billed Charges Per ED Discharge, Opioid-Related and All, 2016-2018

	Opioid			All Emergency Department		
	2016	2017	2018	2016	2017	2018
Discharges	2,110	2,104	2,041	315,596	305,017	301,134
Billed Charges	$7,188,986	$7,568,119	$8,124,260	$884,962,590	$939,842,161	$1,003,378,242
Average Billed Charges Per Discharge	**$3,407**	**$3,597**	**$3,981**	**$2,804**	**$3,081**	**$3,332**

Source: HFDR

Appendix E: Medicaid Claims Data

Total Medicaid Beneficiaries

There were 4,521 Medicaid beneficiaries diagnosed with opioid disorder or poisoning at any point during state fiscal year 2018 (SFY2018). Medicaid spending for these beneficiaries totaled $98.8 million and the average spending per beneficiary diagnosed with opioid disorder and poisoning was $21,854. In comparison, the average spending per beneficiaries not diagnosed with opioid disorder and poisoning is $10,609.

Table 41. Average Spending Per Medicaid Beneficiary, Opioid and All, SFY2018

	Beneficiaries Diagnosed with Opioid Disorder/Poisoning	All Other Beneficiaries
Total Medicaid Beneficiaries	4,521	187,518
Total Medicaid Spending	$98,804,120	$1,989,396,621
Average Spending per Beneficiary	**$21,854**	**$10,609**

Source: State of Alaska, Medicaid Claims Data

Medicaid Beneficiaries with ED Visit

Of the 4,521 Medicaid beneficiaries diagnosed with opioid disorder or poisoning in SFY 2018, 59% (n=2,662) visited the emergency department in the same time frame. In comparison, 33% of all other Medicaid beneficiaries visited the emergency department in SFY2018.

Table 42. Medicaid Beneficiary Emergency Department Visits, Opioid and All Other, SFY2018

	Beneficiaries Diagnosed with Opioid Disorder/Poisoning	All Other Beneficiaries
Total Medicaid Beneficiaries	4,521	187,518
Total Medicaid Beneficiaries with ED Visit	2,662	61,253
% of Beneficiaries with One or More ED visits	**59%**	**33%**

Source: State of Alaska, Medicaid Claims Data

Medicaid beneficiaries diagnosed with opioid disorder or poisoning visited the emergency department an average of three times in SFY2018; beneficiaries without an opioid-related diagnosis visited the emergency department an average of two times.

Table 43. Medicaid Beneficiary Emergency Department Claims, Opioid and All Other, SFY2018

	Beneficiaries Diagnosed with Opioid Disorder/Poisoning	All Other Beneficiaries
Total Medicaid Beneficiaries with ED Visit	2,662	61,253
Total Medicaid ED Claims	9,003	138,261
Average Number of ED Visits per Beneficiary	**3.38**	**2.26**

Source: State of Alaska, Medicaid Claims Data

In SFY2018, there were 2,662 Medicaid beneficiaries diagnosed with opioid disorder or opioid poisoning that visited an emergency department at any point during SFY2018. Medicaid spending for beneficiaries diagnosed with opioid disorder or opioid poisoning at any point during SFY2018 was $4,298,329 across 9,003 claims. In comparison, the average spending per beneficiary for all other beneficiaries was $323.

Table 44. Medicaid Beneficiary Emergency Department Spending, Opioid and All Other, SFY2018

	Beneficiaries Diagnosed with Opioid Disorder/Poisoning	All Other Beneficiaries
Total Medicaid Beneficiaries	4,521	187,518
Total Medicaid ED Spending	$4,298,329	$60,526,247
Average ED Spending per Beneficiary	**$951**	**$323**

Source: State of Alaska, Medicaid Claims Data

Gender

In SFY2018, a smaller number of male Medicaid beneficiaries (n=1,175) were diagnosed with opioid disorder or poisoning at any point in the year compared to females (n=1,487). Similarly, among beneficiaries without an opioid disorder or poisoning, more males visited the emergency department (n=27,741) compared to female Medicaid beneficiaries (n=33,152).

Table 45. Medicaid Beneficiary ED Visits, Opioid-Related and All, by Gender, SFY2018

	Beneficiaries Diagnosed with Opioid Disorder/Poisoning	All Other Beneficiaries	% Opioid-Related
Female			
Total Beneficiaries	1,487	33,512	4.2%
Total Claims	5,292	77,228	6.4%
Total Spending	$2,617,200	$33,914,570	7.2%
Male			
Total Beneficiaries	1,175	27,741	4.1%
Total Claims	3,711	61,033	5.7%
Total Spending	$1,681,129	$26,611,677	5.9%

Source: State of Alaska, Medicaid Claims Data

Age

By age group, Medicaid beneficiaries 19-44 years of age comprise the largest age group of beneficiaries diagnosed with opioid disorder or poisoning. A total of 1,959 beneficiaries aged 19-44 represented 6,184 claims for a total spending of over three million dollars. Among all other beneficiaries, children under 19 years of age are the second largest group of beneficiaries behind adults aged 19-44 years of age. However, of beneficiaries diagnosed with opioid disorder or poisoning, children under 19 are the second smallest age group for the count of Medicaid beneficiaries, claims, and spending.

Table 46. Medicaid Beneficiary ED Visits, Opioid-Related and All, by Age, SFY2018

	Beneficiaries Diagnosed with Opioid Disorder/Poisoning	All Other Beneficiaries	% Opioid-Related
Child Under 19			
Total Beneficiaries	27	21,344	0.1%
Total Claims	84	36,660	0.2%
Total Spending	$46,957	$16,418,169	0.3%
Adult 19-44			
Total Beneficiaries	1,959	22,798	7.9%
Total Claims	6,184	56,385	9.9%
Total Spending	$3,040,468	$27,092,822	10.1%
Adult 45-64			
Total Beneficiaries	636	12,629	4.8%
Total Claims	2,578	33,952	7.1%
Total Spending	$1,176,704	$15,087,019	7.2%
Adult 65-84			
Total Beneficiaries	39	3,955	1.0%
Total Claims	155	10,153	1.5%
Total Spending	$33,969	$1,762,403	1.9%
Adult 85+			
Total Beneficiaries	*	527	*
Total Claims	*	1,111	*
Total Spending	$231	$165,833	0.1%

Source: State of Alaska, Medicaid Claims Data
* Denotes data suppressed where there are fewer than six cases.

Region

The three public health regions with the greatest number of Medicaid beneficiaries, claims, and total spending are Anchorage, Mat-Su, and Gulf Coast regions.

Table 47. Medicaid Beneficiary Emergency Department Visits, Opioid-Related and All, by Age, SFY2018

	Beneficiaries Diagnosed with Opioid Disorder/Poisoning	All Other Beneficiaries	% Opioid-Related
Anchorage			
Total Beneficiaries	1,134	27,356	4.0%
Total Claims	4,347	67,084	6.1%
Total Spending	$2,001,650	$26,539,041	7.0%
Gulf Coast			
Total Beneficiaries	377	5,972	5.9%
Total Claims	937	11,345	7.6%
Total Spending	$569,432	$6,191,470	8.4%
Interior			
Total Beneficiaries	251	6,060	4.0%
Total Claims	950	13,978	6.4%
Total Spending	$478,750	$7,466,637	6.0%
Mat-Su			
Total Beneficiaries	541	7,932	6.4%
Total Claims	1,565	14,723	9.6%
Total Spending	$696,024	$5,783,395	10.7%
Northern			
Total Beneficiaries	23	3,409	0.7%
Total Claims	103	8,247	1.2%
Total Spending	$55,500	$4,355,445	1.3%
Southwest			
Total Beneficiaries	46	4,942	0.9%
Total Claims	126	9,820	1.3%
Total Spending	$57,241	$4,606,921	1.2%
Southeast			
Total Beneficiaries	276	5,156	5.1%
Total Claims	913	12,220	7.0%
Total Spending	$403,999	$5,236,538	7.2%

Source: State of Alaska, Medicaid Claims Data

Appendix F: Assessment of Opioid-Related ED Frameworks for Data Collection

Framework Options: Data Collection

An initial assessment activity was to identify an ED framework for data collection that is readily applicable to Alaska. McDowell Group identified and reviewed six frameworks outlining varied data components deemed integral to opioid-related prevention and treatment response in the ED setting. Frameworks identified and assessed were based on various rationales, implementation strategies, and data collection roles within ED practice. They include:

- *A Quality Framework for Emergency Department Treatment of Opioid Use Disorder*
- *Strategy to Combat Opioid Abuse, Misuse, and Overdose: A Framework Based on the Five Point Strategy*
- *Stem the Tide: Addressing the Opioid Epidemic*
- *2018 Washington State Opioid Response Plan*
- *Emergency Department and Hospital Care for Opioid Use Disorder: Implementation of Statewide Standards in Rhode Island, 2017-2018*
- *Substance Abuse and Mental Health Services Administration Strategic Plan FY 2019-FY 2023*

Framework Identification

The identified frameworks are described briefly below.

A Quality Framework for Emergency Department Treatment of Opioid Use Disorder

Background: National Institute on Drug Abuse, Center for the Clinical Trials Network in collaboration with the American College of Emergency Physicians' (ANEP's) Clinical Emergency Data Registry.

Rationale: Emergency physicians form the front-line response to the opioid epidemic. As primary providers of acute illness stabilization, timely diagnosis, and linkages to appropriate care, ED physicians are uniquely positioned to improve quality of care for patients with opioid use disorder (OUD) and have an essential role in addressing the opioid epidemic and preventing overdose deaths. Currently there are no nationally recognized standards or best practices to guide ED quality improvement efforts in this regard.

Key Features: A multi-stakeholder quality improvement framework with specific structural, process, and outcome measures to guide an emergency medicine agenda for OUD policy, research, and clinical quality improvement focused on primary prevention, harm reduction, and treatment. Structural measures assess a provider's or institution's capacity, systems, and processes. Process measures assess provider activities. Outcome measures assess the effect of the service or intervention on the health of patients.

Data Features: Incorporates structural, process, and ED and population health outcome measures for OUD in primary prevention, harm reduction, and treatment domains.

Applicability to Alaska: Framework is specific to the ED context and treatment of OUD patients. Could serve as model for hospitals with a robust multi-stakeholder quality improvement platform.

Limitations: Not all hospitals engage in quality improvement at every level and/or in the ED. Improvement may not be the top priority in every hospital. Strong and consistent support from leadership is required. In Alaska, quality improvement efforts may be adversely impacted by high staff turnover and locum use.

Strategy to Combat Opioid Abuse, Misuse, and Overdose: A Framework Based on the Five-Point Strategy

Background: Initially put forth in 2017 and further enhanced in 2018, this U.S. Department of Health and Human Services strategy reflects a public-health approach to ending the opioid crisis.

Rationale: Framework identifies robust, scientific evidence as key to success. The framework sets forth specific, concrete public-health-oriented actions to combat OUD and the overdose crisis.

Key Features: A public-health, five-point strategy with emphasis on 1) better addiction prevention, treatment, and recovery services, 2) better data, 3) better pain management, 4) better targeting of overdose-reversing drugs, and 5) better research.

As related to ED practices and care, the framework highlights healthcare-provider education regarding drug-drug interactions and proper disposal of unused opioid prescription medications (prevention); development of a comprehensive education plan for physicians in identification and treatment of addiction and safe pain management, treatment, and recovery (Addiction Treatment); and expanded use of peer workforce as interventionists in various settings, including the ED (Addiction Treatment). Also described is the need for healthcare professionals to develop guidance on screening and treatment for co-occurring mental and substance use disorders and unresolved trauma in people living with chronic pain (Better Pain Management). Finally, a key component is ensuring widespread availability of naloxone for high-risk populations – including those with recent opioid-related ED visits (Better Targeting of Overdose Reversing Drugs).

Data Features: Focus is on strengthening public health data collection and reporting to improve timeliness and specificity of data and to inform a real-time public-health response as the epidemic evolves (Better Data). Measures include durable outcomes such as opioid deaths and non-fatal overdoses as well as surrogate markers such as opioid prescriptions, new drug patterns, related harms, etc. Enhanced and effective use of Prescription Drug Monitoring Programs (PDMP) and statewide data integration mechanisms for clinical decision support is noted.

Applicability to Alaska: Framework highlights underlying trauma and screening for trauma. It builds on use of the PDMP and the provision of naloxone, each of which is currently prioritized in Alaska. The state could identify additional ways to support and/or enhance these key strategies.

Limitations: Framework is broad. This public-health approach requires engagement of multiple entities. The State would have the bulk of implementation responsibility. Statewide integration of data for clinical decision

making is a barrier, as Alaska's statewide data integration efforts are evolving. Universal participation in PDMP is required. A framework component is peer-counseling/peer recovery services in the ED. At present, peer-recovery resources are not universally available or coordinated statewide.

Stem the Tide: Addressing the Opioid Epidemic

Background: Response developed by the American Hospital Association (AHA) in 2017 with input from a multidisciplinary team, including representatives from nursing, risk management, physician leadership, research, and AHA's Section for Psychiatric and Substance Abuse Services and Committee on Clinical Leadership. The Alaska State Hospital & Nursing Home Association (ASHNHA) identifies the toolkit as a resource for Alaska.

Rationale: AHA recognizes that hospitals and health systems must tailor their efforts to meet the resource realities and unique needs of their communities. Activities to address the opioid crisis will vary based on the size of an organization, location, scope of hospital and physician services, and community and state resources.

Key Features: Resource toolkit for hospitals and healthcare systems to share with clinicians and patients and to use to enhance partnerships within their communities. Information is categorized in eight topic areas: 1) clinician education in prescribing practices, 2) non-opioid pain management, 3) addressing stigma, 4) treatment options for OUDs, 5) patient, family, and caregiver education, 6) transitions of care, 7) safeguarding against diversion, and 8) collaborating with communities. Toolkit includes resources and links to trainings, clinical practice and policy guidelines, and case studies for each of the eight topic areas. Some links are no longer active.

Data Features: Although the toolkit does not describe the role of data or provide specific data measures, it does support ED inclusion related to prescribing practices, clinical trainings, non-opioid pain management, Screening, Brief Intervention and Referral to Treatment (SBIRT), naloxone distribution, patient education, and transitions to care.

Applicability to Alaska: The toolkit contains references to case studies specific to the ED, including local models for clinical practice and policies that have potential for adaptation in Alaska communities. clinical practices and policies.

Limitations: Although the toolkit addresses many critical components of an opioid epidemic response, it is not a strategic framework, per se. It prioritizes access to multiple resources, but those resources are not necessarily Alaska-specific.

2018 Washington State Opioid Response Plan

Background: In 2015, Washington's Department of Health Framework Opioid Response Workgroup developed a comprehensive statewide opioid response plan. The framework was subsequently approved by the governor (2016), formally directing state agencies to implement key elements. The plan is updated annually to align with evolution of the problem, changing scientific evidence, new policies implemented by the legislature, and new activities supported by state and federal funding. Contributing workgroups have expertise in prevention, treatment, criminal justice, pregnant and parenting women, morbidity and mortality, and data. Key partners include federal, state, local, and tribal entities as well as professional associations and academic institutions.

Rationale: A collaborative, statewide approach is essential to addressing a complex public health crisis. Coordination and implementation among multi-sector partners is integral to this framework. Partners for all sectors on the local, state and federal levels are engaged in driving implementation of key strategies and activities.

Key Features: Comprehensive and detailed framework that outlines specific objectives, strategies and actions around four priority goals: 1) prevent OUD, 2) identify and treat OUD, 3) reduce morbidity and mortality from OUD and 4) use data and information to detect OUD, monitor morbidity and mortality, and evaluate interventions.

Data Features: Metrics aligned with overall health outcomes and Goals 1-3, as described above.

Applicability to Alaska: A statewide framework with strong policy elements and comprehensive approaches that may be appropriate for Alaska. The framework outlines strategies for engaging a wide range of entities, including EDs, state agencies, tribal partners, educational systems, etc. to identify and coordinate key priorities.

Limitations: Washington is different from Alaska, as Alaska has many multi-sector partners and systems to accommodate (i.e. urban, rural, and tribal) and not just state agencies and hospitals.

Emergency Department and Hospital Care for Opioid Use Disorder: Implementation of Statewide Standards in Rhode Island, 2017-2018

Background: In 2017, the Rhode Island Department of Health (RIDOH) and Department of Behavioral Health, Developmental Disabilities and Hospitals (BHDDH) released treatment standards – *Levels of Care for Rhode Island Emergency Departments for Treating Overdose and Opioid Use Disorder* – specifically for emergency and inpatient care of adult patients with OUD. Standards are designed for licensed acute-care facilities.

Rationale: This framework considers standardized care for OUD; enhanced opioid overdose surveillance and response; and expanded linkage to peer recovery support, naloxone, and medication for OUD as key components to address the opioid crisis.

Key Features: Standards prescribe three levels of hospital and ED treatment and prevention of OUD and opioid overdose and mechanisms for referral to treatment and epidemiological surveillance. Level 3 facilities provide patient education on safe opioid storage and disposal, substance use disorder screening, linkage to treatment upon discharge, peer recovery consultation, fentanyl testing, naloxone distribution, and 48-hour opioid overdose reporting. Level 2 facilities meet level 3 requirements and have trained staff to conduct comprehensive substance-use assessment and initiate medication for OUD. Level 1 facilities meet the requirements for levels 2 and 3, can maintain individuals on OUD medications, and provide additional services for comprehensive treatment. A 48-hour reporting system enables identification of overdose hotspots and changes or gaps in service use, allowing for rapid hospital engagement to identify and rectify lapses in service provision.

Data Features: Mandated 48-hour opioid overdose reporting via an online data-collection tool, tracking of take-home naloxone, and linkages to peer recovery support for overdose patients visiting the ED. Overdose surveillance relies on weekly monitoring of opioid overdose frequency, identification of city and county overdose hotspots, and assessment of service provision.

Applicability to Alaska: The framework has been broadly referenced and has specific ED components. Identifying levels of care for each Alaska ED may help inform or refine institutional response and public surveillance.

Limitations: There is no incentive for hospitals to participate in this certification-based process coordinated by the state. The framework would require major investment, public support for a statewide data system, and formation of a response team. Alaska does not have a history of real-time data delivery. Hotspot analysis is limited by Alaska's population distribution and density. Rhode Island is geographically small; it could be difficult to adapt this framework to Alaska's vast size.

Substance Abuse and Mental Health Services Administration Strategic Plan FY 2019-FY 2023

Background: As an agency within the U.S. Department of Health and Human Services, the Substance Abuse and Mental Health Services Administration (SAMHSA) leads public health efforts to advance the nation's behavioral health. SAMHSA's multi-year strategic plan aligns with the U.S Department of Health and Human Service Strategic Plan FY2018-FY2020. The plan sets a framework of priority goals and objectives identified as currently relevant.

Rationale: SAMHSA's underlying premise reflects a multi-pronged approach to reduce the impact of substance use and mental illness, thus improving individual, community, and public health. Core principles of the plan are: 1) supporting the adoption of evidence-based practices; 2) increasing access to the full continuum of services for mental and substance use disorders; 3) engaging in outreach to clinicians, grantees, patients, and the American public; 4) collecting, analyzing, and disseminating data to inform policies, programs, and practices; and 5) recognizing that availability of mental and substance use disorder services is integral to everyone's health.

Key Features: The framework outlines goals and measurable objectives with associated key performance and outcome measures in five priority areas: 1) combating the opioid crisis through expansion of prevention, treatment, and recovery support services; 2) addressing serious mental illness and serious emotional disturbances; 3) advancing prevention, treatment, and recovery support services for substance use; 4) improving data collection, analysis, dissemination, and program and policy evaluation; and 5) strengthening health practitioner training and education.

Data Features: Select performance and outcome measures associated with priority areas 1 (combating the opioid crisis) and 3 (advancing prevention, treatment, and recovery support services for substance use) may be appropriate for ED settings and practice. Priority area 2 (addressing serious mental illness and serious emotional disturbances) offers measures not related to ED care; area 5 (strengthening health practitioner training and education) uses measures associated with SAMHSA-funded or SAMHSA-delivered trainings. Priority area 4 (improving data collection, analysis, dissemination, and program and policy evaluation) primarily addresses data collection unrelated to EDs such as SAMHSA-grantee data.

Applicability to Alaska: Various entities, including tribal health organizations, may access SAMHSA funding and therefore individually benefit from implementation of the framework's many approaches, including required training and data collection. Alaska has room to identify and personalize its approach to create systemwide

approaches within the framework. The framework offers outcome measures related to prescribing practices, Medically Assisted Treatment (MAT), and provider training.

Limitations: This framework presents broad guidance on a comprehensive approach. While federally driven, entities working within the framework need internal resources and sophistication to obtain and maintain funding, successfully implement goals, and report on key outcome measures. Because this framework is primarily SAMSHA-specific, there is limited guidance as to how the ED could engage all five priority areas.

Table 48. Framework Component: Upstream Prevention

Indicator	Measure	Framework Model						Meets Inclusion Criteria	Status of Data	
		Quality Framework for ED	*DHHS 5-point Strategy*	*Stem the Tide*	*WA State Opioid Response Plan*	*ED/Hospital Care: Rhode Island Standards*	*SAMHSA Strategic Plan FY 2019-2023*	Equitable, Feasible, Sustainable	Currently Collected	Alaska Data Source
Trauma-informed approach to care	% of ED staff with trauma-informed training		X							
ACES screening for trauma	% of ED OUD patients screened		X							

Table 49. Framework Component: Reducing Substance Misuse and Addiction

Indicator	Measure	Framework Model						Meets Inclusion Criteria	Status of Data	
		Quality Framework for ED	*DHHS 5-point Strategy*	*Stem the Tide*	*WA State Opioid Response Plan*	*ED/Hospital Care: Rhode Island Standards*	*SAMHSA Strategic Plan FY 2019-2023*	Equitable, Feasible, Sustainable	Currently Collected	Alaska Data Source
Availability of non-opioid pain management		X								
PDMP-EMR Integration		X								
"Safe prescribing" ED policies		X								
	Patient education about opioid safe storage & disposal on discharge (process measure)	X				X				

Indicator	Measure	Framework Model						Meets Inclusion Criteria	Status of Data	
		Quality Framework for ED	*DHHS 5-point Strategy*	*Stem the Tide*	*WA State Opioid Response Plan*	*ED/Hospital Care: Rhode Island Standards*	*SAMHSA Strategic Plan FY 2019-2023*	Equitable, Feasible, Sustainable	Currently Collected	Alaska Data Source
"Safe prescribing" ED policies	Trial of nonopioid analgesics before opioid initiation when indicated (process measure)	X	X							
	Median days opioids prescribed (process measure)	X								
	Median MME/day per ED visit (process measure)	X								
	Frequency of benzodiazepine and opioid co-prescribing (process measure)	X					X			
	Adverse events after ED discharge after receiving new opioids (ED outcome)	X								
	ED re-visitation for analgesic-associated adverse medication events (ED outcome)	X								
PDMP Utilization	Total number of providers registered with PDMP		X						X	AK Opioid Dash-board/ PDMP
	Number of new providers registered with PDMP		X						X	AK Opioid Dash-board/ PDMP

Indicator	Measure	Framework Model						Meets Inclusion Criteria	Status of Data	
		Quality Framework for ED	*DHHS 5-point Strategy*	*Stem the Tide*	*WA State Opioid Response Plan*	*ED/Hospital Care: Rhode Island Standards*	*SAMHSA Strategic Plan FY 2019-2023*	Equitable, Feasible, Sustainable	Currently Collected	Alaska Data Source
PDMP Utilization	Number of physicians registered with PDMP		X						X	AK Opioid Dash-board/ PDMP
	Number of patient profile requests made by providers		X						X	AK Opioid Dash-board/ PDMP
	Number of prescriptions (II-IV) entered into PDMP		X						X	AK Opioid Dash-board/ PDMP
Provider Training	Educate healthcare professionals re: drug-drug interactions between opioids and other medications, including benzodiazepines		X							
Prescribing Practices Note: *AK ED Opioid & Controlled Substance Prescribing Guidelines* supports this	Prescribers provided with actionable information & guidance on appropriate management of acute pain, including non-opioid approaches and, when appropriate, short-term opioid management.		X	X		X				

Indicator	Measure	Framework Model						Meets Inclusion Criteria	Status of Data	
		Quality Framework for ED	*DHHS 5-point Strategy*	*Stem the Tide*	*WA State Opioid Response Plan*	*ED/Hospital Care: Rhode Island Standards*	*SAMHSA Strategic Plan FY 2019-2023*	Equitable, Feasible, Sustainable	Currently Collected	Alaska Data Source
Prescribing Practices Note: *AK ED Opioid & Controlled Substance Prescribing Guidelines* supports this	Percentage of opioid prescriptions w/ overlapping benzodiazepine prescriptions						X			
Patient, Family & Caregiver Education	Educate utilizers of ED re: policy/practices of opioid therapies, potential side effects/risks, and opioid management in ED			X						
Opioid Diversion	Proportion patients maintaining receipt of medication for OUD at 30 days (population outcome)	X	X							
	ED clinical policies/protocols safeguarding against diversion			X						

Table 50. Framework Component: Harm Reduction

Indicator	Measure	Framework Model						Meets Inclusion Criteria	Status of Data	
		Quality Framework for ED	*DHHS 5-point Strategy*	*Stem the Tide*	*WA State Opioid Response Plan*	*ED/Hospital Care: Rhode Island Standards*	*SAMHSA Strategic Plan FY 2019-2023*	Equitable, Feasible, Sustainable	Currently Collected	Alaska Data Source
Naloxone distribution policy		X		X						
Community Syringe Program		X								
Addressing stigma	Providers trained to reduce fear of stigma & shame among ED SUD patients seeking care			X						
ED Care Coordination: Children's Services	Unknown-									

Table 51. Framework Component: Screening, Referral, Treatment & Substance Use Care Coordination

Indicator	Measure	Framework Model						Meets Inclusion Criteria	Status of Data	
		Quality Framework for ED	*DHHS 5-point Strategy*	*Stem the Tide*	*WA State Opioid Response Plan*	*ED/Hospital Care: Rhode Island Standards*	*SAMHSA Strategic Plan FY 2019-2023*	Equitable, Feasible, Sustainable	Currently Collected	Alaska Data Source
Buprenorphine-waivered providers: ED & community		X								
Availability of outpatient providers of medication for OUD		X								
Community opioid treatment program and providers		X								

Indicator	Measure	Framework Model						Meets Inclusion Criteria	Status of Data	
		Quality Framework for ED	*DHHS 5-point Strategy*	*Stem the Tide*	*WA State Opioid Response Plan*	*ED/Hospital Care: Rhode Island Standards*	*SAMHSA Strategic Plan FY 2019-2023*	Equitable, Feasible, Sustainable	Currently Collected	Alaska Data Source
Addiction medicine specialist consultation access		X								
	1) Proportion of ED OUD patients (process measures):									
	1a) Provision of overdose prevention & response patient education	X	X							
	1b) Discharged w/ prescribed naloxone	X	X	X		X				
	1c) Referred to a syringe access program	X								
	1d) Referred to community resources	X								
Hospital or community bridge programs		X								
	1) Proportion of ED OUD patients (process measures):									
	1a) With initiated medication for OUD	X	X			X				
	1b) Prescribed medication for OUD	X								
	1c) Linked to outpatient OUD treatment	X		X		X				

Indicator	Measure	Framework Model						Meets Inclusion Criteria	Status of Data	
		Quality Framework for ED	*DHHS 5-point Strategy*	*Stem the Tide*	*WA State Opioid Response Plan*	*ED/Hospital Care: Rhode Island Standards*	*SAMHSA Strategic Plan FY 2019-2023*	Equitable, Feasible, Sustainable	Currently Collected	Alaska Data Source
Hospital or community bridge programs (continued)	1d) Counseled by health promotion advocates, counselors, or social workers	X								
	Structured screening & diagnostic questionnaires (process measure)	X		X (SBIRT)		X (For SUD, fentanyl, HCV/HIV)				
	Urine toxicology testing (process measure)	X				X				
	Opioid withdrawal scale at ED discharge (ED outcome)	X								
	HCV and HIV incidence & prevalence (population outcome)	X	X							
Linkages to care (peer support)	Peer recovery consultation		X			X				
	Number of communities utilizing peer recovery coaches in hospital EDs						X			
Provider training & education	Comprehensive educ. plan for providers: identification/treatment of addiction, safe pain management, treatment, recovery.		X							
	Increase number of providers able/willing to provide MAT		X							

Indicator	Measure	Framework Model						Meets Inclusion Criteria	Status of Data	
		Quality Framework for ED	*DHHS 5-point Strategy*	*Stem the Tide*	*WA State Opioid Response Plan*	*ED/Hospital Care: Rhode Island Standards*	*SAMHSA Strategic Plan FY 2019-2023*	Equitable, Feasible, Sustainable	Currently Collected	Alaska Data Source
Provider training & education (continued)	Number of practitioners with DATA 2000 Waiver to prescribe buprenorphine to individuals with OUD						X			
ED care coordination with:										
a. Judicial system	Unknown									
b. Primary care physician	Unknown									
c. Behavioral health providers	Unknown									

Table 52. Framework Component: Relapse Prevention

Indicator	Measure	Framework Model						Meets Inclusion Criteria	Status of Data	
		Quality Framework for ED	*DHHS 5-point Strategy*	*Stem the Tide*	*WA State Opioid Response Plan*	*ED/Hospital Care: Rhode Island Standards*	*SAMHSA Strategic Plan FY 2019-2023*	Equitable, Feasible, Sustainable	Currently Collected	Alaska Data Source
Screening for previous dependence or addiction	Unknown									
Recovery & Supports	Proportion patients engaged in formal addiction treatment at 30 days (population outcome)	X								

Table 53. Framework Component: Surveillance and Information Exchange

Indicator	Measure	Framework Model						Meets Inclusion Criteria	Status of Data	
		Quality Framework for ED	*DHHS 5-point Strategy*	*Stem the Tide*	*WA State Opioid Response Plan*	*ED/Hospital Care: Rhode Island Standards*	*SAMHSA Strategic Plan FY 2019-2023*	Equitable, Feasible, Sustainable	Currently Collected	Alaska Data Source
ED Visits	48 -hour overdose reporting		X			X				
	Overdose emergency department visits (per 10,000 visits)						X		X	AK Opioid Dashboard/ Syndromic Surveillance
	a) Number of opioid-related ED visits by public health region								X	AK Opioid Dashboard/ Syndromic Surveillance
	b) Rate of opioid-related ED visits by public health region								X	AK Opioid Dashboard/ Syndromic Surveillance
	c) Opioid-related ED visits by age-group, 3-month rolling avg.								X	AK Opioid Dashboard/ Syndromic Surveillance
	d) Opioid-related ED visits by sex, 3 month-rolling avg.								X	AK Opioid Dashboard/ Syndromic Surveillance
	Repeated ED visit rates for opioid overdose, opioid withdrawal, or complications of injection drug use (population outcome)	X								

Indicator	Measure	Framework Model						Meets Inclusion Criteria	Status of Data	
		Quality Framework for ED	*DHHS 5-point Strategy*	*Stem the Tide*	*WA State Opioid Response Plan*	*ED/Hospital Care: Rhode Island Standards*	*SAMHSA Strategic Plan FY 2019-2023*	Equitable, Feasible, Sustainable	Currently Collected	Alaska Data Source
OUD Incidence & Prevalence	Patients with unintended prolonged opioid use (population outcome)	X								
	New OUD per-capita incidence (population outcome)	X								
	OUD prevalence (population outcome)	X								
	Opioid overdose incidence (population outcome)	X								
Mortality Data	Opioid overdose death rate		X		X		X		X	AK Opioid Dashboard /Mortality Data
	a) Number of opioid-related overdose deaths by public health region								X	AK Opioid Dashboard /Mortality Data
	b) Rate of opioid-related deaths by public health region								X	AK Opioid Dashboard /Mortality Data
	c) Rate of opioid-related overdose deaths by age group								X	AK Opioid Dashboard /Mortality Data

Indicator	Measure	Framework Model						Meets Inclusion Criteria	Status of Data	
		Quality Framework for ED	*DHHS 5-point Strategy*	*Stem the Tide*	*WA State Opioid Response Plan*	*ED/Hospital Care: Rhode Island Standards*	*SAMHSA Strategic Plan FY 2019-2023*	Equitable, Feasible, Sustainable	Currently Collected	Alaska Data Source
Mortality Data (continued)	d) Percentage of opioid-related deaths by sex								X	AK Opioid Dashboard /Mortality Data
	Risk-adjusted repeated fatal overdose (population outcome)	X								
	Risk adjusted out-of-hospital overdose mortality (population outcome)	X								
	Risk-adjusted 30-day repeated ED visit for nonfatal opioid overdose (ED outcome)	X								
	Prescription opioid overdose death rate				X					
	Heroin overdose rate				X					
Neonatal Abstinence Syndrome	Infants born with Neonatal Abstinence Syndrome				X				X	AK Opioid Dashboard /HFDR
	a) Rate per 1,000 of newborns diagnosed with neonatal abstinence syndrome, 3 month-rolling avg.		X						X	AK Opioid Dashboard /HFDR

Indicator	Measure	Framework Model						Meets Inclusion Criteria	Status of Data	
		Quality Framework for ED	*DHHS 5-point Strategy*	*Stem the Tide*	*WA State Opioid Response Plan*	*ED/Hospital Care: Rhode Island Standards*	*SAMHSA Strategic Plan FY 2019-2023*	Equitable, Feasible, Sustainable	Currently Collected	Alaska Data Source
Neonatal Abstinence Syndrome (continued)	b) Percentage of newborns born with NAS by race/ethnicity								X	AK Opioid Dashboard /HFDR
	c) Percentage of newborns born with NAS by sex								X	AK Opioid Dashboard / HFDR
Opioid Use Surveillance	Patients on high-dose chronic opioid >90 mg MED				X					
	Percentage of opioid prescriptions with daily morphine equivalent dose > 50 MME						X			
	New opioid users who become chronic users		X		X					
	Chronic opioid users with concurrent sedative use		X		X					
	Days of opioids supplied to new users		X		X					
	Risk-adjusted repeated nonfatal overdose (population outcome)	X	X							
	Rates of opioid-related hospitalizations						X			

Indicator	Measure	Framework Model						Meets Inclusion Criteria	Status of Data	
		Quality Framework for ED	*DHHS 5-point Strategy*	*Stem the Tide*	*WA State Opioid Response Plan*	*ED/Hospital Care: Rhode Island Standards*	*SAMHSA Strategic Plan FY 2019-2023*	Equitable, Feasible, Sustainable	Currently Collected	Alaska Data Source
OUD Treatment	% Medicaid clients with an OUD receiving MAT		X		X					
	Percentage of individuals with OUD receiving any form of MAT in the past year						X			
Third-party payment for ED OUD services	Unknown									

Table 54. Framework Component: Upstream Prevention Measures

Indicator/Strategy	Measure	Measure Type	Status of Data	
			Alaska Data Source	Currently Collected
Core Strategies				
Trauma-informed approach to care	% of ED staff with trauma-informed training	Process	ED	
Enhanced Strategies				
ACES screening for trauma	% of ED OUD patients screened	Process	ED	

Table 55. Framework Component: Reducing Substance Misuse and Addiction Measure

Indicator/Strategy	Measure	Measure Type	Status of Data	
			Alaska Data Source	Currently Collected
Core Strategies				
Availability of non-opioid pain management	Number of options available	Process	ED	
Prescription Drug Monitoring Program (PDMP) Use	Total number of providers registered with PDMP	Process	AK Opioid Dashboard/ PDMP	✓
	Number of new providers registered with PDMP	Process	AK Opioid Dashboard/ PDMP	✓
	Number of physicians registered with PDMP	Process	AK Opioid Dashboard/ PDMP	✓
	Number of patient profile requests made by providers	Process	AK Opioid Dashboard/ PDMP	✓
	Number of prescriptions (II-IV) entered in PDMP	Process	AK Opioid Dashboard/ PDMP	✓
PDMP-EHR Integration	PDMP fully accessed through single EHR portal; no additional linkage or log in	Outcome	ED	

Indicator/Strategy	Measure	Measure Type	Status of Data	
			Alaska Data Source	Currently Collected
"Safe prescribing" ED policies	% of ED patients discharged with opioid prescription who receive education about safe storage & disposal	Process	ED	
	Trial of nonopioid analgesics before opioid initiation when indicated	Process	ED	
	Median days opioids prescribed	Process	ED	
	Median MME/day per ED visit	Process	ED	
	Frequency of benzodiazepine and opioid co-prescribing	Process	ED	
	Rates of adverse events after ED discharge after receiving new opioids	Outcome	ED	
	ED re-visitation rates for analgesic-associated adverse medication events	Outcome	ED	
Prescribing Practices	Prescribers provided with actionable information & guidance on appropriate management of acute pain, including non-opioid approaches and, when appropriate, short-term opioid management.	Process	ED	
	Percentage of opioid prescriptions w/ overlapping benzodiazepine prescriptions	Process	ED	
Patient, Family & Caregiver Education	Educate utilizers of ED re: policy/practices of opioid therapies, potential side effects/risks, and opioid management in ED	Process	ED	
Opioid Diversion	ED clinical policies/protocols safeguarding against diversion	Process	ED	

Table 56. Framework Component: Harm Reduction Measures

Indicator/Strategy	Measure	Measure Type	Status of Data	
			Alaska Data Source	Currently Collected
Core Strategies				
Naloxone distribution policy	ED-specific policy on distribution of naloxone (i.e. nasal Narcan) to patients on discharge	Process	ED	
HIV/HCV screening: suspected IV drug use	HIV and HCV incidence and prevalence	Outcome	AK HFRD & Syndromic Surveillance	✓
Enhanced Strategies				
Community Syringe Program	% of ED patients with IV drug use referred to community syringe program, if available	Process	ED	
Addressing stigma	% ED providers trained to reduce fear of stigma & shame among ED SUD patients seeking care	Process	ED	
ED Care Coordination: Children's Services	Age-appropriate substance use screening/evaluation, referral and care coordination protocols for at-risk minors – including care coordination with Children's Services, as needed.	Process	ED	

Table 57. Framework Component: Screening, Referral, Treatment and Substance Use Care Coordination Measures

Indicator/Strategy	Measure	Measure Type	Status of Data	
			Alaska Data Source	Currently Collected
Core Strategies				
Buprenorphine-waivered providers: ED & community	% of ED providers with x-waiver providing treatment	Process	ED	
	% x-waivered community providers providing treatment	Process	ED	
SBIRT protocol	% of ED patients screened utilizing SBIRT or another evidenced-based substance use screening tool	Process	ED	
Provider training & education	Comprehensive education plan for ED providers: identification of addiction, safe pain management, treatment & recovery.	Process	ED	
Care coordination:				
Primary care provider	Implementation of ED-specific primary care referral protocol	Process	ED	
Behavioral health (BH) providers	Implementation of ED-specific BH referral protocol	Process	ED	
Judicial system/Alaska DOC	Implementation of ED-specific DOC care coordination protocol (if applicable)	Process	ED	
Enhanced Strategies				
Availability outpatient medication providers for OUD	Proportion of x-waivered community providers offering treatment	Process	ED	
Addiction medicine specialist consultation access	Proportion of ED OUD patients receiving consultation with addiction medicine specialist within 24 hours	Outcome	ED	
Community opioid treatment program and providers	% of ED OUD patients referred to community opioid treatment program or provider	Process	ED	
Hospital or community bridge programs	% of ED OUD patients linked to hospital or community bridge programs	Process	ED	
Linkages to care (peer support)	% of ED OUD patients linked to peer recovery support services	Process	ED	

Table 58. Framework Component: Relapse Prevention Measures

Indicator/Strategy	Measure	Measure Type	Status of Data	
			Alaska Data Source	Currently Collected
Core Strategies				
Screening for previous opioid dependence or addiction	% of ED patients screened to identifying previous opioid dependence or addiction.	Process	ED	
Enhanced Strategies				
Recovery & Supports	Proportion of ED OUD patients engaged in formal addiction treatment at 30 days post discharge	Outcome	Unknown	

Table 59. Framework Component: Surveillance and Information Exchange

Indicator/Strategy	Measure	Measure Type	Status of Data	
			Alaska Data Source	Currently Collected
Core Strategies				
ED Visits	Timely submission of HFRD to SOA	Process	ED/Hospital	✓
	Repeated ED visit rates for opioid overdose, opioid withdrawal, or complications of injection drug use	Outcome	ED	
	Overdose emergency department visits (per 10,000 visits)	Outcome	AK Opioid Dashboard/ PDMP	✓
	Number of opioid-related ED visits by public health region	Outcome	AK Opioid Dashboard/ PDMP	✓
	Rate of opioid-related ED visits by public health region	Outcome	AK Opioid Dashboard/ PDMP	✓
	Opioid-related ED visits by age-group, 3-month rolling avg.	Outcome	AK Opioid Dashboard/ PDMP	✓
	Opioid-related ED visits by sex, 3 month-rolling avg.	Outcome	AK Opioid Dashboard/ PDMP	✓

Indicator/Strategy	Measure	Measure Type	Status of Data	
			Alaska Data Source	Currently Collected
Enhanced Strategies				
OUD Incidence & Prevalence	Opioid overdose incidence	Outcome	AK Opioid Dashboard/ PDMP	✓
	Patients with unintended prolonged opioid use)	Outcome	Unknown	
	New OUD per-capita incidence	Outcome	Unknown	
	OUD prevalence	Outcome	Unknown	
Mortality Data	Opioid overdose death rate	Outcome	AK Opioid Dashboard/ PDMP	✓
	Number of opioid-related overdose deaths by public health region	Outcome	AK Opioid Dashboard/ PDMP	✓
	Rate of opioid-related deaths by public health region	Outcome	AK Opioid Dashboard/ PDMP	✓
	Rate of opioid-related overdose deaths by age group	Outcome	AK Opioid Dashboard/ PDMP	✓
	Percentage of opioid-related deaths by sex	Outcome	AK Opioid Dashboard/ PDMP	✓
	Risk-adjusted repeated nonfatal overdose	Outcome	Unknown	
	Risk adjusted out-of-hospital overdose mortality	Outcome	Unknown	
	Risk-adjusted 30-day repeated ED visit for nonfatal opioid overdose	Outcome	ED	
Neonatal Abstinence Syndrome	Number of infants born with Neonatal Abstinence Syndrome	Outcome	AK Opioid Dashboard/ PDMP	✓
	Rate per 1,000 of newborns diagnosed with neonatal abstinence syndrome, 3 month-rolling avg.	Outcome	AK Opioid Dashboard/ PDMP	✓

Indicator/Strategy	Measure	Measure Type	Status of Data	
			Alaska Data Source	Currently Collected
Enhanced Strategies (continued)				
Neonatal Abstinence Syndrome (continued)	Percentage of newborns born with NAS by race/ethnicity	Outcome	AK Opioid Dashboard/ PDMP	✓
	Percentage of newborns born with NAS by sex	Outcome	AK Opioid Dashboard/ PDMP	✓
Opioid Use Surveillance	Risk-adjusted repeated nonfatal overdose (population outcome)	Outcome	Unknown	
	Rates of opioid-related hospitalizations	Outcome	HFRD	✓