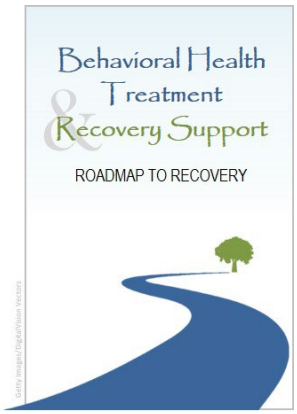


# Mental Health and Support Services Use and Other Outcomes After SUD-Related Acute Events

## SUPPORT ACT §1003 Roadmap to Recovery Planning Grant

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Report to the Health Care Authority §1003 SUPPORT ACT Roadmap to Recovery Planning Grant Steering Committee Co-Chairs, Dr. Charissa Fotinos and Dr. Keri Waterland. The Section 1003 Roadmap to Recovery Project is funded by the Centers for Medicare and Medicaid Services (CMS) of the U.S. Department of Health and Human Services (HHS) as part of a financial assistance award totaling $3,997,144 with 100 percent funded by CMS/HHS. Contents are those of the authors and do not necessarily represent the official views of, nor an endorsement, by CMS/HHS, or the U.S. Government.

TO IMPROVE BEHAVIORAL HEALTH TREATMENT AND RECOVERY SERVICES for Medicaid beneficiaries, the Washington State Health Care Authority (HCA) received a SUPPORT ACT[1] grant from the Centers for Medicare and Medicaid Services (CMS). In support of this effort, we conducted analyses on the service utilization of adult Medicaid beneficiaries with a SUD diagnosis who had a SUD-related acute event in calendar year (CY) 2018. In this third report of a three-report series, we examined the mental health services and support services received by adult Medicaid beneficiaries with a SUD within 3 and 12 months of the initial acute SUD event (index event) in CY 2018. In addition, we examined death and arrest outcomes for this population.

## Key Findings

1. **Subsequent use of outpatient mental health treatment was highest following inpatient or residential SUD treatment acute event services.** Among those with a SUD-related inpatient or residential acute index event, 41 percent received outpatient mental health treatment within 3 months.
2. **Support service use varied depending on the type of SUD-related acute index event.** SUD support services were the most common among those with SUD-related inpatient or residential acute events. Home- and Community-Based Services were the most common among those with a SUD-related inpatient hospitalization initial acute event.
3. **Medicaid beneficiaries with an acute index event of SUD-related inpatient hospitalization had the highest rates of all-cause deaths and overdose or other drug-related deaths in the index month or within 3 and 12 months of the index month.** Among those with any SUD-related acute event, the rate of death (all-cause) was 3.8 percent at 12 months. However, among those with a SUD-related inpatient hospitalization acute index event, the rate of death (all-cause) was 8.1 percent at 12 months post index.
4. **Arrest rates were highest among those with a SUD-related outpatient emergency department event within the index acute event month and within 3 months of the index acute event.** However, arrest rates were highest among those with a withdrawal management event within 12 months of the acute index event. Arrest rates were consistently lowest among those with a SUD-related inpatient hospitalization index event.

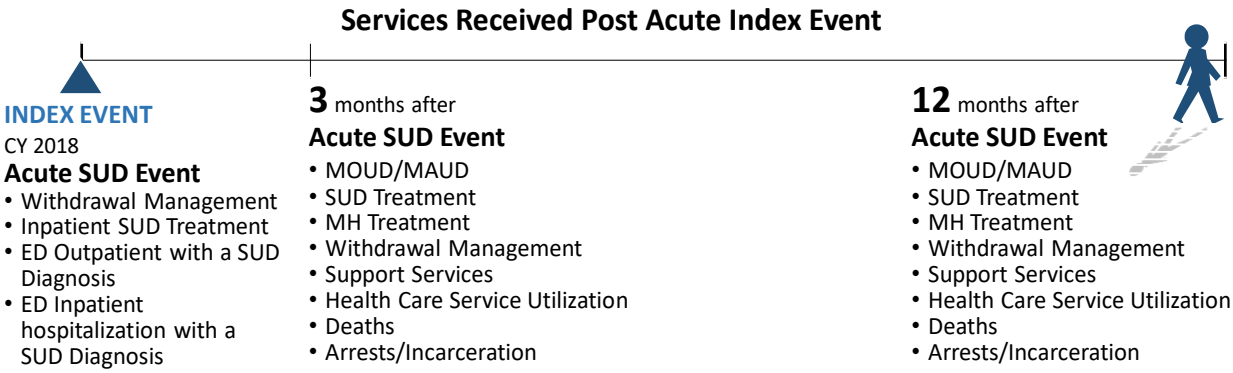
[1] More information about the SUPPORT ACT implementation in Washington can be found at: https://www.hca.wa.gov/about-hca/apple-health-medicaid/support-act.

# Services Received After Acute Index Event

We identified services received and other outcomes within 3 and 12 months of the initial (index) acute SUD event (see Figure 1 below). These services and outcomes were divided into six broad categories: post-index SUD-related acute events, emergency department and hospital utilization, SUD services, mental health services, support services, and other outcomes.

FIGURE #1.

## Index and Post-Index Acute Event Services Identification




The categories of services discussed in this report include:

- **Mental Health Services.** Outpatient mental health treatment, and psychotropic medications.
- **Support Services.** Foundational Community Supports (FCS) supportive housing, FCS supported employment, other SUD support services (receipt of other SUD-related support services in community engagement/referral services, housing services, SUD peer support services, and recovery support services). SUD peer support services and recovery support services are also reported separately), case management, home- and community-based services (HCBS).
- **Other Outcomes.** Deaths (all-cause and overdose), and arrests (all and new).

As shown in a prior report (Lopez et al. 2022), of the total number of Medicaid beneficiaries with a SUD diagnosis, nearly a quarter (22.5 percent) had at least one (Any) SUD-related acute event within CY 2018. Of those with a SUD-related acute event, 12.0 percent had multiple acute events within the index month (see Table 1).

TABLE 1.

## Summary of Acute Event Types

CY2018, By Type of Acute Event in Index Month

| | Medicaid Beneficiaries with a SUD-related Acute Event | |
|---|---|---|
| | NUMBER | PERCENT |
| Any Acute SUD Event (Any) | 39,356 | 100% |
| Multiple Types of Acute SUD Events (Multiple) | 4,718 | 12.0% |
| **Type of SUD-related Acute Event in Index Month*** | | |
| Withdrawal Management (WM) | 4,130 | 10.5% |
| Inpatient or Residential SUD Treatment (IP SUD) | 5,311 | 13.5% |
| SUD-related ED Visit – Outpatient (SUD ED-OP) | 23,535 | 59.8% |
| SUD-related Inpatient Hospitalization (SUD IP-HOSP) | 11,849 | 30.1% |

*Type of Acute Event categories are not mutually exclusive.

In the following tables, percentages are the number of those who received or experienced post-index services/outcomes within the specified timeframe (rows) out of those who experienced the indicated type of acute index event (columns). For example, in Table 2 below, of those Medicaid beneficiaries with a SUD diagnosis who experienced a withdrawal management (WM) acute index event, 33.4 and 51.4 percent received outpatient mental health treatment within 3 and 12 months of the index event, respectively.

## Mental Health Services

Prior research shows that more than two-thirds of Medicaid beneficiaries with a SUD diagnosis have a co-occurring mental health diagnosis (Bittinger et al., 2021). After an acute SUD-related event, Medicaid beneficiaries may also receive mental health-related services. Table 2 below focuses on the two types of mental health-related services examined in this report: receipt of outpatient mental health treatment and prescriptions for psychotropic medications.

TABLE 2.

### Mental Health-Related Services after Acute Index Event

Within 3 months and 12 months of the CY 2018 Index Event

| | Types of Acute Index Events for Medicaid Beneficiaries with a SUD Diagnosis | | | | | |
|---|---|---|---|---|---|---|
| | **Any** (n=39,356) | **Multiple** (n=4,718) | **WM** (n=4,130) | **IP SUD** (n=5,311) | **SUD ED-OP** (n=23,535) | **SUD IP-HOSP** (n=11,849) |
| | PERCENT | PERCENT | PERCENT | PERCENT | PERCENT | PERCENT |
| **Within 3 Months of Index Event** | | | | | | |
| Outpatient MH Treatment | 29.9% | 38.0% | 33.4% | 41.3% | 29.9% | 27.4% |
| Psychotropic Medications | 39.6% | 52.1% | 49.8% | 51.0% | 38.0% | 40.3% |
| **Within 12 Months of Index Event** | | | | | | |
| Outpatient MH Treatment | 44.4% | 53.1% | 51.4% | 57.5% | 45.0% | 39.1% |
| Psychotropic Medications | 55.3% | 68.0% | 67.0% | 65.8% | 54.7% | 53.9% |

**Outpatient Mental Health Services.** For individuals with Any SUD-related index event, 29.9 percent received outpatient MH treatment within 3 months and 44.4 percent within 12 months of index. Of those with Multiple SUD-related index events 38.0 percent received outpatient MH treatment within 3 months and 53.1 percent within 12 months of index. Individuals with IP SUD index events had the highest rates of outpatient MH treatment within 3 and 12 months of the index event (41.3 and 57.5 percent, respectively), followed by those with WM index events (33.4 and 51.4 percent, respectively), and those with SUD ED-OP index events (29.9 and 45.0 percent, respectively). Individuals with SUD IP-HOSP index events had the lowest rate of outpatient MH treatment within 3 and 12 months (27.4 and 39.1 percent, respectively).

**Psychotropic Medications.** For individuals with Any SUD-related index event, 39.6 percent received psychotropic medications within 3 months and 55.3 percent within 12 months of index. Of those with Multiple SUD-related index events, 52.1 percent received psychotropic medications within 3 months and 68.0 percent within 12 months of index. Within 3 months of index, individuals with IP SUD index events had the highest rate of psychotropic medication receipt (51.0 percent), whereas those with SUD ED-OP index events had the lowest (38.0 percent). Within 12 months of index, individuals with WM index events had the highest rate of receipt of psychotropic medications (67.0 percent), whereas those with SUD IP-HOSP index events had the lowest (53.9 percent).

## Support Services

The utilization of SUD-specific and non-SUD specific support services post-index event are included in Table 3 below. Other SUD support services include receipt of community engagement/referral services, SUD housing services, SUD peer support services, and recovery support services. Peer support services and recovery support services are also reported as separate categories under the other SUD support services category.

TABLE 3.

### Support Services after Acute Index Event

Within 3 months and 12 months of the CY 2018 Index Event

| | Types of Acute Index Events for Medicaid Beneficiaries with a SUD Diagnosis | | | | | |
|---|---|---|---|---|---|---|
| | **Any** (n=39,356) | **Multiple** (n=4,718) | **WM** (n=4,130) | **IP SUD** (n=5,311) | **SUD ED-OP** (n=23,535) | **SUD IP-HOSP** (n=11,849) |
| | PERCENT | PERCENT | PERCENT | PERCENT | PERCENT | PERCENT |
| **Within 3 Months of Index Event** | | | | | | |
| FCS Supportive Housing | 0.2% | ** | 0.3% | 0.4% | 0.2% | 0.1% |
| FCS Supported Employment | 0.3% | 0.4% | 0.4% | 0.5% | 0.3% | 0.3% |
| Other SUD Support Services | 4.0% | 7.4% | 8.2% | 12.7% | 3.3% | 1.9% |
| Peer Support Services | 0.6% | 0.9% | 0.6% | 1.2% | 0.6% | 0.6% |
| Recovery Support Services | 1.4% | 2.0% | 2.8% | 4.3% | 1.0% | 0.6% |
| SUD Case Management | 0.6% | 0.6% | 0.9% | 2.1% | 0.4% | 0.3% |
| Home and Community Based Services | 5.3% | 2.9% | 0.9% | 0.8% | 4.0% | 10.5% |
| **Within 12 Months of Index Event** | | | | | | |
| FCS Supportive Housing | 1.0% | 1.1% | 1.5% | 1.7% | 1.0% | 0.5% |
| FCS Supported Employment | 1.5% | 1.8% | 2.2% | 2.1% | 1.4% | 1.4% |
| Other SUD Support Services | 6.7% | 11.5% | 12.9% | 17.7% | 6.0% | 3.6% |
| Peer Support Services | 1.3% | 2.4% | 1.8% | 2.6% | 1.3% | 1.2% |
| Recovery Support Services | 2.5% | 3.3% | 4.5% | 6.4% | 2.1% | 1.3% |
| SUD Case Management | 1.3% | 1.5% | 2.1% | 3.8% | 1.0% | 0.6% |
| Home and Community Based Services | 7.2% | 4.9% | 1.5% | 1.5% | 5.5% | 13.8% |

**Suppressed due to small numbers (n<11)

**Foundational Community Supports (FCS).** In early 2018 as part of a broader Medicaid Transformation Project[2], the Foundational Community Supports – Supportive Housing and Supported Employment programs were implemented in Washington state. Even though implementation of the program was just beginning during the measurement period, individuals with SUD-related acute events in CY2018 were enrolling in both programs.

*Supportive Housing*. Of those with Any SUD-related index event, 0.2 percent received supportive housing services within 3 months of index and 1.0 percent within 12 months. Of those with multiple SUD-related index events, 1.1 percent received supportive housing services within 12 months of the index month. Supportive housing services were received at the highest rate within 3 and 12 months by individuals with IP SUD index events (0.4 and 1.7 percent, respectively) and at the lowest rate by those with SUD IP-HOSP index events (0.1 and 0.5 percent, respectively).

*Supported Employment.* Of those with Any SUD-related index event, 0.3 percent received supported employment services within 3 months of index and 1.5 percent within 12 months. Of those with Multiple SUD-related index events, 0.4 percent received supported employment services within 3

[2] More information about the Foundational Community Supports programs can be found at https://www.hca.wa.gov/about-hca/programs-and-initiatives/medicaid-transformation-project-mtp/initiative-3-foundational-community-supports-fcs.

months of index and 1.8 percent within 12 months. Supported employment services were received at the highest rates within 3 months of index by individuals with IP SUD index events (0.5 percent) and by individuals with WM index events (2.2 percent) within 12 months of index. Supported employment services were received at the lowest rate within 3 and 12 months of index by those with SUD ED-OP and SUD IP-HOSP index events (0.3 and 1.4 percent, equally and respectively).

Due to the continued expansion of the program after CY 2018, we would expect a higher rate of utilization of these services in subsequent years.

**Other SUD Support Services.** Of those with Any SUD-related index event, 4.0 percent received other SUD support services within 3 months of index and 6.7 percent within 12 months. Of those with Multiple SUD-related index events, 7.4 percent received other SUD support services within 3 months of index and 11.5 percent within 12 months. Individuals with IP SUD index events had the highest rate of receipt of other SUD support services within 3 and 12 months of index (12.7 and 17.7 percent, respectively), followed by those with WM index events (8.2 and 12.9 percent, respectively). Those with SUD IP-HOSP index events had the lowest rate of receipt of other SUD support services within 3 and 12 months of index (1.9 and 3.6 percent, respectively).

**Peer Support Services.** These services provide scheduled activities that promote recovery, self-advocacy, development of natural supports, and maintenance of community living skills. Of those with Any SUD-related index event, 0.6 percent received peer support services within 3 months of index and 1.3 percent within 12 months. Of those with Multiple SUD-related index events, 0.9 percent received peer support services within 3 months of index and 2.4 percent within 12 months. Individuals with IP SUD index events had the highest rate of receipt of peer support services within 3 months (1.2 percent) and 12 months (2.6 percent) of index event. Those with WM, SUD ED-OP, and SUD IP-HOSP all equally received the same rate of receipt of peer support services within 3 months (0.6 percent). Those with SUD IP-HOSP index events had the lowest rate of receipt of peer support services received within 12 months of index (1.2 percent).

**Recovery Support Services.** A broad range of nonclinical services that assist individuals and families to initiate, stabilize, and maintain long-term recovery from substance use. Of those with Any SUD-related index event, 1.4 percent received recovery support services within 3 months of index and 2.5 percent within 12 months. Of those with Multiple SUD-related index events, 2.0 percent received recovery support services within 3 months of index and 3.3 percent within 12 months. Individuals with IP SUD index events had the highest rate of receipt of recovery support services within 3 months (4.3 percent) and 12 months (6.4 percent) of the index event, followed by those with WM index events (2.8 and 4.5 percent, respectively). Those with SUD IP-HOSP index events had the lowest rate of receipt of recovery support services received within 3 and 12 months of index (0.6 and 1.3 percent, respectively).

**SUD Case Management.** SUD case management includes case planning, case consultation and referral services, and other support services for the purpose of engaging and retaining clients in treatment. Of those with Any SUD-related index event, 0.6 percent received case management services within 3 months of index and 1.3 percent within 12 months. Of those with Multiple SUD-related index events, 0.6 percent received case management services within 3 months of index and 1.5 percent within 12 months. Individuals with IP SUD index events had the highest rate of receipt of case management services within 3 and 12 months of index (2.1 and 3.8 percent, respectively), followed by those with WM index events (0.9 and 2.1 percent, respectively). Those with SUD IP-HOSP index events had the lowest rate of receipt of case management within 3 and 12 months of index (0.3 and 0.6 percent, respectively).

**Home- and Community-Based Services (HCBS).** Home- and community-based services provide opportunities for Medicaid beneficiaries to receive services in their own home or community, rather

than in institutions or isolated settings. It is important to note that only HCBS services provided by the DSHS Aging and Long-Term Support Services Administration are included in this analysis.

Of those with Any SUD-related index event, HCBS services were the most frequently used type of support services with 5.3 percent receiving HCBS within 3 months and 7.2 percent within 12 months. HCBS was also the most frequently used support service among those with SUD ED-OP and SUD IP-HOSP events. Individuals with SUD-related SUD IP-HOSP had the highest rate of receipt of HCBS within 3 and 12 months of index (10.5 and 13.8 percent, respectively), followed by those with SUD-related SUD ED-OP index events (4.0 and 5.5 percent, respectively). Of those with Multiple SUD-related index events, HCBS services were the second most utilized type of services, with 2.9 percent receiving HCBS within 3 months of index and 4.9 percent within 12 months. Those with IP SUD and WM index events had considerably lower rates of HCBS services and at 12 months at 1.5 percent.

## Other Outcomes

We examined all-cause (due to any cause) deaths and overdose or other drug-related deaths, and all arrests and new arrests (no previous arrests in CY 2017). Given the adverse nature of these outcomes, we also identified events that occurred in the index month, in addition to looking at 3- and 12-months post-index (see Table 4).

TABLE 4.

### Other Outcomes after Acute Index Event

At Index and Within 3 months and 12 months of the CY 2018 Index Event

| | Types of Acute Index Events for Medicaid Beneficiaries with a SUD Diagnosis | | | | | |
|---|---|---|---|---|---|---|
| | **Any** (n=39,356) | **Multiple** (n=4,718) | **WM** (n=4,130) | **IP SUD** (n=5,311) | **SUD ED-OP** (n=23,535) | **SUD IP-HOSP** (n=11,849) |
| | PERCENT | PERCENT | PERCENT | PERCENT | PERCENT | PERCENT |
| **Within Index Event Month** | | | | | | |
| Death (All Cause) | 0.7% | 0.6% | >0.3% | >0.2% | 0.3% | 2.1% |
| Death (Overdose/Other Drug-Related) | 0.1% | >0.2% | >0.3% | >0.2% | 0.1% | 0.3% |
| Arrests - New | 2.8% | 2.5% | 2.4% | 1.7% | 3.7% | 1.5% |
| Arrests - All | 7.8% | 6.5% | 6.2% | 5.6% | 10.2% | 3.9% |
| **Within 3 Months of Index Event** | | | | | | |
| Death (All Cause) | 1.4% | 1.5% | 0.5% | 0.2% | 0.8% | 3.5% |
| Death (Overdose/Other Drug-Related) | 0.2% | >0.2% | >0.3% | >0.2% | 0.2% | 0.3% |
| Arrests – New | 7.1% | 7.7% | 8.3% | 6.3% | 8.4% | 4.8% |
| Arrests – All | 19.2% | 19.6% | 21.1% | 20.5% | 22.5% | 11.4% |
| **Within 12 Months of Index Event** | | | | | | |
| Deaths (All Cause) | 3.8% | 4.0% | 1.8% | 1.2% | 2.6% | 8.1% |
| Deaths (Overdose/Other Drug-Related) | 0.5% | 0.6% | 0.5% | 0.4% | 0.5% | 0.8% |
| Arrests - New | 14.6% | 16.3% | 18.7% | 14.3% | 16.3% | 10.7% |
| Arrests - All | 33.6% | 35.6% | 40.1% | 39.2% | 37.4% | 22.0% |

**All-Cause Deaths and Overdose or Other Drug-Related Deaths.** When looking at the rates of all-cause deaths across types of acute events, the pattern is consistent across the three times periods. Rates of all-cause deaths are highest among those with a SUD IP HOSP acute index event and the rate is considerably higher than the rates for all other types of acute events. This may, in part, be due to the age distribution of those receiving SUD IP HOSP services. As shown in prior reports (Lopez et al. 2023), the likelihood of a SUD IP HOSP acute event is higher among older adults. Within 12 months of the acute index event, the rate of all-cause deaths was 8.1 percent for individuals with a SUD IP-HOSP

acute event compared with 2.6 percent for individuals with a SUD ED-OP acute event, 1.8 percent for individuals with a WM acute event and 1.2 percent for individuals with IP SUD acute events.

The rates of overdose and other drug-related deaths are much lower than rates for all-cause deaths. While individuals with SUD IP-HOSP acute index events also have a higher rate of overdose and other drug-related deaths compared to the rates for all other types of acute events, the difference in rates is smaller. Within 12 months of the acute index event, the rate of overdose and other drug-related deaths was 0.8 percent for individuals with a SUD IP-HOSP acute event compared with 0.5 percent for individuals with a WM or SUD ED-OP acute event, and 0.4 percent for individuals with IP SUD acute events.

**Arrests.** For both categories of arrests, rates were highest among those with a SUD ED-OP event within the index acute event month and within 3 months of the acute index event and next highest for those with a WM event. However, within 12 months of the acute index event, the pattern flipped, and arrest rates were highest among those with a WM event followed by those with a SUD ED-OP event. Arrest rates were consistently lowest among those with a SUD IP-HOSP event.

## Summary

This report contains analyses of services received and other outcomes experienced by adult Medicaid beneficiaries with a substance use disorder (SUD) diagnosis who had a SUD-related acute event in CY 2018. The services and outcomes examined in this report included mental health services, support services, and other outcomes (deaths and arrests). Utilization of services and other client-level outcomes were identified within 3 and 12 months of the initial SUD-related acute event for mental health services and support services. We also examined deaths and arrests occurring in the month of the initial acute SUD event as well as at 3- and 12-months post index. Results of our descriptive analyses revealed varying patterns in Medicaid beneficiaries' use of behavioral health and support services by type of SUD-related acute index event. The patterns and the outcomes indicated in this report underscore the wide-reaching impact of SUD on individuals and the healthcare system. In addition, this analysis identifies a need to promote a more integrated approach to SUD management and treatment for Medicaid beneficiaries with SUD who have had contact with the criminal legal system (e.g., drug court, therapeutic community).

Understanding the current utilization of behavioral health treatment and recovery support services is crucial to identifying both strengths and gaps in the existing behavioral health system in Washington state. The patterns observed in the service utilization of Medicaid beneficiaries with SUD highlight areas that may be underutilized as points of intervention for those receiving SUD-related acute care services. As outlined within the findings of this report, an integrated approach to behavioral health treatment and recovery services that is expanded across different levels of care may contribute to an improvement in healthcare outcomes for individuals with SUD.

## TECHNICAL NOTES

**STUDY FUNDING**

This study is funded under Health Care Authority (HCA) Contract #K4249-01, Department of Social and Health Services/Research and Data Analysis. Contract Description: Roadmap to Recovery: Substance Use and Opioid Use Recovery Planning Grant: A Pilot Study Funded Under Section 1003 of the SUPPORT Act by Centers for Medicare & Medicaid Services with Washington State Health Care Authority. Dates of service: 2/15/2020-9/30/2021.

**STUDY POPULATION**

Adult (age 18+) individuals enrolled in Title XIX Medicaid at the start of the intake year, who have been diagnosed with substance use disorder (SUD) and/or opioid use disorder (OUD), are the focus of these analyses. Medicaid beneficiaries with non-Medicaid primary health care coverage (also referred to as third-party liability) were excluded from the analyses, as complete health care information may not be available for these individuals. Analyses were further restricted to individuals who were continuously enrolled in Medicaid in CY 2018 and CY 2019. Definitions of SUD and OUD diagnoses are as follows:

- **Substance Use Disorder diagnosis** is defined as the presence of a substance use disorder (SUD) diagnosis 24 months prior to the start of the intake year. Example SUD diagnoses include diagnoses related to alcohol, amphetamines (including methamphetamine), cocaine and other stimulants, heroin, and other opioids (including synthetic opioids), and cannabis. It does not include diagnoses related to tobacco use disorder.
- **Opioid Use Disorder diagnosis** is defined as the presence of an Opioid Use Disorder (OUD) diagnosis 24 months prior to the start of the intake year. Example OUD diagnoses include diagnoses related to synthetic and non-synthetic opioids, such as heroin and fentanyl. OUD diagnoses are a subset of SUD diagnoses (all individuals with an OUD diagnosis will also be identified as having a SUD diagnosis).

**ACUTE EVENTS**

Within the population of Medicaid beneficiaries with an SUD diagnosis, the first month with an eligible acute event (described below) within the intake year (CY 2018) was classified as the index month. Four types of acute events were identified. These categories are not mutually exclusive. Medicaid beneficiaries with an SUD diagnosis who had more than one type of acute event in the index month are included in each type of acute event.

- **Withdrawal management.** Medicaid beneficiaries with an SUD diagnosis who had an SUD withdrawal management service in the index month.
- **Inpatient/residential SUD treatment.** Medicaid beneficiaries with an SUD diagnosis who had an inpatient SUD treatment service in the index month.
- **Emergency department visit – outpatient.** Medicaid beneficiaries with an SUD diagnosis who had an outpatient ED visit with any SUD-related diagnosis (the visit did not result in a transfer to a general medical inpatient hospitalization) in the index month. An SUD diagnosis in any diagnosis field (primary and other) qualifies the ED visit as SUD-related.
- **Inpatient SUD-related hospitalization.** Medicaid beneficiaries with an SUD diagnosis who had an ED visit with any SUD-related diagnosis that resulted in a transfer to a general medical inpatient hospitalization (not inpatient SUD treatment) in the index month. An SUD diagnosis in any diagnosis field (primary and other) qualifies the ED visit as SUD-related.

Two additional summary categories are included in the report:

- **Any acute SUD event.** Medicaid beneficiaries with an SUD diagnosis who had any relevant SUD-related acute event in the index month.
- **Multiple types of acute SUD events**. Medicaid beneficiaries with an SUD diagnosis who had more than one type of acute events in the index month. Individuals with multiple acute events of only one type (e.g. multiple outpatient ED visits) are not included in this category.

## SERVICES AFTER ACUTE INDEX EVENT

After identifying the index month, we looked for receipt of post-index services within 0-3 months and within 0-12 months of the index month.

- **Mental Health Treatment Services.** Detailed information about service modalities are available in the Service Encounter Reporting Instructions.
  - **Outpatient mental health services.** Receipt of outpatient mental health treatment services.
  - **Psychotropic medications.** Receipt of a psychiatric medication.
- **Support Services.** Detailed information about service modalities are available in the Service Encounter Reporting Instructions.
  - **Supportive housing (Foundational Community Supports).** Receipt of Supportive Housing services via the Foundational Community Supports program. Individuals may have also received Supported Employment services.
  - **Supported employment (Foundational Community Supports).** Receipt of Supported Employment services via the Foundational Community Supports program. Individuals may have also received Supportive Housing services.
  - **Other SUD support services.** Receipt of other SUD-related support services in community engagement/referral services, housing services (including recovery housing and Pregnant, Postpartum, or Parenting Women's Housing Support Services), Peer Support Services, and Recovery Support Services. Peer Support Services and Recovery Support Services are also reported separately.
  - **Peer support services.** These services provide scheduled activities that promote recovery, self-advocacy, development of natural supports, and maintenance of community living skills.
  - **Recovery support services.** A broad range of nonclinical services that assist individuals and families to initiate, stabilize, and maintain long-term recovery from substance use.
  - **Case management.** Case management services (not direct treatment services) for individuals with SUD.
  - **Home and Community Based Services.** Receipt of in-home- and community-based setting long-term services and supports (LTSS) provided the by DSHS Aging and Long-Term Support Services Administration. This includes in-home personal care services, adult family home services, adult residential care services, and/or assisted living services. Similar services provided by the DSHS Development Disabilities Administration were not included.
- **Other Outcomes.** Given the adverse nature of these outcomes, we report on events that occurred within the index month, as well as the within 0-3 months and within 0-12 months.
  - **Deaths (all cause).** Death due to any cause.
  - **Deaths (overdose/drug-related).** Drug-related deaths, which may be due to drug overdose (either as the primary cause of death or contributing cause of death), intentional self-harm, or any other unspecified drug related cause of death.
  - **Arrests (all).** Any arrests as identified via the WASIS database that is maintained by the Washington State Patrol.
  - **Arrests (new).** Any arrests as identified via the WASIS database that is maintained by the Washington State Patrol, for the population who did not have an arrest in CY 2017.

## DATA SOURCES

Data used in this report came from the integrated administrative data maintained in the Department of Social and Health Services Integrated Client Databases (ICDB). The ICDB contains data from several state administrative data systems, including the state's ProviderOne MMIS data system that contains Medicaid claims and encounter data. The ICDB allows for the examination of a broad set of measures for Medicaid beneficiaries.

## REFERENCES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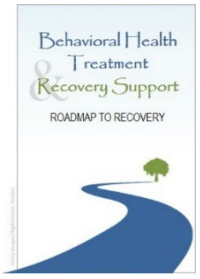



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ACKNOWLEDGMENT

We acknowledge the collaborative efforts of our colleagues throughout the Research and Data Analysis Division and our valued program partners. Thank you for your commitment to transforming the lives of Washington's vulnerable populations whom we serve.