

# Behavioral Health Needs of Jail Inmates in Washington State

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Report to the Washington State Office of Financial Management's Statistical Analysis Center, Thea Mounts, Director and Keri-Anne Jetzer, Forecast Analyst.

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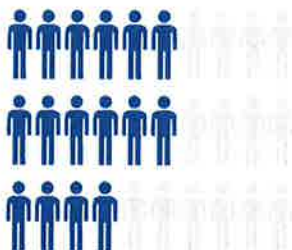
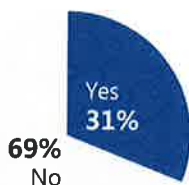
**T**HIS REPORT DESCRIBES the characteristics of 123,240 individuals booked into jail in 2013 who were recent or former clients of the Washington State Department of Social and Health Services (DSHS) or the Health Care Authority (HCA). We compare mental health and substance use disorder treatment needs among the 44,805 Medicaid enrollees booked into jail and the general Medicaid population. To identify behavioral health treatment needs among Medicaid recipients booked into jail, we matched statewide jail booking records with mental health and substance use disorder indicators in the DSHS Integrated Client Database (ICDB). Mental health treatment needs were identified by receipt of publicly funded mental health treatment services, prescriptions for psychotropic medications, and mental health-related medical service encounters, hospitalizations and diagnoses during the jail booking year or the year prior. Substance use disorder treatment needs were identified using a comprehensive set of indicators including diagnoses, procedures, prescriptions, treatment or arrests that reflect a possible substance use disorder.

## Key Findings

- ▶ **The majority (86 percent)** of the 143,610 individuals booked into jail in 2013 were recent or former clients of DSHS or the HCA.
- ▶ **Due to Affordable Care Act related expansion**, the Medicaid enrollment rate of individuals entering jail increased, from 31 percent in 2013 to 58 percent through September 2014. We expect the rate to increase further.
- ▶ **Thirty-one percent (44,805)** of individuals booked into jail in 2013 were enrolled in Medicaid in the booking year or the year prior, of which:

### Adults Booked into Jail

Medicaid Enrollee in 2012 or 2013?



- Six in ten (58 percent) had mental health treatment needs.
- Six in ten (61 percent) had substance use disorder treatment needs.
- Four in ten (41 percent) had co-occurring disorder indicators.

TOTAL = 143,610

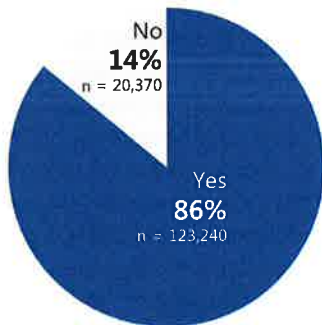
## Evaluation Design

This report examines (1) the characteristics of individuals booked into jail who were recent or former clients of the Washington State Department of Social and Health Services (DSHS); and (2) the public behavioral health system involvement among Medicaid enrollees entering jail and the general Medicaid population. To identify behavioral health treatment needs among Medicaid recipients booked into jail, we matched statewide jail booking records with mental health and substance use disorder indicators in the DSHS Integrated Client Database (ICDB).<sup>1</sup> Jail booking records were extracted from the Jail Booking and Reporting System (JBRS) and King County Jail database.

## Population

FIGURE 1.

### Adults Booked into Jail DSHS client since 1999?



TOTAL = 143,610

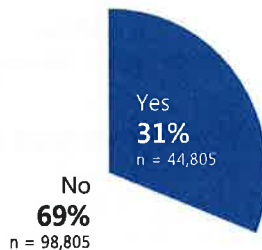
### DSHS Clients

We identified 143,610 distinct individuals booked into jail in 2013. After matching individual jail booking records with the DSHS Integrated Client Database (ICDB) we found the majority (86 percent) of persons booked into jail were DSHS clients, meaning they were served by DSHS or received publicly funded medical assistance through the Health Care Authority (HCA) at some point in time between 1999 through 2015 (Figure 1).<sup>2</sup> Two-thirds (not shown) of adults booked into jail were served in the past five years, primarily by the Economic Services Administration and the Health Care Authority. Ten percent were new clients, served for the first time after entering jail.

FIGURE 2.

### Adult Medicaid Enrollees Booked into Jail

Medicaid Enrollee in 2012 or 2013?



TOTAL = 143,610

### Medicaid Recipients

Nearly one-third (44,805) of individuals entering jail in 2013 were enrolled in Medicaid or other publicly funded medical programs in the booking year or the year prior (Figure 2). Individuals enrolled in Medicaid may be eligible for publicly funded behavioral health services. For those not eligible for Medicaid, some limited public behavioral health services are available, with priority given to crisis mental health services, and substance use disorder treatment for pregnant women and those who use intravenous (IV) drugs. Some criminal offenders are eligible to receive substance use disorder treatment funded through the Criminal Justice Treatment Account (see RCW 70.96A.350).

SOURCES: Jail Booking and Reporting System (JBRS) and the DSHS Integrated Client Database (ICDB).

<sup>1</sup> The ICDB is a longitudinal database created and maintained by RDA that contains years of detailed, client-level social services history, costs, risks and outcomes.

<sup>2</sup> 3,178 of the individuals matched to the ICDB were not direct recipients of DSHS services or Medicaid enrollees, but shared a household with individuals receiving such services (see technical notes).

# Client Characteristics

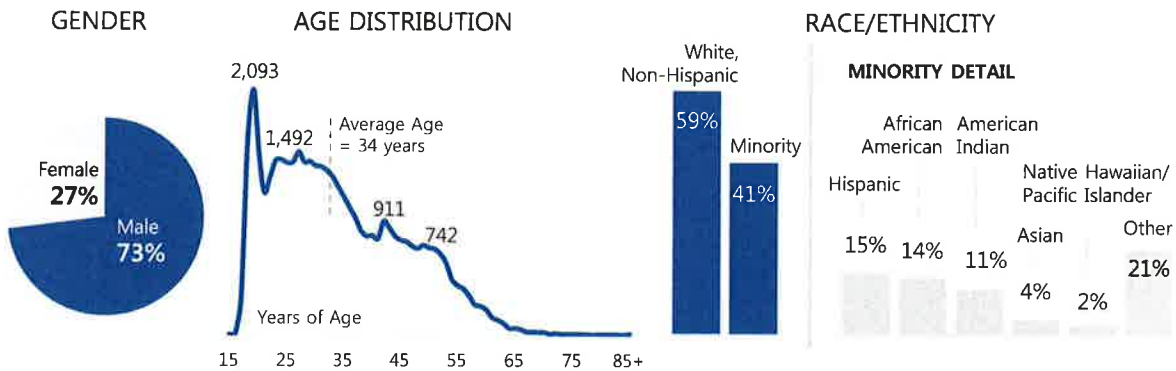
## DSHS Clients Booked into Jail

We examined demographic characteristics for the 123,240 DSHS clients entering jail in 2013. Most individuals entering jail were male (73 percent; 27 percent were female) and were on average 34 years old (Figure 3). Forty-one percent were racial or ethnic minorities. Fifteen percent were Hispanic, 14 percent were African American, 11 percent were American Indian and 21 percent were other racial or ethnic groups. For comparison, the minority population in Washington State is 29 percent.<sup>3</sup>

FIGURE 3.

### Demographic Profile of DSHS Clients Booked into Jail in 2013

TOTAL = 123,240



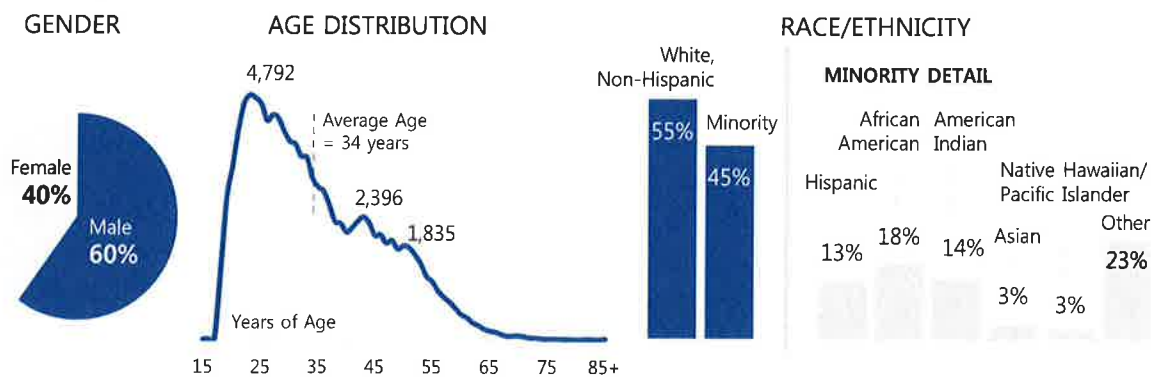
## Medicaid Recipients Booked into Jail

The demographics of the 44,805 Medicaid recipients booked into jail in 2013 are similar to the DSHS jail population, with the exception of gender (Figure 4). Females account for a larger portion of the Medicaid population (40 percent).

FIGURE 4.

### Demographic Profile of Medicaid Enrollees Booked into Jail in 2013

TOTAL = 44,805



SOURCE: Jail Booking and Reporting System (JBRS) and the DSHS Integrated Client Database (ICDB).

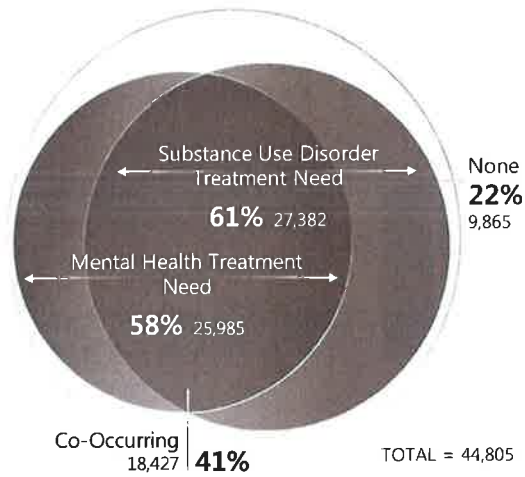
NOTE: Among DSHS clients, gender was missing for 28 individuals, age was missing for 570 clients and race/ethnicity was missing for 5,373 clients. Among Medicaid clients entering jail, age was missing for 248 clients and race/ethnicity was missing for 258 clients.

<sup>3</sup> Washington State Office of Financial Management, "Population by Race and Hispanic Origin: 2010 and 2014, Executive Summary," (April 1, 2014 estimate).

## Behavioral Health Indicators

We examined behavioral health indicators, during the booking year and year prior for individuals entering jail in 2013 with at least one month of Medicaid or related coverage during the same time period (n = 44,805). Mental health treatment need was identified by receipt of publicly funded mental health treatment services, prescriptions for psychotropic medications, and mental health-related medical service encounters, hospitalizations and diagnoses. Substance use disorder treatment need was identified using a comprehensive set of indicators including diagnoses, procedures, prescriptions, and treatment or arrests that reflect a possible substance use disorder.

FIGURE 5.  
Medicaid Enrollees Booked into Jail



### Most Medicaid Clients Entering Jail had Behavioral Health Treatment Needs

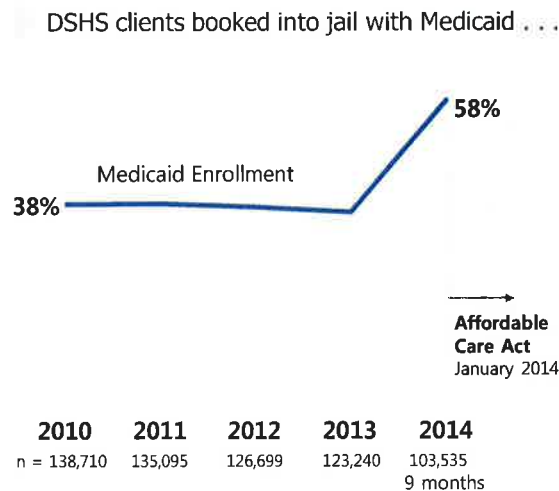
We found that 78 percent of Medicaid recipients booked into jail (Figure 5) had behavioral health treatment needs. Over half (58 percent) of Medicaid recipients entering jail were identified with administrative data as having mental health treatment needs.

Nearly two-thirds of Medicaid enrollees had indicators of substance use disorder treatment needs and 41 percent had indicators of co-occurring disorders. See Appendix, Table 1 for prevalence rates by County.

NOTE: These categories are not mutually exclusive and do not add to 100 percent. SOURCE: Jail Booking and Reporting System (JBRS) and the DSHS Integrated Client Database (ICDB).

## Implications of the Affordable Care Act

FIGURE 6.  
Trend in Medicaid Enrollment



### Medicaid Enrollment among Jail Inmates Increased with the Affordable Care Act

In 2014 Medicaid expansion under the Affordable Care Act resulted in a sharp increase in the Medicaid enrollment rate of individuals entering jail (Figure 6).<sup>4</sup>

- From 2010 to 2013, 36 to 38 percent of individuals entering jail had Medicaid or other related medical coverage.
- Preliminary data through September 2014 indicate 58 percent of those entering jail were enrolled in Medicaid. This rate is expected to continue to increase further over time.

SOURCE: Jail Booking and Reporting System (JBRS) and the DSHS Integrated Client Database (ICDB).

<sup>4</sup> Under the Affordable Care Act individuals are eligible for Medicaid if their annual income is at or below 138 percent of the federal poverty level. For more information on Health Care Reform see <http://www.hca.wa.gov/hcr/Pages/default.aspx>.

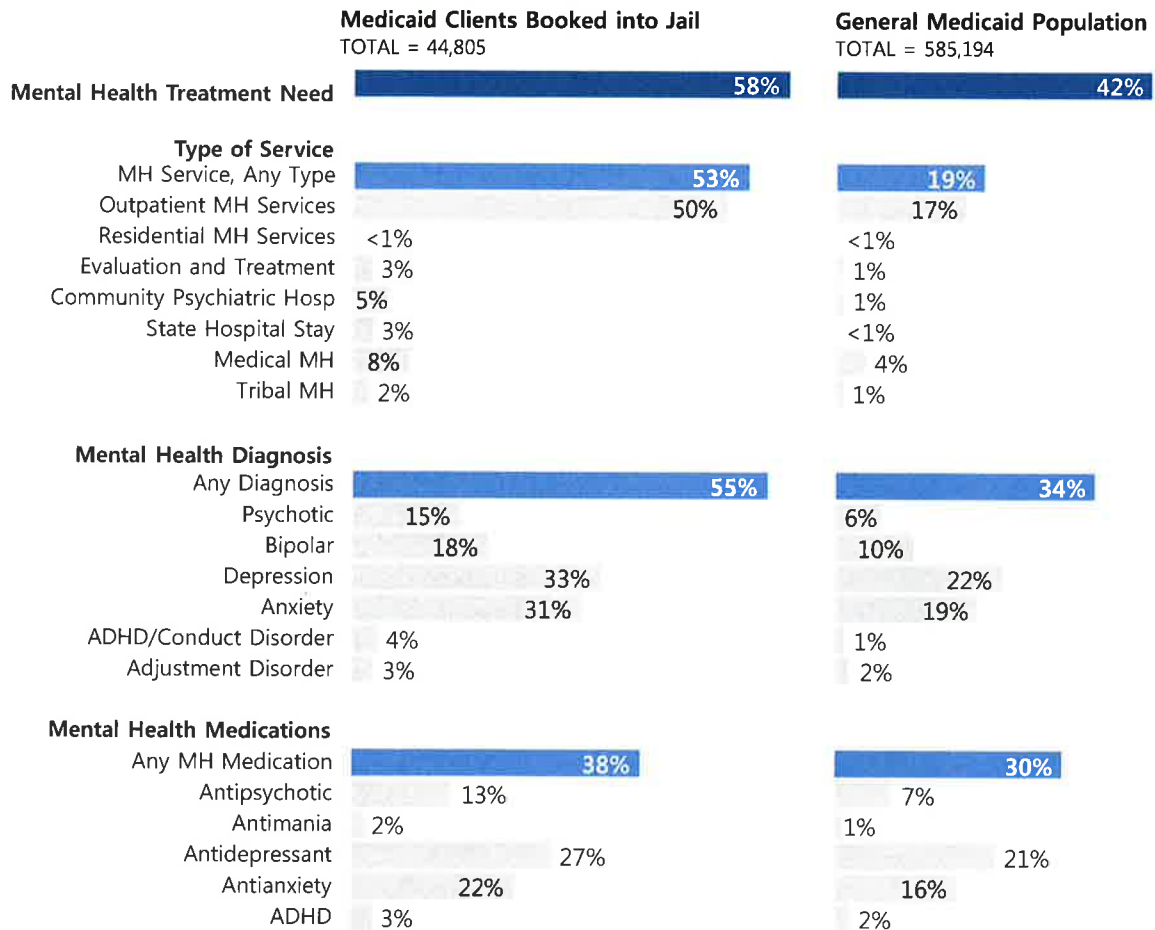
## Mental Health Treatment Need

We compared mental health indicators for adults who were Medicaid recipients for at least one month in 2012 or 2013, to that of Medicaid recipients booked into jail in 2013 (Figure 7). Medicaid recipients booked into jail were considerably more likely to have mental health treatment needs (58 percent), compared to the general adult Medicaid population (42 percent).<sup>5</sup> Among Medicaid recipients booked into jail, half recently (in the booking year or year prior) received outpatient mental health services, compared to 17 percent of those in the general adult Medicaid population.

Just over half (55 percent) of Medicaid recipients booked into jail had a mental health diagnosis identified in administrative records, compared to 34 percent in the general adult Medicaid population. Among Medicaid clients entering jail, depression was the most common diagnosis (33 percent), followed by anxiety disorders (31 percent), bipolar disorder (18 percent), and psychotic disorders (15 percent).

FIGURE 7.

### Mental Health Treatment Need for Medicaid Clients Booked into Jail in 2013 and the General Adult Medicaid Population



SOURCE: Jail Booking and Reporting System (JBRS) and the DSHS Integrated Client Database (ICDB).

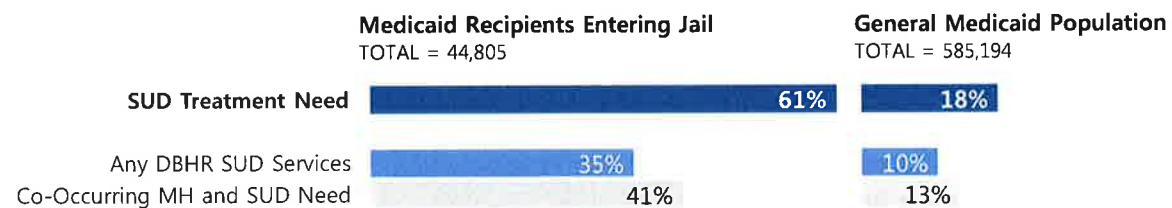
<sup>5</sup> A larger percentage of the general adult Medicaid population were female (61 percent) compared to the Medicaid eligible jail population (40 percent), which may influence mental health treatment needs.

## Substance Use Disorder Treatment Need

Administrative data indicate that 61 percent of Medicaid enrollees entering jail in 2013 had substance use disorder treatment needs, compared to just 18 percent of the general adult Medicaid population (Figure 8). We found just over one-third (35 percent) of Medicaid recipients entering jail recently received publicly funded treatment for substance use disorders (in the jail booking year or the year prior). Ten percent of the general adult Medicaid population received substance use disorder treatment during the same time period. Just under half (41 percent) of Medicaid clients booked into jail had co-occurring mental health and substance use disorder treatment needs, compared to 13 percent of the general adult Medicaid population.

FIGURE 8.

### Substance Use Disorder Treatment Need for Medicaid Clients Booked into Jail in 2013 and the General Adult Medicaid Population



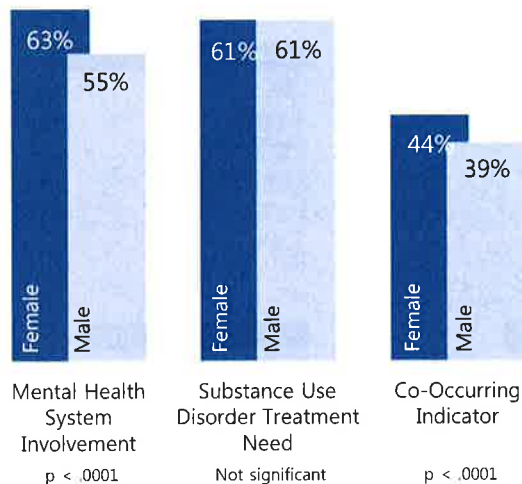
SOURCE: Jail Booking and Reporting System (JBRS) and the DSHS Integrated Client Database (ICDB).

## Gender Matters

FIGURE 9.

### Behavioral Health System Involvement by Gender

Among Medicaid Recipients Booked into Jail in 2013  
TOTAL = 44,805



SOURCE: Jail Booking and Reporting System (JBRS) and the DSHS Integrated Client Database (ICDB).

### Female Medicaid Recipients Entering Jail are More Likely than Males to have Mental Health Treatment Needs

Female jail inmates are more likely than males to suffer from a serious mental illness (Steadman et al. 2009). We found a higher proportion of female Medicaid recipients had mental health treatment needs compared to males (Figure 9).

- 63 percent of female Medicaid recipients entering jail versus 55 percent of males had mental health treatment needs. Females were more likely to have a diagnosis of depression (37 percent, compared to 26 percent for males) or anxiety (35 percent, compared to 24 percent for males). Males were more likely to have a psychotic diagnosis (15 percent) compared to females (10 percent, not shown).
- We found similar rates of substance use disorder treatment needs (61 percent) among males and females.

## Discussion

We found a substantial degree of overlap between the DSHS client population and those entering jail. The majority (86 percent) of individuals booked into jail in 2013 were recent or former DSHS/HCA clients. A similar overlap has been documented for those released from Department of Corrections (DOC) facilities: 80 percent of persons released from DOC facilities had received DSHS services (Morrissey & Cuddeback 2008). Recognizing criminal justice system-involved individuals as a shared population has led DSHS and DOC to improve data share agreements and initiate re-entry partnerships.

### **We found a substantial degree of overlap between the DSHS client population and those entering jail, and high rates of behavioral health treatment needs among Medicaid recipients who entered jail.**

Among those booked into jail with Medicaid or other related medical coverage:



- **6 in 10** had mental health treatment needs (58 percent).



- **6 in 10** had substance use disorder treatment needs (61 percent).



- **4 in 10** had co-occurring disorder indicators (41 percent).

- Medicaid recipients entering jail were more likely to have mental health treatment needs compared to the general adult Medicaid population (58 percent versus 42 percent) and particularly more likely to have substance use disorder treatment needs (61 percent compared to 18 percent). It should be noted that alcohol or drug abuse may be contributing to the offense that resulted in a jail booking.<sup>6</sup>
- Preliminary data from 2014 indicate the Medicaid enrollment rate of individuals entering jail is increasing, from 36 percent in 2013 to 58 percent through September 2014. We expect that rate will increase further. The enhanced federal match for Medicaid enrollees provides a strong business case for jails and DOC to facilitate enrollment for the Medicaid expansion population (Mancuso 2010).
- The local jail population has high rates of substance use disorder treatment needs and significant mental health treatment needs. National estimates indicate 21 percent of jail inmates have recent histories of treatment or receipt of medications for mental health conditions, and that 60 percent suffer from recent symptoms (James & Glaze 2006). Most (68 percent) have substance use disorders (Karberg & James 2005). Medicaid expansion has increased access to behavioral health treatment for the local jail population.
- Finally, jail stays are relatively short, over half (55 percent) of the individuals booked into jail are released within seven days. As most individuals entering jail will quickly return to the community, rapid screening and information sharing between treatment providers and local jails is necessary to identify and effectively meet behavioral health needs. This collaboration could facilitate treatment while individuals are still incarcerated and during the transition back to the community.

<sup>6</sup> Information on the charging offense at the time of booking was incomplete (see technical notes).

## APPENDIX | County Detail

TABLE 1.

### Behavioral Health Indicators for DSHS and Medicaid Clients Booked into Jail in 2013

	MEDICAID RECIPIENTS				
	DSHS Clients Booked into Jail	Medicaid Clients Booked into Jail	Mental Health Treatment Need	Substance Use Disorder Tx Need	Co-Occurring Indicator
	TOTAL	TOTAL	PERCENT	PERCENT	PERCENT
<b>WASHINGTON</b>	<b>123,240</b>	<b>44,805</b>	<b>58%</b>	<b>61%</b>	<b>41%</b>
Adams	434	141	43%	50%	26%
Asotin	713	258	58%	52%	36%
Benton	6,954	2,641	59%	58%	40%
Chelan/Douglas	2,702	1,083	61%	62%	45%
Clallam	1,901	758	61%	66%	46%
Clark	9,193	2,855	52%	60%	38%
Columbia	112	39	74%	44%	36%
Cowlitz	3,500	1,369	62%	55%	40%
Ferry	388	132	63%	67%	50%
Franklin <sup>7</sup>	—	—	—	—	—
Garfield	63	19	53%	37%	32%
Grant	2,227	871	51%	53%	32%
Grays Harbor	1,417	538	56%	71%	44%
Island/San Juan	1,008	358	54%	56%	37%
Jefferson	577	225	63%	63%	43%
King	26,814	9,931	60%	63%	44%
Kitsap	—	—	—	—	—
Kittitas	1,339	368	58%	56%	36%
Klickitat	556	194	53%	62%	40%
Lewis	2,538	1,074	60%	65%	45%
Lincoln	477	195	54%	70%	39%
Mason	1,069	423	60%	60%	41%
Okanogan	1,285	503	52%	55%	32%
Pacific	424	154	54%	55%	36%
Pend Oreille	412	167	59%	56%	44%
Pierce	12,421	4,235	54%	58%	37%
Skagit	2,386	849	60%	66%	43%
Skamania	241	77	52%	61%	40%
Snohomish	14,265	4,770	59%	66%	44%
Spokane	8,610	3,534	61%	58%	40%
Stevens	461	210	50%	50%	33%
Thurston	3,078	1,108	61%	56%	39%
Wahkiakum	67	23	61%	43%	39%
Walla Walla	942	320	58%	53%	38%
Whatcom	3,372	1,208	58%	68%	44%
Whitman	364	86	58%	48%	28%
Yakima	5,540	2,087	48%	54%	31%
DOC <sup>8</sup>	4,543	1,666	65%	74%	51%

<sup>7</sup> Jail booking data for Franklin and Kitsap Counties were incomplete.

<sup>8</sup> Department of Corrections violators booked into local jails (booking county was unknown).



## TECHNICAL NOTES

### STUDY DESIGN AND OVERVIEW

This report summarizes the results of an analysis identifying the overlap between the DSHS/HCA client population and the local jail population. We also examined behavioral health system involvement among Medicaid enrollees booked into jails and the general Medicaid population. Jail data were extracted from the Jail Booking and Reporting System (JBRS) and the King County Jail database. Jail data include statewide county and city jail booking records for those entering jail between January 1, 2010 and September 30, 2014. Jail booking records were matched with the DSHS Integrated Client Database (ICDB) via a sophisticated matching process that uses name, social security number and date of birth. We used person link ID and jail booking date to identify distinct booking records by year. For 2013, 86 percent of individual jail booking records matched a client record in the ICDB, meaning that 86 percent of individuals booked into jail were DSHS or HCA clients at some point in time since 1999.

### STUDY POPULATION

This report focuses on individuals who were booked into a city or county jail and were:

- **Department of Social and Health Services (DSHS) Clients.** Individuals served by DSHS or HCA at some point in time since 1999. We found 3,178 individuals in the ICDB with no record of DSHS services or Medicaid enrollment. These individuals were likely sharing a household with someone receiving DSHS services. Because Department of Health death records are used in the linking process, a small number of individuals (94) linked to the ICDB because they died between 2013 and 2015.
- **Medicaid Clients.** Individuals were considered enrolled in Medicaid if they were receiving Medicaid or other publicly funded medical programs for at least one month during 2012 or 2013 (the booking year or the year prior). We used the following medical eligibility categories: Categorically Needy Blind or Disabled (1), Medically Needy Blind or Disabled (2), Categorically Needy Aged (3), Medically Needy Aged (4), Categorically Needy HWD – Apple Health for Workers with Disabilities Ticket to Work (5), Categorically Needy Pregnant Women (6), Categorically Needy Family Medical (8), Affordable Care Act Expansion Adults (9), Categorically Needy Children (10), CHIP - Children's Health Insurance Program (13), Medically Needy Other Disabled - Family/Pregnant (14), and Categorically Needy Breast and Cervical Cancer (19).

### DATA SOURCES AND MEASURES

#### Jail Booking and Reporting System (JBRS)

JBRS is a multijurisdictional database of jail booking and release records. All non-tribal city and county jails in Washington State are connected to the JBRS system, with the exception of Aberdeen and Hoquiam. The JBRS data contain incomplete booking records for Franklin and Kitsap Counties due to changes in local booking systems. Information on the charging offense at the time of booking was missing for 36 percent of booking records. In addition, there is not a standard reporting format for offenses across jurisdictions. For more information on the JBRS system see <http://www.waspc.org/jail-booking-and-reporting-system-jbrs->.

#### DSHS Integrated Client Database

The Research and Data Analysis Division (RDA) of DSHS maintains a longitudinal, integrated client database (ICDB) containing over 15 years of detailed service risks, history, costs and outcomes. A full description of the ICDB can be viewed at <https://www.dshs.wa.gov/sesa/rda/research-reports/dshs-integrated-client-database-0>. We examined the following indicators over a two year time period (2012 to 2013), to include the booking year and the year prior.

- **Mental Health Treatment Need** – was identified by receipt of publicly funded mental health treatment services, prescriptions for psychotropic medications, and mental health-related medical service encounters, hospitalizations and diagnoses using data from ProviderOne (medical) and the Consumer Information System (mental health service records). This measure is restricted to the population on Medicaid or similar medical coverage.

- **Medicaid Eligibility** – Medicaid eligibility reflects that a Medicaid Recipient Aid Category was recorded in ProviderOne. See “Medicaid Clients” above for a description of the medical eligibility categories used in this report.
- **Substance use disorder treatment** – clients who received substance use disorder treatment were identified using data from the Treatment and Assessment Report Generation Tool (TARGET).
- **Substance use disorder treatment need** – data from three information systems, including ProviderOne (medical), TARGET (chemical dependency) and the Washington State Patrol (arrests) were used to identify probable substance use disorders based on diagnoses, procedures, prescriptions, and treatment or arrests that reflect a possible substance use disorder. This measure is restricted to the population on Medicaid or similar medical coverage.

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