

# **Providing Medication to Treat Opioid Use Disorder in Washington State Jails**

July 3, 2018

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Prepared for the Division of Behavioral Health and Recovery  
Washington State Department of Social and Health Services  
Contract 1731-18409

## Acknowledgments

The authors are grateful to the following people who collaborate in efforts to help understand the challenges faced by Washington State jails during the opioid epidemic and facilitate the sharing of knowledge, including through organizing a teleconference series which provided data for this report: Ned Newlin, Jail Services Liaison, Washington Association of Sheriffs & Police Chiefs; Caleb Banta-Green, Affiliate Associate Professor, Department of Health Services, University of Washington School of Public Health; Yong Ki Shin, Assistant Clinical Dean for Western Washington, and Clinical Associate Professor for the Department of Medicine, and Medical Director of Grays Harbor Jail; and Kevin Bovenkamp, Assistant Secretary for Health Care, Washington State Department of Corrections. Mr. Newlin was also invaluable in facilitating communication with jail commanders around the state, and providing access to Washington State jail statistics. Finally, we appreciate support from Ahney King and Earl Long of the Department of Social and Health Services Division of Behavioral Health and Recovery, who made this work possible.

## Abbreviations

CJTA	Criminal Justice Treatment Account
COWS	Clinical Opioid Withdrawal Scale
DBHR	Washington State Department of Social and Health Services Division of Behavioral Health and Recovery
DEA	United States Drug Enforcement Agency
DOC	Washington State Department of Corrections
DSHS	Washington State Department of Social and Health Services
ETS	Evergreen Treatment Services
FDA	United States Food and Drug Administration
HCA	Washington State Health Care Authority
NaphCare	An Atlanta-based corrections medical service provider
NP	Nurse Practitioners
OTM	Opioid Treatment Medication
PA	Physicians' Assistant
SCORE	South Correctional Entity (multi-jurisdictional jail in Des Moines)
STR	State Targeted Response (federal grant from U.S. Substance Abuse and Mental Health Services Administration to Washington State, administered by the Health Care Authority)
THS	Therapeutic Health Services
UW ADAI	University of Washington Alcohol and Drug Abuse Institute
WASPC	Washington Association of Sheriffs and Police Chiefs

## Executive Summary

Over half of the regular illicit users of opioids in Washington State will exit the doors of a jail this year. The Washington State Opioid Response Plan identifies the criminal justice system as a strategic area of focus, and specifies expanded access to opioid treatment medications as the primary intervention. However, little is known about the status of treatment for opioid use disorder in Washington State jails. We therefore conducted this survey to better understand what treatments are currently being provided in our state's jails along with barriers to, and facilitators of, provision of medications, with the goal of informing policymaking.

### Key Findings:

- *High level of interest:* most jail leaders are very interested in addressing opioid use disorder and thirsty for information about how to do better
- *14 of the 33 surveyed jails are actively providing Opioid Treatment Medications (OTM)*
- *Most commonly used medication:* buprenorphine (12/14 active jails)
- *Most common use of OTM:* maintenance of treatment begun prior to incarceration (12/14 active jails)
- *Greatest immediate benefit to jails and individuals:* use of buprenorphine for treatment of opioid withdrawal
- *Greatest long-term benefit to communities:* integration of jails with community treatment resources
- *Major barriers to implementation:*
  - *Lack of knowledge:* about medications, regulations, evidence-based practice
  - *Lack of resources:* funding, community treatment capacity, information systems

### Conclusions and Recommendations

Adequate treatment of opioid use disorder in jails requires two large steps:

1. Implement OTM protocols within jails:
  - a. Maintain treatment for those already on any form of OTM in the community. If methadone is not available, either transition methadone-treated individuals to buprenorphine or transfer them to a facility where methadone is available.
  - b. Closely monitor patients at risk for opioid withdrawal using a validated instrument, and treat withdrawal symptoms with buprenorphine, or methadone if available.<sup>1</sup>

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<sup>1</sup> Withdrawal treatment using clonidine combined with other non-opioid medications may be appropriate, if the clinical goal is withdrawal without OTM (The ASAM National Practice Guideline for the Use of Medications in the

- c. Once symptoms are stable, offer a choice of OTM, with the decision jointly made by patient and medical provider. At least buprenorphine or methadone should be available, if not all three options. Continue the chosen medication throughout the period of incarceration, as with treatment for any other chronic disease.
  - d. Provide access to behavioral treatments for opioid use disorder.
2. Coordinate patient care between jails and community providers of medical, behavioral health, chemical dependency and social services to facilitate re-entry into the community.

For successful statewide implementation of OTM, the following recommendations are offered:

1. *Address Knowledge Gaps*
  - a. Outreach to and education of: policymakers, jail leaders and staff, community medical providers, community organizations
  - b. Technical support: consultation, grant assistance, data analysis, model policies
2. *Address Resource Gaps*
  - a. Increase funding for jail staff: nursing, medical staff, care coordinators
  - b. Incentives to jails and community providers to improve coordination
  - c. Funding for immediate needs of prisoners at the time of re-entry
  - d. Collective purchasing by a state agency to reduce costs

Based on what we learned, jails recognize the key role they play in opioid use disorder management, and are ready and willing to do what is needed. Many have already started to provide OTM, and others are planning it. Barriers to widespread use of OTM are deficits in knowledge and resources at the state and local levels. We offer an inventory of recommendations to address the deficits. Overall, we recommend that Washington State take an approach focused on support services, training and incentive funding.

## **Introduction**

It is widely known that the United States and Washington State are in the throes of an opioid epidemic. What is not as widely appreciated is the central role of the incarcerated population in

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Treatment of Addiction Involving Opioid Use. American Society of Addiction Medicine. 2015). ASAM cautions that “Withdrawal management alone can be the first step, but is not a primary treatment for opioid use disorder and should only be considered as a part of a comprehensive and longitudinal plan of care that includes psychosocial treatment, with or without medication-assisted therapy.” Thus, to be complete, we mention as a withdrawal treatment the optional use of clonidine combined with non-opioid medications. This is not a first line approach, but may be used if agreed on by practitioner and patient.

that epidemic. We estimate that of the approximately 47,751 residents of Washington who are regular illicit users of opioids (heroin and prescription pain medications), 26,727 (56%) will exit the gates of a Washington prison or jail this year, including 25,510 (53%) exiting a jail (see Appendix). Thus we believe that individuals in our state's jails are not just part of the opioid tableau – they are the epicenter.

Failure to treat opioid use disorder during incarceration has serious consequences, including an extremely high risk of overdose death after release, morbidity and mortality from opioid withdrawal during incarceration, high rates of crime and recidivism, and social and medical consequences of untreated opioid use disorder after release. Aside from the public health and public safety concerns, there are associated economic costs.

The value of addressing opioid use disorder in jails is driven not only by the consequences of failure to treat, but also by the unique opportunity for change. Indeed, individuals with opioid use disorder who find themselves in jail are: a) a “captive audience” for health and behavior education; b) not impaired by mind-altering substances (assuming they remain in jail for at least several days); and c) motivated by the reality that their drug use has seriously impacted their life.

Three medications have been approved by the United States Food and Drug Administration (FDA) for treatment of opioid use disorder: methadone, buprenorphine (brand names Suboxone®, Subutex®, and others) and extended-release naltrexone (ER-naltrexone, brand name Vivitrol®).

Use of buprenorphine or methadone reduces risk of overdose death by 50% or more compared with behavioral treatment alone, and keeps people involved in behavioral treatment. Use of any of the three medications in combination with behavioral treatment such as counseling has been established as the first-line evidence-based treatment for opioid use disorder. Studies have shown savings of \$5 for every \$1 spent on medications to treat opioid use disorder. Savings include reductions in the cost of health care and public safety.

The abbreviation OTM (Opioid Treatment Medications) is used in this report to refer to the use of any of the three medications approved by the United States Food and Drug Administration to treat opioid use disorder - methadone, buprenorphine, or extended-release naltrexone (ER-naltrexone) – with or without behavioral treatment, either for time-limited management of opioid withdrawal or for maintenance treatment of opioid use disorder. We chose to avoid the commonly used term MAT, which refers to Medication-Assisted Treatment, because it connotes that medication is only an ancillary part of the treatment.

Comprehensive implementation of OTM in jails and prisons in Rhode Island resulted in a 60% reduction in overdose death among the recently incarcerated after one year, translating to a 12% reduction in statewide opioid overdose deaths.

The Washington State Opioid Response Plan recognizes that an effective statewide effort to address the opioid epidemic must include implementation of OTM in jails. Yet very little is known about how Washington State jails – a public safety venue – are managing opioid use disorder – a public health problem. Given this information gap, the Washington State Department of Social and Health Services Division of Behavioral Health and Recovery commissioned this survey to gather information about the status of OTM use in Washington State jails, and the barriers interfering with more widespread use. The goal of the survey and this report is to broaden availability of OTM in jails by informing policymaking and potential legislation, and by providing guidance to individual jails.

## **Methods**

We conducted a qualitative evaluation of the status of OTM in Washington State jails using information gathered from the following sources: 1) in-depth semi-structured telephone interviews with jail commanders, health services staff, and community treatment providers, 2) self-reports of jail commanders and health services staff during a teleconference January 3, 2018 held for the purpose of collaborative information exchange among Washington State jails providing or interested in OTM, organized by representatives of Washington Association of Sheriffs and Police Chiefs (WASPC), Washington State Department of Social and Health Services Division of Behavioral Health and Recovery (DSHS DBHR), Washington State Department of Corrections (DOC), University of Washington Alcohol and Drug Abuse Institute (UW ADAI), Ki Shin, MD (Medical Director, Grays Harbor County Jail), and the authors, 3) a community meeting of the Kitsap County Re-entry Task Force on February 2, 2018; and 4) interviews with Emily Feely, MD, Steven Bonner, MD and Shannon Matthews, RN of NaphCare, Inc., a commercial correctional health care company that contracts with a number of Washington State jails. Descriptive statistics on jails were provided by WASPC.

We used purposive sampling to select jails for the study, with a goal of achieving diversity of the sample along the following dimensions: jail size (average daily population; ADP): large (ADP $\geq$ 200), medium (ADP 50-199), or small (ADP $<$ 50); geography: Eastern or Western Washington; jurisdiction type: county, city, multi-jurisdiction, or tribal; population density: urban or non-urban; and racial diversity. Jail OTM status was assessed as active (use of an OTM medication for any purpose), or not active. Interviews were conducted by one or both of the authors during the period from December 10, 2017 to April 6, 2018. We originally intended to de-identify all data, including the names of the participant jails. However, when it became clear that jails with more developed OTM programs embraced the idea of sharing their experience

with others, we decided, with permission of those jails, to identify them. We chose to report our raw data only, without expressing our results in terms of percentages of the sample or an extrapolated estimate of the percentage of all jails (or all jail-incarcerated individuals) in Washington. We did so to underscore the non-random, and therefore potentially statistically biased, nature of our sample.

During the interviews, information was elicited about the management of individuals at risk for or demonstrating signs of opioid withdrawal at the time of booking, during incarceration, and at the time of release. Additional topics covered during the semi-structured interviews included: the history and current status of opioid use disorder treatment in the jail, perceived degree to which opioid use disorder is a problem in the jail, knowledge and attitudes about OTM of the corrections and health services leadership and staff and within the community, the size and availability of medical and nursing staff, pharmacy capabilities, community resources for providing education and support services during incarceration, community capacity to provide OTM after release, and care coordination at the time of release.

The purpose of OTM was categorized as either: 1) maintenance - continuation of a medication begun prior to incarceration, 2) withdrawal - use of a medication for treatment of opioid withdrawal, and 3) induction - initiation of a medication at any time prior to release, for continued use on re-entry to the community.

## Results

Information was obtained from a non-random sample of 33 jails, representing 51% of Washington's 65 tribal and non-tribal jails. For 21 jails, the primary source of information was a telephone interview; for 11 jails, information was obtained from a combination of telephone interview and the teleconference; for one jail, an in person interview occurred.

Table 1 shows characteristics of the sampled jails by OTM status. Fourteen of the sampled jails are actively providing OTM (the "active" jails), and most of the others are either planning it or aware that change is needed. The active jails include 10 of the 12 large jails (average daily population  $\geq 200$ ); none of the jails with average daily population  $<50$  have begun implementation.

Table 2 shows characteristics of jails we surveyed and the specific medicine and its purpose for each of the active jails. The most commonly used medication was buprenorphine (12/14 active jails), and the most common use of OTM was maintenance of treatment begun prior to incarceration (12/14 active jails). Almost all jails which began OTM for pregnant women have since expanded to treatment of the general population.

Table 1: Characteristics of Sampled Jails by OTM Status

Jail Characteristics	Active OTM	Total Sample
Size		
Large (200+)	10	16
Medium (50-199)	4	9
Small (<50)	0	8
Geography		
Western WA	11	21
Eastern WA	3	12
Jurisdiction type		
County	12	24
City	0	6
Multi-jurisdiction	2	2
Tribal	0	1
Population density		
Urban	7	12
Non-urban	7	18
Length of Stay (average, range)	15 (7-25)	15 (6-28)
% Minorities (range)	13-50	0-57

Table 2: Characteristics of Active Jails and Their use of OTM

Jail Name	Jurisdiction type	Western WA/ Eastern WA	Size (L/M/S)	Average Length of Stay (Days)	% minority	Maintenance			Withdrawal Treatment		Induction		
						Bup	Met	Nlt	Bup	Met	Bup	Met	Nlt
Chelan	multi-jurisdictional	East	L	17	26%	x					x		possible
Clallam	county	West	M	15	16%	x			preg*		x		
Clark	county	West	L	NR	NR	x			preg*				
Franklin	county	East	M	13	13%	x			x		x		
Grays Harbor	county	West	M	28	14%	x	x		x		x		
Island	county	West	M	7	17%	x							
King	county	West	L	20	50%		x			preg*		preg	
Lewis	county	West	L	9	13%	x					preg		
Pierce	county	West	L	25	46%	x	x		x		x	x	x
SCORE	multi-jurisdictional	West	L	8	42%	x	x		x		preg	preg	x
Skagit	county	West	L	6	31%	x			x				
Snohomish	county	West	L	17	NR	x	x	x	x	x	x	x	x
Spokane	county	East	L	16	25%	x	x		x	preg*			
Whatcom	county	West	L	13	33%						preg		

NR - Not reported

preg - for pregnant women

L/M/S - Large/Medium/Small

SCORE - South Correctional Entity (multijurisdictional jail in Des Moines)

Bup - Buprenorphine

Met - Methadone

Nlt - Naltrexone

\*OTM used to prevent withdrawal



## **Motivations, Benefits, and Facilitators**

A striking finding was the high level of interest in addressing opioid use disorder among almost everyone with whom we spoke, and their thirst for information about how to do better. Change was underway at many jails, and several jails began or expanded implementation of OTM during the study period. The driver behind initiation of discussion about OTM varied among jails. Examples included a sheriff, jail director, physician, nurse, judge, prosecuting attorney, community clinic, treatment program, or health service contractor.

### *Motivations for using OTM for withdrawal:*

- reduce injuries from jumping off upper tiers during withdrawal (a recurring theme reported by at least four jails)
- reduce deaths from withdrawal in jail and the expense of associated lawsuits
- reduce suicides due to distress from opioid withdrawal
- reduce cost of transfer to emergency departments (hundreds to thousands of dollars per patient)
- reduce violence
- improve relations with incarcerated individuals
- reduce risk of miscarriage

### *Benefits of using OTM for withdrawal:*

- potent and precise reversal of all symptoms and signs of withdrawal (buprenorphine described as “a silver bullet”)
- more humane or “civilized”
- shorter withdrawal time
- reduced vomiting and diarrhea and associated custodial costs
- reduced frequency of calls for medical attention
- eliminated transfer to emergency departments for withdrawal
- no sedation or euphoria (buprenorphine)
- improved behavior
- improved patient and facility safety
- improved relationships with staff
- improved ability to participate in jail activities and the legal process (consult with attorneys, etc.)

### *Motivations for beginning patients on chronic OTM (induction):*

- reduce post-release overdose deaths

- reduce recidivism (“the revolving door”)
- reduce property crimes
- reduce burden of opioid use in the community
- change lives

*Facilitators of use of OTM for withdrawal:*

- NaphCare, Inc. (supplier of medical services) withdrawal protocol
  - Standardized 5-day tapered dosing controls signs and symptoms in almost all patients.
  - Computer-based monitoring: a dashboard tracks all patients, displays COWS score and time for next dose.
  - Telemedicine: In Lewis County, prescribers at NaphCare’s Atlanta headquarters initiate the taper, and on-site staff implement the protocol.
- SCORE accepts transfers from other jails - pregnant patients and others with severe withdrawal symptoms. They treat 30-50 (maximum 82) patients each day.
- Crushing of buprenorphine. Crushing buprenorphine tablets reduces administration time and diversion risk. Some jails would like reassurance that this practice is safe.

*Facilitators of care coordination with community providers:*

- Methadone clinics sending staff into jail:
  - In King County Jail, Therapeutic Health Services (THS) provides daily methadone dosing.
  - At SCORE, Evergreen Treatment Services (ETS) assesses and enrolls patients during incarceration.
- Jail transporting patients to methadone clinic:
  - Grays Harbor County Jail transports patients to and from the ETS methadone clinic for daily dosing.
- Clallam County Jail initiatives:
  - Invited a community clinic to explore a State Targeted Response (STR) grant for a buprenorphine nurse care coordinator, then collaborated with UW ADAI to help develop a smooth transition from jail to clinic
  - An article in the local newspaper published the names of local providers accepting recently incarcerated patients. This resulted in non-participating clinics calling the jail and asking to participate.
  - Invited a local pharmacist to make arrangements so patients induced onto buprenorphine can pick up a three-day supply paid for by the jail to avoid any treatment gap
- Hot Spotters program:

- Franklin County Jail participates in monthly meetings with the local courts, police, hospitals, treatment programs, emergency medical service and DSHS to strategize on best practice for the highest utilizers of these systems.
- These community connections have facilitated Franklin’s comprehensive use of buprenorphine: they induce it to control withdrawal, continue it until release, and arrange follow-up appointments.

### *Current funding sources*

Use of Medicaid and Medicare funds during incarceration is prohibited except in limited circumstances, due to the Inmate Exclusion provision in the Social Security law. Alternative funding sources for OTM:

- The jurisdiction's general funds (the most common).
- The 1/10<sup>th</sup> of 1% of sales tax dollars earmarked for behavioral health.
- County Health Department funds – a unique arrangement in King County, where the health department manages all medical services.
- Federal funds from the Substance Abuse and Mental Health Services Administration (SAMHSA), channeled through the State Targeted Response (STR) grant. This is currently used in Clallam County, and is planned in several other communities.

### **Challenges**

A variety of barriers interfered with OTM implementation, divided here into knowledge gaps, resource gaps and miscellaneous barriers. Knowledge gaps reflect: a) complexity of the issue; b) rapid evolution of the science related to opioid use disorder and treatment; c) lack of accessibility of scientific data to a non-scientist audience; and d) gaps in the science itself.

### *Knowledge Gaps About Medications*

1. Risk of death from opioid withdrawal. Some were not aware that patients can die from complications such as dehydration due to vomiting and diarrhea, or suicide due to distress from opioid withdrawal symptoms.
2. Buprenorphine. Some people had not heard of buprenorphine prior to our interview.
3. Buprenorphine for managing opioid withdrawal. One person believed that withdrawal from buprenorphine was the same as from any other opioid.
4. Various formulations of buprenorphine. We frequently needed to explain that buprenorphine is the active ingredient in Suboxone®, which is a combination of buprenorphine plus naloxone, and that a less expensive buprenorphine tablet without naloxone is available.

5. Naloxone as an abuse deterrent. Few understood that naloxone is inactive when the combined medicine is placed under the tongue as directed but will cause severe withdrawal symptoms if injected.
6. Medication costs. Some believed buprenorphine could cost \$100 or more per patient per day. In fact, a 2 mg dose is \$0.44 at the bulk purchase rate obtained by NaphCare, Inc, and \$1 on GoodRx.com. A 5-day withdrawal protocol costs approximately \$6, comparable to the cost of less-effective medications.
7. Prescriber training for buprenorphine. Providers at most small jails do not have authorization (a DEA “X” number, or “waiver”) to prescribe buprenorphine. Some jails can provide access to buprenorphine but only when a waived provider is on-call. One provider has a waiver but feels too inexperienced to use it.
8. Difference between addiction and its treatment.
  - The belief that use of methadone or buprenorphine is simply “replacing one addiction with another” was surprisingly rare among those we contacted. However, they reported finding it among judges, prosecutors, county commissioners, community corrections, jail administrators, front line custody officers, medical providers, and nurses.
  - This belief reflects a misunderstanding of addiction, which is defined by the uncontrolled use of a substance despite harm. The treatment medications buprenorphine and methadone prevent the craving that leads to uncontrolled use, and improve function in society.
9. Buprenorphine smuggling into jails.
  - This common phenomenon was sometimes interpreted as evidence of the abuse potential of buprenorphine. However, community research shows that illicit buprenorphine is usually used to help control withdrawal symptoms, and is most common where legal access is scarce.

### *Knowledge Gaps About Regulations*

1. Strict DEA regulations regarding methadone.
  - One jail ran afoul of DEA regulations and had to terminate their program.
  - One provider, unaware of DEA restrictions, prescribes methadone for withdrawal symptoms without authorization.
  - One jail had to delay starting a methadone program for a year, while waiting to receive a response from DEA about an implementation question.
2. DEA regulations on buprenorphine.
  - Prescribing buprenorphine requires DEA authorization (a “waiver” or “X” number).
  - Physician assistants (PAs) and nurse practitioners (NPs) can be authorized.
  - The required training is 8 hours for physicians, 24 hours for PAs and NPs.

- Training can be obtained online for free.
  - Buprenorphine can be administered for opioid use disorder for 72 hours without a waiver as a bridge until a waived clinician can be contacted.
3. DEA regulations on opioids for treating opioid use disorder.
- Opioid medications other than buprenorphine are prohibited for treatment of opioid use disorder, except in inpatient settings or with a federal Opioid Treatment Program license.
  - One jail uses acetaminophen with codeine to maintain or withdraw pregnant women from opioids. The DEA has not interfered, but qualifications as an “inpatient setting” should be reviewed.

### *Knowledge Gaps About Evidence-based Practice<sup>2</sup>*

1. Management of opioid withdrawal symptoms includes:
  - a. Frequent monitoring with a validated instrument such as COWS (Clinical Opioid Withdrawal Scale)
  - b. Buprenorphine or methadone
  - c. Clonidine, as an alternative to buprenorphine or methadone in select cases, with additional medications to control vomiting, diarrhea and pain
  - d. Aggressive hydration and electrolyte replacement
  - Most jails have no protocol for monitoring withdrawal.
  - Of jails not providing OTM, most do not use clonidine except for high blood pressure.
  - Some jails do not provide any medications.
  - Most jails provide fluids and electrolytes such as Gatorade.
2. For management of withdrawal symptoms in pregnant women, buprenorphine or methadone should be used to prevent miscarriage.
  - Several jails are aware of the risk and avoid it by not accepting pregnant women, transferring them to another facility, or asking the court to release them.
  - Some jails were not aware of the risk and have allowed pregnant women to undergo withdrawal.

### *Resource Gaps - Funding*

1. Nursing. This is the biggest driver of costs to a jail. For OTM, nursing time is needed to assess risk, verify community prescriptions, monitor withdrawal symptoms every 4 hours, administer medications (5-8 minutes for buprenorphine to dissolve under the tongue, 3-5 minutes if crushed), and coordinate care at time of release.

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<sup>2</sup> Based on guidelines from the American Society of Addiction Medicine, National Commission on Correctional Health Care, and American Correctional Association

2. Medical providers. The #2 driver of costs. Some jails don't have enough provider hours to take care of current workload.
3. Medications. The cost of buprenorphine or methadone is approximately \$1/day. ER-naltrexone is prohibitively expensive for most jails at \$1,300 (cost on GoodRx.com) for one injection lasting 30 days. (At some jails, the manufacturer supplies an initial dose.)
4. Correctional officers. Officers segregate patients undergoing treatment or monitoring, transport patients to and from the medical ward, or transport patients to outside OTM providers. (This cost is offset by a reduced cost of managing symptoms and violence.)
5. Counseling. Most jails have inadequate funds for behavioral treatment. (Some large jails have social workers and psychiatrists on staff. At smaller jails, behavioral treatment when available is provided by state or non-profit agencies or volunteers.)

#### *Resource Gaps - Community Providers and Services*

1. OTM capacity. This is the most important barrier to OTM induction. Methadone clinics are scarce in rural areas. Waivered buprenorphine prescribers are scarce, have waiting lists, and often are unwilling to accept recently incarcerated patients because of stigma or time constraints. A wait time of even one day after release can be too long.
2. Transportation. Patients often don't get to a follow-up appointment unless transportation is arranged.
3. Housing. Transitional housing often doesn't accept people on OTM.
4. Pharmacy access. Rural jails may have no local pharmacy. One small rural jail can only provide medications when brought in by the patient or a family member.

#### *Resource Gaps - Information Systems*

1. Information exchange with community providers. Most jails do not have electronic health records, so care coordination is time-consuming. Communication is by telephone, fax or paper record.
2. Data tracking. There is limited ability to report number of patients undergoing withdrawal or treatment or transferred to an emergency department.
3. Medicaid suspension. SB 6430, effective June 2016: coverage is now reinstated at time of release. The Health Care Authority accesses the statewide Jail Booking and Reporting System (JBRS) and batch updates occur every 24 hours. There can be a delay in apparent coverage, depending on time of day that release occurs. This is usually not a major issue.

#### *Miscellaneous Challenges – Medicolegal Risks*

1. Discontinuation of stable OTM. There is legal risk with discontinuation of a medically necessary treatment for a chronic disease. Failure to continue stable OTM introduces risk of morbidity and mortality from withdrawal during incarceration, and from relapse and overdose death after release.

2. Narcotic-free policies. No jail has a formal “narcotic-free” policy, but we learned that some individual staff members hold that belief and message it to patients. This can interfere with access to treatment and invite litigation.
3. Pregnancy. Jails without a clear policy for managing opioid withdrawal during pregnancy are inviting litigation.
4. Discontinuation of stable OTM before transfer to DOC. This is a logical approach because DOC does not currently offer OTM while in prison. However, there is medical and legal risk to both jail and prison. Of note, DOC has recently begun programs to induce OTM prior to release.

#### *Miscellaneous Challenges - Other*

1. Diversion. This was a concern of many jails not yet implementing OTM. Jails implementing OTM prevented this by segregating or closely monitoring patients during treatment. Smaller jails with space limitations would find segregation challenging.
2. Uncertain release date. Often an individual is released directly from court, so it is difficult to plan induction of OTM prior to release. One jail solved the problem by improving communication with the court.
3. Knowledge gaps among funders. City and county executives and commissioners are not always aware of the benefits to the community of effective OTM in jails, including reduced recidivism, reduced criminal justice costs, and improved public health.

## **Conclusions and Recommendations**

Adequate treatment of opioid use disorder in jails requires two large steps:

1. Implement OTM protocols within jails:
  - a. Maintain treatment for those already on OTM in the community. If methadone is not available, either transition methadone-treated individuals to buprenorphine or transfer them to a facility where methadone is available.
  - b. Closely monitor patients at risk for opioid withdrawal using a validated instrument, and treat withdrawal symptoms with buprenorphine, or methadone if available.<sup>3</sup>

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<sup>3</sup> Withdrawal treatment using clonidine combined with other non-opioid medications may be appropriate, if the clinical goal is withdrawal without OTM (The ASAM National Practice Guideline for the Use of Medications in the Treatment of Addiction Involving Opioid Use. American Society of Addiction Medicine. 2015). ASAM cautions that “Withdrawal management alone can be the first step, but is not a primary treatment for opioid use disorder and should only be considered as a part of a comprehensive and longitudinal plan of care that includes psychosocial treatment, with or without medication-assisted therapy.” Thus, to be complete, we mention as a withdrawal treatment the optional use of clonidine combined with non-opioid medications. This is not a first line approach, but may be used if agreed on by practitioner and patient.

- c. Once symptoms are stable, offer a choice of OTM, with the decision jointly made by patient and medical provider. At least buprenorphine or methadone should be available, if not all three options. Continue the chosen medication throughout the period of incarceration, as with treatment for any other chronic disease.
  - d. Provide access to behavioral treatments for opioid use disorder.
2. Coordinate patient care between jails and community providers of medical, behavioral health, chemical dependency and social services to facilitate re-entry into the community.

Based on what we learned, jails recognize the key role they play in opioid use disorder management, and are ready and willing to do what is needed. Many have already started to provide OTM, and others are planning it. Barriers to widespread use of OTM are deficits in knowledge and resources at the state and local levels. Below we offer an inventory of recommendations to address the deficits. Overall, we recommend that Washington State take an approach focused on support services, training and incentive funding.

#### *Recommendations for Statewide Action to Address Knowledge Gaps*

1. Outreach and education
  - Outreach to policymakers - visits to city and county executives and commissioners, judges, prosecuting and defending attorneys, sheriffs, and jail commanders at their places of work and at conferences to explain the public health, public safety and economic benefits of OTM in jails.
  - Outreach to community medical providers to encourage them to obtain a buprenorphine waiver and to accept formerly incarcerated patients in their practice, or to develop programs specific to this patient population. We recommend coordination with the Statewide Reentry Council, created in 2016 (RCW 43.380) to improve public safety and outcomes for individuals reentering the community.
  - Buprenorphine waiver training specifically for jail providers
  - Training of jail medical and nursing staff on regulations and processes for all forms of OTM
  - Training of corrections officers on opioid use disorder and its treatment, and on constructive attitudes and nondiscriminatory behaviors towards patients with this condition
2. Consultation service for jail medical staff
  - Purpose:
    - Provide assistance in protocol development
    - Provide support to medical staff who have recently obtained a buprenorphine waiver



- Provide support to medical staff with difficult or unusual cases. One of the authors (LG) has identified interested experienced buprenorphine prescribers through the Washington Society of Addiction Medicine.
  - Provide assistance in program monitoring and quality improvement
  - Potential delivery models:
    - Operated by a state agency, e.g. DSHS or DOC. The medical consultants could be employees or contractors.
    - Operated by a private medical group
  - Potential funding models:
    - State budget appropriation
    - Annual subscription from participating jails
3. Sharing of information and experience among jails A teleconference series was recently started for this purpose, as described in Methods. Participating jails have expressed strong interest in continuing this series.
  4. Data collection and reporting Incentive funding and a consultation service should be offered to jails implementing OTM to encourage data collection on costs and benefits. More robust data would help with quality control and assist other jails in OTM implementation planning.
  5. Model policies and procedures This document would provide a roadmap for OTM implementation, including options for a variety of jail settings.
  6. DEA regulations as they apply to jails We are not aware of any existing interpretation of DEA regulations as they apply to treatment of opioid use disorder in the jail setting. For example, different rules apply to use of specific medications in hospital vs. clinic settings, and it is not obvious which rules would apply to a medical unit at a particular jail. A roadmap is needed for navigating the regulations affecting partnership with a local methadone clinic to bring methadone into a jail. The state attorney general could develop an interpretation, or request the DEA to develop one.
  7. Assistance with grants A state agency such as DSHS could monitor government and other sites for announcements of grant opportunities, and provide assistance to jails and their potential partners which may not have the expertise or resources to apply for grants.
  8. Pharmacy Quality Assurance Board opinion on crushing of buprenorphine A small but high quality clinical trial demonstrated that the tablet works as well crushed as whole. Absent an absolute prohibition, we believe that jails should be informed of the acceptability of the crushing technique.
  9. Central website with resources for jails This site would provide links to educational materials, model policies and procedures, funding and grant opportunities, interpretation of DEA regulations, contact information for jails with active OTM

programs, and studies on OTM in the corrections setting. A website would be more useful than a publication, given the ongoing evolution of this field. Possible hosts for such a website include DSHS DBHR, Department of Health, WASPC, UW ADAI, and DOC. These are the authors' suggestions and have not been discussed with any of the possible hosts.

### *Recommendations for Statewide Action to Address Resource Gaps*

10. Incentives for jails to implement OTM Specific needs are listed above in Results. Factors required to estimate the amount of needed funding include:
  - The size of the total jail population: approximately 12,000 in Washington State jails (see Appendix).
  - The percentage of the jail population affected by opioid use disorder (see Appendix). Approximately 18% of incarcerated individuals in the country are believed to have a significant opioid use history. In our sample, small jails in Eastern Washington reported opioid withdrawal as rare, while in SCORE and Snohomish, over half of inmates may have an opioid use disorder, and dozens are treated for withdrawal each day.
11. Incentives for jails to participate in local buprenorphine Hub and Spokes networks
12. Incentives for community providers to accept referrals from jails
13. Incentives for buprenorphine waiver-training, particularly at medical residency programs and NP and PA schools
14. Direct funding for immediate needs of recently released prisoners such as transportation and housing
15. Collective purchasing to reduce costs HCA and DOC are potential coordinators of purchasing OTM medications. This is the authors' suggestion which has not been discussed with these agencies.

### *Potential administration of increased funding:*

16. Criminal Justice Treatment Account (CJTA) The CJTA budget of approximately \$12 million per biennium is administered by DBHR to provide alcohol and drug treatment services to a subset of justice-involved individuals. However, by current law (RCW 71.24.850), this funding is not available to most incarcerated individuals. Revision of the RCW to increase the size of the fund and to allow fewer restrictions would allow wider access to OTM in jails.
17. Health Care Authority
  - Medicaid. There are several possibilities to allow access to Medicaid funding:
    - Use the state half of Medicaid funds (via policy or legislation).
    - Seek an 1115 demonstration waiver from the Centers for Medicare and Medicaid Services to fund opioid response treatment for persons eligible for

Medicaid at or during the time of incarceration (as requested in 2018 substitute engrossed HB 2489 Part II, Section 2 (5)(a)).

- Healthier Washington: through Accountable Communities of Health
- Federal funds that could become available through opioid epidemic appropriations

*Recommendations for Actions at Jails*

18. Monitor opiate withdrawal systematically using COWS. Facilities without full-time nursing staff can train officers to use it.
19. Use clonidine for withdrawal as the first medication choice until OTM is available. Supplement with additional medications, and provide aggressive fluid and electrolyte replacement.
20. Treat pregnant women with buprenorphine or methadone. Be aware of DEA regulations, and transfer patients promptly to an authorized facility if necessary.
21. Avoid “narcotic-free” messaging.
22. Develop communication links with the courts to better predict release date.
23. Provide several days of medication at release, to avoid treatment gap and potential loss to follow-up.
24. Use the buprenorphine monoprodukt rather than the more expensive combination buprenorphine + naloxone.
25. Avoid ER-naltrexone as the sole OTM option. There are reasons for caution:
  - This expensive medication has been marketed aggressively by its manufacturer to criminal justice system purchasers as a non-opioid option for treating opioid use disorder.
  - Long-term outcomes remain uncertain due to limited data.
  - Compared to buprenorphine and methadone, ER-naltrexone has a greater risk of overdose for patients who relapse, because of loss of opioid tolerance.
  - Jails that have offered this option have found minimal interest from patients.

## Appendix

### Calculation of Size of the Correctional Population with Opioid Use Disorder (OUD) in Washington

Assumptions/Limitations: This calculation makes a number of assumptions which may not be accurate. Due to limited data availability, this calculation mixes data from different years. It assumes that the gender-specific ratios of opioid use disorder in Washington correctional facilities match the average for the U.S. It assumes that the community-level rate of opioid use disorder in Washington matches the average for the U.S. It assumes that the prevalence of OUD among releasees matches that of the whole jail or prison population. Finally, it depends on the narrow definition of OUD in a US Bureau of Justice Statistics report (defined as “regular use”) and the 2016 National Survey on Drug Use and Health. Thus the results should be viewed as an estimate.

# of individuals with OUD released from WA DOC annually

$$\begin{aligned} &= (\# \text{ Individual citizens released from WA DOC annually}) * [(\text{Fraction of US prison residents who are male} * \text{Prevalence of OUD among males US prison residents}) + (\text{Fraction of US prison residents who are female} * \text{Prevalence of OUD among females US prison residents})] \\ &= (7,850^4) * [(1,500,278^5 / (1,500,278 + 113,462^5) * 15.2\%^6) + (113,462 / (1,500,278 + 113,462) * 22.3\%^6)] \\ &= 1,217 \end{aligned}$$

# of individuals with OUD released from WA jails annually

$$\begin{aligned} &= (\# \text{ individual citizens released from WA jails annually}) * [(\text{Fraction of US jail residents who are male} * \text{Prevalence of OUD among male US jail residents}) + (\text{Fraction of US jail residents who are female} * \text{Prevalence of OUD among female US jail residents})] \\ &= (143,601^7) * [(673,891^8 / (673,891 + 93,729^8) * 16.8\%^6) + (93,729 / (673,891 + 93,729) * 24.7\%^6)] \\ &= 25,510 \end{aligned}$$

# of individuals with OUD released from WA jails and prisons annually

$$\begin{aligned} &= \# \text{ of individuals with OUD released from WA DOC annually} + \# \text{ individuals with OUD released from WA jails annually} \\ &= 26,727 \end{aligned}$$

# of individuals with opioid use disorder in WA

$$\begin{aligned} &= (\text{Pop. WA} / \text{Pop. US}) * \# \text{ US citizens with OUD} \\ &= (7,406,000^9 / 325,700,000^9) * 2,100,000^{10} \\ &= 47,751 \end{aligned}$$

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<sup>4</sup> Prison Admissions and Releases by County – Fiscal Years 2006-2017, WA DOC, Report 400-RE001

<sup>5</sup> Prisoners in 2009. Bureau of Justice Statistics, December 2010. H West, W Sabol, S Greenman

<sup>6</sup> Drug Use, Dependence, and Abuse Among State Prisoners and Jail Inmates, 2007-2009; Bureau of Justice Statistics. J Bronson, J Stroop, S Zimmer, M Berzofsky. Reported as “regular use.”

<sup>7</sup> Behavioral Health Needs of Jail Inmates in Washington State. Dept. of Social and Human Services, 2013. Though this is reported as the number booked, assuming steady state, it is a reasonable proxy for number released.

<sup>8</sup> Jail Inmates at Midyear 2009 – Statistical Tables. Bureau of Justice Statistics

<sup>9</sup> US Census Bureau, 2017

<sup>10</sup> National Survey on Drug Use and Health, 2016, <https://www.hhs.gov/opioids/about-the-epidemic/>, defined as misuse of opioid pain relievers or heroin use