# Social determinants of health (SDOH) and system-level and practice-level options for addressing the overdose death crisis

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This document was prepared by Carmen Albizu Garcia, Siddhi Ganesh and Ricky N. Bluthenthal and reviewed by members of the National Academy of Medicine (NAM) Action Collaborative on Countering the U.S. Opioid Epidemic. Statements in this document do not necessarily reflect the views of members of the Action Collaborative on Countering the U.S. Opioid Epidemic, the NAM, or the National Academies of Sciences, Engineering, and Medicine. The document is intended to help inform and stimulate discussion. It is not a report of the NAM or the National Academies.

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## Social determinants of health (SODH) and system-level and practice-level options for addressing the overdose death crisis.

Opioid-related overdose mortality continues at historically high levels in the US (see https://www.cdc.gov/nchs/pressroom/nchs_press_releases/2022/202205.htm). Social determinants of health are increasely understood to contribute to this mortality crisis (Barocas et al., 2019; Beseran et al., 2022; Blair & Siddiqi 2022). Healthy People 2030 defines social determinants of health as the "conditions in the environments where people ae born, live, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life- outcomes and risks" (see https://health.gov/healthypeople/priority-areas/social-determinants-health). Health systems and provider/practitioner responses to the overdose mortality crisis are directly and indirectly impacted by social determinants of health. For instance, since much of health insurance is still provided through employment, lower-income populations are less likely to have generous insurance plans that cover extended stays in substance use treatment. In the public health insurance system, access to Medicaid (through Medicaid expansion) has been refused in some states, leaving some populations uninsured and thus unable to make use of required mental health services (Cummings et al., 2014; Grogan et al., 2016; Saloner et al., 2017). Lastly, even for those with insurance, mental health parity in coverage continues to be not fully implemented (Dickson-Gomez et al., 2022) and among existing providers reluctance to accept Medicaid reimbursement amounts has lowered patient access to medication for opioid use disorder (MOUD) (Knudsen & Studts 2019). In the following, we will identify issues at the intersection of SODH, overdose deaths, and health systems and providers for purposes of providing recommendations and examples from the field on practice-based and evidence-based efforts to address the overdose death crisis.

## A. Criminalization of drug use and its impact on social determinants of health (SDOH)

The United States, with only 5% of the world population, houses 25% of the global prison population (Helen Fair and Roy Walmsley. World Prison Population. 13th edition. Institute for Crime and Justice Policy Research, October 2021). Among those incarcerated populations in the US, a disproportionate share are minoritized populations (Black, Hispanic, and American Indian). These disparities in incarceration arose from 50 years of waging the war on drugs declared by President Nixon in 1971. In the US, drug prohibition punishes offenders with incarceration for use, simple possession as well as the production, distribution, and sales of certain drugs. Between 1972 and 2008 the prison population increased by 800 percent although small reductions in overall prison population have been observed since that date (Sentencing Project 2022). Criminalization has impacted mainly low-income Blacks and Latinxs that are overrepresented in penal institutions despite comparable prevalence of drug use to that of whites. Further, despite the fact that large proportions of the US prison population have a substance use disorder (SUD), MOUD for persons living in jails and prisons who are diagnosed with an opioid use disorder (OUD) is scarce. In 2017 only 30 of the 5,100 of the US jails and prisons offered buprenorphine or methadone to incarcerated persons with an OUD. As of 2018 these services were available in only 14 of the 50 states and in the territory of Puerto Rico (SAMHSA 2019).

Eliminating felony convictions for drug offenses will prevent harmful consequences that impact the social determinants of health and hinder social reintegration that disproportionately impact racial and ethnic minorities and poor non-Hispanic Whites (Iguchi et al., 2005). Restrictions imposed on persons returning to the community after completing a sentence for a felony conviction include food stamps and public assistance denial, suspension of driver's licenses, and denial of child custody, voting rights, employment, loans, and student financial aid (Hodge & Dholakia 2021). These additional penalties, once sentences are served, continue to impact SDOH for formerly incarcerated people by denying them access to sources of economic and social support needed for successful social integration and health.

Conditions in support of ending drug prohibition are emerging. A recent nationwide poll conducted jointly by the American Civil Liberties Union and the Drug Policy Alliance reports wide public support to end the drug war and reinvest instead drug enforcement resources in treatment and addiction services (Kanaack et at., 2021).

These developments provide an opportunity for health systems to begin tackling stigma in the workforce, expansion of evidence-based treatment and other services that address SDOH, to improve entry, retention in care and the health and social outcomes for persons with an OUD.

# Recommendations:

1. **Encourage states to adopt alternatives to incarceration including decriminalization.** Decriminalization is the removal of criminal penalties for drug law violations (usually possession for personal use). Two dozen countries, and dozens of U.S. cities and states, have taken steps toward decriminalization. In the US decriminalization has been applied mostly to marijuana laws. By decriminalizing possession and investing in treatment and harm reduction services, we can reduce the harms of drug misuse while improving public safety and health. Rhode Island and Vermont decriminalized buprenorphine diversion, recognizing that drug overdose is a greater threat. Los Angeles County created an Office of Diversion and Reentry and housed it within their health services department, and like in Baltimore, the Los Angeles District Attorney is declining to prosecute people for possession of small quantities of illicit substances.

## Example:

Oregon Measure 110, Drug Decriminalization and Addiction Treatment Initiative (2020). The State of Oregon permits initiative-sponsored petitions onto the ballot. Proposition 110 was passed by voters in November of 2020 and went into effect February 2021. It reduced penalties of personal consumption from a misdemeanor to a Class E violation, akin to a traffic violation with a maximum $100 fine that can be waived through assessment. Simultaneously, it uses cannabis tax revenue to fund the full spectrum of substance use disorder treatment services in the state. Each county funds a Behavioral Health Resource Network for "one stop shop" service connection. Persons intervened will not have a criminal record.

**2. Encourage states to opt for Medicaid suspension instead of elimination when an individual is sentenced to a prison or jail.**

The Centers for Medicare and Medicaid Services has long encouraged states not to terminate coverage for enrolled individuals during their time in correctional facilities, but rather to suspend it until release or until enrollees are sick enough to require off-site inpatient care - the only type of care Medicaid covers for incarcerated populations. Suspension allows for all Medicaid services to resume seamlessly upon re-entry to the community, a time of particularly high mortality. (Medicaid and Incarcerated Individuals. In Focus. Congressional Research. Services. May 12, 2021. https://crsreports.congress.gov/product/pdf/IF/IF11830). The need for a seamless transition is underscored by findings from a study assessing mortality throughout a 4 year period among prisoners released from a state system. The authors reported that the adjusted risk of death among former inmates at 1.9 years was 3.5 times that among other state residents. During the first 2 weeks after release, the risk of death among former inmates increased nearly fourfold to 12.7 times that among other state residents, with a markedly elevated relative risk of death from drug overdose (Binswanger et al., 2007). Assuring a seamless transition to medication initiation for an untreated OUD or continuation of treatment received during incarceration needs to be prioritized in reentry services as well as dispensation of naloxone upon release to avoid preventable mortality.

**3. Expand access to MOUD in carceral settings and provide a seamless transition to community care upon release.**

The White House 2022 National Drug Control Strategy recognizes that only 6.5% of the 41.1 million people who needed treatment for SUD in 2020 received treatment at a specialty treatment facility over the previous year. The gap is due to the many barriers that persons in need face to access care. The plan calls for actions that will expand access to evidence-based treatments that have been shown to reduce overdose risk and mortality and emphasizes the need to develop stronger data collection and analysis systems to better deploy public health interventions from harm reduction to MOUD. It also includes a chapter on Criminal Justice that focuses on direct actions that will improve the delivery of evidence-based treatment when appropriate for people in carceral settings or in the reentry process in addition to other carceral-impacted persons.

The White House Strategy is aligned with the Roadmap for States to Reduce Opioid Use Disorder in the Justice System published in 2019 by the National Governors' Association and the American Correctional Association. The following figure illustrates multiple stakeholder involvement (on the right) required to assure successful attainment of the outcomes that appear on the left portion of the slide. One of the key sectors that needs to engage in this planning process are the many Healthcare Systems operating throughout the nation. We encourage readers to access the Roadmap to specifically identify expectations for engagement in planning and providing a continuum of care for persons with an OUD under criminal legal supervision (https://www.nga.org/wp-content/uploads/2021/02/NGA-Roadmap-on-MOUD-for-People-in-the-Justice-System_layout_final.pdf).


4. **Expand access to the Transitions Clinic Network (TCN) model to overcome the many barriers to care engagement post incarceration responsible for adverse preventable health and social outcomes upon reentry** (https://transitionsclinic.org/transitions-clinic-network/).

The TCN Model of Enhanced Primary Care is staffed with an interdisciplinary team that includes community health workers with lived experience to help persons with a chronic health condition, including SUD, enter and remain in primary care with integrated SUD/OUD treatment. The primary care system creates relationships with other systems within the community: the criminal legal system and community supervision, community based organizations (re-entry services), faith-based networks, behavioral health systems, housing systems, and tertiary care. In clinical trials of the model individuals who received care in the TCN clinic had 50% fewer emergency department visits in 12 months following prison release, spent 25 days fewer in jail at 12 months and had fewer parole/probation violations. Investments in the health system can have significant outcomes on the social determinants while also leading to cost savings. TCN clinics are operating in 13 states and in the US territory of Puerto Rico (Shavit et al., 2017).

## B. Drug Prohibition and Racialization of the child welfare system: Impact on Families with OUD.

The US drug treatment gap, a structural outcome of drug prohibition, impacts the integrity of families as well and the removal of children by Child Protection Services (CPS) authorities. In her webinar presentation, Professor Dorothy Roberts, author of "Torn Apart: How the Child Welfare System Destroys Black Families--and How Abolition Can Build a Safer World" (Roberts 2022) underscored the following:

- Nearly 500,000 US children are annually placed in foster care or removed temporarily from their homes, based on the false assumption that drug use by parents is inherently harmful to children.

- Most child neglect cases involve some sort of allegation of substance use.
- Using drugs by itself does not necessarily make a parent unfit. The conflation of substance use with maltreatment ignores the care that parents provide their children and the care they could provide with treatment to address underlying psychiatric and socioeconomic problems that can lead to addiction.

# Recommendations:

1. **Obtain guidance on your state's implementation of the Family First Prevention Services Act of 2018.** The federal law reforms are meant to help keep children safely with their families and avoid the traumatic experience of entering foster care. They are intended to ensure children are placed in the least restrictive setting that is appropriate to their special needs when foster care is needed. **The Children's Defense Fund** has published *A Technical Guide for Agencies, Policymakers and Other Stakeholders* that is regularly updated, to inform on the tools the law provides to improve the quality of services and supports, including new requirements for placement assessments, evidence-based programs, residential treatment, and common-sense licensing. This document can be accessed in https://www.childrensdefense.org/policy/policy-priorities/child-welfare/family-first/implementing-the-family-first-prevention-services-act/.

## C. Drug use during pregnancy.

Since 1973, approximately 45 states have sought to take legal action against women for exposing their unborn fetus to drugs. Proponents of criminalization laws purport that threatened or actualized prosecution and incarceration will discourage maternal drug use; this has not been shown to be the case. Mandatory reporting requirements may pose a threat to the woman and provider relationship, and as such, have the potential to deter women from seeking prenatal care. Thus, for optimal care of pregnant women with opioid and substance use problems, it is imperative that providers understand the legal mandates in their state, including care for women who reside in other states (Rizk et al., 2019). The American College of Obstetrics and Gynecology (ACOG) recommends early universal screening, brief intervention (such as engaging a patient in a short conversation, providing feedback and advice), and referral for treatment of pregnant women with opioid use and opioid use disorder, in order to improve maternal and infant outcomes. In general, a coordinated multidisciplinary approach without criminal sanctions has the best chance of helping infants and families (American College of Obstetricians and Gynecologist 2017).

# Recommendations:

1. **The Guttmacher Institute** website provides a current summary of state policies related to substance use during pregnancy, including whether substance use is considered child abuse and when testing or reporting is required by law (https://www.guttmacher.org/state-policy/explore/substance-use-during-pregnancy). Physicians, social workers and nursing staff should be encouraged to check their state's policies when encountering a pregnant female that is using drugs and procedures should be designed to protect women from abandoning care due to fear of criminal legal interventions.

2. **Pregnancy Justice (https://www.pregnancyjusticeus.org/programs/legal-advocacy/)** is an organization "dedicated to defending the rights of pregnant people against criminalization and other rights violations because of pregnancy and all pregnancy outcomes." Health services providers caring for women faced with criminal actions based on the finding that they use a criminalized drug may explore legal advocacy, legal counsel, and other resources through the organizations' website. The organization can assist in the development of the health sector's local comprehensive strategies to address the needs of pregnant women at risk of prosecution for drug use.

3. **Use peer support models to improve engagement in treatment services for women.**

### Example:

> MOMS program in Oregon (https://cohealthcouncil.org/?initiatives=moms-program). St. Charles Center for Women's Health and Best Care Treatment Services collaborated to develop a program to improve the clinical outcomes for women with substance use disorder and their newborns. From the site's webpage they "…develop the partnerships, workflows, messaging and outreach approaches to successfully embed a SUD clinician in the clinic in order to build relationships and demonstrate engagement in services with the women who screen positive for a substance use disorder. The SUD clinician uses an Intentional Peer Support model to engage the women given their current motivation for change and life circumstances." Peer support is provided by women in recovery who can also help to educate practicing physicians. They use non-punitive approaches, cannot work for CPS or report on what they learn from the people they are supposed to be helping. Since often the state mandates treatment without adequate assessment of patient's needs to identify the best interventions to address them, in some cases mandated treatment can do more harm than good. Navigators can also help with engagement in the broader healthcare system.

## D. Barriers to on demand medication access

Health systems have not prioritized providing the full complement of medication for opioid use disorder and practices. Procedures, such as prior authorization, inhibit efficient uptake of medication treatment for those who are ready for it. Requiring prior authorization has been reported to demand physicians to spend an inordinate amount of time searching web sites for authorized medications, subsequently provide extensive information about the patient's

condition to select medications authorized by the insurance company, followed by a waiting period prior to receiving authorization or denial. The process, in addition to taxing physicians' workload, is likely to result in deleterious effects on patient care (Nasrallah 2020).

Delaying appropriate treatment generates a cascade of other adverse conditions that impact the health of persons with an OUD. Restricting beneficial medications increases the likelihood of drug overdose and incarceration since it exposes the person that uses drugs who is unable to access timely care to criminal interventions for using illegal drugs for withdrawal management or purchasing medications from the illegal market. Arrests can lead to incarceration and subsequently to a myriad of adverse social conditions detrimental to their health and wellbeing that persist after release.

# Recommendations:

1. **Preauthorization requirements should be eliminated for all SUD services and FDA-approved formulations of SUD medications.** Health plans have required prior authorization for SUD services and medications more frequently than other medical services. In response to the opioid epidemic, state lawmakers have removed some prior authorization requirements such that in 2020, 21 states and the District of Columbia had enacted laws limiting public and/or private insures' prior authorization requirements for SUD treatment (Andraka-Christou et al., 2023). Emerging research reveals increases in buprenorphine-naloxone use is associated to reductions in hospitalizations and emergency department encounters related to SUD (Weber 2020).

2. Avoid treatment disruptions due to pharmacy encountered barriers by assuring coordination between health systems, community pharmacies and insurance providers to facilitate easy and speedy filling of buprenorphine prescriptions.

## Examples:

**Community pharmacies are adopting models to address SDOH.** A promising collaborative model to enhance adherence to buprenorphine treatment involves a care team between physicians and pharmacists. The physician provides clinical guidance and prescribes the buprenorphine and the pharmacist in addition to dispensing the buprenorphine provides education on its use, monitors drug use and treatment safety as well as medication diversion through the Prescription Drug Monitoring Program. Results of its implementation at six months include satisfaction with the model by all the parties involved and 90 percent retention at six months (NIDA 2021).

**Community Health Workers in pharmacy staff**. A model to address social determinants of health in underserved populations has been established in Missouri by SEMO Rx pharmacies. Community pharmacies are staffing pharmacy technicians trained as community health workers. This is allowing staff to identify patient social needs and coordinate services with other local organizations to intervene with situations that risk appropriate management of chronic health conditions (Pharmacy Times 11/3/2022).

3. **Implement Medication First Principles where appropriate.** Medication first approaches to MOUD are analogous to Housing First approaches to homelessness (Winograd et al., 2019). This model consists of 4 principles (Winograd et al., 2020). 1) Patients receive medications as quickly as possible (and even before lengthy assessments), 2) Maintenance level doses are delivered without time limits or arbitrary tapering, 3) Psychosocial services are not a required condition of continued treatment, and 4) Medication is discontinued only if patient's condition worsens. Implementation of these principles in Missouri yielded promising outcomes including increases in MOUD prescribing, shorter time to MOUD initiation, improvements in retention in treatment for up to 6 months and lower cost (Winograd et al., 2020). More widespread use of these principles appears warranted given these promising early results.

## E. Stigma towards persons who use drugs in the health care system has impacted quantity and quality of care.

Drug prohibition has significantly impacted the health care sector and contributed to the very large gap between availability and need for MOUD, the standard of care for persons with an OUD. Prior research indicates that in the US there is capacity to treat with MOUD only 18% of persons with an OUD (Volkov 2021) Criminalizing drug use promotes the belief that persons who use drugs cannot be trusted. These beliefs are normalized and are often enacted through demeaning and dehumanizing encounters with health professionals that hinder treatment engagement and retention in care.

Findings from a recent national survey of Primary Care Providers reports that nearly 70% of respondents endorsed items reflecting social distancing from persons with an OUD under treatment with medications (Stone et al., 2021). In addition, stigma against treatment with the opioid agonist medications methadone and buprenorphine, the standard of care for an OUD, has led to the belief that this involves substituting one drug for another, and is reflected in health care providers' hesitancy to accept MOUD. These negative attitudes among providers have been found to interact as well with other normative beliefs regarding substance use disorders, resulting in sluggish adoption of buprenorphine treatment in the US despite the persistent opioid overdose epidemic (Louie et al., 2019).

# Recommendations:

1. **Address stigma towards persons with an OUD in the health care workforce.** A recent literature review of the evidence base of stigma reduction in health facilities suggests that persistent gaps in stigma reduction strategies still exist (Nyblade et al., 2019). The authors conclude that the factors being recognized as key to the interventions include involvement of clients living with the stigmatized condition or behavior as participants in panel discussions, trainers, or in joint provider–client workshops. Further efforts should include building management buy-in and ownership and empowering facility-based "champion" teams of health workers and clients who develop and lead tailored stigma reduction efforts in their facilities as well as attention to the physical space to avoid unwanted disclosure of status. Aronowitz and Meisel (2022) highlight the challenge encountered in attempts to develop successful interventions to reduce stigma towards persons with an SUD since they propose that health care professionals and the general population find it difficult to reconcile the chronic disease model

of substance use disorders with the continued criminalization of certain drugs and of those who use them. A recent systematic review concluded that educational interventions could improve attitudes towards people with SUD, but the inclusion of contact with individuals in recovery is needed to achieve long term benefits (Bielenberg et al., 2021).

In the absence of definitive studies to guide a broad anti stigma campaign for persons with an SUD in the health services sector, work conducted in this setting on stigma towards persons living with HIV by the USAID and PEPFAR funded Health Policy Project (HPP), provide recommendations developed during a five-year effort to improve health systems in developing countries. The "Comprehensive Package for Reducing Stigma and Discrimination in Health Facilities" is comprised of three booklets: a Guide for Administrators, a Training Guide, and a User's Guide (Available at[http://www.healthpolicyproject.com/index.cfm?id=publications&get=pubID&pubId=281](http://www.healthpolicyproject.com/index.cfm?id=publications&get=pubID&pubId=281)).

2. Coordinate with community programs for persons who use drugs that center on deconstructing stigma and addressing participants' needs through an array of harm reduction and recovery services that impact SDOH.

## Examples:

**Atira Women's Resource Society** in Canada, empowers women affected by violence with an SUD and their children based on the understanding that gender-based violence is central to their drug use. They offer safe housing, education, support for mothering, among other services to increase opportunities for women to keep themselves and their children safe and enable them to preserve family integrity. (https://atira.bc.ca/)

**Unity Recovery** combines Recovery Oriented and Harm Reduction Services to provide a continuum of services from community outreach to recovery services that are based on partnering with participants and respecting their autonomy to support them in addressing their priority needs. (https://unityrecovery.org/our-services).

3. To enhance understanding of the impact of current drug policies on SDOH obtain input from organizations that bring together persons who use drugs involved in advocacy to develop understanding of policies that affect them, their impact on their interactions with the health care system, and how to overcome barriers that reduce their possibilities of safe and healthy living.

## Example:

**Urban Survivors Union (USU- https://www.druguservoice.org/).** The USU aspires to change public narrative about drug users and sex workers and the harms experienced from current policies that affect their social integration and health through an Advocacy Academy, Harm Reduction Education, with special attention to Methadone Advocacy. They can collaborate in training and providing opportunities for encounters with the health care workforce to deconstruct stigma and inform on the consequences of structural barriers of current policies that contribute to disparities in their health outcomes.

## F. Increase provider prescribing of MOUD

Regulations governing the prescribing of buprenorphine for MOUD were established to permit primary care physicians to contribute to increasing SUD treatment options. However, engagement by primary care physicians in buprenorphine prescribing has remained insufficient (Wakeman and Barnett 2018). Recent developments arising from the COVID-19 pandemic should facilitate greater provider involvement in prescribing buprenorphine by removing DEA training requirements and providing greater flexibility in protocols for initiating and continuing buprenorphine treatment (Pessar et al., 2021), although early evidence is contradictory (Hailu et al., 2023; Jones et al., 2022). Therefore, additional steps can be taken to continue the trend toward greater prescribing of buprenorphine.

# Recommendations:

1. **Take advantage of the DEA Removal of the DATA Waiver requirement to increase the number of physicians able to prescribe buprenorphine for an OUD. (https://www.samhsa.gov/medication-assisted-treatment/removal-data-waiver-requirement).** Section 1262 of the Consolidated Appropriations Act, 2023 (also known as Omnibus bill), removes the federal requirement for practitioners to have a waiver to prescribe medications, like buprenorphine, for the treatment of OUD. With this provision all practitioners who have a current DEA registration that includes Schedule III authority, may now prescribe buprenorphine for Opioid Use Disorder. (https://www.samhsa.gov/medication-assisted-treatment/removal-data-waiver-requirement) From a social determinants of health perspective, this should increase the availability of MOUD for patients in areas that are medically underserved (Abell-Hart et al., 2022; Weintraub et al., 2021).

2. **Inform and train providers to adopt dispositions provided by SAMHSA' recent update of federal rules applied to MOUD designed to expand access to treatment for OUD.** Specifically, the proposed rule change would update 42 CFR Part 8 by removing stigmatizing or outdated language; supporting a more patient-centered approach; and reducing barriers to receiving care. It will facilitate treatment access by allowing take home doses of methadone and the use of telehealth in initiating buprenorphine (SAMHSA 2022), although DEA regulations require an in-person visit within 30 days to refill prescription.

3. **Recruitment interventions to increase MOUD prescribing among treatment centers.** Investigators used the "Physician Recruitment Descriptive Factors Framework" to test approaches for providing MOUD treatment options within existing treatment centers in 3 states (Molfenter et al., 2023). Results indicate that having an active physician recruiter and resources to support recruitment was associated with greater availability of MOUD for patients as had been found in prior studies (Knudsen et al., 2019).

## G. Financing health services interventions to address SDOH.

There is growing recognition of the need to support community-based interventions to support patient health within health systems. Efforts can include using health system funds to pay for housing for patients with unstable housing, basic income supports, or providing funds to support transitions between health care systems.

# Recommendations:

1. **Apply for Medicaid 1115 waivers to establish experimental, pilot, or demonstration projects to improve the continuum of care for persons with an OUD.** Section 1115(a) of the Social Security Act waives certain provisions of the Medicaid law to give states additional flexibility to design and improve their programs. In response to the ongoing opioid crisis, the Centers for Medicare & Medicaid Services (CMS) provides opportunities for states to demonstrate and test flexibilities to improve the continuum of care for beneficiaries with substance use disorders (SUDs) including Opioid Use Disorder.

> **Example a: Oregon Health Plan Substance Use Disorder 1115:** The state sought authority to provide high-quality, clinically appropriate treatment to beneficiaries with substance use disorder (SUD) while they are short term residents in residential and inpatient treatment settings that qualify as Institutions for Mental Diseases (IMDs). **The state also has expenditure authority to allow the state to provide community integration services which consists of housing and employment supports to individuals transitioning back into the community from an IMD or other residential setting.** (Access to this and other demonstration projects can be found in https://www.medicaid.gov/medicaid/section-1115-demonstrations/index.html)**.**

> **Example b. CalAim 1115 Demonstration waiver 2022 Services and Supports for Justice-Involved Adults and Youth:** These initiatives focus on stabilizing health pre-release, ensuring continuity of coverage through Medi-Cal pre-release enrollment strategies, and supporting re-entry to the community. DHCS has requested federal approval to engage with carceral-involved individuals who meet specific clinical criteria (e.g., pregnant, chronically ill, behavioral health needs) in the 90 days prior to re-entry to stabilize their health; assess their health, social, and economic needs; and facilitate a successful re-entry to the community. Related to this request, DHCS is also seeking approval of additional PATH funds to support planning and information technology investments to implement the provision of services in the period prior to release and to provide County Behavioral Health agencies with support to stand up in-reach programs. (https://www.medicaid.gov/medicaid/section-1115-demonstrations/downloads/ca-calaim-ca1.pdf)

2. **Assess opportunities to address SDOH provided by the State Opioid Settlement Funds where applicable:** EXHIBIT E List of Opioid Remediation Uses Schedule A Core Strategies of the final opioid settlement agreement of August 11, 2021, provides a list of opioid remediation uses grouped in two sections. Part B includes treatment and prevention interventions that can be supplemented with settlement funds that also include a broad array of wrap-around services that target SDOH for individuals with OUD and any co-occurring SUD/MH conditions. These

include housing, transportation, education, job placement, job training, childcare, community navigators, case management, and connections to community-based services. Participating states are required to establish processes and administrative structures to guide settlement spending. Since process and administrative structures for allocating funding vary across states, the health care sector should coordinate with the state authority for guidance regarding availability of funds and their allocation and to identify safety net services in the community that facilitate intersectoral collaboration to address SDOH among persons with a SUD in their care(/www.attorneygeneral.gov/wp-content/uploads/2021/12/Exhibit-E-Final-Distributor-Settlement-Agreement-8-11-21.pdf).

3. **Explore recommendations compiled by ASTHO (Association of State Health Officials)**

   a. **See "A Comprehensive Public Health Framework to Address the Opioid Crisis"** that includes a section that compiles sources of funding from federal agencies and a selection of US foundations (https://my.astho.org/opioids/resources/funding-entities).

   b. **Braiding and Layering Funding to Address Housing: Individuals with Substance Use Disorders:** (www.astho.org/globalassets/pdf/sdoh-braiding-and-layering-housing-individuals-with-substance-use-disorders.pdf). This publication addresses the need of persons with SUDs who often have unsafe or otherwise untenable housing, with many experiencing homelessness, presenting challenges to initiating and/or sustaining recovery. The document provides examples of braiding and layering funding streams to support a range of housing options for individuals with SUDs.

## H. Hospital-based interventions

Hospitals are a missed intervention points in addiction treatment when patients who use drugs are not offered harm reduction and/or treatment options during their medical visits (Nolan et al., 2021). Medical institutions can maximize their interventional potential for improving patient experiences (Chan Carusone et al., 2019) , decreasing patient directed discharges (Appa et al., 2022; Ti et al., 2015), and improve overall treatment outcomes for patients who are using drugs, via specific hospital-based interventions. The recommendations below can be implemented by medical practitioners, such as health system administrators, clinicians, and payers and aim to address social determinants of the health consequences of the war on drugs.

1. **Universal screening for opioid use disorder and initiation of treatment among hospitalized patients.** Over a half a million people are discharged each year hospitals in the US (Peterson et al., 2018). Improving access to MOUD among inpatients is one way to effectively reduce harms from OUD. Further, because lower-income individuals are more likely to develop OUD (NIDA, 2017; Ghertner & Groves 2018; Grogan et al., 2016) providing universal access to MOUD for those hospitalized each year addresses social determinants of health. There are several interventions with promising results to consider in this space.

a. **Substance use intervention teams (SUIT).** The SUIT is comprised of an interdisciplinary team that provides inpatient consultation to patients with substance use disorders. The team is comprised of physicians, nurse practitioners, clinical pharmacist, social workers, and a nurse and was demonstrated to improve screening for all patients to nearly 90% and resulted in 1,400 brief interventions and another 880 patients beginning MOUD while still inpatient (Tran et al., 2021).

b. **Addiction consult services (ACS).** As a companion to universal screening for SUDs, addiction consult services can be a practical way for improving inpatient outcomes (Kershaw et al., 2022), initiation of substance use treatment, and supporting linkages to community treatment and services (Priest & McCarty 2019). As described in the literature, ACS involves the following elements: completing a substance use history, withdrawal symptom management, counseling on treatment goals and options, initiation of treatment, and discharge planning to ensure linkage to community resources and treatment (Weinstein et al., 2018). Staffing patterns for ACS appear to vary and can include range of medical specialties (i.e., addiction medicine, family medicine, psychiatry, internal medicine among others), allied health providers (i.e., nurses, social work, occupation therapist), and community-engaged personnel (including outreach workers, peers, recovery coach) among others (Marcovitz et al., 2019). ACS has some earlier evidence of effectiveness (Sokolski et al., 2023), appears acceptable to clinicians and patients (Beckett et al., 2022; Bredenberg et al., 2023; Hoover et al., 2022), and was flexible enough to be implemented successful during the COVID pandemic (Harris et al., 2021).

c. **Case Management/Patient navigation.** Case management and patient navigation strategies are widely used to address screening and care for various ailments. Pilots of this approach for people with OUD have been implemented recently and appear to show promise. For instance, Hawkins and colleagues conducted an open trial of a Care Management Model (CMM) (Hawkins et al., 2018). CMM uses a team-based approach, delivered through one-on-one sessions with patients. It emphasizes flexibility and works to coordinate services across a wide range of needs including medications for SUD, motivational interviewing, housing, mental health, primary and specialty care. Patients are followed throughout the process by a social worker. Patient navigation was examined in a randomized trial with 400 medical patients with opioid, cocaine, and/or alcohol use disorder to determine its effectiveness when added to a hospital's addiction consultation service (Gryczynski et al., 2021). As part of the Patient Navigation intervention, social workers met with patients during their inpatient admission and continued to provide services in the community for 3 months after discharge. The social workers focused on promoting SUD treatment, recommended medical follow-up, and basic self-care. They offered motivational support, linked patients to services, advocated on patients' behalf, and resolved practical barriers. Compared to Usual Care, participants who received Patient Navigation were significantly more likely to access SUD treatment in the community and were less likely to have hospital readmissions within 30 days of discharge. A significant effect of Patient Navigation on hospital readmissions was observed through 12 months of follow-up. This approach should be replicated in multi-site trials.

d. **MOUD initiated during emergency room visits.** A variety of approaches have been taken to improve linkages to and initiation of SUD treatment within emergency room systems. The approach involves screening of patients in ED (either through screening or self-report) and then contact with case managers and/or medical providers to identify appropriate treatment and initiate treatment if possible while patients is still in emergency room care. This approach has proven to be feasible in urban and rural areas, within spoke and hub systems, and for statewide programing (Thomas et al., 2020). Funding for this approach originated from states and federal sources but at least 2 systems are sustained through hospital funding (Clemency et al., 2022; Thomas et al., 2022). These models continue to be developed and improved on. Early results identified the following concerns: 1) Long-term retention in MOUD appears modest (Reuter et al, 2022); 2) Financing for treatment will vary by insurance type, state and local funding, and health system policies; and 3) Addressing provider stigma towards people who use drugs and medications for opioid use disorder are still needed (Johnson et al., 2022).

2. **Treat opioid withdrawal management as an opportunity to initiate MOUD.** There are several approaches to initiating MOUD for patients experiencing opioid withdrawal symptoms. Approaches can include either buprenorphine (Cisewski et al., 2019) or methadone and are described below.

   a. **Increase use of the 72-hour rule for methadone initiation.** Opioid withdrawal symptoms are among the most common medical condition experienced by people who use opioids and has been associated with non-fatal overdose in several studies (Bluthenthal et al., 2020; Coffin et al., 2007). Use of medications to treat opioid use disorder can also be used to address opioid withdrawal. While federal regulations restrict methadone provision outside of approved, specialty clinics, there is an exception to these regulations. The 72-hour rule (Title 21, Code of Federal Regulations, Part 1306.0 (b) allows physicians who are not registered as opioid treatment programs to administer methadone for purposes of relieving acute withdrawal symptoms (Laks et al., 2021). Few studies have been conducted on this approach to initiating methadone treatment, but available reports indicated high feasibility from the physician perspectives and wide acceptability from patients (Taylor et al., 2022).

   b. **Broaden access to transportation including greater eligibility for Medicaid non-emergency medical transportation and increased availability of transportation providers** Medicaid non-emergency medical transportation (NEMT) benefits & CareMore Health partnership with Lyft are two ways to reduce barriers to MOUD and ancillary care for SUD (Powers et al., 2016; 2018).

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