
The Connecticut Opioid REsponse Initiative
September 2023

The Connecticut Opioid REsponse (CORE) Initiative

Draft Report on Funding Priorities for the Opioid Settlement Funds in the State of Connecticut

September 2023

Executive Summary

Connecticut is amid an opioid overdose crisis with over 1,400 deaths in both 2021 and 2022. The state has an unprecedented opportunity to use funds received from the settlement of opioid-related litigation to address this crisis and reduce overdose deaths and opioid-related adverse personal and public health effects in the immediate, near, and long-term. This report, authored by faculty in the Yale Schools of Medicine and Public Health, uses current epidemiological and biomedical evidence on the overdose crisis to update recommendations from the 2016 Connecticut Opioid REsponse (CORE) Initiative Report.

Note: To expedite immediate use of these funds, this is a preliminary set of recommendations to provide timely guidance to the Connecticut Opioid Settlement Advisory Committee (OSAC). This early draft will allow for public and expert comment, and we anticipate providing a more detailed version of this report, in February 2024.

In this report we highlight six priorities that the OSAC can support now with settlement funds. Fund initiatives that:

1. Increase access to and support the most effective medications (methadone and buprenorphine) for opioid use disorder across diverse settings
2. Reduce overdose risk and mortality, especially among individuals at highest risk and highest need with linkage to treatment, naloxone, and harm reduction
3. Improve the use of existing data and increase data sharing across relevant agencies and organizations
4. Increase the size of the addiction-specialist workforce and improve non-specialist and community understanding of the scale and nature of OUD as well as evidence-based treatments to decrease stigma and promote treatment uptake
5. Simultaneously deploy and evaluate select primary, secondary, and tertiary prevention strategies
6. Address social determinants and needs of at-risk and impacted populations

The strategies and tactics discussed in this report align with guidance from the Opioid Litigation Settlement (Exhibit E), which constrains possible uses of Opioid Litigation Settlement funds, and with the Principles for the Use of Funds from the Opioid Litigation endorsed by over 60 organizations including the Yale Program in Addiction Medicine. These priorities aim to provide both general and specific guidance on potential funding targets, but are, by design, not exhaustive, as our group anticipates novel proposals from entities in the state presenting promising opportunities to reduce overdose deaths.

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Background

In 2016, in the face of an unprecedented number of opioid overdoses in the state, the Connecticut Opioid REsponse (CORE) team developed a strategic plan laying out a series of strategies designed to reduce opioid-related deaths. That document, a summation of the scientific literature at the time, provided guidance to the state, alongside efforts from the Alcohol and Drug Policy Council (ADPC), a statewide stakeholder group. Many of the recommendations of that report and from the ADPC have now been enacted.

Unfortunately, since the publication of the initial CORE report, overdose deaths in the state have continued to rise. Where in 2016 there were 931 opioid-related deaths in the state, in both 2021 and 2022 there were over 1,400 opioid-related deaths.[1] The reasons for this continued rise are multiple and interacting, but the main driver has been a changing illicit opioid market now dominated by fentanyl and fentanyl analogues. Stimulant-related deaths are increasing and xylazine adulteration of fentanyl has become increasingly prevalent.

Opioid Overdose Crisis in Connecticut since 2016

In the 2016 CORE report, several broad evidence-based priorities, with attendant strategies and tactics and methods, were identified to address the opioid overdose crisis. The outlined strategies have since been used by various state agencies and jurisdictions, including the ADPC, to plan the state's response. Among strategies proposed by the 2016 report, increasing access to medications for opioid use disorder (MOUD), especially methadone and buprenorphine, and increasing access to naloxone, were particularly central.

The number of individuals receiving methadone increased in the state substantially between 2012 (14,000) and 2017 (21,000), but there have been minimal increases since that time. Similarly, the estimated number of individuals receiving buprenorphine increased in the state substantially between 2015 (21,000) and 2020 (30,000), with only modest increases since that time. There are no reliable estimates of the number of people in the state at risk for overdose who would benefit from treatment with MOUD. Nonetheless, the rising number of opioid overdoses indicates there is an unmet need for these treatments in the state. Unmet need includes individuals who use opioids or have OUD and are at risk of overdose but have not initiated MOUD, and individuals who have initiated MOUD but were not retained in treatment. There are also geographic, socioeconomic, and racial disparities in access to methadone and buprenorphine within the state. Methadone access is limited to federally certified opioid treatment programs (OTPs) that are largely concentrated in our state's urban centers and several portions of the state have few or a very limited number of active buprenorphine prescribers. In addition, since 2016 there have been changes in Connecticut law lowering barriers to naloxone prescribing and efforts to increase naloxone distribution across various agencies (especially the Department of Mental Health and Addiction Services (DMHAS), the Department of Public Health (DPH), and the Department of Correction (DOC)).

Opioid Settlement Funds

Legal settlements with prescription opioid manufacturers and distributors resulted in large payments to be transferred to states party to the suits for the intended use of addressing the public health

consequences of the prior decade's increase in opioid prescribing. This Opioid Settlement Fund has provided the state of Connecticut (henceforth CT) with the means to implement initiatives and interventions to reduce overdose deaths in the state. At the request of DMHAS and in coordination with the ADPC, the CORE team with members from the Yale Program in Addiction Medicine has been again invited to summarize the existing scientific literature and make recommendations regarding funding priorities to the statutorily created Opioid Settlement Advisory Committee (OSAC) charged with distributing the Opioid Settlement Funds in Connecticut.

The CORE team will provide recommendations in two stages. To provide immediate guidance to the OSAC as they convene and plan for the initial disbursement of funds received by the state, the first stage, encompassed by this report, will be delivered to the OSAC in the summer of 2023. This report summarizes and revises the recommendations developed for the 2016 report, attending to evolution of the opioid overdose crisis and the scientific evidence since the publication of that report. This draft will also allow for public and expert review and comment. The second stage will be a final report to DMHAS delivered in February 2024.

This initial report provides guidance to the members of the OSAC for immediate use of settlement funds. The priorities and strategies outlined in this report reflect current understanding, both via empiric research and computer-based modelling, of what interventions have the best evidence of efficacy and likelihood to reduce overdose deaths and adverse public health effects in the near, middle, and long term. We specifically identified strategies most likely to have the greatest immediate impact (number of overdose deaths prevented) per dollar spent.

We have also included strategies that have some evidence to support their effectiveness and recommend that any use of opioid settlement funds for these strategies be directly tied to rigorous evaluation of their efficacy. Given the length of time over which the settlement funds will be distributed, there is an opportunity to build evidence for strategies that are promising but currently lacking a robust evidence base.

Although not specific to CT, several studies have created computer models evaluating the relative efficacy of different strategies to reduce overdose deaths.[2-5] These studies consistently identify strategies that reduce overdose risk especially among those at highest risk – for example, harm reduction efforts including naloxone distribution among people who use fentanyl and other drugs – as the most likely to reduce overdose deaths by the greatest magnitude in the near term. The strategies next most likely to reduce overdose deaths in the near term are those that increase access to medications, especially methadone and buprenorphine, and support treatment engagement, retention, remission, and recovery. Despite inherent uncertainty regarding the impact of various strategies, we believe funding allocations should be distributed across diverse priority areas in a manner that reflects potential impact rather than concentrated in a few priority areas.

Recommendations and strategies identified in this report conform to the nine core abatement strategies identified in the Opioid Litigation Settlement (also known as Exhibit E) to address the opioid overdose crisis. The language of the settlement encouraged states to dispense funds to strategies identified within Exhibit E List of Opioid Remediation Uses, although states are ultimately given discretion on how to spend funds.

In addition, these recommendations are consistent with the Principles to Guide the Use of Opioid Litigation Funds (Principles Group), endorsed by over 60 organizations including the Yale Program in Addiction Medicine, national medical societies, national public health organizations, schools of public health, and national addiction advocacy groups. The overarching Principles regarding allocation of these funds are the following:

1. Spend the Money to Save Lives
2. Use Evidence to Guide Spending
3. Invest in Youth Prevention
4. Focus on Racial Equity
5. Develop a Fair and Transparent Process for Deciding Where to Spending Funding

We would like to highlight two aspects of these Principles that are not explicitly addressed by our priority recommendations. First, we agree with Principle 1, that funding should be allocated to maximize likelihood of reducing overdose deaths and saving lives. To see the highest return on investment, in overdose deaths averted and lives saved, we recommend that distribution of funding allocations match the geographic burden of overdose deaths in the state, which is overwhelmingly concentrated in CT's major cities. We also wish to highlight the global importance of Principle 4. Instead of framing racial equity as a categorical funding priority in this report, we recommend that **all funding decisions** spanning all priorities incorporate a racial equity lens and that funds be allocated to address systemic racism and inclusion of diverse populations across systems designed to abate the opioid overdose crisis.

Of potential benefit to the OSAC, the Principles Group has developed several resources that members of the Committee can refer to in their funding allocation processes.

Exhibit E explicitly includes research activities as possible targets of funding from Opioid Litigation Settlement Funds. As it is unclear what impact on opioid overdose research activities would have, especially in the near term, we have not included recommendations regarding their funding in this report. If the OSAC determines that funding of research activities is of interest, we can provide recommendations regarding research priorities. We do, however, recommend the evaluation of funded interventions as well as opioid overdose trends and related metrics in the state. Evaluating the impact of programs implemented is not research *per se* and can guide continued effective allocation of resources.

In addition, we agree with the Principles Group, that funds received by the state should be used to supplement rather than replace existing funding. Current funding and programing are not meeting the needs of people who use opioids as evidence by the high number of overdose deaths. For example, the state of Connecticut already funds a large portion of the medications used for the treatment of opioid use disorder either via reimbursement through billable services from Medicaid or grants through DMHAS. Opioid Settlement funds should not be used to replace these funding streams, but ideally can be used to fund initiatives to increase the number of people accessing these services.

How to Read This Report

Organization of each funding priority section: For each funding priority, we have identified strategies, goals targeted by each strategy, along with potential tactics for the OSAC to fund. The key provided below supports navigation of these components. Tactics included are not exhaustive. We anticipate other initiatives or approaches may be proposed by community organizations or other entities that target the same the goals. Included in this report are two appendices. Appendix A outlines several

model programs from other states that have demonstrated success in achieving one or more of the goals laid out in this report and that we suggest the OSAC consider funding in CT, and Appendix B describes initiatives that we explicitly caution against the OSAC providing extensive funding, due to demonstrated inefficacy or a paucity of evidence.

Component	Description
Priority	Overarching funding category supporting a specific goal and encompassing one or more strategies and several tactics.
Goal	The summary target outcome for a given funding priority.
Strategy	A specific approach belonging to a stated strategy to achieve a stated goal.
Tactic	A specific action that may be funded to implement a strategy.

Funding Priorities

Funding Priority 1: Increase Access to and Support the Most Effective Medications (Methadone and Buprenorphine) for Opioid Use Disorder Across Diverse Settings

Rationale

The provision of MOUD, particularly methadone and buprenorphine, is the most effective form of addiction treatment to decrease rates of substance use, overdose deaths, transmission of viral infections, and criminal behavior.[6,7] Opioid Settlement Funds should be used to fund initiatives that increase the proportion of people with opioid use disorder who initiate treatment with methadone or buprenorphine and are retained in treatment on these medications.

Consistent access to MOUD for people with OUD is a crucial tool for reducing overdoses in the state, but people confront the following barriers when attempting to initiate or maintain treatment with MOUD:

- Inadequate numbers of clinicians who accept certain insurances, including Medicaid
- Clinicians in emergency departments (EDs) and hospitals who do not routinely initiate these treatments in patients with untreated OUD
- Small number of ambulatory care sites, including primary care, that prescribe buprenorphine
- Inadequate number of clinicians who provide MOUD to adolescents and young adults
- Small number of clinicians in the state who offer same-day provision of MOUD
- Challenges with transportation to treatment settings
- Pharmacies that opt to not dispense buprenorphine (as initiated by a prescription from a prescriber) or have limits on dispensing[8-10]

Funding should be directed to decreasing all potential barriers to accessing these treatments and improving retention in MOUD treatment.

Evidence

Methadone and buprenorphine have ample evidence from clinical trials and epidemiological data supporting them as the most effective treatments for improving a range of outcomes among people with OUD. Most importantly, they dramatically reduce the risk of overdose. Since 2016, several state agencies, including DMHAS, Department of Social Services (DSS), and DOC, have made efforts to increase the number of individuals initiating and engaging in methadone or buprenorphine treatment. These have included efforts to lower barriers to accessing methadone, increasing capacity throughout the state to prescribe buprenorphine and methadone, and increasing access to methadone and buprenorphine for incarcerated people with OUD.

The number of individuals receiving methadone increased in the state substantially between 2012 (14,000) and 2017 (21,000), with minimal increases since that time. Similarly, the estimated number of individuals receiving buprenorphine increased in the state substantially between 2015 (21,000) and 2020 (30,000), with only modest increases since that time. There is less data on the proportion of people

who are retained on either methadone or buprenorphine long-term. Nonetheless, the rising number of opioid overdoses indicates there is an unmet need for these treatments in the state. Unmet need includes individuals who use opioids or have OUD and are at risk of overdose but have not initiated MOUD, and individuals who have initiated MOUD but were not retained in treatment. There are also geographic, socioeconomic, and racial disparities in access to methadone and buprenorphine within the state. Methadone, limited to federally certified OTPs, is largely concentrated in our state's urban centers and several portions of the state have few or very limited number of active buprenorphine prescribers.

Building on substantial data supporting the efficacy of MOUD for a range of outcomes, there is growing evidence for programs that can improve engagement and maintenance of MOUD treatment, including programs that:

- Initiate MOUD among patients in a range of settings, including EDs[11,12], hospitals, and via mobile delivery service
- Provide specialty addiction consult services in general medical hospitals
- Provide time-limited "bridge" treatment between clinical settings[13]
- Provide broad access to low threshold MOUD treatment initiation and retention, including
    - providing MOUD on the same day
    - reducing logistical and financial hurdles to receiving MOUD, and
    - avoiding discharging patients from care for ongoing substance use[12,14]
- Support clinicians with initiatives such as Providers Clinical Support System, Project Echo, California Bridge, Maryland Addiction Consultation Service, and Project Assert (see Appendix A)
- Provide "medication first" models and interim MOUD (i.e. models providing MOUD without counseling)[15,16]
- Target, through tailored strategies, high-need populations including minoritized patients, adolescents, pregnant and parenting women, overdose survivors, those with OUD and low opioid tolerance, and those with HIV or Hepatitis C (HCV)

Potential Impact

The potential impact of expanding access to MOUD would be immediate and, if able to retain people in treatment, sustained in the near- and long-term, with continuing investments.[4] Any tactics that increase uptake of methadone or buprenorphine treatment and increase retention in treatment are ones that will reduce overdose deaths. There is strong evidence that OUD treatments that do not use methadone or buprenorphine are inferior to those that do.[6,17,18] A study in CT indicates that such treatments may in fact produce greater opioid-related mortality than no treatment.[19]

Strategies

Strategy #1: Strategically expand access to and improve retention on methadone and buprenorphine via federally certified OTPs.

- **Goal:** Ensure geographically strategic, equitable, and timely access to methadone and buprenorphine in OTPs; lower barriers to methadone and buprenorphine treatment initiation and continuation.

- **Tactic #1:** Fund expanded service provision at existing OTPs (including expanding service hours, providing same-day MOUD, and providing supportive behavioral health services such as Cognitive Behavioral Therapy and Contingency Management[20]).
- **Tactic #2:** Fund initiatives to determine locations and populations currently with unmet need for OTP services and establish OTP services to meet these unmet needs.
- **Tactic #3:** Fund increased provision of mobile OTP services providing methadone, buprenorphine, and ancillary support ("wrap-around") services.
- **Tactic #4:** Fund initiatives to support access to buprenorphine either for MOUD initiation or transition from methadone within existing OTPs to increase patient-centered MOUD provision.
- **Tactic #5:** Fund initiatives that support linkage to ancillary support services (emphasis on transportation, insurance enrollment, vocational training, employment support, and childcare) for individuals engaged in MOUD via OTPs.
- **Tactic #6:** Fund initiatives that lower barriers to remaining on or resuming MOUD within OTPs not otherwise explicitly mentioned above. This may include, as allowable by federal regulations, expanding use of take-home doses, loosening rules that restrict treatment based on results of urine drug testing, or other innovative models.

Strategy #2: Increase provision of MOUD for people in CT EDs and hospitals and support improved transitions of care.

- **Goal:** Equip all CT EDs and hospitals to both prescribe MOUD and create plans for ongoing receipt of MOUD after discharge.

  - **Tactic #1**: Fund initiatives to train and support ED and hospital clinicians in provision of MOUD.[21]
  - **Tactic #2:** Fund initiatives to develop and sustain hospital-based addiction specialist consult services.[22]
  - **Tactic #3:** Fund initiatives to develop and implement substance use navigator services that work in collaboration with clinicians and highlight the benefits of MOUD, such as the *Project ASSERT* model, in all EDs and hospitals (see Appendix A).[23]
  - **Tactic #4:** Fund initiatives that work to ensure provision of MOUD in skilled nursing facilities upon hospital discharge by addressing barriers and coordination of treatment across transitions of care.
  - **Tactic #5:** Fund initiatives, not otherwise explicitly described here, that support continuation and retention on MOUD for people initiated MOUD in EDs and hospitals.

Strategy #3: Increase availability of buprenorphine in office-based settings of primary care, federally qualified health centers, hospital-based clinics, recovery support services, harm reduction services, and other settings.

- **Goal:** Timely, convenient access to buprenorphine in all parts of the state regardless of insurance status

  - **Tactic #1:** Fund initiatives to train and support clinicians throughout state in skills and knowledge to screen for OUD, prescribe buprenorphine, and connect patients to ancillary support services (see Appendix A for description of MACS program).

- **Tactic #2:** Fund initiatives that expand access to buprenorphine in office-based settings including those that provide care for pregnant and parenting people, adolescents, or populations currently with inequitable access to buprenorphine.
- **Tactic #3:** Fund initiatives that provide ancillary support services to MOUD treatment across office-based and general medical care, specialty addiction treatment, recovery support services, and harm reduction services.
- **Tactic #4:** Fund initiatives that lower barriers to remaining on or resuming buprenorphine in office-based settings.
- **Tactic #5:** Fund expanded access to select, evidence-based behavioral services such as Contingency Management or Cognitive Behavioral Therapy for patients receiving buprenorphine in office-based settings.[20]

Strategy #4: Ensure access to all FDA-approved medications for OUD for people incarcerated in and transitioning out of CT DOC.

- **Goal:** All individuals incarcerated in CT DOC should be screened for OUD and have access to all three FDA approved MOUD options at time of entry to and exit from CT DOC.
    - **Tactic #1:** Fund initiatives to support the CT DOC efforts to expand access to all FDA-approved MOUD in all CT DOC facilities.
    - **Tactic #2:** Fund initiatives to ensure timely connection to and retention on MOUD following release from CT DOC, including support for comprehensive discharge planning and expansion of guest-dosing of methadone at all OTPs in state for people released from CT DOC.

Strategy #5: Improve analysis and timely reporting of existing data pertinent to provision of MOUD in the state.

- **Goal:** Creation of timely reported metrics on MOUD provision in the state via merging and linking relevant existing data from treatment providers, state agencies, and other entities in the state. Metrics can be used by stakeholders and policymakers to guide funding, policy, and agency efforts to improve MOUD provision.

    - **Tactic #1:** Fund initiatives to generate and support the timely reporting of geographically granular metrics on number of individuals accessing methadone or buprenorphine.
    - **Tactic #2:** Fund initiatives to generate and support the timely reporting of metrics on number of overdose survivors in the state who access methadone or buprenorphine within one month of a non-fatal overdose.
    - **Tactic #3:** Fund initiatives that track the percentage of people incarcerated in CT DOC screened for OUD, percentage with OUD receiving MOUD, and percentage successfully linked to MOUD following release into the community.
    - **Tactic #4:** Fund initiatives to generate reports on access to methadone and buprenorphine via federally certified OTPs, office-based practices, hospitals/EDs, and other treatment settings with focus on geographic, socio-economic, and racial disparities in MOUD access.

Funding Priority 2: Reduce Overdose Risk and Mortality, Especially Among Individuals at Highest Risk and Highest Need with Linkage to Treatment, Naloxone, and Harm Reduction

Rationale

Although opioid-involved non-fatal overdoses in CT have been recorded in the thousands and every municipality in the state except two have experienced fatalities, the burden falls mostly heavily on specific cities and specific vulnerable groups of CT residents. Reviewing the scientific literature and CT-specific data, we conclude that efforts to reduce overdoses will have the greatest impact if strategies are focused on Individuals who:

- have recently experienced a non-fatal overdose
- use opioids alone
- have a history of OUD and have lost tolerance to opioids
- are opioid-naïve or have low tolerance and are purchasing illicit stimulants that include fentanyl
- are unhoused or marginally housed

There are a significant number of individuals who fall into one or more of these groups residing in the state. Recommendations in this section focus on how to reduce overdoses among these groups beyond increased access to MOUD, as addressed in Priority #1.

The substantial impact of the criminal justice system on people who use opioids and those with OUD adds another barrier to preventing overdose fatalities, particularly when considering these high-risk groups. People who are arrested, incarcerated, or otherwise exposed to the criminal justice system often find that opportunities to increase their wellbeing are diminished by restrictions of community supervision and repeated incarceration.[24] Return to substance use often results in re-incarceration, prompting concealment of use and using alone, resulting in unwitnessed, potentially fatal overdoses. Since return to use frequently occurs shortly after release from custody, people in the month after their release have demonstrably high overdose mortality.[25]

Recently, the unregulated stimulant (i.e., cocaine and methamphetamine) supply has been occasionally contaminated with fentanyl leading to overdoses in people who use stimulants (and not opioids). Harm reduction programs can offer fentanyl test strips or other forms of drug checking to alert stimulant users to fentanyl-contaminated batches. It is important to fund programs that provide effective linkages of at-risk individuals to naloxone, drug supply testing, syringe service programs, and education about fentanyl contamination of the stimulant supply.

Housing instability exacerbates an individual's risk of overdose in myriad ways that are compounded by de jure criminalization of substance use and de facto criminalization of homelessness. Programs and initiatives that recognize low-barrier, stable housing as a critical measure to reduce harm and promote treatment engagement and retention have the potential to address a litany of overdose risk factors among people use who and those with a substance use disorder.

Evidence

CT currently has several harm reduction-focused community-based organizations that have extensive experience implementing harm reduction services and engaging with people who use drugs. DMHAS, DPH, and town-level agencies have experience engaging with these organizations to produce harm reduction-focused activities. Since 2016, the CT DOC has also increased efforts to provide naloxone to people released from our prisons and jails. CT has also made several legislative changes to increase naloxone access and in the current legislative session a law, Public Act No. 23-97, was enacted to pilot harm reduction centers in the state.[26,27] This logistical and policy environment puts CT in an advantageous position to implement and enhance harm reduction efforts.

Public Act No. 23-97 does not include language on provision of safe consumption sites, locations where a person can use opioids under supervision of trained personnel, sometimes referred to as overdose prevention sites, within these harm reduction centers. Given current interpretation of state and federal statute that would prohibit provision of supervised consumption services, our report does not include recommendations to fund them. However, if state or federal statute, or their interpretation, were to change, these types of interventions should be considered given growing evidence on their efficacy in preventing overdose deaths. Two overdose prevention sites opened in New York City in November 2021 and have since witnessed thousands of substance use episodes and more than 700 potentially fatal overdoses without a single fatality. Overdose prevention sites exist in other countries, again without experiencing a single fatal overdose.[28] The legality of these services in the United States is evolving as a lawsuit within the federal judicial system is currently pending regarding the provision of these services in Philadelphia. In addition, Rhode Island and Minnesota have passed legislation aimed at opening sites. These examples demonstrate efficacy of this unique, pragmatic, if controversial, approach to reducing overdose mortality. They also provide a blueprint for what might be offered in CT harm reduction centers beyond supervised consumption as models typically offer expedited addiction treatment access, other medical services, and ancillary support services.

Potential Impact

Improving access to services that reduce overdose risk in individuals at the highest risk via linkage to treatment, naloxone, and harm reduction services has significant potential to reduce overdose deaths in the near term. Several models comparing different community-based interventions to address the overdose crisis have demonstrated that increased naloxone access has the greatest potential and is the most cost-effective intervention to reduce overdose deaths.[2-5]

Strategies

Strategy #1: Increase linkage to naloxone, drug supply testing, and syringe service programs for people at high risk of overdose.

- **Goal:** All at-risk individuals using opioids and those near them will have to access naloxone.

    - **Tactic #1:** Fund initiatives that directly distribute naloxone to high-risk individuals or people around them (including families, friends, and first responders). This can include supporting community groups that work directly with people who use, provision of naloxone to first

responders (e.g., EMTs, police officers), targeted outreach interventions for people who use opioids, or novel naloxone distribution methods such as vending machines
    - **Tactic #2:** Fund initiatives that support naloxone distribution to high-risk locations (public locations associated with opioid use or past overdoses) and other initiatives to ensure at-risk individuals using opioids are near someone who can administer naloxone if needed.
    - **Tactic #3:** Fund initiatives that do outreach to people who use opioids and provide linkage to specific harm reduction services including naloxone, drug supply testing, and syringe service programs.
    - **Tactic #4:** Fund initiatives to create metrics on naloxone provision, use of naloxone to reduce overdoses, and geographic access to naloxone in the state reported in a timely fashion via merging and linking relevant existing data from treatment providers, pharmacies, state agencies, and other entities. Metrics can be used by stakeholders and policymakers to guide funding, policy, and agency efforts to improve naloxone provision.
    - **Tactic #5:** Fund initiatives that support near real-time reporting of fatal and non-fatal overdoses that include geographic, contextual, and other granular data and partner with jurisdictions to support targeted public health responses to reduce overdoses.

Strategy #2: Create harm reduction centers that provide ancillary support services for people actively using drugs.

There is evidence that centers that provide a range of harm reduction services reduce overdose death and other complications of opioid use from studies in Canada, Western Europe, Australia, and most recently in New York City. During the most recent legislative session Public Act No. 23-97 was enacted which allows the establishment of three harm reduction centers in CT municipalities.[29] The final bill did not include language allowing for the provision of safe consumption or overdose prevention sites, and we do not recommend funding of services not legal under current interpretation of federal and state statute. Nevertheless, we do recommend that CT learn from model overdose prevention sites regarding what and how *other* services can be provided in these harm reduction centers. The following tactics are needed to ensure that the centers have the greatest chance of reducing overdose mortality.

- **Goal:** All at-risk individuals will have to access harm reduction centers.

    - **Tactic #1:** Fund initiatives that develop, create guidance for, and facilitate community consensus on a minimum package of services for harm reduction centers and determine the staffing needs to deliver services.
    - **Tactic #2:** Fund initiatives that perform needs assessment, education, and consensus building efforts to support selection of sites that are acceptable to both people who use drugs and other community stakeholders.
    - **Tactic #3:** Fund initiatives to evaluate harm reduction center programs. This can include analyzing data and generating metrics for harm reduction centers including volume of use, overdose fatalities averted, referrals to and entry into treatment for substance use disorders, referrals to and utilization of medical and social services, and changes in community attitudes regarding the harm reduction centers.
    - **Tactic #4:** Fund initiatives to assess and respond to community attitudes regarding overdose prevention centers, akin to those being run in New York and Rhode Island, in anticipation of changes in federal or state statutes.

Strategy #4: Reduce solitary opioid use.

Individuals who use drugs alone are at greatest risk for fatal overdose since there is no one around to recognize and respond to the overdose, either by summoning help or administering naloxone. Criminalization and stigma drive a need to conceal one's substance use and promote solitary use. Reducing solitary drug use can greatly reduce opioid overdose deaths, but this will require tactics that promote informing others when using.

- **Goal:** Decrease the number of individuals using drugs alone.
    - **Tactic #1:** Fund creation and evaluation of initiatives designed to decrease the number of individuals using drugs alone such as a safe drug use hotline. Components needed would be 24-hour a day telephone or smartphone accessible service that will monitor callers while they use and send help if not alerted that the caller is fine.

While this tactic is promising given evidence that a high percentage of overdose deaths occur during solitary opioid use[30,31], the evidence for specific interventions to address this issue is scant. Existing hotlines have not been evaluated, and people's willingness to use a system that keeps tabs on them while in the act of using is unknown.[32] Efforts to determine the benefits of promoting use of such services are worth funding as a near-term tactic. Changing community attitudes around substance use and reducing stigma are long-term undertakings.

Strategy #5: Reduce unanticipated exposure to opioids among opioid-naïve individuals who use drugs.

Fake prescription opioid pills that contain high potency synthetic opioids such as fentanyl are increasingly prevalent. Opioid-naïve individuals are at high risk for fatal and non-fatal overdoses if they use illicitly manufactured pills. In addition, the unregulated stimulant (i.e., cocaine and methamphetamine) supply is occasionally contaminated with fentanyl. Drug testing services, a growing presence in the state, are reporting cases of cocaine mixed with high potency fentanyl and occasionally other synthetic opioids. As a result, CT has witnessed multiple clusters of fatal stimulant-involved opioid overdoses with survivors claiming that they were seeking cocaine, not opioids. Drug testing can reduce exposure to unwanted contaminants and has seen some limited effectiveness in preventing the consumption of adulterated drugs.[33,34] A recent study (under peer review) from CT found that among those who sought to consume illicit cocaine but not opioids, only 13% used a fentanyl test strip in the last year while 45% felt that the risk of contaminants in their cocaine was always a possibility. Reaching these at-risk individuals will require expanding the harm reduction work force and this, too, should be supported with settlement funds.

- **Goal**: Decrease fatal and non-fatal overdose among opioid-naïve individuals who use fake prescription opioids and stimulants
    - **Tactic #1:** Fund initiatives that provide real-time testing of opioids, including fake opioid pills, and stimulants as the drug supply and the technology for point-of-use testing evolves. Current approaches to consider include using fentanyl and/or xylazine testing strips or supporting more sophisticated technology like Fourier transform infrared spectroscopy.
    - **Tactic #2:** Fund initiatives to expand harm reduction outreach staff who are trained to inform people who use drugs of the prevalence and persistence of fentanyl in opioids, including fake

opioid pills, and stimulants and instruct on appropriate harm reduction measures – don't use alone, test your drugs, and carry naloxone.

- **Tactic #3:** Fund initiatives to collect, report, and disseminate real time data on the drug supply in CT. Potential data sources can include overdose events, drug seizures, or voluntary testing of drugs. Dissemination might include local efforts to engage and report to communities or networks of people who use drugs on status of the illicit drug supply.

Funding Priority 3: Improve the Use of Existing Data and Increase Data Sharing Across Relevant Agencies and Organizations

Rationale

The COVID-19 pandemic has demonstrated the need for and value of a rapid and efficient process of collecting, accessing, analyzing, and reporting data for a coordinated public health response. The same approach is needed to address the opioid overdose crisis. Important data relevant to addressing opioid overdoses includes existing data collected by state agencies (e.g., admissions into addiction treatment, opioid prescribing, use of harm reduction services, fatal and non-fatal overdoses). Confidentially tracking how individuals at risk of opioid overdose are interacting with various systems and subsequent overdose outcomes can only be achieved by linking and merging individual existing data that currently exist across different agencies within the state. A robust data infrastructure accessible to policy makers, public health professionals, clinicians, and researchers able to produce reliable metrics pertinent to preventing overdoses can support evaluation of existing and novel programs and in so doing ensure effective, data-driven funding allocation.

Existing data collected by state agencies and other entities in the state relevant to addressing the opioid overdose crisis are collected in separate data systems. In addition, use of these data is constrained by insufficient support for data management and regulations protecting personal identifiable information and personal health information. Funding sufficient support at all relevant agencies and establishing processes and frameworks, as endorsed by the National Governor's Association, that facilitate breaking down barriers between data systems, linking relevant datasets, and addressing these regulatory burdens is crucial to maximizing the use of existing data to inform policy decisions.

Evidence

CT has made significant progress in improving publicly reported data pertinent to the overdose crisis since 2016. This includes a DPH-developed publicly accessible dashboard of overdose data, monthly reports from DPH on overdose data, treatment data reported by DMHAS and DSS, among other efforts.[35] CT DPH has also developed a system of near-real time reporting of emergency medical services (EMS) responses to non-fatal overdoses in the state (Statewide Opioid Reporting Directive, aka SWORD) which has already shown benefits in alerting the state to incidents of fentanyl-contaminated stimulant supply. In addition to these cross-sectional and longitudinal reports, in response to the 2016 CORE recommendations, there has been successful linkage of data across multiple state agencies demonstrating key features of the overdose crisis including the low proportion of overdose survivors that engage in addiction treatment within 30 days of their non-fatal overdose, the nearly 50% improvement in survival rate of individuals with non-fatal overdose who receive methadone or buprenorphine treatment, and the decreasing impact of prescription opioids on the overdose crisis in CT.[36,37] Despite progress with these one-time linkages, there remain missed opportunities for the state to improve its data infrastructure.

There are several examples of data linkages worth emulating from other states. Following the Chapter 55 legislation passed in 2015, the Massachusetts Department of Public Health developed and manages a data platform merging 10 datasets from five different government agencies as mandated by statute.[38] These data are available to state agencies but also vetted researchers who have generated a wealth of

near real-time, relevant epidemiological data to guide targeted public health responses.[39,40] Similar efforts have taken place in Rhode Island[41,42], Vermont[43], Maryland[44,45], Minnesota[46], among many other states.

Strategies

Strategy #1: Develop and report in a public, timely fashion updated metrics pertinent to reducing overdoses and overdose mortality in the state, especially around provision of MOUD and distribution of naloxone, with special focus on at-risk populations.

- **Goal:** Create and maintain publicly accessible dashboards where specific metrics pertinent to reducing overdoses in the state are regularly reported.
    - Tactics on metrics and data needs are included in prior sections of this report where relevant to other funding priorities.

Strategy #2: Improve access, analysis, and timely reporting of existing data pertinent to reducing overdoses in the state.

- **Goal:** Create a data platform merging and linking relevant existing data accessible to agencies, policy makers, healthcare providers, and researchers.
    - **Tactic #1:** Fund state efforts to create a data platform to merge and link relevant existing data from state agencies which allow for generation of metrics relevant to reducing opioid overdose deaths. The data platform should include processes accounting for data security and privacy and allow for access by agencies, policy makers, and researchers relevant to efforts to reduce opioid overdose deaths.
    - **Tactic #2:** Fund initiatives or positions within or across relevant agencies (DMHAS, DSS, Department of Consumer Protection, DPH, CT DOC, Office of the Chief Medical Examiner) to improve and expedite data sharing and analysis relevant to the opioid overdose crisis. Activities can include implementing systems and processes for data sharing and protection, timely analysis, development of timely metrics, and development of public facing dashboards reporting timely data.

Strategy #3: Develop metrics, benchmarks, and reporting systems for programs focused on reducing overdose deaths in the state, especially those funded by opioid settlement funds.

- **Goal:** Develop common metrics for reporting efficacy that are reliable, reproducible, and timely to inform policy decisions for programs targeting opioid overdoses throughout the state; require initiatives funded with opioid settlement dollars to employ these metrics

    - **Tactic #1**: Fund initiatives that create and track opioid overdose metrics within an existing state agency to support evaluation of programs and decision-making by the OSAC and policy makers.

Funding Priority 4: Increase the Size of the Addiction-specialist Workforce and Improve Non-specialist Clinician and Community Understanding of OUD and Evidence-based Treatments to Decrease Stigma and Promote Treatment Uptake

Rationale

Workforce**:** There is a shortage of health professionals in the state with specialty training in addiction across the spectrum. In addition, most general health professionals need training and support to address addiction and reduce unintended stigma toward people with substance use and addiction.

Stigma**:** At the community level, OUD is a highly stigmatized condition. Inadequate education and frank misinformation are threats to improving understanding of the causes of OUD, manifestations, and effective treatments, resulting in missed opportunities for treatment.[47] A recent survey of CT residents conducted by Shatterproof demonstrates that CT residents are less willing on average, when compared to a national sample, to want someone with OUD to marry into their family, be a close friend, or spend an evening with them socializing.

Evidence

Workforce: Increasing the number of addiction specialty trained members of the healthcare workforce is associated with increased provision of evidence-based treatments. Addiction specialty training and certification is available for nurses, physicians, social workers, counselors, and other health professionals.

Stigma: The language used to describe people with OUD can have a profound effect on community and health professional attitudes.[48] Interventions that directly aim to reduce stigma, both among the healthcare workforce and the public, have demonstrated mixed results.[49,50] A widely cited New England Journal of Medicine commentary details the need for evidence-base for anti-stigma campaigns, yet acknowledges that measurement of these programs' effectiveness is challenging.[51] The authors point to three attributes that tend to contribute to successful anti-stigma campaigns: 1) use of person-first language; 2) emphasizing solutions and the benefits of treatment; and 3) use of sympathetic narratives — stories that humanize people with addiction. In 2016, the CORE initiative provided dedicated training designed to increase knowledge and address stigma to media professionals in CT. The CT ADPC Prevention Subcommittee has hosted several similar events focused on the media. Additionally, DMHAS has launched the Live LOUD campaign to address stigma in the state.

Potential Impact

Workforce: An increase in the number of certified addiction specialists (nursing, social work, physicians, etc.) will have an immediate impact on access to and the quality of treatment for CT residents. Programs to train and support non-specialist clinicians should provide timely improvements, too, particularly with respect to provision of MOUD in general medical settings.

Stigma: Public awareness of and education about OUD among healthcare professionals and the public have not been tied directly to lives saved or cost-effectiveness. However, as above, they are generally

considered essential components of successful public health campaigns and may drive long-term improvements in treatment initiation, retention, and acceptability.

Strategies

Strategy #1: Grow the addiction specialty workforce in CT.

- **Goal:** Improved access for people with OUD to credentialed addiction specialists providing evidence-based treatments.
    - **Tactic #1:** Fund initiatives that grow the addiction specialty workforce by providing specialty training in addiction to nurses, social workers, advanced practice providers, pharmacists, psychologists, and physicians.

Strategy #2: Increase the ability of non-specialist clinicians to provide screening, treatment, and linkage to evidence-based addiction treatments.

- **Goal:** Improve addiction training within the general healthcare workforce.
    - **Tactic #1:** Fund initiatives to provide non-specialist training and support in addiction to nurses, social workers, advanced practice providers, pharmacists, psychologists, and physicians to improve overall knowledge, skills, and attitudes regarding addiction in the health care workforce.

Strategy #3: Increase public-facing educational efforts regarding OUD and high potency synthetic opioids such as fentanyl, to increase dissemination of accurate, evidence-based, non-stigmatizing information. Public-facing educational efforts should include the causes, manifestations, and treatments pertaining to OUD, including MOUD.

- **Goal:** Improve public understanding of and decrease community stigma toward OUD and its treatments.
    - **Tactic #1:** Fund initiatives that increase dissemination of accurate, evidence-based, non-stigmatizing information on OUD causes, manifestations, and MOUD.
    - **Tactic #2:** Fund initiatives that disseminate accurate information about the risks of high potency synthetic opioids such as fentanyl.

Funding Priority 5: Simultaneously Deploy and Evaluate Select Primary, Secondary, and Tertiary Prevention Strategies

Rationale

Public health efforts to address the opioid overdose crisis can be categorized as primary, secondary, or tertiary prevention. Primary prevention focuses on averting the developing disease and, in the case of the opioid overdose crisis, targets initiation of use of nonprescribed opioids or development of opioid use disorder. Secondary prevention focuses on early identification of people at risk for injury and can be thought of as efforts to prevent progression of use of nonprescribed opioids to opioid use disorder or early treatment for people with opioid use disorder prior to experiencing an overdose. Tertiary prevention attempts to attenuate the consequences of advanced disease and, in the context of the opioid overdose crisis, can include efforts to reduce the fatality of overdose events, mitigate other harms related to opioid use, and provide low barrier treatment to opioid overdose survivors. Primary prevention efforts are appealing as they can have important long-term benefits, but they require targeting a large number of individuals without opioid use disorder to effectively reduce overdose risk. Secondary and tertiary efforts are appealing because they target the small number of people who are at highest risk of overdose, but often require a larger per-person investment of resources to be effective.

Evidence

Primary Prevention

Prevention, especially among youth, can have important long-term benefits.[52] However, as highlighted by the National Institute on Drug Abuse (NIDA), there are few scientifically valid programs that specifically prevent prescription opioid, heroin or fentanyl initiation among youth. Some commonly used programs do not work and most prevention programs have focused on preventing initiation of other substances (e.g., alcohol, tobacco or cannabis), not opioids.[53,54-58] NIDA acknowledges "there is a gap in the evidence for interventions and strategies to prevent non-medical use of opioids and OUD in the transition from adolescence to young adulthood." Because of this the Principles recommend that *"Jurisdictions should be sure that the programs that they are funding are supported by a solid evidence base… Jurisdictions should also fund long-term evaluations of youth prevention programs to ensure that they are having their desired effect."* Safe opioid prescribing can limit diversion of prescription opioids and minimize transitions to OUD in those receiving chronic long-term opioids.[59] Addressing social determinants and community mental health can decrease opioid initiation and progression to OUD (see Funding Priority 6).

DMHAS currently supports a range of primary prevention efforts including public-facing educational or media efforts (e.g., *Change the Script*), college and school-based awareness campaigns (e.g., Connecticut Healthy Campus Initiative, State Educational Resource Center), and parent-targeted education campaigns (e.g., Governors Prevention Partnership). In addition, DMHAS and DPH have supported efforts to educate prescribers on safer opioid prescribing practices via academic detailing. Lessons learned from these efforts should inform OSAC decisions regarding funding primary prevention efforts. Primary prevention efforts implemented in the state that are evidence-based and have demonstrated success via rigorous evaluation should be considered for additional financial support.

Secondary Prevention

There is evidence to support programs designed to prevent progression of opioid use among those who have started, provide MOUD treatment where indicated – especially among high-risk populations (overdose survivors, pregnant and parenting people, hospitalized patients, people leaving carceral or non-medication-based treatment settings) – and, where indicated, provide multi-modal evidence-based chronic pain treatment. Abrupt tapering of long-term opioid treatment for chronic pain can increase risk for overdose and should be avoided.[60-63] There are effective interventions that decrease risk for injection-related infections such as endocarditis, Hepatitis C, and HIV.

Tertiary Prevention

There is evidence to support naloxone, syringe service and other harm reduction services.

Potential Impact

The impact of youth prevention efforts on overdose deaths will not be immediate. One computer modeling analysis found that across strategies designed to 1) prevent prescription opioid misuse, 2) reduce heroin initiation, 3) decrease the number of people receiving a prescription, and 4) decrease the rate of development of OUD, no strategy achieves more than a 2% reduction in overdose by 2032; however, impact grows over time.[5] Reducing heroin initiation (and by extension, fentanyl) should have a more immediate and disproportionate impact on overdose deaths than reducing prescription opioid initiation.

Strategies

Primary Prevention

Strategy #1: Fund primary prevention of opioid use among youth.

- **Goal:** Fewer CT youth will initiate opioids.
    - **Tactic #1:** Increase access to interventions with high ratings in the Blueprints for Healthy Youth Development
    - **Tactic #2:** Fund rigorous simultaneous evaluations of primary prevention programs that are initiated to assure these interventions are meaningfully decreasing opioid initiation and producing other anticipated outcomes.

Strategy #2: Expand access to programs that address social determinants and community mental health to decrease opioid initiation and progression to OUD (see Funding Priority 6 for tactics).

Strategy #3: Support safe opioid prescribing, limit diversion of prescription opioids, and decrease the transition to OUD in those receiving chronic long-term opioids.

- **Goal:** Decrease any adverse personal and public health impact of opioid prescribing for acute and chronic pain.
    - **Tactic #1:** Fund initiatives that support medical providers to embed the Prescription Monitoring Program into the electronic medical record systems of all CT prescribers.

Facilitating access to the Prescription Drug Monitoring Program in prescriber workflow when they may write prescriptions for controlled substances increases the likelihood that this information will be used to inform clinical decisions. Currently, several large health care systems in the state have done this, but not all CT prescribers, especially ones outside of large systems, have access to these enhanced EHR systems to track controlled substance prescribing.

- **Tactic #2:** Fund programs that provide training on safe and effective opioid prescribing and multimodal treatment of acute and chronic pain, especially efforts that reduce unnecessary opioid prescriptions following common acute painful conditions (e.g., dental procedures[64,65], minor musculoskeletal injuries[66,67]).

Secondary Prevention

Strategy #4: Expand access to MOUD treatment (see Funding Priority 1), provide multimodal chronic pain treatment, and prevent injection-related infectious risks.

- **Goal:** Increase access to multimodal chronic pain treatment and decrease injection-related infectious complications.

  - **Tactic #1:** Fund programs to expand access to multimodal chronic pain treatment and Cognitive Behavioral Therapy for chronic pain in the community and general medical settings.
  - **Tactic #2:** Fund programs that expand access to services that prevent injection-related infectious risks in the community, general medical settings (hospitals, emergency departments, primary care), carceral settings, addiction treatment settings, and harm reduction programs.

Tertiary Prevention

Strategy #5: Expand access to naloxone, syringe service and other harm reduction services (see Funding Priority #2).

Funding Priority 6: Address Social Determinants and Needs of At-Risk and Impacted Populations

Rationale

Disparities in social, economic, and environmental determinants of health exacerbate adverse outcomes of substance use, including overdose mortality, and create barriers to addiction treatment, pointing to a need for interventions that address these determinants.[68,69] In CT, the largest number of deaths and greatest burden of opioid-related morbidity is in urban centers and disproportionately falls on racially and ethnically minoritized communities; the unhoused, unemployed, and uninsured; individuals who are or were recently incarcerated; and, individuals residing in geographic areas with limited access to healthcare services. Applying a health equity lens to addressing the overdose crisis and prioritizing upstream, structural solutions can meaningfully reduce morbidity and mortality, improve access to and retention in treatment, and be cost-effective in the long-term.

Potential Impact

Funding interventions to address social determinants of health constitute an investment in ameliorating structural drivers of illicit substance use, substance use disorder, and related harms including overdose. Positive benefits of such interventions may be observed in the short-, intermediate-, and long-term, reflecting the compounding nature of these interventions. For example, taking action to expand access to affordable and safe housing may reap immediate benefits by providing shelter and a place to securely store medications and belongings, intermediate benefits by facilitating stability needed to gain and maintain financial capital through employment and public benefits; and, long-term benefits by aiding establishment of supportive community connections, social networks, and place-based identity.[70-72] Lack of access to stable housing and other basic needs such as transportation, food, and childcare, are cited by many CT-based community organizations and clinicians as the primary barrier to initiation of and retention in treatment for OUD.

Given the multiyear timeframe for the disbursement of opioid settlement funds, these long-term tactics are a productive use of the funds with the potential to promote individuals' well-being and decrease community disorder in a longitudinal manner with return on investment for primary, secondary, and tertiary prevention (see Funding Priority #5).

Strategies

Strategy #1: Ensure that individuals at risk for overdose engaging in addiction treatment have access to transportation, insurance, employment services, and childcare.

- **Goal:** People engaging in treatment will have the social determinants of overdose risk and treatment engagement addressed.
    - **Tactic #1:** Fund initiatives at OTPs and other addiction treatment settings to directly provide or facilitate linkage to ancillary services addressing social determinants.
    - **Tactic #2:** Fund initiatives that provide transportation, insurance, childcare, and employment support for people with OUD engaged in addiction treatment.

Strategy #2: Ensure access to all FDA-approved medications for OUD for people incarcerated in CT DOC (see Priority #1).

Strategy #3: Provide affordable supportive and transitional housing for people with substance use disorders; increase access to "Housing First" models and other models of affordable, supportive, and transitional housing to unhoused people with and at high risk for OUD.

The cure for homelessness is housing, and housing dominates the list of needs reported by people with OUD. As part of the Opioid Settlement Agreement, the provision of housing to people with OUD appears in several sections of Exhibit E, which lists acceptable opioid remediation strategies.

- **Goal:** All individuals with OUD will have same-day access to housing.
    - **Tactic #1:** Fund initiatives that identify, obtain possession of, retrofit, and maintain existing housing units that provide shelter for unhoused or marginally housed individuals with OUD without regard to their engagement in OUD treatment or harm reduction services.
    - **Tactic #2:** Fund initiatives to support residential housing that contain substantial portions reserved for individuals with OUD.
    - **Tactic #3:** Fund initiatives that provide essential ancillary services for individuals housed in the units created by the first two tactics.

Appendices

Appendix A: Model Programs for OSAC To Highly Consider Funding to Replicate in Connecticut

CA Bridge Model of low-barrier buprenorphine treatment in emergency departments[12,73] **(Priority #1)**
Emergency department-based interventions that promote initiation of effective, evidence-based treatment for opioid use disorder (OUD), especially buprenorphine, and continuation of MOUD following discharge, have several advantages. First, people with OUD often present to EDs for medical reasons associated with opioid use (overdose, infection). Second, EDs are geographically dispersed through the state and provide twenty-four-hour access to assessment and treatment for OUD. Third, use of ED services for people with OUD is a marker of a high overdose risk and is associated with a high risk of mortality.

The Public Health Institute in collaboration with the California Department of Health implemented the CA Bridge Model supporting low-barrier buprenorphine treatment in 85% of the state's EDs.[11,73] The basic elements of the CA Bridge model include low-barrier buprenorphine treatment, active patient navigation from ED to outpatient treatment, and provision of harm reduction interventions. Early results from this program have been encouraging. Of all the patients with OUD presenting to participating EDs, 60% were provided buprenorphine during their ED or hospital visit, 45% received a buprenorphine prescription, and 40% attended at least one follow-up visit following discharge. Given the broad reach of this program and its proven effectiveness, we recommend the OSAC highly consider funding an intervention mirroring CA Bridge in CT.

Maryland Addiction Consultation Service/MACS[74,75] **(Priorities #1 and #5)**
Increased access to buprenorphine is contingent on increasing the number of prescribers who are actively prescribing buprenorphine. Historically, prescribing buprenorphine required a special waiver from the DEA (aka "X-waiver") of which, nationally, only 6% of DEA-licensed prescribers pursued with very few among them actively prescribing. Prescribers regularly cited limited training in OUD assessment and treatment, lack of institutional support, insufficient referral options, burdensome regulatory procedures, and prescribing stigma as barriers to increased buprenorphine prescribing. In 2023, Congress passed the MAT Act which eliminated the need for a special waiver to prescribe buprenorphine, but without addressing these barriers to increase prescribing we are skeptical that, by itself, this change in law will drastically improve the rate of buprenorphine prescribing.

To support increased buprenorphine prescribing in their state, the Maryland Addiction Consultation Service (MACS) model was developed and launched by the University of Maryland School of Medicine in collaboration with the Maryland Department of Health Behavioral Health Administration. The model was tailored to address prescriber-identified barriers to prescribing buprenorphine and included a warmline consultation staffed Monday-Friday/9am-5pm, targeted statewide outreach, diverse prescriber-tailored training offerings, and real-time connection to individualized patient resources and referrals. Early evidence from this model have demonstrated increased geographic penetration of buprenorphine throughout the state of Maryland.

Project ASSERT[23,76] **(Priority #1, Priority #6)**

Project ASSERT (Alcohol and Substance Abuse Services, Education, and Referral to Treatment) is an innovative program which is embedded in EDs to help patients access drug treatment services. First launched and developed in the Yale-New Haven Hospital emergency department in 1999, it uses health promotion advocates, who are integrated into the ED and directly collaborate with healthcare providers, to screen, provide brief interventions, and directly refer patients to specialty substance use treatment.

OnPoint NYC[77] (Priority #2)

Building on evidence generated by international models[78], New York City opened the first two sanctioned overdose preventions sites in the United States. This model, which allows for consumption of substances on-site under direct supervision of medically trained professionals, has demonstrated to reduce overdose deaths. In addition to a space for supervised consumption, OnPoint, the model implemented in New York City, also serves as a no-barrier drop-in center providing access to food and showers, harm reduction services, health and wellness services, and case managers that facilitate linkage to mental health services, counseling, and public benefits navigation. These sites also offer screening for HIV and HCV, wound care, and rapid connection to MOUD and other addiction treatment programs for individuals who are interested.[79,80] As CT moves towards its own model of harm reduction centers, as mandated in Public Act No. 23-97, we support the OSAC funding services for these centers in line with lessons learned about provision of a range of services from New York City's models, as feasible within the present scope and interpretation of CT law. If in the future CT or federal statue, or interpretation thereof, were to change to allow provision of safe consumption center services, we also recommend that OSAC fund those efforts.

Chapter 55 Public Health Data Warehouse (Priority #3)

Responding to a lack of actionable data in the state to target efforts to address the opioid overdose crisis and the structural barriers to data sharing, the Massachusetts Legislature passed a law (aka "Chapter 55") which mandated that the Massachusetts Department of Health analyze and maintain a data set linking individual level data from 10 data sets held by state agencies. The law also obligated DPH to generate a report analyzing seven key questions pertinent to addressing the overdose crisis. This data revealed several insights (e.g., economic costs of OUD, prevalence of OUD, demographic differences of treatment use) that have directly informed the response by policy makers in the state. This process has led to biannual data briefs, legislative reports, and 25 scientific publications.

Life skills Training and Project Toward no Drug Abuse (Priority #5)

The Blueprints for Healthy Youth Development lists only one (Lifeskills Training) program that achieves its highest "Model Plus" rating. However, it should be recognized that there is no scientific evidence to date that this intervention decreases initiation of opioids among youth. A second program, Project Toward no Drug Abuse, achieves a "Model" rating and reports a "hard drug use" outcome. We recommend consulting the Blueprint database for details and requiring rigorous simultaneous evaluations to assure these interventions are meaningfully decreasing opioid initiation and producing other anticipated outcomes. There are also primary prevention models with more evidence regarding effectiveness of reducing youth alcohol and other (non-opioid) drug use initiation that we recommend OSAC consider funding if funding includes rigorous evaluation of their effectiveness.

U.S. Department of Veterans Affairs (VA) Housing First initiatives

Housing First is an evidence-based permanent supportive housing approach for vulnerable individuals that emphasizes immediate, rapid access to supportive housing without preconditions such as treatment engagement or abstinence from substance use. Housing First programs often emphasize provision of community-based, client-centered services and have been shown to be able to accommodate and achieve housing stability for many, including individuals with serious mental illness and severe substance use disorders. Since 2011, the VA has implemented Housing First nationally with significant success in housing high risk veterans throughout the country including CT.[81,82] There is strong evidence that Housing First can achieve housing stability, some evidence that it reduces health care utilization costs, especially ED and inpatient hospitalizations, but currently no evidence that it improves substance use disorder symptoms.[83] If OSAC funds initiatives to improve housing stability in people at risk of opioid overdose, we recommend they be based on Housing First principles and be tied to rigorous evaluation of their effectiveness in reducing overdose risk.

Appendix B: Strategies Not Recommended

Increasing the proportion of individuals with OUD exclusively receiving "detoxification" or inpatient and residential services as a treatment for OUD

There is little evidence to support the initial treatment of OUD using detoxification or residential services alone without connection to long-term treatment, especially MOUD, regardless of duration.[84,85] Detoxification procedures are associated with a high rate of relapse and increase the risk of overdose.[86,87] Inpatient or residential treatments that initiate or continue MOUD are clinically indicated in individuals who are not able to benefit from outpatient or intensive outpatient services, especially those meeting clinical indication for higher levels of care.[85] Compared to detoxification or extended inpatient treatment, initial treatment with MOUD has the most scientific support and is an approach endorsed by state, federal and international entities.[85]

Increasing the number of programs that exclusively or preferentially treat people with naltrexone (instead of methadone or buprenorphine)

Naltrexone is FDA-approved for the treatment of OUD. However, naltrexone does not prevent symptoms of withdrawal or address opioid craving. Initial treatment with naltrexone requires a period of opioid abstinence of up to 7 days, which is difficult for many individuals with OUD to attain. Also, in both clinical trials and epidemiological data, naltrexone's efficacy for preventing relapse is lower than methadone and buprenorphine.[40,88] There is also less data indicating it decreases overdose death, human immunodeficiency virus (HIV) or hepatitis C virus (HCV) transmission, or other adverse consequences associated with opioid use as compared to methadone and buprenorphine. In programs that offer all three FDA-approved medications, a minority of individuals opt for naltrexone and the overwhelming majority opt for treatment with methadone or buprenorphine. Therefore, given both its relative inferiority compared to methadone and buprenorphine as well as patient preferences, we recommend against funding initiatives that exclusively or preferentially offer naltrexone for the treatment of opioid use disorder. Instead, we recommend funding initiatives that offer access to all three FDA-approved medications or those that prioritize methadone or buprenorphine.

Enhancing criminal legal efforts to reduce illicit drug supply

Historically, criminal justice efforts to reduce opioid supply – increased policing, harsher penalties, increased rates of imprisonment – have often been the default intervention of federal and local governments to address the harms of drug use in the United States. We do not recommend funding these strategies as they have proven ineffectual in reducing overdose death (in fact are associated with increased risk of overdose death)[89-91], do not center addiction as a medical condition, increase stigma related to opioid use and treatment seeking behaviors[92,93], and come with high rates of collateral consequences including disparate impacts on minoritized populations.[94,95] This does not preclude funding of interventions – such as diversion programs or interventions to increase access to treatment, naloxone, and harm reduction services via criminal justice entities.

Increasing use of mandated addiction treatment or civil commitment

Involuntary civil commitment is a legal provision that allows for forcible addiction treatment of individuals typically in some form of detention facility. Jurisdictions throughout the country have increasingly directed resources to the use these provisions to address the opioid overdose crisis. Under current Connecticut statute (Conn. Gen. Stat. § 17a-685(a)) there are provisions allowing for commitment of individuals with substance use disorders for up-to-180 days of involuntary detention

providing the individual is determined to be a danger to self, danger to others, intoxicated, or gravely disabled, although to our knowledge this provision is rarely utilized. We do not recommend that the OSAC fund increased use of this legal provision given the ethical concerns and the limited data on its efficacy for preventing overdose deaths. Available evidence demonstrates that civil commitment is likely associated with increased risk of non-fatal overdoses[96] and infectious disease transmission[97], and that it reinforces negative perceptions of addiction treatment in people who use drugs making them less likely to access treatment in the future.[98]

Increasing investment in novel formulations or new medications to reverse opioid overdoses
In response to the ongoing overdose crisis, pharmaceutical companies have developed several expensive novel opioid antagonists (either new methods of administering naloxone or development of non-naloxone compounds) to reverse opioid overdoses. To date there is no evidence that these opioid antagonist formulations provide superior efficacy or effectiveness in reversing opioid overdoses even in an era when the drug supply is dominated by fentanyl and fentanyl analogues. In addition, newly approved, non-generic medications carry a price often several times higher than prior formulations of naloxone. Given lack of superior efficacy and higher cost, we do not recommend the OSAC fund investment in these new formulations until they are proven to be more cost-effective than naloxone.[99]

Funding primary prevention programs targeting youth substance use that are not based on evidence of efficacy or are not tied to ongoing rigorous evaluation
Given concerns about opioid use initiation and the rising number of overdoses in children and adolescents, there is natural motivation to fund public health campaigns that decrease youth substance use. By far the best known recent historical example is the D.A.R.E. program which, at its peak, was the country's largest school-based prevention program and received three quarter of a billion dollars of federal funding annually despite evidence that it was ineffective in preventing youth substance use.[100] Unfortunately, although there is growing evidence for primary prevention programs that might impact youth substance use initiation, there remains limited data on effective youth prevention programs to impact opioid use initiation. Those with evidence supporting them are outlined under Priority #4.[54-58] Use of opioid settlement funds on ineffective prevention programs will have no effect on reducing overdoses in the near, intermediate, or long term. As such we recommend that any opioid settlement funds that are used for primary prevention be tied directly to rigorous evaluation of their efficacy, and we do not recommend the OSAC fund youth substance use prevention programs that are not evidence-based.

Funding public health programs that are not based on evidence of efficacy
The use of public communication or media campaigns to educate, promote awareness, reduce stigma, or achieve other goals is a common strategy employed in public health. Despite their popularity, there is relatively little research to guide the design of these campaigns to address topics around substance use, harm reduction, stigma, or other opioid-related topics.[101-103] There is also little evidence they are effective in achieving important outcomes around reducing opioid use, reducing stigma, increasing treatment engagement, and, importantly, reducing overdose rates. In some cases, poorly designed and thought-out public communication or media campaigns have been associated with increased stigma around opioid use or opioid use disorder. As such, if OSAC decides to fund public communication or media campaigns, we recommend that they be well-designed with input from people with lived experience, based on strong public health principles, and designed with a focus on reducing stigma and driving demand for effective evidence-based treatments.[101,104]

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Glossary of Acronyms

Acronym	Definition
ADPC	Alcohol and Drug Policy Committee
CORE	Connecticut Opioid REsponse Initiative
CT	Connecticut
DMHAS	Connecticut Department of Mental Health and Addiction Services
CT DOC	Connecticut Department of Correction
DPH	Connecticut Department of Public Health
DSS	Connecticut Department of Social Services
ED	Emergency Department
EMS	Emergency Medical Services
HCV	Hepatitis C Virus
HIV	Human Immunodeficiency Virus
MOUD	Medications for Opioid Use Disorder
NIDA	National Institute on Drug Abuse
OSAC	Opioid Settlement Advisory Committee
OTP	Opioid Treatment Program
OUD	Opioid Use Disorder
SWORD	Statewide Opioid Reporting Directive

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