Funding Priority 3: Improve the Collection, Analysis, Sharing, and Use of Data Across Agencies and Organizations Relevant to Addressing the Opioid Overdose Crisis

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 and other entities (e.g., admissions into addiction treatment, opioid prescribing, use of harm reduction services, fatal and non-fatal overdoses). However, these data are collected in separate, siloed data systems. Confidentially tracking how people at risk of opioid overdose are interacting with various systems and subsequent overdose outcomes can only be achieved by linking and merging these data. 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.

In addition to current data siloes, use of available data is presently 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. Connecticut has developed some processes, including existing collaborations between relevant state agencies and the Office of Policy and Management's P20 WIN system, which have the potential to provide a roadmap and platform for optimizing the use of existing data in the state to reduce opioid overdose deaths.

Beyond optimizing the use of *existing data* there are opportunities to use opioid settlement funds to generate *new data* to inform the state's response to the opioid overdose crisis. This includes data generated from programs receiving funding from the opioid settlement, improved data collection to address racial inequities in opioid overdose-related outcomes, and collection of data highlighting the experience and needs of communities and individuals with lived and living experience of opioid use. In particular, development of shared metrics, data collection, and public reporting of these metrics and data from programs receiving funding from the opioid settlement will provide transparency, oversight, and accountability in the use of funds to address the overdose crisis. This is consistent with Principle #5 of the Principles for the Use of Funds from the Opioid Litigation.

Evidence

Connecticut 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, DCP reporting of controlled substance, buprenorphine and naloxone prescriptions[1], efforts to link DCP data from the PDMP with overdose deaths by DPH, among other efforts.[2] The DPH has also developed a system of near-

real time reporting of 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.[3-6] These linkages have demonstrated key features of the overdose crisis in Connecticut, 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 the state.[4,6] Despite progress with these one-time linkages, there remain missed opportunities for the state to improve its data infrastructure to address the evolving crisis and inform the state's response.

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.[7] 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.[8,9] Similar efforts have taken place in Rhode Island[10,11], Vermont[12], Maryland[13,14], Minnesota[15], Kentucky[16], among many other states.

Strategies

Strategy #1: Develop and report in a public, timely fashion high-priority metrics pertinent to reducing overdoses and overdose mortality in Connecticut, 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 along the OUD cascade of care[17,18] and pertinent to reducing overdoses in the state, are regularly reported.

- **Tactic #1:** Fund efforts to estimate the number of people at risk of overdose in the state including those with at risk opioid use and OUD. These efforts should include estimation of those at risk in sub-populations of special interest (e.g., racialized minorities, pregnant people, adolescents, people engaged in care in EDs or hospitals for opioid-related issues, people being released from jails and prisons).

- **Tactic #2:** Fund initiatives to improve statewide reporting of addiction treatment engagement and retention, especially methadone and buprenorphine, and subsequent outcomes, with special attention to people at high risk or other vulnerable populations such as those mentioned under Tactic #1.

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

Goal: Create a data platform linking relevant existing data accessible to agencies, policy makers, healthcare providers, and researchers.

- **Tactic #1:** Fund initiatives that support existing data collection and reporting efforts relevant to addressing the opioid overdose crisis. This can include initiatives to support and optimize

- systems like the PDMP, Office of Chief Medical Examiner post-mortem investigations, real-time surveillance efforts collecting data from the Poison Control Center, hospitals, emergency medical services, and drug testing/checking.

- **Tactic #2:** Fund state efforts to create a data platform to merge and link relevant existing data from state agencies, first responders, health departments, and health care providers (including hospitals, emergency medical services) 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 #3:** Fund staffing and organizational infrastructure within or across relevant agencies (DMHAS, DSS, DCP, DPH, DCF, OPM, DOC, OCME), health departments, and health care providers (including hospitals, emergency medical services) 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, hiring staff to perform and support data analysis activities, timely analysis, development of timely metrics, and development of public-facing dashboards reporting timely data.

- **Tactic #4:** Fund collaborations between state agencies and academic partners to develop novel, timely epidemiological reporting systems and program evaluation efforts related to the opioid overdose crisis and initiatives funded via the opioid settlement funds.

Strategy #3: Develop metrics, benchmarks, and reporting systems for programs that are 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. Metric development and data collection should include participation from community members and people who use funded programs, with an emphasis on addressing potential racial biases in data collection and interpretation. 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 OSAC-funded programs and decision-making by the OSAC and state policy makers.

- **Tactic #2:** Fund initiatives that create an open, public-facing platform to share data and metrics generated by OSAC-funded programs, to improve transparency and consistency of reporting across these programs in line with public reporting in other states.[19]

- **Tactic #3:** Fund initiatives that provide technical assistance and training to entities funded by the OSAC, especially those providing direct services to high need populations, to improve data collection and reporting on services provided. A secondary benefit of these efforts will be to develop the capacity in these organizations for data collection and reporting.

Priority 3 References

1. CT Department of Consumer Protection Prescription Monitoring Program. Connecticut Department of Consumer Protection. https://data.ct.gov/stories/s/a2js-37an/. Published 2024. Accessed.
2. Canning P DS, Ali S, Logan SB, Alter A, Hart K, Coler R, Kamin R, Wolf S, Soto K, Whiteman L, Jenkins M. Using Surveillance with Near-Real-Time Alerts During a Cluster of Overdoses from Fentanyl-Contaminated Crack Cocaine, Connecticut, June 2019. *Public Health Rep.* 2021;136:18S-23S.
3. Becker WC HR, Dormitzer CM, Doernberg M, D'Onofrio G, Grau LE, Hawk K, Lin HJ, Secora AM, Fiellin DA. Merging statewide data in a public/university collaboration to address opioid use disorder and overdose. *Addict Sci Clin Pract.* 2021;16(1).
4. Haas A VA, Doernberg M, Barbour R, Tong G, Grau LE, Heimer R. Post-incarceration outcomes for individuals who continued methadone treatment while in Connecticut jails, 2014–2018. . *Drug Alcohol Depend.* 2021;227:108937.
5. Heimer R BA, Lin H, Grau LE, Fiellin DA, Howell BA, Hawk K, D'Onofrio G, Becker WC. . Receipt of opioid use disorder treatments prior to fatal overdoses and comparison to no treatment in Connecticut, 2016–17. *Drug Alcohol Depend.* 2024;254(111040).
6. Howell BA BA, Grau LE, Lin HJ, Greene C, Lee H, Heimer R, Hawk KE, D'Onofrio G, Fiellin DA, Becker WC. . Concordance between controlled substance receipt and post-mortem toxicology in opioid-detected overdose deaths: A statewide analysis. *Drug Alcohol Depend.* 2023;1(244):09788.
7. The Massachusetts Opioid Epidemic: A Data Visualization of Findings from the 2016 Chapter 55 Report. Massachusetts Department of Public Health. https://chapter55.digital.mass.gov/. Published 2016. Accessed.
8. Barocas JA WL, Wang J, Walley AY, LaRochelle MR, Bernson D, Land T, Morgan JR, Samet JH, Linas BP. Estimated prevalence of opioid use disorder in Massachusetts, 2011–2015: a capture–recapture analysis. . *American Journal of Public Health.* 2018;108(12):1675-1681.
9. Larochelle MR BD, Land T, Stopka TJ, Wang N, Xuan Z, Bagley SM, Liebschutz JM, Walley AY. . Medication for opioid use disorder after nonfatal opioid overdose and association with mortality: a cohort study. . *Annals of Internal Medicine.* 2018;169(3):137-145.
10. RIDOH's Drug Overdose Surveillance Data Hub. Rhode Island Department of Health Drug Overdose Surveillance Data Hub. https://ridoh-overdose-surveillance-rihealth.hub.arcgis.com/. Accessed.
11. Marshall BD YJ, Goyer J, Green TC, Koziol JA, Alexander-Scott N. . Development of a statewide, publicly accessible drug overdose surveillance and information system. *American Journal of Public Health.* 2017;107(11):1760-1763.
12. Daly ER DK, Swenson DJ, Lakevicius P, Metcalf E, Chan BP. Use of emergency department data to monitor and respond to an increase in opioid overdoses in New Hampshire, 2011-2015. . *Public Health Reports.* 2017;132(1):73S-79S.
13. Cherico-Hsii S BA, Singal P, Horon I, Beane E, Casey M, Rebbert-Franklin K, Sharfstein J. Sharing overdose data across state agencies to inform public health strategies: a case study. *Public Health Reports.* 2016;131(2):258-263.
14. Krawczyk N EM, Schneider KE, Richards TM, Lyons BC, Jackson K, Ferris L, Weiner JP, Saloner B. . Predictors of overdose death among high-risk emergency department patients with substance-related encounters: a data linkage cohort study. . *Annals of Emergency Medicine* 2020;75(1):1-2.

15. Drug Overdose Dashboard. Minnesota Department of Health. https://www.health.state.mn.us/communities/opioids/opioid-dashboard/index.html. Published 2023. Updated January 13, 2023. Accessed.
16. Freeman PR MJ, Dasgupta N, Oyler DR, Slavov K, Collins C, Hargrove S, Freeman E, Miracle D, Slavova S. Drugs involved in Kentucky drug poisoning deaths and relation with antecedent controlled substance prescription dispensing. *Subst Abus Treat Prev Policy.* 2023;18(1):53.
17. *States Should Measure Opioid Use Disorder Treatment to Improve Outcomes.* Pew Charitable Trusts; October 18, 2022 2022.
18. Williams AR NE, Bisaga A, Levin FR, Olfson M. . Development of a cascade of care for responding to the opioid epidemic. . *American Journal of Drug and Alcohol Abuse.* 2019;45(1).
19. Opioid Epidemic Response Spending Dashboard. Minnesota Management and Budget. https://mn.gov/mmb/impact-evaluation/projects/opioid-epidemic-response/spending-dashboard/. Published 2024. Accessed.