

Roundtable on Data Sharing Policies, Data-Driven Solutions, and the Opioid Crisis

BACKGROUND INFORMATION

OVERVIEW

The Office of the Chief Technology Officer at the U.S. Department of Health and Human Services (HHS) and the nonprofit Center for Open Data Enterprise (CODE) are co-hosting a Roundtable on Data Sharing Policies, Data-Driven Solutions, and the Opioid Crisis on Friday, July 13, 2018. This document briefly summarizes relevant context and background information for Roundtable participants, including information on:

- The U.S. Opioid Crisis
- Sharing and Using Data to Address the Opioid Crisis
- HHS Response to the Opioid Crisis
- Objectives for the HHS Roundtable

THE U.S. OPIOID CRISIS

Opioids are a class of drugs that includes heroin, fentanyl, and legally-available narcotics and pain medications like oxycodone, hydrocodone, codeine, and morphine.¹ In recent decades, the number of opioid medication prescriptions has increased, as has the [misuse of both prescription and non-prescription opioids](#) in the United States. Devastating consequences of the opioid epidemic include increases in opioid misuse and related overdoses, as well as the rising incidence of newborns experiencing withdrawal syndrome due to opioid use and misuse during pregnancy.² In 2016, 116 people died everyday in the United States from opioid-related drug overdoses.³

SHARING AND USING DATA TO ADDRESS THE OPIOID CRISIS

Data is a critical tool in fighting the deadly, nationwide opioid epidemic. Many federal, state, and local government agencies as well as nonprofits, academic institutions, and the private sector are using data to track opioid prescriptions, identify treatment opportunities, and understand risk factors that can predict opioid use. Some examples of applied data sharing and data use in combating the opioid crisis include:

- Using data on drug overdoses to [map and track trends in opioid usage](#), which helps target prevention and treatment efforts such as provision of Naloxone and prescription drug take back boxes to get harmful drugs off the street.
- Analyzing [data collected from wastewater](#) to estimate opioid usage in cities.
- Collecting and presenting in-depth data on opioid treatments and overdoses using “dashboards” like those developed in the states of [Illinois](#), [Pennsylvania](#), and [West Virginia](#) that allow policymakers, health practitioners, and academics to visualize the breadth and scope of the opioid crisis in specific states and counties.
- Developing an [early response tool based](#) on real-time overdose surveillance to track drug overdoses in real time in order to prepare nearby facilities for outbreaks of opioid emergencies.

¹ <https://www.hhs.gov/opioids/prevention/index.html>

² <https://www.hhs.gov/opioids/about-the-epidemic/index.html>

³ <https://www.hhs.gov/opioids/sites/default/files/2018-01/opioids-infographic.pdf>

While there are significant opportunities to leverage data in the fight against the opioid crisis, there are legal, cultural, and technical barriers to sharing and using this information. These include:

- **Legal Barriers.** Data providers and users have to consider existing legal frameworks when sharing and using data with sensitive information. Regulations including [The Health Insurance Portability and Accountability Act of 1996 \(HIPAA\)](#) and [Title 42, Part 2 of the Code of Federal Regulations \(CFR\)](#) have been identified as posing specific challenges.
- **Cultural Barriers.** Data providers and users have to navigate complex legal and administrative processes when sharing and using data, resulting in common misconceptions about compliance as well as a lack of harmonization within and across various government agencies.
- **Technical Barriers.** Data providers and users commonly face issues with data quality, timeliness, and a lack of data standards, which also create obstacles for data use and data sharing.

HHS RESPONSE TO THE OPIOID CRISIS

The U.S. Department of Health and Human Services (HHS) recognizes the opioid crisis as a major priority. HHS has also identified the potential of data-driven approaches and the need to scale these efforts rapidly to address the growing crisis.

HHS 5-Point Strategy to Combat the Opioid Crisis


In 2017, HHS declared a [public health emergency](#) and announced a [5-Point Strategy To Combat the Opioid Crisis](#), which includes:

- 1) Better addiction prevention, treatment, and recovery services
- 2) Better data
- 3) Better pain management
- 4) Better targeting of overdose reversing drugs
- 5) Better research



HHS Opioid Code-A-Thon

Building on these efforts, the HHS Office of the CTO hosted an [Opioid Code-a-Thon](#) in December 2017 “to promote and employ innovative ways to leverage technology and data to address the nationwide opioid epidemic.” The Code-a-Thon brought together over 50 teams to develop data-driven tools and platforms, with three teams selected as winners from the prevention, treatment, and usage tracks.

HHS Code-a-Thon Winners⁴

- In the prevention track coders were asked, “*How can you help federal, state, and local stakeholders predict and analyze the supply and movement of legal and illicit opioids?*” The [Visionist Inc.](#)  team came up with a program called Take Back America, to assess the unmet need in five states for take back programs at pharmacies where unused or unneeded opioids can be returned, therefore taking a source of opioids out of circulation.

⁴ <https://www.hhs.gov/about/news/2017/12/08/hhs-announces-winners-hhs-opioid-code-thon.html>

- In the treatment track coders were asked, ***“How can you help federal, state, and local stakeholders improve access to effective treatment and recovery services?”*** The [Origami Innovations](#)  team, from New Haven, Connecticut, produced a model designed for real-time tracking of overdoses, allowing first responders and health authorities to be prepared for tracking events such as an outbreak of fentanyl overdoses in communities. This real time tracking would enable area hospitals and local health departments to allocate resources where they are most needed.
- In the usage track coders were asked, ***“How can you help federal, state, and local stakeholders identify at-risk populations and their underlying risk characteristics of opioid misuse or abuse?”*** The [Opioid Prescriber Awareness Tool \(OPAT\)](#)  team borrowed from military aviation to create an instrument panel providing clinicians with a visual representation of their opioid prescribing patterns compared with those of their peers. The tool also informs the referral process and provides easy access to contact information for multi-modal pain and addiction treatment options in the prescriber's area.

FRAMING & OBJECTIVES FOR THE HHS ROUNDTABLE

The Office of the Chief Technology Officer at the U.S. Department of Health and Human Services (HHS) and the nonprofit Center for Open Data Enterprise (CODE) are co-hosting a Roundtable on Data Sharing Policies, Data-Driven Solutions, and the Opioid Crisis on Friday, July 13, 2018.

The HHS Office of the CTO is committed to fostering the use of data for social good while also advancing the goals of the ReImagine HHS effort to [“Get Better Insights from Better Data”](#). They are leading a Department-wide effort to understand how HHS is using and sharing its own data to make more evidence-based policy decisions.

This Roundtable will convene experts from federal, state, and local government, the private sector, non-profit organizations, and academia to explore possibilities and limits of data sharing, and identify successes and proposed solutions for using data to address the opioid crisis.