Leveraging Data to Unleash Innovation & Curb the Opioid Epidemic

In the complex fight against the opioid overdose epidemic, states can use data to identify critical needs, direct resources and drive policymaking. An NGA survey of 41 states conducted in September 2018 found that at least 33 states are comprehensively employing data as a key part of their opioid response plans to align and target efforts to reduce the number of opioid-related overdoses. Informed by lessons learned from the states, the following brief provides a guide for new governors and senior state officials to develop a targeted data strategy that includes timely data exchange and collaboration across state agencies for more effective information sharing.

Checklist of Questions for New Administrations

* What is the lead agency or who is the designated opioid czar to lead the state's action plan?
* What are the state's goals on the opioid crisis and what data are needed to achieve them?
* What existing data efforts are already happening in the state, and who is the data lead in the state?
* What agencies or entities own the data?
* How are data being shared and integrated across agencies and levels of government?
* How much funding allocation does the state have and how much is currently being spent on data collection?
* How can the state build capacity to collect and analyze these data, and can the state leverage university partners?
* Does the state already have partnerships across key state or local agencies, or will it require outreach and facilitating relationships?

Priority Data Streams for Collection

State officials have generally included four data streams that are central to identifying emerging trends, informing policymaking and implementing innovative programs to save lives.

WHAT data should be collected?	WHO owns the data?	WHEN are they needed?[1]	HOW are they used and WHY?
FIRST RESPONDER DATA Responses to suspected drug overdoses (e.g. naloxone administrations).	Local law enforcement & EMS	Daily	Early indicators of suspected overdoses, spikes and trends in overdoses and communities in need of resources. Critical to rapid response to the evolving epidemic.
EMERGENCY DEPARTMENT DATA Hospital admissions for drug overdose, withdrawal, opioid use disorder (OUD), infectious disease resulting from intravenous opioid use.	Local & regional emergency departments	Weekly	Provides information of treatment capacity, spikes and trends in overdoses and substances responsible for the most overdoses.
FATAL OVERDOSE DATA Official cause of death	Medical examiners, coroners, state vital statistics offices	Twice a year	Provides a retrospective view on drug overdoses and allows states to track trends annually. Can also provide information on overdoses related to specific substances.
TREATMENT DATA Treatment capacity data from hospital clinics and other treatment facilities.	Health care providers	Varies by source	Provides information on type of services provided (inpatient, outpatient or residential services, whether facilities offer MAT, the number of patients treated and overall capacity). Allows for better allocation of resources and availability of treatment.

[1] The frequency of data collection cited in this column provides a respective reference point for ideal data timeliness.

Additional Data

While primary data streams should be prioritized in a state's comprehensive framework, there are many other data that can demonstrate impact and assist in painting a more complete picture of the challenges of substance use in a specific state.

WHAT data should be collected?	WHO owns the data?	WHEN are they needed?	HOW are they used and WHY?
PUBLIC SAFETY DATA Drug seizure & drug crime arrests; toxicology reports of seized drugs.	State police, law enforcement, data repository, crime labs	Monthly	Provides information on the type of illicit substances supply. Some states use Drug Monitoring Initiatives to track and share drug seizures and arrests through shared data dashboards.
MEDICAID CLAIMS DATA Suspected drug overdoses (e.g. naloxone administrations), OUD diagnosis, prescription information, and information on treatment.	State Medicaid agencies	Varies by source	Identifies vulnerable populations to target treatment and individuals diagnosed with OUD. This information can also help identify prescribing patterns.
PRESCRIPTION DRUG DATA Prescription Drug Monitoring Programs (PDMPs), number of prescriptions distributed.	State PDMP lead	Varies by source	Tracks and monitors the distribution of prescription of opioids. This information allows states to track prescription misuse, co-prescribing of benzodiazepines, geographic distribution and prescribing rates by opioid type.
CRIMINAL JUSTICE DATA Prison & jail intake data on substance use, correctional treatment data, probation & parole violations related to substance use.	State departments of corrections, local jails, criminal justice information agencies	Monthly	Informs state opioid czar or state agency lead of needs and capacity to treat justice-involved populations, and provides information on regions impacted, and effectiveness of treatment through recidivism rates.

Actions Governors and Senior State Officials Can Take

1. **Develop and implement or utilize an existing data governance structure.**
   Achieving the state's goals of saving lives and promoting public health requires coordination and collaboration across state, local and federal governments. Governors play an important role in establishing operations and governance frameworks at the state level that institutionalize coordination and collaboration, especially around collecting data.

2. **Prioritize data streams that provide information needed for critical decisions and understand how slower, more comprehensive data can impact long-term policy decisions.**
   With the appropriate data, state officials can develop laws and policies to support initiatives, allocate resources, and implement and scale successful programs for reducing overdose deaths. Using data to this end, however, requires knowing what data are useful, at what time and for what purpose. State officials should keep in mind that data timeliness may differ depending on the purpose of data collection and the origin of the data. Typically, real-time data on overdoses allows officials to stay current on emerging trends, while slower, more comprehensive data informs policy making and impact over time.

3. **Continue to build data capacity.**
   Although this paper suggests that there are four priority data streams, that does not mean that a more comprehensive data strategy isn't needed. Governors and states should work toward building a comprehensive, integrated data system that can help target response efforts to the opioid overdose epidemic, but also the issue of substance use disorder more broadly. This type of comprehensive data linking and data collection could provide a more comprehensive look at policy and program impact.