

## Developing Substance Use Disorder Data Dashboards to Facilitate Evidence-Based Decision-Making

In July 2014, the Centers for Medicare & Medicaid Services (CMS) launched a collaborative between the Center for Medicaid and CHIP Services and the Center for Medicare & Medicaid Innovation called the Medicaid Innovation Accelerator Program (IAP). The goal of IAP is to improve health and health care for Medicaid beneficiaries and to reduce costs by supporting Medicaid agencies' ongoing payment and delivery system reforms. IAP provides targeted technical assistance to Medicaid agencies across four program areas. The first IAP program area began in February 2015 and focused on technical assistance for better identifying individuals with a substance use disorder (SUD), expanding coverage for effective SUD treatment, and enhancing SUD practices delivered to beneficiaries. As part of this program area, IAP convened several learning collaboratives on topics Medicaid agencies identified as priorities in their efforts to combat the opioid crisis, including using data to better understand their population with SUD.

### SUD Data Dashboard Affinity Groups and Technical Assistance

To support states' SUD data analytic needs, IAP convened two SUD Data Dashboard Affinity Groups that assisted Medicaid agencies with creating or revising SUD-specific data dashboards. The primary goal of these data dashboard opportunities was to display performance results to facilitate evidence-based decision-making. Participating Medicaid agencies received individual coaching and technical assistance from IAP, which provided expertise in SUD data analytics and data visualization, webinars on data visualization and dashboard design best practices, and peer-to-peer discussion opportunities.

This fact sheet summarizes the dashboard projects of the seven participants in the Data Dashboard Affinity Groups (the District of Columbia, Florida, Iowa, Oklahoma, Tennessee, Virginia, and West Virginia). All of the participating Medicaid agencies initially developed internal dashboards that included basic demographics and SUD-related diagnosis rates. However, participants varied widely in the other metrics they included. The internal audiences for these dashboards were primarily state Medicaid agency leadership or elected officials. A few participants also designed external dashboards, with some variability in the targeted external audiences.

#### DISTRICT OF COLUMBIA

DC has one of the highest rates of overdose deaths in the United States, prompting its team to prioritize data that would identify "hot spots"—areas with high overdose rates and gaps in services. For its IAP project, the DC Department of Health Care Finance focused its initial dashboard on (1) the size and characteristics of the DC Medicaid population with an opioid use disorder (OUD) diagnosis, (2) the number of OUD-related emergency department (ED) visits and hospitalizations, and (3) access to medication through waived physicians and methadone clinics (e.g., prescribing rates, number of waived providers, number of clinics). The IAP team helped DC prioritize indicators that could be analyzed with its Medicaid data, as well as develop an informative dashboard for other agencies involved in creating DC's Opioid Strategy, including the DC Council and the Mayor, to improve and better target service delivery. DC also leveraged data produced during this opportunity to support the successful submission of a Section 1115 demonstration waiver application. In the second round of affinity group participation, DC updated its goals to align with its newly approved Section 1115 demonstration waiver. DC focused on 11 metrics required in its first waiver monitoring report to CMS.

Over the course of the affinity group, DC coded the measures using Medicaid claims data, accessed and included additional data from the DC behavioral health authority, and leveraged IAP technical assistance sessions to obtain feedback on options for displaying these data. DC finished with the initial set of measures included in an internal dashboard with future plans to expand to a public-facing dashboard.

**DC Contact:** April Grady, [april.grady@dc.gov](mailto:april.grady@dc.gov)

## FLORIDA

Initially, Florida's Agency for Health Care Administration developed an internal SUD dashboard with the goal of sharing future versions of the dashboard externally. Over the course of the technical assistance opportunity, the IAP team consulted with Florida on the opioid-specific content to be included in data dashboards (e.g., measures), how audiences could use the dashboard, and the design of dashboards to aid in decision-making. Florida decided to focus on the number of opioid prescriptions per month by county, as well as the number of Medicaid enrollees receiving opioids by prescription type. With support from IAP, Florida finalized the dashboard series for agency leadership approval and for the state to consider which views and features will be internal, public facing, and practitioner facing.

**Florida Contact:** Emily Saras, [emily.saras@ahca.myflorida.com](mailto:emily.saras@ahca.myflorida.com)

## IOWA

The Iowa Department of Human Services' dashboard was designed to provide critical information to internal leadership in the state Medicaid program. The IAP team helped Iowa prioritize areas of interest for the dashboard. The Medicaid agency began with a wide array of topics (e.g., demographics, medication-assisted treatment [MAT], chronic conditions, health care utilization) but ultimately focused its initial dashboard on metrics related to Medicaid enrollees with SUD diagnoses. The dashboard includes, among other data, the number and rate per 1,000 distinct members with SUD diagnoses, filtered by fiscal year or quarter and by health plan. Additional metrics in the dashboard focus on primary and secondary SUD diagnoses, Medicaid aid type, age, gender, and race/ethnicity. The state plans to expand the dashboard to include the broader group of metrics initially discussed and, ultimately, would like to develop a public-facing dashboard. Next steps that the state is considering include involving subject matter experts more heavily, working in conjunction with its managed care organizations, and increasing the involvement of policy leadership in revisions.

**Iowa Contact:** Kurt Behrens, [kbehren@dhs.state.ia.us](mailto:kbehren@dhs.state.ia.us)

## OKLAHOMA

IAP assisted the Oklahoma Health Care Authority with development of the Substance Use Stewardship (SUS) dashboard, which gives a high-level snapshot of Oklahoma Medicaid members who may be at risk for opioid misuse. The SUS dashboard allows users to quickly compare morphine milligram equivalents (MMEs) by county or prescriber in real time. Oklahoma used this preliminary SUS data by mailing letters to Oklahoma prescribers outlining their specific prescribing habits as related to MMEs. To curb opioid prescribing, the OHCA also initiated a 240-MME limit and intended to periodically decrease the MME limit over that year. OHCA has used the SUS dashboard to monitor average cumulative MME over time as the MME limit decreases. The SUS dashboard also provided MME data via the Pharmacy Help Desk, a virtual tool for OHCA staff. The SUS dashboard was presented to OHCA executive staff, who provided positive feedback and suggested that several workgroups be formed to more closely examine the data. To support these workgroups, the IAP team assisted Oklahoma with mockups of additional metrics and dashboard components, including overdose data by county, naloxone prescriptions, and neonatal abstinence syndrome diagnoses.

**Oklahoma Contact:** Burl Beasley, [burl.beasley@okhca.org](mailto:burl.beasley@okhca.org)

## TENNESSEE

The Tennessee Division of TennCare worked with IAP to build an internal dashboard for use by the agency's leadership and elected officials. This work evolved through three stages. First, the IAP team helped Tennessee prioritize domains of interest, with the state focusing on acute use, as measured using MME, and on use of MAT for OUD. The IAP team assisted the Medicaid agency in identifying metrics suitable for the dashboard and collaborated to determine meaningful ways to visually represent the selected information. In the second stage, Tennessee included opioid use during pregnancy and cost of OUD treatment, based on its earlier work with IAP. The state's dashboard 1.0 was fully developed and in full operation to provide immediate answers to internal questions generated during the Tennessee legislative session. After dashboard 1.0 was operational, Tennessee and the IAP team discussed how the Medicaid agency might incorporate Controlled Substance Monitoring Database data into its dashboard to improve its population health initiatives for identifying high-risk individuals. Tennessee moved on to this third stage and began work to include these data within an updated dashboard. Future plans by TennCare include further analyzing costs/claims, exploring the state's chronic user population based on the earlier IAP support, and ultimately expanding access to the public.

**Tennessee Contact:** Ben Heavrin, [ben.heavrin@tn.gov](mailto:ben.heavrin@tn.gov)

## VIRGINIA

Virginia's Department of Medical Assistance Services dashboard development plan focused on both publicly facing data and targeted data for use by executive leadership. The IAP team provided an initial dashboard mockup that helped Virginia identify seven potential metrics for inclusion in its SUD dashboard: utilization of medication, continuity of pharmacotherapy and ED visits for OUD, opioid overdose ED visits and deaths, availability of waived practitioners, and infants exposed to substance use among Medicaid beneficiaries. After review of these metrics, Virginia selected the final three for testing in its dashboard prototype. In working to include these three indicators in the dashboard, Virginia determined that two (i.e., rate of opioid overdose deaths and prevalence of neonatal abstinence syndrome) were not feasible to produce because of data sharing limitations. Virginia has since worked with its data warehouse contractor to prepare two SUD-focused reports: one on beneficiaries' opioid utilization and another on providers' opioid prescribing practices.

**Virginia Contact:** Ashley Harrell, [ashley.harrell@dmas.virginia.gov](mailto:ashley.harrell@dmas.virginia.gov)

## WEST VIRGINIA

West Virginia's Bureau for Medical Services planned a dashboard to provide Medicaid agency leadership and members of the state legislature with current SUD-related data, while also supporting CMS reporting requirements for West Virginia's Section 1115 SUD demonstration waiver. The state sought to update its SUD programs by using data to quantify the highest impact for its beneficiaries with SUDs, especially when considering increasing access to MAT services as well as buprenorphine and Vivitrol® prescribers. The IAP team assisted West Virginia with selecting 16 metrics to include in its dashboard and testing six of them. These metrics included methadone utilization to treat OUD, instances of response by emergency medical services for opioid overdose, utilization of residential and outpatient treatment, rates of MAT use, and total spending for peer recovery support specialist services. West Virginia used IAP to assist in the design and layout of the dashboard. The state has since completed the dashboard, and it is available for use by the Bureau of Medicaid Services' leadership and program managers to view metrics, modify filters, and generate SUD-specific reports.

**West Virginia Contact:** Cynthia Parsons, [cynthia.a.parsons@wv.gov](mailto:cynthia.a.parsons@wv.gov)

Additional information on the IAP Reducing SUDs program area, including materials from the SUD Data Dashboard Affinity Group, is available on the [Medicaid IAP Reducing SUDs web page](#).