

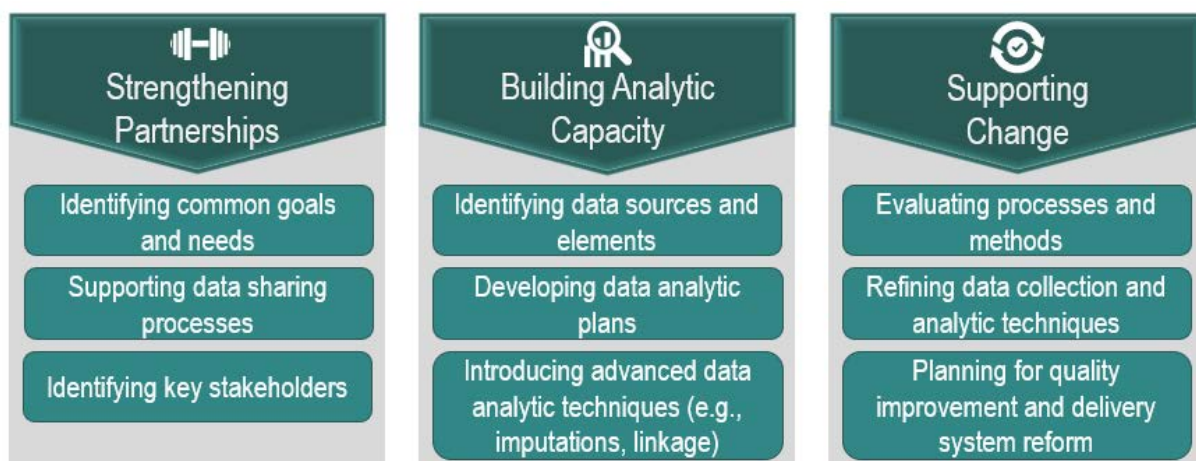
Strengthening Partnerships While Developing Data Analytic Capacity to Support Reduction of Maternal Mortality and Severe Maternal Morbidity in Medicaid

The Centers for Medicare & Medicaid Services (CMS) Medicaid Innovation Accelerator Program (IAP) is a collaboration between the Center for Medicaid and Children’s Health Insurance Program (CHIP) Services and the Center for Medicare & Medicaid Innovation that is designed to build state capacity and support ongoing innovation in Medicaid. From March 2020 to August 2020, the IAP Strengthening Partnerships While Developing Data Analytic Capacity to Support Reduction of Maternal Mortality (MM) and Severe Maternal Morbidity (SMM) technical assistance opportunity supported Medicaid agencies with establishing and strengthening partnerships with stakeholders, developing data analytic capacity, and understanding MM and SMM among Medicaid beneficiaries. This fact sheet describes the technical assistance provided and summarizes the goals and progress made by each participating state.

Maternal Mortality and Severe Maternal Morbidity Data Analytic Technical Assistance

IAP provided technical assistance to seven Medicaid agencies and their state partners (Delaware, Kentucky, Massachusetts, North Carolina, South Dakota, Texas, and Wyoming) to help solidify collaborations while improving data analytic capacity to examine MM and SMM in Medicaid. An IAP coach team consisting of experts in maternal health, data analytics, quality measurement, and performance improvement worked with each state to identify goals and develop a data analytic plan. State teams engaged in an array of activities throughout the technical assistance period, such as developing data use agreements (DUAs), reviewing best practices for linking data, identifying risk factors for MM and SMM, and drafting driver diagrams. Complementing the coach-led technical assistance, states also participated in peer-to-peer learning opportunities to share experiences and best practices (see Figure 1 for core technical assistance activities). Note, as this cohort was launching in March 2020, states began shifting resources to focus on the Coronavirus Disease 2019 (COVID-19) pandemic, thus limiting their ability to engage fully in IAP.

Figure 1. Technical Assistance Activities Provided



DELAWARE

As part of the IAP technical assistance opportunity, the Delaware Division of Medicaid and Medical Assistance (DMMA) collaborated with the Child Death Review Commission's Maternal Mortality Review (MMR) committee and the Delaware Division of Public Health. Delaware IAP goals were to: (1) link Medicaid data with the MMR committee data to better understand MM in Medicaid; (2) evaluate risk and prevention opportunities for MM; and (3) identify strategies to improve its related data warehouse capabilities. The IAP team supported Delaware in obtaining the necessary agreements for data sharing and establishing a process for identifying maternal deaths in Medicaid. The state will be able to use results of this work to supplement information used in the Maternal Mortality Review Information Application and case review process. The MMR committee will use this information to gain a more complete picture of services received and prescriptions filled in cases of maternal death. Leveraging the IAP partnership discussions about MM, Delaware identified additional risk factors of SMM to explore and validate. The state plans to use collaborative relationships between DMMA, the MMR committee, and the Division of Public Health to deepen its understanding of maternal deaths and SMM patterns among Medicaid beneficiaries.

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KENTUCKY

The Kentucky Department of Medicaid Services collaborated with the Kentucky Department for Public Health and the Office of Health and Data Analytics to: (1) strengthen partnerships with its recently established Maternal Mortality Review Committee (MMRC) and Perinatal Quality Collaborative (PQC); and (2) examine rates and patterns of SMM in Medicaid. Initial analyses of Kentucky's data showed that the most common forms of SMM that lead to death are cardiac conditions (e.g., cardiac arrest/ventricular fibrillation, ventilation, acute myocardial infarction). Based on these findings, Kentucky identified reducing modifiable cardiac events that contribute to SMM as a primary aim. The IAP team helped the state to develop a driver diagram to identify which drivers were needed to achieve its project aim and to create a data analytic plan for examining cardiac-related risk factors for SMM. The state plans to partner with its Office of Health Data and Analytics to link vital statistics to Medicaid claims and encounter data. Kentucky also intends to track risk factors related to MM through chart reviews from the state's MMRC.

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MASSACHUSETTS

Massachusetts' Medicaid and CHIP agency (MassHealth) collaborated with the Massachusetts Department of Public Health to: (1) build capacity for data analysis to examine MM and SMM that can contribute to eventual elimination of inequities in health outcomes; (2) identify clinical and nonclinical risk factors among Medicaid enrollees (including gaps in accessing care); and (3) strengthen the Medicaid Management Information System (MMIS) capabilities to monitor and assess MM and SMM. The IAP team provided technical assistance to Massachusetts by: (1) providing guidance on data sharing and DUA development; (2) conducting a review of social determinants of health (SDoH) data collected by states; and (3) sharing subject matter expertise on using imputation to address high levels of unknown or missing race, ethnicity, and language information in Medicaid data. Based on the IAP technical assistance provided, MassHealth created a business requirements document to refine a maternal health data layer within its MMIS that eventually will include linked data from Medicaid claims and encounters, birth and fetal death certificates, hospital discharge records, and MMRC chart reviews. This data layer will facilitate analyses of MM and SMM in Medicaid and will be integrated with other datasets containing SDoH data. MassHealth and the Department of Public Health also developed a driver diagram that can be used to create a clear path to work together toward eliminating the gap in racial and ethnic disparities, as well as reducing the overall rate of SMM for pregnant and postpartum women enrolled in Medicaid.

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NORTH CAROLINA

The North Carolina Division of Health Benefits (Medicaid) partnered with the North Carolina Division of Public Health and Community Care of North Carolina to: (1) strengthen their partnerships; (2) develop a comprehensive maternal health data strategy to help systematically analyze and monitor Medicaid MM and SMM at the population level; and (3) use this data strategy to drive future work that aligns with the state's Medicaid Quality Strategy, including assessing maternal deaths as part of North Carolina's MMRC. The IAP team worked with the state in developing a driver diagram that articulated a long-term aim to reduce MM and SMM by the end of December 2023 and a focus on reducing disparities. To further support the state's goals, the IAP team developed a profile of existing maternal health initiatives, provided recommendations on methods to access SMM data for future analyses, and created an analytic plan for the state related to its maternal health data strategy.

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SOUTH DAKOTA

The South Dakota Department of Social Services (Medicaid) collaborated with the South Dakota Department of Health to examine best practices for linking maternal Medicaid data to other data sources and to develop a process to identify pregnant beneficiaries at high risk for MM and SMM. As part of its data analytic plan development, the IAP team provided technical assistance to South Dakota on methods for estimating the rate of SMM among Medicaid beneficiaries. Additionally, the IAP team shared with the state examples of methods to examine prenatal care initiation and utilization along with examples of SDoH among this population. This information can be used to design interventions to address SDoH that reduce MM and SMM. To support the state's recently established MMRC, the IAP team connected South Dakota with peer states that are linking Medicaid data with MMRC chart reviews.

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TEXAS

The Texas Health and Human Services Commission (HHSC), in partnership with the Texas Department of State Health Services (DSHS) and the Institute of Child Health Policy at the University of Florida (Texas' external quality review organization), used its IAP participation to begin to address barriers to establishing a data sharing process between HHSC and DSHS that facilitates activities to support MM and SMM reduction. The IAP team collaborated with the state to develop a project driver diagram with an aim to reduce SMM in Medicaid by 10 percent by June 2024. To address this project aim, the state intends to research options for initiating a standardized screening tool to help quantify high-risk pregnancies and enable providers to identify and deliver evidenced-based care interventions to reduce SMM. Additionally, Texas plans to hold its managed care plans accountable for MM and SMM with new required reporting. The IAP team also provided technical assistance on the validity of technical specifications for new state developed quality measures. Additionally, the IAP team connected Texas with other states that have active projects focused on reducing MM and data sharing initiatives. In addition, Texas received technical assistance related to data infrastructure and governance from one of IAP's federal partners, the Office of the National Coordinator for Health Information Technology.

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WYOMING

Wyoming Medicaid partnered with the Wyoming Maternal and Child Health (MCH) Unit and the Wyoming MCH Epidemiology Program to improve early identification of high-risk pregnancies and determine the prevalence of MM and SMM in Wyoming. To support these goals, the IAP team developed and refined a data analytic plan to help the state solidify its research questions and analytic parameters, including target population (Medicaid-enrolled women aged 15 to 44 years), time frame (between January 2018 and December 2019) and lists of

International Classification of Diseases, Tenth Revision, codes to identify risk factors for SMM (based on Centers for Disease Control and Prevention SMM indicators, substance use, and psychiatric conditions). Additionally, the IAP team collaborated with the state to develop a project driver diagram that included a long-term aim to develop and implement data-driven recommendations on strategies to reduce and prevent MM and SMM by June 2022. Initial analyses conducted by the state showed high prevalence of major depressive disorder, anxiety, and nicotine dependence. The state plans to conduct further analyses to better understand the extent to which MM and SMM are preventable and to identify strategies to ensure that pregnant women at risk for preventable MM and SMM have access to necessary resources, including risk-appropriate care.

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Information on the IAP Data Analytics program, including materials from the IAP MM/SMM Data Analytics Track, is available on the [IAP Data Analytics](#) webpage list [here](#).