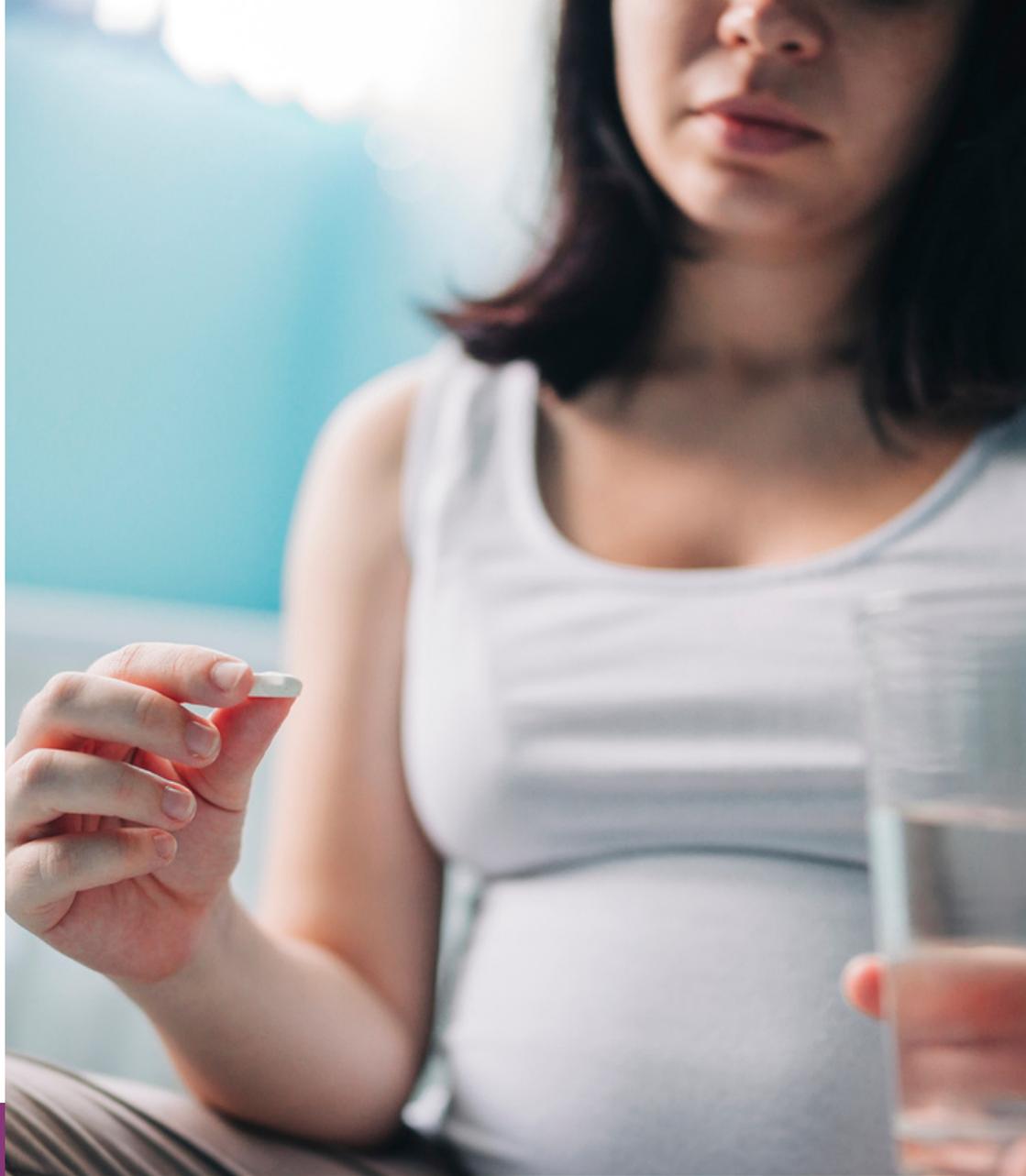


GOAL 1

Action 1.10

WHITE HOUSE
BLUEPRINT
EVIDENCE TO
ACTION BRIEFS



Strengthen supports and access to perinatal addiction services for individuals with substance use disorders



Maternal Health
Learning & Innovation Center™
MaternalHealthLearning.org

**THE WHITE HOUSE BLUEPRINT
FOR ADDRESSING THE
MATERNAL HEALTH CRISIS**

The [White House Blueprint for Addressing the Maternal Health Crisis](#) (White House Blueprint) has identified goals and actions to reduce the rates of maternal mortality and morbidity, eliminate disparities in maternal health outcomes, and improve the experience of pregnancy, birth, and the postpartum period for people across the United States.

The following Evidence to Action Brief highlights Action 1.10 in the White House Blueprint in an effort to increase access to and coverage of comprehensive high-quality maternal health services, including behavioral health services (Goal 1).

Maternal Health Action 1.10

Strengthen supports and access to perinatal addiction services for individuals with substance use disorders by partnering with hospitals and community-based organizations to implement evidence-based interventions.

Contribution to Quality of Life

The White House Blueprint is a “whole-of-government approach to combating maternal mortality and morbidity” so that all people in the United States who are capable of becoming pregnant and giving birth are healthy and safe.

Evidence-based interventions that strengthen perinatal and postnatal support structures can help to mitigate the potentially devastating consequences of maternal substance use disorder (SUD).

Basic Facts

Pregnant women and people who can become pregnant who suffer from SUD often experience worse perinatal outcomes than those without SUD, including longer hospitalizations following delivery and a higher risk for preterm delivery.¹ Women between age 18 and 29 are at the greatest risk of developing SUD, and this risk continues throughout their reproductive years (see Figure 1).² Tobacco, alcohol, and cannabis are the most commonly used substances during pregnancy, followed by opioids and cocaine.² Maternal opioid disorder (MOD)* is a type of SUD that refers specifically to opioid addiction.² Opioid use disorder (OUD) is one of the leading causes of maternal mortality across many states during and up to one year after pregnancy.³

“Research has shown that SUD/OUD may have especially serious consequences for maternal and infant health in the US, at least partially because of lack of access to high quality OUD treatment options, including medication-assisted treatment among those who are pregnant or parenting.”⁴ Providing adequate access to care and appropriate screenings in the preconception, perinatal, and postnatal period, along with ensuring that pregnant people who have SUD/OUD deliver in a hospital equipped to support both the birthing person and infant with neonatal abstinence syndrome, is critical to improving maternal and infant health outcomes.^{5,6} Studies show that early detection of SUD/OUD can prevent its progression and prevent serious consequences for both the birthing person and infant.⁷ Evidence also suggests that receiving integrated obstetrical care and SUD/OUD treatment is associated with a reduced risk for preterm birth and shorter infant hospitalization.¹

To reduce coverage gaps, improve access to high-quality care, and address geographical barriers to health care access, the [White House Blueprint](#)⁸ commits to ensuring that the Department of Health and Human Services (HHS) partners with hospitals and community-based organizations to provide evidence-based interventions during the perinatal and postnatal periods for individuals with SUD/OUD. The White House Blueprint states that HHS will also provide education and support to individuals with SUD/OUD at each stage during pregnancy and the 12 months following birth to reduce stress that could trigger a return to drug use or overdose.



How are we doing?

Below we highlight selected data related to Action 1.10. Racial, ethnic, geographic, and socioeconomic disparities emphasize where efforts should be focused to improve health outcomes related to Action 1.10.

Figure 1: Drug Overdose Mortality Rates Among Pregnant and Postpartum Persons, 2017–2020

	Pregnant or postpartum			Reproductive age (15–44 y)		
	No. of persons	No. of live births	Drug overdose mortality rate per 100,000	No. of persons	Population	Drug overdose mortality rate per 100,000
Year						
2017	252	3,844,260	6.6	9,191	63,958,243	14.3
2018	266	3,780,401	7.0	9,198	64,171,698	14.3
2019	304	3,769,144	8.1	9,433	64,325,356	14.6
2020	427	3,360,653	11.9	12,756	64,543,832	19.7
TOTAL	1,249	14,963,458	8.3	40,578	256,999,129	15.7
Absolute change rate*						
2017–2020			5.3			5.3
2019–2020			3.7			5.1

*95% confidence interval, not included

The rate of drug overdose mortality rates among pregnant and postpartum birthing people increased from 6.6 per 100,000 in 2017 to 11.9 per 100,000 in 2020. Fentanyl and other synthetic drugs are those most responsible for pregnancy-associated mortality.

Source: Bruzelius E, Martins SS. [US Trends in Drug Overdose Mortality Among Pregnant and Postpartum Persons, 2017–2020](#). *JAMA*. 2022;328(21):2159-2161.

Figure 2: Neonatal Abstinence Syndrome (NAS) and Maternal Opioid-Related Diagnosis (MOD) by Race and Ethnicity Percent Distribution, 2017

	Neonatal abstinence syndrome	Maternal opioid-related diagnoses
Race/Ethnicity		
Non-Hispanic White	77.5	79.9
Non-Hispanic Black	8.1	8.1
Hispanic	8.5	7.8
Non-Hispanic Asian/Pacific Islander	0.8	0.8
Non-Hispanic Other/multiple races	5.1	3.5

In 2017, there were significant racial and ethnic disparities in NAS and MOD. Non-Hispanic White women had the highest rate of MOD compared with non-Hispanic Black, Hispanic, Asian/Pacific Islander, and Other/multi-race women.

Source: Hirari AH, et al. [Neonatal Abstinence Syndrome and Maternal Opioid-Related Diagnosis in the US, 2010–2017](#). *JAMA*. 2021;325(2):146-155.



Figure 3: Neonatal Abstinence Syndrome (NAS) and Maternal Opioid-Related Diagnosis (MOD) per 1,000 Birth Hospitalizations, 2010–2017

	Neonatal abstinence syndrome		Maternal opioid-related diagnoses	
	2010	2017	2010	2017
Race/Ethnicity				
Non-Hispanic White	4.6	10.4	4.1	12.4
Non-Hispanic Black	1.8	3.7	1.4	4.2
Hispanic	1.3	3.1	0.9	3.0
Non-Hispanic Asian/Pacific Islander	0.2	0.9	0.2	1.0
Non-Hispanic Other/multiple races	1.8	5.1	1.9	5.8

Between 2010 and 2017, there was an increase in the rate of NAS in the US, from 4.0 per 1,000 birth hospitalizations to 7.3 per 1,000 birth hospitalizations (data not shown). The rate of MOD also increased significantly, from 3.5 per 1,000 hospital deliveries in 2010 to 8.2 per 1,000 hospital deliveries in 2017 (data not shown). The rate of NAS increased among all racial and ethnic groups, except the non-Hispanic Asian/Pacific Islander birthing person.

Source: Hirari AH, et al. [Neonatal Abstinence Syndrome and Maternal Opioid-Related Diagnosis in the US, 2010–2017](#). *JAMA*. 2021;325(2):146-155.

Figure 4: Neonatal Abstinence Syndrome (NAS) and Maternal Opioid-Related Diagnosis (MOD) Insurance Status, 2017

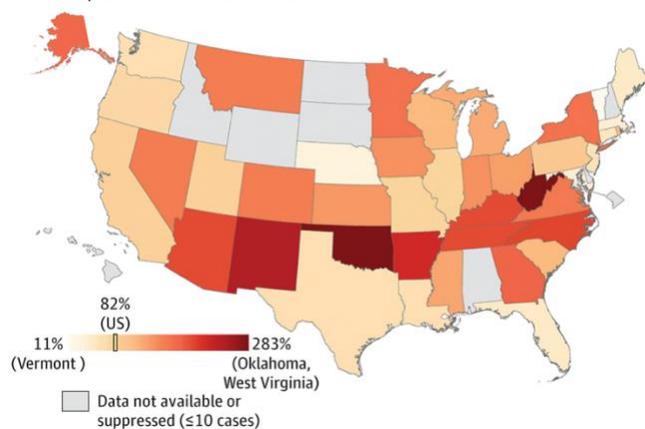
	Neonatal abstinence syndrome (%)	Maternal opioid-related diagnoses (%)
Primary Expected Payor		
Medicaid	84.0	77.1
Private	10.0	16.4
Self-Pay	4.8	1.8
Other Public	1.2	4.7

Birthing people with Medicaid are more likely to have diagnosed MOD (77.1) compared with those with private, self-pay, and other insurance payors. Similarly, birthing persons with Medicaid are more likely to deliver an infant with NAS (84.0) compared with those with private, self-pay, and other public insurance.

Source: Hirari AH, et al. [Neonatal Abstinence Syndrome and Maternal Opioid-Related Diagnosis in the US, 2010–2017](#). *JAMA*. 2021;325(2):146-155.



Figure 5: Neonatal Abstinence Syndrome (NAS) Percent Change Rate per 1,000 Birth Hospitalizations by State, 2010–2017



The percent change in NAS per 1,000 birth hospitalizations ranged from 11% in Vermont to 283% in Oklahoma. Those living in rural areas and small metropolitan areas are more likely to have NAS-exposed infants.

Source: Hirari AH, et al. [Neonatal Abstinence Syndrome and Maternal Opioid-Related Diagnosis in the US, 2010–2017](#). *JAMA*. 2021;325(2):146-155.

Story Behind the Data: Factors Affecting Progress

The opioid epidemic has had a devastating effect on maternal and infant health in the US. The roots of the opioid epidemic can be traced to providers who over-prescribe opioids and pharmaceutical companies⁹ that misleadingly market opioids to treat pain instead of supporting patients to find alternative treatments.¹⁰ Compounding this trend was the fact that opioids are generally covered by insurance policies whereas alternative treatments and therapies are not.¹⁰

There are significant racial, ethnic, socioeconomic, and geographic disparities among pregnant and postpartum people with SUD/OD. Between 2017 and 2020, the pregnancy-associated drug overdose mortality rate in the US increased from 6.6 per 100,000 to 11.9 per 100,000 (see Figure 1)¹¹, an 81% increase in just four years.¹¹ This trend mirrors the increase in overdose deaths among all women of reproductive age. During this same period, rates of overdose deaths increased from 14.4% to 19.8%, a four-year increase of 38% for women of reproductive age.¹¹ Pregnancy-associated deaths increased from 2017 to 2020 for all periods of gestation, including pregnancy, early postpartum, and late postpartum.¹¹

MOD also saw a national increase from 3.5 per 1,000 births in 2010 to 8.2 per 1,000 births in 2017.¹² In 2017, among infants born to a birthing person with MOD, almost 80% identified as non-Hispanic White birthing people, compared with 8.1% among non-Hispanic Black, 7.8% among Hispanic, and 4.3% among non-Hispanic Other/Asian/Pacific Islander birthing persons (see Figure 2).¹² During this same period, there was a national increase in the rate of NAS from 4.0 to 7.3 per 1,000 birth hospitalizations.¹² Similarly, infants born with NAS was highest among non-Hispanic White birthing people (77.5%), compared with 8.1% among non-Hispanic Black, 8.5% among Hispanic, and 5.9% among non-Hispanic Other/Asian/Pacific Islander birthing persons (see Figure 2).¹²

The uptick in MOD and NAS has significantly increased hospitalization rates among birthing people and infants. Between 2010 and 2017, the rates of both MOD and NAS increased among all racial and ethnic groups. “Median hospital length and mean costs were greater for those with NAS and MOD relative to overall birth and delivery hospitalizations,”¹² thus increasing the burden and costs to health care systems.



Socioeconomic status is also a risk factor for MOD. MOD is highest among women and birthing people with Medicaid insurance compared with those with private insurance (see Figure 4).¹² Women and birthing people living in zip codes with annual household incomes of less than \$44,000 have increased rates of MOD compared with those living with household incomes of at least \$74,000.¹² NAS is less common in large metropolitan areas compared with small metropolitan/rural areas.¹⁰ As noted in the [White House Blueprint](#), “Rural residents have a greater probability of severe maternal morbidity and mortality, compared with urban residents, exacerbating the disparities for rural people of color.”^{8, pg.23} There also are disparities by state. The percent change in MOD per 1,000 birth hospitalizations (2010–2017) ranged from 1.7% in Nebraska to 47.3% in Vermont (see Figure 5).¹²

CALL TO ACTION

Public health interventions and policies should support all birthing people—and especially those from historically marginalized populations—to stay connected to the health care system (before, during, and after pregnancy), to speak openly about any substance use disorders and misuse without repercussions, and to access evidence-based addiction support programs in their communities. Health insurance coverage must be expanded for pregnant and postpartum individuals to allow for continuing treatment.

Moreover, there is a lack of adequate postpartum psychosocial support services, including relapse prevention programs, to address substance misuse during this critical time.¹³ When treatment programs are available, there are disparities in access. Among reproductive-age women in this country in need of SUD treatment, only 9.3% received it, indicating that pregnant people do not receive priority access to addiction treatment.¹⁴ Non-Hispanic Black birthing people and pregnant women of color are less likely to have access to treatment and to receive medical assistance for SUD/OD, and have a lower adherence to treatment compared with non-Hispanic White women.¹²

Medications for Opioid Use Disorder (MOUD), including methadone, buprenorphine, and naltrexone, are the gold standard for treating opioid use disorder in pregnancy and have been found to be positively associated with treatment retention.¹⁵ However, evidence has shown that pregnant women of color receive lower doses of methadone at delivery as compared with White women, reflecting inequity. In one study, 67% of pregnant women of color with OUD received a lower dose of methadone at delivery compared with White women.¹⁶ Experts in OUD/SUD among birthing persons found a “... higher dose of methadone is positively associated with improved treatment retention in pregnancy; it is also probable that the present results underrepresent the magnitude of this inequity, as underdosed women of color may have been lost to follow-up and/or discontinued methadone by the time of delivery.”¹⁶ Provider bias contributes to the low percentage of use of MOUD among pregnant women of color.

In addition, social stigma and shame felt by many birthing people causes them to underreport any substance misuse during pregnancy.¹⁷ Punitive measures that result if a pregnant patient tests positive for an illegal substance is also a deterrent to care, as this can be a disqualifier for coverage under publicly funded programs and can be the sole factor in determining family separation.¹³ Women of color and other marginalized birthing people feel the brunt of shame, stigma, and punitive repercussions more than White women.

Furthermore, Medicaid coverage does not always include SUD (of any type), mental health screening and treatment, and case management or outreach services, and often is limited to 60 days (instead of the optimal one year after delivery).

What can be done to address the issue?

The [White House Blueprint](#) identifies actionable steps to address Action 1.10. In addition, experts from the maternal and child health field have identified the following innovative, evidence-informed strategies after a review of several databases and national repositories.



Maternal & Child Health (MCH) Innovations

MCH experts selected the following resources for action after a review that included the [MCHbest Database](#), a database developed to aggregate evidence-based strategies that can be used as is or adapted to fit local and state-level contexts; the [Association of Maternal and Child Health Program's Innovation Hub \(AMCHP\)](#), a searchable repository of local and state practices, policies, and community-based innovations considered to be “what’s working” in the MCH field; the [Robert Wood Johnson Foundation's What Works for Health \(RWJ\)](#) database, a tool that helps local communities to identify policies and programs that fit within their context and match their priorities; the [Maternal Health Learning and Innovation Center](#), a national resource for improving maternal health inequities; and a search of leading organizations and agencies working in this field.

- [Alliance for Innovation on Maternal Health \(AIM\) Patient Safety Bundle: Care for Pregnant and Postpartum People with Substance Use Disorder](#). The evidence-based AIM Patient Safety Bundles are available for implementation at the state and county level, where perinatal women with SUD/OD are cared for. The AIM bundles include actionable steps that are adaptable to a variety of settings and provide a structured way of improving the processes of care and patient outcomes. Technical assistance is available to organizations interested in implementing and evaluating these bundles.
- [Clinical Guidelines for Treating Pregnant and Parenting Women with Opioid Use Disorder and Their Infants](#). This clinical guidance comes from the Substance Abuse and Mental Health Services Administration (SAMHSA) and includes fact sheets for care and assessments during the perinatal and postnatal periods, recommendations for pharmacotherapy practices, and guidance on how to address polysubstance use during and after pregnancy. The guidelines also include information about medication-assisted treatment during pregnancy.
- [Maternal Opioid Misuse \(MOM\) Model Evaluation](#). “A Center for Medicare and Medicaid Innovation’s patient-centered service-delivery model that aims to improve the quality of care and reduce costs for pregnant and postpartum Medicaid beneficiaries with OUD.”
- [National Helpline](#). SAMHSA’s national helpline is a free, confidential, 24/7, 365-day-a-year treatment referral and information service (in English and Spanish) for individuals and families facing mental and/or substance use disorders.
- [Perinatal Substance Use Practice Bundle](#). The Indiana Perinatal Quality Improvement Collaborative’s *Perinatal Substance Use Practice Bundle*, a promising practice, establishes a uniform process of identification and intervention from screening at the first prenatal care visit to discharge and follow-up for both mother and baby. (AMCHP)
- [Perinatal Continuum of Care](#). The *Continuum of Care* tool is a cutting-edge practice and was developed by Colorado’s Tri-County Health Department. The holistic tool was developed to illustrate the range of services, such as substance-use treatment, along with social connections and informal support, that a family needs on the pathway to well-being. The tool also describes opportunities to address perinatal mental health across a variety of service sectors. (AMCHP)
- [Plans of Safe Care \(POSC\)](#). This resource offers information for clinicians and public health professionals on interventions to support families with infants with prenatal substance exposure. These include webinars on understanding maternal SUD and POSC for maternal health professionals and examples of state and local implementation of POSC, as well as links to additional resources.
- [Pregnancy and Substance Use: A Harm Reduction Toolkit](#). Intended for pregnant and parenting people who use drugs and their service providers, this toolkit was developed by the Academy of Perinatal Harm Reduction and the National Harm Reduction Coalition. It

Both the [American College of Obstetricians and Gynecologists](#) and the [Association of Women's Health, Obstetric and Neonatal Nurses \(AWHONN\)](#) recommend universal screening for SUD at the first prenatal care visit, without repercussions such as punitive drug testing, reporting laws, or criminal prosecution.



utilizes a harm-reduction framework to empower people to have healthy pregnancies and supports stigma-reduction strategies that target health care workers and other professionals who may hold bias and contribute to feelings of shame and perceived stigma among pregnant women with SUD.

- [The American College of Obstetricians and Gynecologists](#). ACOG supports several policies to improve birth outcomes for mother and infant, including: Medicaid Expansion coverage for up to one year after delivery that includes SUD and mental health screening and treatment, outreach, and treatment and case management services; medically assisted treatment when appropriate; adequate postpartum psychosocial support services, including SUD treatment and relapse-prevention programs; safe opioid prescribing practices; and an increased focus on curbing alcohol and tobacco use during pregnancy.

State Maternal Health Innovations from the Health Resources & Services Administration (HRSA) Maternal and Child Health Bureau (MCHB) Grantees

The [State Maternal Health Innovations \(MHI\)](#) initiative, funded by [HRSA's MCHB](#), currently provides funding to 18 states to develop, implement, and evaluate state-level equity-centered innovations. Below we highlight innovations that address Action 1.10 from the MHI cohorts (2019–2024):

- *Illinois.* [Perinatal Substance Misuse Training](#) utilizes DocAssist, a free statewide consultation and training service for Healthcare and Family Services—enrolled primary care clinicians who care for and treat children, adolescents, and perinatal women. The DocAssist program developed Perinatal Substance Misuse Training to help clinicians understand why screening for substance use is part of comprehensive obstetric care, become familiar with available validated prescreening and screening tools, increase their capacity to care for and manage perinatal patients with substance use, and review state-mandated reporting of perinatal substance use. The trainings are available to the public and have also been approved for continuing medical education credit.
- *Oklahoma.* [Mothers and Newborns affected by Opioids \(OMNO\)](#) is an initiative that aims to enhance collaboration and provide structure and guidance to the work that hospitals and providers are doing to address the effects of opioids on mothers and newborns. As part of OMNO, the Oklahoma Department of Mental Health and Substance Abuse Services supports a partnership with [CHES Health eIntervention](#) services to make available to Oklahoma providers [eIntervention](#), a web-based referral management platform designed to increase the number of individuals who initiate treatment through successful referral. The Envoy smartphone app connects individuals and family members with SUD treatment and support resources and supports providers to coordinate care from referral to treatment. The program is open to all Oklahoma hospitals and providers. OMNO also developed an algorithm for integrating substance abuse screening in the maternity care context. This [fact sheet](#) describes the process, which utilizes the Screening, Brief Intervention and Referral to Treatment (SBIRT) framework.
- *Montana.* [EMPATHS](#) is a system-level treatment model in which universal screening for substance use in pregnancy is being implemented by the Montana Obstetrics & Maternal Support (MOMS) statewide maternal health innovation project. Patients screening positive for substance-use concerns are connected to behavioral health treatment services and peer and community supports to promote healthy outcomes for mothers and babies. In addition, [Psychiatric Referrals, Intervention, and Support for Moms \(PRISM\)](#), a partnership between Montana's Department of Public Health and Human Services and Frontier Psychiatry, provides a free, statewide psychiatric consultation line for any clinician caring for the mental health of patients who are pregnant or in the postpartum period. The line helps to increase providers' capacity to screen, assess, treat, and refer those experiencing maternal depression, anxiety, substance use, and related behavioral health disorders in rural and medically underserved areas in the state.



Resources from the [MCH Evidence Center's Digital Library](#)

The [MCH Digital Library](#) is a digital repository of evidence-based and -informed toolkits, briefs, white papers with seminal and historic resources. The following may support Action 1.10.

- Substance Abuse and Mental Health Services Administration. [Clinical Guidance for Treating Pregnant and Parenting Women with Opioid Use Disorder and Their Infants](#). 2018 January. HHS Publication No. (SMA) 18-504. Substance Abuse and Mental Health Services Administration. Accessed August 24, 2023.
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- U.S. Department of Health and Human Services, Health Resources & Services Administration. [Caring for Women with Opioid Use Disorder: A Toolkit for Organization Leaders and Providers](#). 2020. Rockville, Maryland. U.S. Department of Health and Human Services. Accessed August 24, 2023.
- Association of Maternal and Child Health Programs; National Association of State Alcohol and Drug Abuse Directors. [Issue brief: Screening, Brief Intervention and Referral to Treatment \(SBIRT\) for Pregnant and Postpartum Women: Opportunities for State MCH Programs](#). 2020. Washington, DC.

Strategy Development Criteria to Consider for State and Local Implementation

To select impactful strategies for local implementation, an organization may consider using the following criteria, based on the Results-Based Accountability framework outlined in the book *Trying Hard Is Not Good Enough* by Mark Friedman.

- **Specificity:** Ensure strategies are clearly defined, including responsible parties and timelines.
- **Leverage:** Evaluate how strategies can improve data quality and reliability.
- **Values:** Assess alignment with community and organizational values.
- **Reach:** Consider feasibility and affordability at the required scale.

Using these criteria can aid in developing feasible and impactful strategies. Visit maternalhealthlearning.org/Blueprint for more details.



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The MHLIC is available for consultation, coaching, and technical assistance to support your implementation of any innovations to improve maternal mortality and morbidity. For more information, visit <https://maternalhealthlearning.org/connect>.

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