GOAL 1
Action 1.4

WHITE HOUSE BLUEPRINT EVIDENCE TO ACTION BRIEFS

Strengthen risk-appropriate care in rural and urban areas

Maternal Health
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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 1.4 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 1.4

Strengthen risk-appropriate care in rural and urban areas by encouraging states to implement the CDC Levels of Care Assessment Tool (CDC LOCATe), a web-based, standardized assessment of birthing facilities that allows states to see the distribution of the levels of care (e.g., basic care, specialty care) at facilities throughout the state.

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.

The current structure of the reproductive health care system perpetuates health and safety issues that contribute to maternal mortality and severe maternal morbidity. Risk-appropriate care, or perinatal regionalization, is a systemic approach that ensures that pregnant people and infants at risk for complications receive care in a facility that has the capabilities—including personnel and services—to appropriately meet their needs.[1, pg.25]

Basic Facts

The maternal health crisis in the United States goes beyond a lack of access and resources—it is related to the structural inequities that exist in our systems of care, which calls for a systemic response.[2] Two out of three pregnancy-related deaths in the US have been found to be preventable.[1, pg.17, 3] As noted in the White House Blueprint, "each year thousands of individuals experience unexpected complications of pregnancy, including severe heart issues, the need for blood transfusions, eclampsia, and blood infections."[1, pg.17] The US has the highest rate of maternal death among all high-income countries, and it is increasing: This country's maternal mortality rate was 32.9 deaths per 100,000 live births in 2021, compared with 23.8 deaths per 100,000 live births in 2020, with the highest rates seen among women of color (see Figure 1).[4]

While specific modifications in the clinical management of complications are being implemented, systems can be improved to respond to high-risk pregnancies. A classification system known as the Levels of Maternal Care was established in 2015 (updated in 2019 and reaffirmed in 2021) to encourage development of systems that support the provision of risk-appropriate care specific to maternal health needs.[5] The four levels of care are:

- Basic care (Level I)
- Specialty care (Level II)
- Subspeciality care (Level III)
- Regional perinatal health care centers (Level IV)

In an established system of risk-appropriate care, state and regional authorities collaborate to determine an appropriate coordinated system of care and implement policies that support a regionalized approach.[5] The goal is to enhance the ability of birthing people to give birth safely in their communities while providing a system that responds to circumstances when high-level resources are required and allows for antenatal referral or maternal transport.

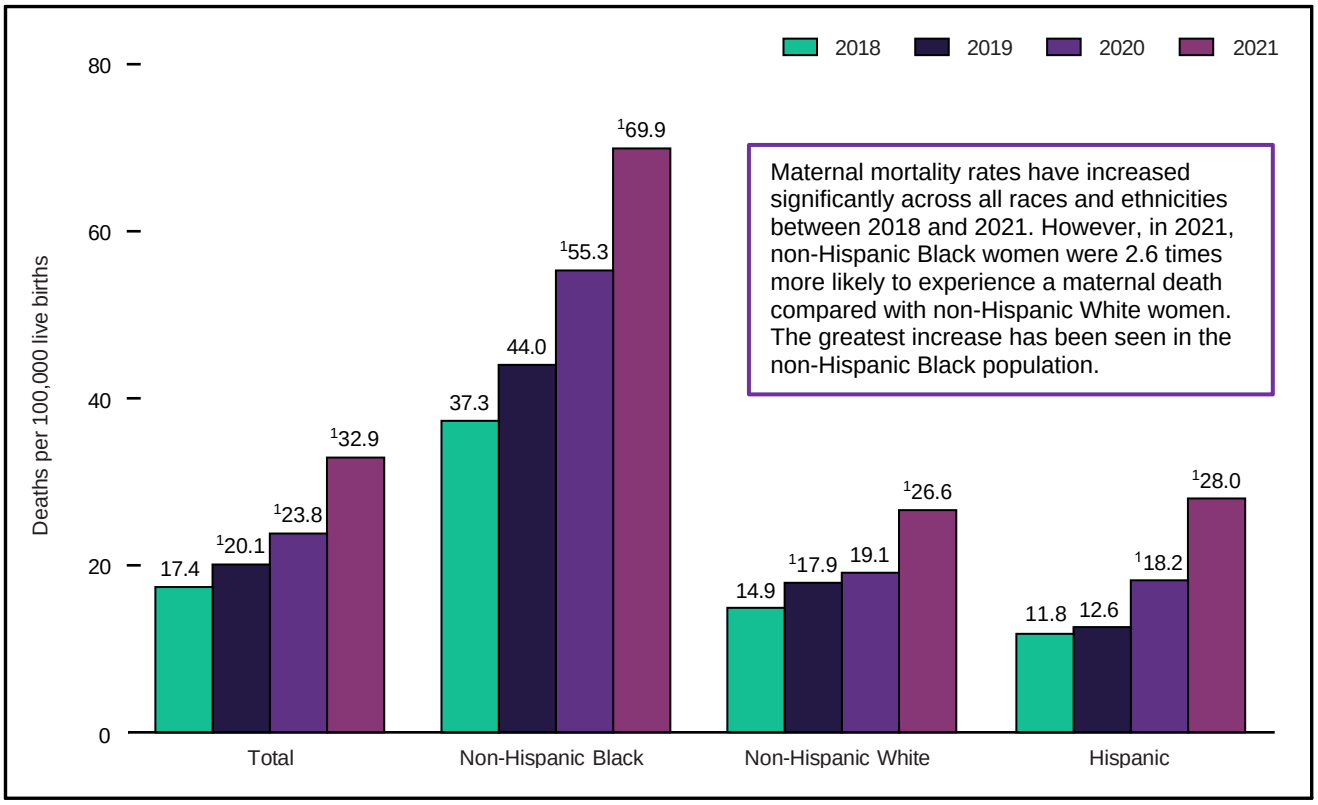
The Department of Health and Human Services developed the CDC Levels of Care Assessment Tool (LOCATe) in 2013 to respond to a need identified by states and national partners for a simple way to assess maternal and neonatal care capabilities at facilities. Providing a standardized way to assess a state's birthing facilities, the web-based tool identifies the levels of care along with the distribution of staff at facilities throughout the state.[1, pg.25] LOCATe is based on the most recent guidelines from the American Academy of Pediatrics, the American College of Obstetricians and Gynecologists, and the Society for Maternal-Fetal Medicine.

To increase the uptake of levels of maternal care, the White House Blueprint identified LOCATe as an evidence-based tool states can implement.[1, pg.25] The White House Blueprint also highlights technical assistance, including capacity building, in the areas of data analysis and quality improvement, from the Association of State and Territorial Health Officials and the CDC to support four states (Texas, Florida, Georgia, and Indiana) to implement the LOCATe tool.[1, pg.25]

How are we doing?

Below we highlight data related to Action 1.4. Racial, ethnic, geographic, and socioeconomic disparities emphasize where efforts should be focused to improve health outcomes related to Action 1.4.

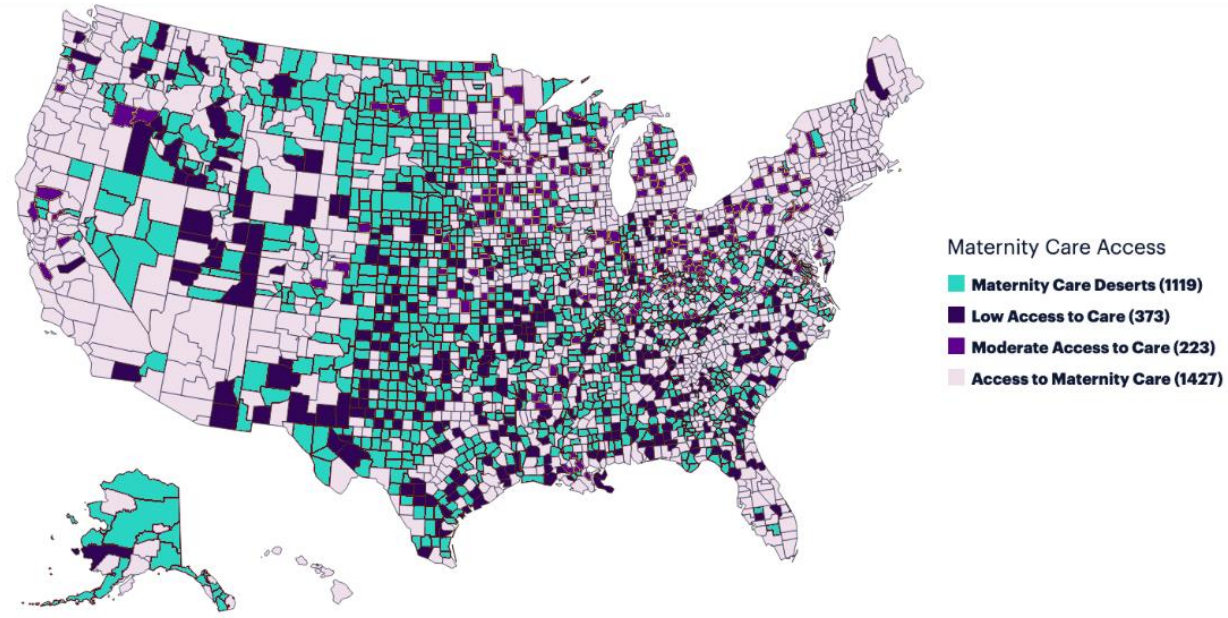
Figure 1: US Maternal Mortality Data by Race and Ethnicity, 2018–2021



[1]Statistically significant increase from previous year ($p < 0.05$).

Note: Race groups are single race.
Source: National Center for Health Statistics, National Vital Statistics System, Mortality

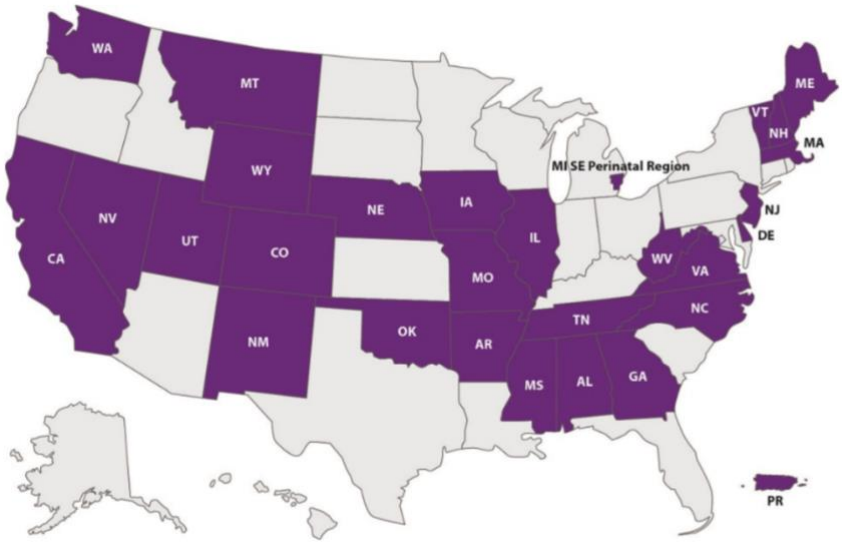
Figure 2: Maternity Care Deserts in the United States, by County, 2020



More than 2.2 million women of childbearing age in the US live in a maternity care desert and more than 36% of all counties in the US are designated maternity care deserts. Between 2020 and 2022, the number of counties declared maternity deserts increased by 5%.

Source: US Health Resources & Services Administration, Area Health Resources Files, 2021

Figure 3: States Implementing the CDC LOCATe Tool, April 2023



As of April 2023, 27 states have successfully implemented the CDC LOCATe tool. States can find success stories and implementation strategies at the CDC's website.

Source: States Actively Implementing the CDC LOCATe Tool

Story Behind the Data: Factors Affecting Progress

Implementing Levels of Maternal Care programs is imperative when access to emergency obstetric care is limited. In the last decade, more than 55% of rural US counties have lost hospital-based obstetric services (see Figure 2), yet those living in rural areas are at greater risk of maternal mortality and severe maternal morbidity compared with those living in urban areas.[6] These risks are exacerbated for people of color and for Medicaid beneficiaries living in rural areas.[6]

Contributing to the problem is the lack of widespread implementation of Levels of Maternal Care programs at the state level. Although research has demonstrated "an increased risk of neonatal mortality for very low birth weight infants when they are born outside of a neonatal intensive care unit level III hospital" and that there are better delivery outcomes for pregnant people with complex medical issues in "higher acuity"[5] hospitals, only 27 states are utilizing LOCATe (see Figure 3).[7]

Health care providers' implicit bias may prevent them from responding immediately to Black patients' concerns, leading to a delay in medical attention when maternal warning signs indicate a potential life-threatening complication.[8] Furthermore, health care systems have not adequately addressed unconscious racial bias in maternal health care. Think Cultural Health offers Culturally and Linguistically Appropriate Services in maternal health care through an "e-learning course designed for providers and students to increase their cultural competency, cultural humility, and person-centered care and combat implicit bias across the continuum of maternal health care."[9] However, "many health care providers struggle to acknowledge the impact of personal implicit bias on how they care for their patients."[10] A study conducted by the Society for Maternal Fetal Medicine identified that although health care providers show "willingness to acknowledge that disparities affect their practice" (84%), only 29% believed that personal biases influenced their ability to care for patients."[10]

What can be done to address the issue?

The White House Blueprint identifies actionable steps to address perinatal regionalization, Action 1.4. Additionally, there are a number of innovative, evidence-informed strategies that could be implemented at the local, state, and/or national level described below. For more information on innovations that help ensure that those who are giving birth are heard, see Evidence to Action Briefs related to Goal 1 of the White House Blueprint.

> "The CDC LOCATe tool provides states and hospital systems with a structure for a standardized approach to perinatal regionalization. The survey can stimulate the even more critical genuine collaboration and system planning to ensure that all birthing people and their infants receive care in facilities and provider teams best suited to their needs."
>
> –Dr. Kate Menard, Distinguished Professor of Maternal-Fetal Medicine at UNC Chapel Hill, advocates for a systemic approach to maternal care

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 & 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 & Innovation Center, a national resource for improving maternal health inequities; and a search of leading organizations and agencies working in this field.

- CDC Levels of Care Assessment Tool (LOCATe). States can use this web-based tool to develop coordinated regional systems of care to help ensure pregnant people give birth at the most appropriate facility for their medical needs. For information on how public health

departments implement and use LOCATe in their jurisdictions, read the CDC's journal article here.

- Levels of Maternal Care Obstetric Care Consensus. This consensus statement provides a classification system that defines the required minimal capabilities, physical facilities, and medical and support personnel for Levels of Maternal Care. The purpose of this article was to "reaffirm the need for levels of maternal care, as initially presented in the 2015 Obstetric Care Consensus."
- Make Perinatal Regionalization Work for Your State. The National Institute for Children's Health Quality provides information on how to implement regionalization in your state and the necessary approaches to improve maternal and infant health outcomes.
- Risk-Appropriate Perinatal Care. National Performance Measure (NPM 3) identifies the CDC's LOCATe tool as an emerging practice to assess maternal and neonatal care capabilities of hospitals and centers (MCHbest).
- State Implementation. This report by the American College of Obstetrics and Gynecology reviews the status of levels of maternal care implementation by state and shares the following information: a state's guidelines, legislation that establishes level of care designation, state regulations that specify levels of care criteria, the entity that sets criteria for level designation, method of designation and frequency, and whether LOCATe has been assessed.
- The Perinatal/Neonatal Outreach Coordinator Project. The University of North Carolina's Collaborative for Maternal and Infant Health assists birthing facilities with completion of the CDC LOCATe tool.

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 1.4 from the MHI cohorts (2019–2024):

- *Montana.* The Montana Obstetrics Maternal Support (MOMS) program implemented the CDC LOCATe assessment and established Montana's Maternal Mortality Review Committee as part of a broad effort to identify areas for improvement in maternal health outcomes. MOMS completed implementation of the LOCATe assessment in 2021 with 96% of birthing facilities in the state. To address the gap among facilities that did not participate in LOCATe, MOMS launched an emergency obstetric services assessment to determine the preparedness in hospitals without an obstetric unit. Paired with CDC LOCATe data, this assessment will help to advance statewide perinatal regionalization efforts.
- *North Carolina.* The NC Division of Public Health brought together more than 100 stakeholders from across the state to form the Perinatal Health Equity Collective. The Collective is working to advance the NC Perinatal Health Strategic Plan (2022–2026), a statewide guide focused on health equity in maternal health. The Collective established Maternal Health Levels of Care and Neonatal Levels of Care action teams comprising experts who collaborate to identify evidence-based solutions.
- New Jersey, North Carolina, Iowa, Georgia, and Colorado's MHI programs have implemented the CDC LOCATe tool. Success stories can be found here.

Evidence-based Strategy Measures from the MCH Evidence Center Related to Action 1.4

Throughout the country, state level Title V MCH agencies develop measures to help track their efforts around improving the health and well-being of women, children, and families. Below are selected measures related to improving equitable maternal and child outcomes that can support Action 1.4.

CALL TO ACTION

Risk-appropriate care, or perinatal regionalization, can ensure that pregnant and birthing people are routed to the most appropriate level hospital for their current condition(s) and that care responds to all types of high-risk medical needs. When appropriate care is available and utilized, severe maternal morbidity and mortality may be reduced. To make the most headway in addressing the maternal health crisis, efforts to implement this action should happen in conjunction with efforts to address unconscious racial bias in health care.

- Number of steps of the LOCATe process completed in order to design and align the Alabama Perinatal Regionalization System Guidelines with national criteria for the Maternal Levels of Care (AL).
- Pilot of the CDC LOCATe model in one of South Carolina's Level III hospitals (SC).
- Percentage of birth facilities with level of care documented using the CDC LOCATe tool (NC).
- Percentage of birthing hospitals that complete the CDC LOCATe tool annually (AR and Marshall Islands).
- Several states have published guidelines that define hospital levels of maternal care by specifying minimum capabilities and personnel for every level (Arizona, Arkansas, Georgia, Illinois, Indiana, Iowa, Louisiana, Maryland, Massachusetts, Mississippi, New York, Ohio, South Carolina, Tennessee, Texas, Washington). Find more information here.

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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