WHITE HOUSE BLUEPRINT FOR ADDRESSING THE MATERNAL HEALTH CRISIS

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In the United States of America, in the 21st century, being pregnant and giving birth should not carry such great risk. And yet, before, during, and after childbirth, women in our country are dying at a higher rate from pregnancy-related causes than in any other developed nation. This means that far too many women experience pain, neglect, and loss during what should be one of the most joyous times of their lives.

For certain women, the risk is much higher. Regardless of income or education level, Black women are three times as likely to die from pregnancy-related complications. Native American women are more than twice as likely to die. And women who live in rural America—where there are many maternal care deserts—are about 60 percent more likely to die. These outcomes are largely due to systemic inequities, which create significant disparities in how women experience the healthcare system that can often be a matter of life and death.

I have spent my entire career fighting for the health, safety, and wellbeing of women. For years, I have worked to make sure our country treats maternal mortality as the national crisis it is, and I am proud to lead our Administration's efforts to address this issue.

Our Administration has come together to bring the whole of government to bear on this crisis through a sustained, multi-year, multi-agency effort to combat maternal mortality and morbidity, and reduce racial disparities nationwide.

The White House Blueprint for Addressing the Maternal Health Crisis contains 50 actions that over a dozen agencies will undertake to help improve maternal care. My hope is that the steps outlined in this Blueprint will move us closer to a future where every woman and every mother has the care she needs to thrive.

Executive Summary

The United States is facing a maternal health crisis. Our country's maternal mortality rate is the highest of any developed nation in the world and more than double the rate of peer countries, and most pregnancy-related deaths are considered preventable. Beyond maternal mortality, severe maternal morbidity[i] impacts far too many families. Each year, thousands of women experience unexpected outcomes of labor and delivery that result in significant short- or long-term consequences to their health such as heart issues, the need for blood transfusions, eclampsia, and blood infections. Systemic barriers, together with a failure to recognize, respect and listen to patients of color, has meant that Black and American Indian/Alaska Native (AI/AN) women, regardless of income or education, experience a greater share of these grave outcomes, as do rural women.

The challenge in front of us extends beyond healthy pregnancy and outcomes. For far too many mothers and families, pregnancy and childbirth are traumatic experiences, lacking in dignity and respect, and too often resulting in complications, mistreatment, and high medical bills. For too long, we have allowed preventable deaths, life-altering complications, and untreated mental health and substance use disorders to persist. And the continued attacks on women's fundamental rights, including restrictions on abortion and family planning, are undermining the ability for women to be safe and healthy.

This crisis is longstanding, but has been exacerbated by the COVID-19 pandemic and recent trends in hospital obstetric unit closures in rural areas. Mothers and families across our country need an urgent response. **The Biden-Harris Administration is committed to cutting the rates of maternal mortality and morbidity, reducing the disparities in maternal health outcomes, and improving the overall experience of pregnancy, birth, and postpartum for people across the country.**

Our vision for the future is that the United States will be considered the best country in the world to have a baby. This will require bold, unprecedented action through a whole-of-government strategy, including coordinated efforts from multiple federal agencies.

Essential to this effort is for Congress to act and close the Medicaid coverage gap to help the nearly 4 million Americans living in Medicaid non-expansion states gain access to affordable and comprehensive Medicaid coverage. Congress should also require all states to provide continuous Medicaid coverage for 12 months postpartum (currently, states are only required to provide pregnancy-related Medicaid coverage for 60 days postpartum) and make significant investments in other efforts that reduce maternal morbidity and mortality, including the $470 million in the Fiscal Year (FY) 2023 President's Budget. This funding will expand maternal health initiatives in rural communities; implement implicit bias training for health care providers; create pregnancy medical home demonstration projects; address the highest rates of perinatal health disparities, including by supporting the perinatal health workforce; strengthen data collection and evaluation; and address behavioral health disorders. It also includes extending and

[i] Severe maternal morbidity includes unexpected outcomes of labor and delivery that result in significant short- or long-term consequences to a woman's health.

increasing funding for the Maternal, Infant, and Early Childhood Home Visiting Program, which serves families at risk for poor maternal and child health outcomes each year.

This Blueprint lays out specific actions that the federal government will take to improve maternal health. They are underpinned by a continual focus on advancing equity. They also build on the breadth of ongoing federal work focused on maternal health and existing Administration priorities, including the National Strategy on Gender Equity and Equality, the Executive Order on Transforming Federal Customer Experience and Service Delivery to Rebuild Trust in Government, the Administration's strategy to address the nation's mental health crisis, and the National Drug Control Strategy. It outlines five priorities to address our maternal health crisis. They are:

Goal 1: Increase Access to and Coverage of Comprehensive High-Quality Maternal Health Services, Including Behavioral Health Services

Everyone deserves the peace of mind health insurance brings, including those starting or expanding their families. Working to ensure that every person has access to comprehensive health care coverage and high-quality health care services, regardless of where they live or how much they earn, is critical to ending the maternal health crisis. It is not only critical in pregnancy and childbirth, but for people at every phase of life. Gaps in insurance coverage before and after pregnancy are common. Even when insurance coverage is consistent, pregnant and postpartum people struggle to access care based on where they live. Maternity care deserts[ii] are prevalent and prevent individuals from accessing timely prenatal, delivery, and postpartum care, including behavioral health care.

We will work to eliminate coverage gaps by encouraging states to extend Medicaid coverage from 60 days to a full 12 months postpartum and ensuring that the federal government serves as a model employer for maternal health coverage. To increase access to care, we will improve the obstetric readiness of hospitals without obstetric units so they have the adequate capabilities to safely perform deliveries, if needed. We will work to ensure women return to primary care after the end of their pregnancies, a critical step to ensuring patients remain healthy after pregnancy. We will continue to invest in maternal behavioral health by launching a 24/7 national support hotline for pregnant individuals and new mothers facing mental health challenges and improving provider education. We will also strengthen access to perinatal addiction services by partnering with hospitals and community-based organizations to implement evidence-based practices. Congress must also take critical steps to bolster access to and coverage of maternal health services.

Goal 2: Ensure Those Giving Birth are Heard and are Decisionmakers in Accountable Systems of Care

Improving quality of care and creating a system where pregnant and postpartum women and their families are heard and respected are critical. The federal government has supported states to become active in quality improvement initiatives through efforts like Perinatal Quality Collaboratives (PQCs), networks of providers working together to implement best clinical practices in hospitals. The Alliance for Innovation on Maternal Health (AIM) program is also federally funded and offers evidence-based best practices related to treatment and training for

[ii] These are counties in which access to maternity health care services is limited or absent.

hospitals. But full-scale adoption of these practices has not happened for several reasons: not all states have been funded to support this key infrastructure, and hospitals are not required to adopt these best practices, may struggle to procure the resources needed to implement them, and/or are not externally incentivized to do so. We will explore opportunities to advance equitable, high-quality maternity care provided by hospitals in several ways, including by engaging with the public to explore revising the Conditions of Participation for hospitals to receive federal funding. We also proposed a "Birthing-Friendly" designation for hospitals participating in perinatal quality improvement programs and implementing evidence-based practices to improve maternal heath so that families know which hospitals are taking steps to provide high-quality care and so that hospitals are more accountable for the quality of care they provide. Congress must act as well. For example, the FY 2023 President's Budget would support a PQC in every state.

In addition, we will focus on ensuring that all women are listened to, respected, and provided the needed information and explanation during their pregnancy, delivery, and postpartum, and feel empowered to be decisionmakers in their own care. Bias and other structural inequities often result in women and people of color—particularly Black women—being treated differently than White women during pregnancy and childbirth. Women report having their pain ignored, requests for help denied, and decisions on medical interventions—like labor induction, for example—being made for them. With funds from the FY 2023 President's Budget, we will help train providers on implicit biases as well as culturally and linguistically appropriate care, bolster the voice of communities of color when analyzing factors contributing to pregnancy-related deaths, educate and empower more women and families to know the early warning signs of pregnancy-related complications and behavioral health disorders, and make insurance coverage and costs of maternity care transparent and easy to understand.

Goal 3: Advance Data Collection, Standardization, Harmonization, Transparency, and Research

Data and research are foundational to achieving every goal in this Blueprint. Yet, data collection on maternal health risks, services, outcomes in the United States continues to be fragmented, unstandardized, nontransparent, and irregular. As a result, health care systems, communities, and government entities do not have a fully informed grasp of the problem and what solutions should be deployed. Incomplete and inconsistent data collection also means maternal morbidity and mortality rates are not effectively quantified, which can slow or halt action to address known disparities in maternal outcomes. Data often lags, and data systems (e.g., hospital discharges and claims data, birth and death certificates, public programs that offer food and housing assistance) often operate in siloes. In addition, pregnant and lactating women are often excluded from clinical research because of concerns about possible harm to them and their babies, leaving providers with insufficient information to inform clinical decisions. Maternal Mortality Review Committees (MMRCs)–multi-disciplinary committees that convene at the state or local level to review deaths of women during or within a year of pregnancy—play a key role in understanding the causes and solutions to maternal mortality, but much more work is needed and broader community-based perspectives must be sought.

To strengthen analyses of maternal health data, we will make additional data on population- and community-level indicators—such as the number of available behavioral health providers, the violent crime rate, and prevalence of food insecurity in an area, as examples—available to all MMRCs. With funds from the FY 2023 budget, we would support systems, such as the Pregnancy Risk Assessment Monitoring System (PRAMS), to test and implement alternate

approaches to data collection in order to increase response rates, particularly among underrepresented communities. We will work with insurance carriers that provide coverage to the 8.2 million people covered by the Federal Employees Health Benefits (FEHB) program to progressively improve their collection of race and ethnicity data, allowing us to target interventions that improve maternal health to disproportionately impacted populations. We will work to match housing data with health data to understand how to better assist pregnant women in public housing. We will also leverage anonymized data from sources assessing the impacts of chemical and non-chemical stressors on women's reproductive health so that we can better educate the public and providers about how pollution, natural disasters, and other stressors can contribute to poor outcomes. We will bolster our research efforts by building the next generation of maternal health researchers, enhancing HHS research on rural maternal health, and identifying remaining research gaps that need to be filled.

Goal 4: Expand and Diversify the Perinatal Workforce

Our maternal health workforce is under-resourced and not representative of our country's diversity. The United States currently experiences a shortfall of thousands of obstetricians, licensed midwives, family physicians, and other women's health providers–a gap that is expected to grow in the coming decades. Due to low reimbursement rates and lack of coverage from insurers, there is also a short supply of non-clinical professionals like doulas that provide support to women and their families during pregnancy and are associated with lower rates of pregnancy complications. Compounding these workforce concerns is the exceptional lack of diversity in these professions and limited pathways for historically underrepresented communities to enter these roles. Given the known benefits of culturally appropriate care, recruiting and training providers from diverse communities is paramount.

To address the gaps in our perinatal workforce, we will increase the number of physicians, licensed midwives, doulas, and community health workers in underserved communities; provide guidance to states to help them expand access to licensed midwives, doulas, and freestanding birth centers; and encourage insurance companies to improve reimbursement for and coverage of midwives and perinatal supports, such as doulas and nurse home visits. Congress must also act. With funding from the President's FY 2023 Budget, we will grow and diversify the perinatal workforce, including the doula workforce.

Goal 5: Strengthen Economic and Social Supports for People Before, During, and After Pregnancy

For mothers and families across our country, health does not exist in a vacuum, and the health care system alone cannot fully address our maternal health crisis. Maternal health outcomes are markedly worse when pregnant and postpartum women are housing insecure, hungry, live in areas with toxic environmental chemicals, face financial instability, lack workplace protections and benefits, and/or are repeatedly exposed to crime and violence, including sexual assault, domestic violence and other forms of gender-based violence. Addressing our maternal health crisis depends on strengthening economic and social supports for women and families. We will focus on improving these social determinants of health by making it easier to enroll in federal programs that provide food, housing, childcare, and income assistance. We will increase screening among pregnant women for social risk factors like homelessness and food insecurity. We will increase awareness of workplace benefits and protections so women know what leave they can take after having a baby, what reasonable break time requirements are in place for them

to pump breast milk, and what anti-discrimination laws exist. We will also update our policies to remove unnecessary pregnancy work and training limitations for service members, eliminating barriers to well-being, retention, and career advancement for those who are pregnant.

Conclusion

We imagine a future where every person in this country can have a safe, dignified pregnancy and birth and where equitable access to health care before, during and after pregnancy is assured. Our vision includes acknowledging that this work is only possible if we address the systemic racism that is entrenched not only in our health care system—but also, as stated in our Executive Order on Advancing Racial Equity and Support for Underserved Communities through the Federal Government, in our laws and public policies, and in our public and private institutions. To achieve our vision, every segment of our government and society must do its part. Many state, tribal, and local governments, non-profit organizations, hospitals, health insurance companies, and others have pioneered new interventions and models of care, providing leadership for the nation. Others can do much more to improve maternal health and Congress must play a role as well. We remain focused not only on understanding the circumstances contributing to every pregnancy that ends in mortality or morbidity and how to prevent such outcomes, but also on every other pregnancy that leaves individuals and families with trauma or otherwise leaves diminished trust in our health care system. With the actions we take to improve maternal health, we advance our vision for the future, and we call on every segment of society to join us in this work.

Maternal Health Actions At-A-Glance

Goal 1: Increase Access to and Coverage of Comprehensive High-Quality Maternal Health Services, Including Behavioral Health Services

To reduce coverage gaps, improve access to high-quality care, and address geographical barriers to access, we will:

1.1. Work to ensure pregnant and postpartum women have comprehensive, continuous health insurance coverage during pregnancy, and for no less than 12 months following the end of pregnancy, by encouraging states to leverage the American Rescue Plan Act of 2021 state plan option to provide 12 months postpartum Medicaid and Children's Health Insurance Program (CHIP) coverage. We also urge Congress to make 12 months of postpartum coverage mandatory for all state Medicaid and CHIP programs and to close the Medicaid coverage gap.

1.2. Ensure the federal government serves as a model employer for maternal health care coverage by strengthening coverage, benefits, and services around maternal care across Office of Personnel Management (OPM) via the Federal Employees Health Benefits (FEHB) Program, Department of Health and Human Services (HHS) (including the Indian Health Service), Department of Veterans Affairs (VA), and Department of Defense (DoD).

1.3. Improve rural obstetric readiness at hospitals and Indian Health Service (IHS) facilities by developing guidelines and standards so facilities without obstetric units are still "obstetric ready," expanding the Rural Maternity and Obstetrics Management Strategies (RMOMS) Program to enhance access to maternal and obstetric care in rural communities, and providing free readily accessible online obstetrical trainings to HRSA-funded health centers and free clinics to support the delivery of competent preconception, prenatal, intrapartum, and postpartum care.

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.

1.5. Expand access to family planning services, including prepregnancy health and contraception, by supporting Title X Family Planning Program providers, issuing guidance from the Military Health System requiring walk-in contraceptive clinics at all military medical treatment facilities, and ensuring all enrolled veterans of childbearing age receiving care at VA are assessed for pregnancy intention during a primary care visit.

1.6. Reduce uncontrolled hypertension through an Indian Health Service pilot program to expand utilization of self-monitored blood pressure management equipment and through targeted interventions by VA to manage enrolled veterans of childbearing age with hypertension and other known risk factors for developing preeclampsia. Improve quality of care provided to pregnant and postpartum women with or at risk for hypertensive disorders of pregnancy by disseminating self-measured blood pressure

monitoring tools and resources for obstetrical providers, primary care professionals, and the pregnant and postpartum women they serve.

1.7. Improve quality of care provided to pregnant and postpartum women with or at risk for hypertensive disorders of pregnancy by disseminating self-measured blood pressure monitoring tools and resources for obstetrical providers, primary care professionals, and the pregnant and postpartum women they serve.

1.8. Facilitate continuity of care for service members and veterans by identifying avenues to ensure pregnant service members are aware of their prenatal care options upon leaving active service.

1.9. Ensure veterans receiving pregnancy care at VA return to primary care after the end of their pregnancy by scheduling a "return to primary care visit" and requiring maternity care coordination and support to continue for one full year postpartum.

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

1.11. Keep incarcerated mothers and their infants together by developing resources for state, tribal, and local correctional facilities to create residential programs for pregnant and postpartum inmates, based on Bureau of Prisons programs.

1.12. Establish a national, confidential, 24-hour, toll-free hotline for pregnant and postpartum individuals facing mental health challenges to increase access to mental health care.

1.13. Appoint a dedicated Associate Administrator for Women's Services in HHS's Substance Abuse and Mental Health Services Administration (SAMHSA) to lead its efforts on promoting positive mental health during pregnancy and in the postpartum period.

1.14. Expand capacity to screen, assess, treat, and refer for maternal depression and related behavioral disorders by providing real-time psychiatric consultation, care coordination support, and training to frontline health care providers.

1.15. Integrate behavioral health supports in community settings by training navigators and community health workers to identify behavioral health needs and link families to local resources, such as medical homes, school based and other community health centers, community-based organizations, and local community social supports.

Goal 2: Ensure Those Giving Birth are Heard and are Decisionmakers in Accountable Systems of Care

To improve quality of care, hold providers accountable, and prioritize patient needs and their experience before, during, and after pregnancy, we will:

2.1. Explore opportunities to advance equitable, high-quality maternity care provided by hospitals, including engaging with the public on possible revisions to the Conditions of Participation for hospitals receiving funding from the Medicare and Medicaid programs, as well as proposing a new "Birthing-Friendly" hospital designation to publicly report those facilities with a demonstrated commitment to maternal health

through participation in perinatal quality improvement programs and implementation of evidence-based practices.

2.2. Bolster the voice of communities of color when analyzing factors contributing to pregnancy-related deaths by developing a roadmap to increase community participation in state maternal mortality review committees MMRCs and incorporating community participation in future funding opportunities when allowable.

2.3. Empower AI/AN pregnant and postpartum women and educate providers by expanding the Hear Her™ campaign to include culturally relevant materials to raise awareness of urgent maternal warning signs and improve communication between patients and providers.

2.4. Make insurance coverage and costs of care transparent and easy to understand by financially protecting consumers from surprise medical bills and providing uninsured and self-pay patients with cost estimates before scheduled care.

2.5. Empower women with their own data, enabling more women to get automated access to their electronic prenatal, birth, and postpartum health records.

2.6. Train providers on implicit biases, culturally and linguistically appropriate care and behavioral health needs of pregnant and postpartum women, including screening and referral for abuse and maltreatment.

2.7. Address systemic discrimination in health care by providing guidance on the prohibition of discrimination on the basis of race, color, national origin, age, disability, or sex (including pregnancy, sexual orientation, and gender identity), in various health programs and activities.

2.8. Encourage the removal of structural barriers that prevent women with disabilities from receiving adequate reproductive care by supporting providers' adoption of the U.S. Access Board's standards for accessible medical diagnostic equipment (MDE), such as exam tables, mammography equipment, and weight scales.

2.9. Embed equity into Quality Family Planning Guidelines to provide guidance to help clients prevent or achieve pregnancy, basic infertility services, preconception health services, pregnancy testing and counseling, contraceptive services, and sexually transmitted disease services.

2.10. Support care coordination by implementing Pregnancy Medical Home demonstration sites that emphasize quality and care coordination through a team-based approach to care with the goal of reducing adverse maternal health outcomes and maternal death.

2.11. Support state innovation efforts by establishing state-focused Maternal Health Task Forces and improving state-level data surveillance on maternal mortality and severe maternal morbidity.

2.12. Reduce the stigma of postpartum depression and other behavioral health conditions through a media campaign to raise awareness about postpartum depression.

2.13. Support breastfeeding (for those who wish to breastfeed) through the Reducing Disparities in Breastfeeding Innovation Challenge, which will identify effective programs that increase breastfeeding initiation and continuation rates, decrease

disparities among breastfeeding individuals, and demonstrate sustainability and the ability to replicate and/or expand the program.

2.14. Work with Congress to ensure the President's budget proposal on maternal health is fulfilled, so that states, cities, and counties can improve quality of care and prevent unnecessary deaths by enrolling every state in the Alliance for Innovation on Maternal Health program and facilitating Perinatal Quality Collaboratives operating at full capacity in every state.

Goal 3: Advance Data Collection, Standardization, Harmonization, Transparency, and Research

To bridge gaps in data collection, invest in maternal health research and pregnant people participating in clinical trials, and commit to collecting and using race, ethnicity, and other demographic data to identify and prevent adverse outcomes, we will:

3.1. Improve data collection by enhancing MMRC data to inform maternal health interventions, supporting PRAMS data collection improvements, working with hospitals in the Maternal Morbidity and Mortality Data and Analysis Initiative to identify drivers of poor outcomes, coordinating with Health Center Program participants to report deidentified data that will help address disparities, working with FEHB carriers to capture race and ethnicity data, requiring reporting of perinatal, behavioral health, and child health measures under Medicaid/CHIP, and including maternity metrics in the public Medicaid and CHIP Scorecard.

3.2. Bolster research and build the next generation of maternal health researchers by funding opportunities for research under the Implementing a Maternal Health and PRegnancy Outcomes Vision for Everyone (IMPROVE) initiative, identifying research gaps to inform future research to improve health outcomes, and enhancing HHS research on rural maternal health.

3.3. Better understand conditions that impact pregnancy through a systematic review on risk factors for poor pregnancy outcomes, funding demonstration sites that seek to address endometriosis and other issues that increase the risk of pregnancy complications, a systemic review studying Women, Infants, and Children (WIC) participation and maternal outcomes, linking housing and health data to understand contributors to maternal mortality, and advancing research on environmental stressors and pregnancy.

Goal 4: Expand and Diversify the Perinatal Workforce

To address the obstetric provider shortage, incorporate critical practitioners (such as licensed midwives) and community-based workers (such as doulas) into the maternal care system, and bolster and diversify the provider workforce, we will:

4.1. Train more family medicine and obstetric providers in underserved settings through the Primary Care Training and Enhancement—Community Prevention and Maternal Health Program.

4.2. Expand and diversify the number of nurses and certified midwives in underserved areas by using a set-aside for the Nurse Corps to support maternal and women's health registered nurses, Advanced Practice Nurses, and Certified Nurse Midwives.

4.3. Increase the number of community health workers and health support workers in underserved areas via the Community Health Worker Training Program.

4.4. Expand access to doulas, licensed midwives, and freestanding birth centers by releasing guidance for states regarding coverage options in Medicaid. Further expand access in other programs by launching a doula services and training program for incarcerated women, and encouraging FEHB carriers to improve reimbursement rates and expand coverage for certified nurse midwives, freestanding birth centers, and perinatal support services, including lactation consultants and doulas.

4.5. Evaluate the impact of doulas and lactation supports on service members and their families through a demonstration project providing beneficiaries with doula and lactation services not typically covered under TRICARE.

4.6. Identify Maternity Care Health Professional Target Areas, areas within primary care Health Professional Shortage Areas with the highest need for maternity care health professionals and target National Health Service Corps placements for obstetricians and certified nurse midwives there.

Goal 5: Strengthen Economic and Social Supports for People Before, During, and After Pregnancy

To tackle the non-medical structural forces driving inequity in maternal health, including housing insecurity, food insecurity, environmental stressors, and economic insecurity, we will:

5.1. Streamline enrollment in benefit programs for housing, child care, financial assistance, and food by building better linkages between these programs so that pregnant and postpartum women can more easily obtain services that address their needs outside the doctor's office.

5.2. Address social determinants of maternal health, supporting projects to expand maternal mental health access, increase access to digital tools, and expand models that train maternal health care providers and students on how to address implicit bias and racism and screen for social determinants of health.

5.3. Increase awareness of workplace benefits and protections for pregnant and postpartum women, like access to a private lactation room and break time to pump, through a comprehensive outreach campaign to make both workers and employers aware of these protections.

5.4. Prevent and address violence against pregnant and postpartum individuals with a state-level pilot program incentivizing providers to receive training on pregnancy and postpartum intimate partner violence.

5.5. Standardize leave recommendations for pregnancy loss and neonatal health complications for the Military Health System.

5.6. Screen veterans of childbearing age for homelessness, food insecurity, intimate partner violence, depression and other factors during primary care visits.

5.7. Identify and address potential adverse effects on maternal health from climate change.

5.8. Educate providers on the impact of environmental exposures on maternal health.

5.9. Replace lead service lines as they can cause serious health effects to a developing fetus and infants, increases the likelihood of learning and behavioral problems, and increase a mother's risk for miscarriage.

5.10. Communicate wildfire risks by relaunching EPA's wildfires web page to make it easier for the public to find user-friendly information on taking action before, during and after wildfires to reduce smoke exposure. EPA is also working to make more information on wildfire health risks available in Spanish and will continue to coordinate closely with the CDC on these public health messages.

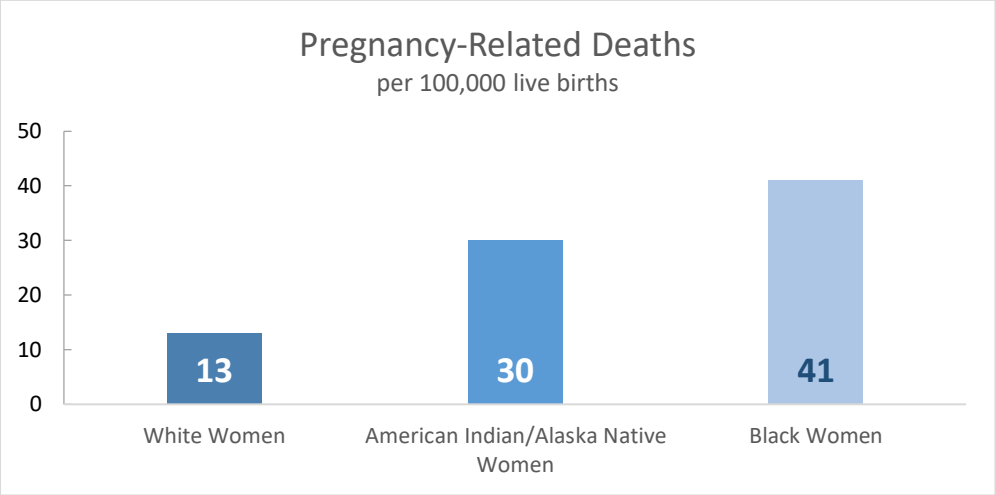
5.11. Eliminate barriers to well-being, retention, and career advancement for female service members by updating policies to remove unnecessary universal pregnancy work and training limitations that may adversely impact a service member's career.

5.12. Hold a White House Conference on Hunger, Nutrition, and Health to end hunger, improve nutrition and physical activity, reduce diet-related disease, and close the disparities around them.

Introduction

The United States is facing a maternal health crisis. Our country's maternal mortality rate is the highest of any developed nation in the world and more than double the rate of peer countries, like the United Kingdom, Australia, Spain, and Germany.[1] The majority of pregnancy-related deaths are considered preventable.[2, 3] Each year thousands of individuals[iii] experience unexpected complications of pregnancy, including severe heart issues, the need for blood transfusions, eclampsia (where high blood pressure results in seizures), and blood infections.[4, 5] These instances of severe maternal morbidity can have short and long-term consequences for those giving birth, which may impact future pregnancies and health outcomes for women, their children, and their families.[6] Importantly, pregnancy complications extend beyond just physical health. One in seven people experience behavioral health disorders during the prenatal and postpartum period with significant impacts to the individuals and their family; in some states, overdose is a leading cause of death in the year after pregnancy.[7]

Figure 1: Pregnancy Related Deaths by Race from 2007-2016[8]



Although our maternal health crisis places anyone giving birth at risk, its effects are not equally shared. Black women are more than three times as likely as White women to die from pregnancy-related causes, while American Indian/Alaska Native (AI/AN) are more than twice as likely (Figure 1).[9, 10] These disparities persist regardless of income, education, geography, and other socioeconomic factors.[11] Systemic barriers and the failure to recognize, respect and listen to patients of color when they express concerns continues to contribute to unequal outcomes for Black and AI/AN people in our health system.[12] Considerable disparities have also been reported for rural women and for women with disabilities.[13, 14]

Systemic barriers include access to comprehensive reproductive health care—including access to abortion—which is critical to promoting better maternal and infant health outcomes. As *Roe v.*

[iii] This strategy to address our maternal health crisis is inclusive of every person giving birth, irrespective of orientation, identity, or demographic background.

Wade is increasingly threatened, and even fewer women have access to abortion, experts anticipate that maternal mortality crisis will only worsen, particularly for women of color and low-income women. The compounding of these crises - the rising maternal mortality rate and lack of access to abortion - is undermining women's ability to be safe and healthy.

COVID-19 compounded many of these complexities. The CDC reports that the number of maternal deaths per 100,000 live births increased between 2019 and 2020, the first year of the pandemic, and increases were greatest for Black and Hispanic women. COVID-19 infection has been found to be associated with increased risk for preterm birth and serious morbidity from obstetric complications.[15] In addition to the increased risk from obstetric complications, for pregnant women diagnosed with COVID-19, there is a higher risk of intensive care unit admission, the need for mechanical ventilation, and death related to COVID-19.[16]

Moreover, over the last decade, the U.S. has seen an increase in obstetric unit closures in hospitals, leaving over 55% of rural counties without hospital-based obstetric services.[17] The loss of hospital-based services is most prominent in rural communities with a high proportion of Black residents.[18] Rural residents have a greater probability of severe maternal morbidity and mortality, compared with urban residents, exacerbating the disparities for rural people of color.[19] These numbers—troubling on their own—compound the fact that behind every statistic is a person whose pain may have been overlooked or whose voice underheard.

Our Vision

Addressing our maternal health crisis requires both bold vision and action. By working together—the federal government; state, local, and tribal governments; the private sector, and civil society—we will work to not only cut the rates of maternal mortality and morbidity, but reduce the disparities in maternal health outcomes that continue to persist and improve the experience of pregnancy, birth, and postpartum care for people across the country. We envision that **the United States will be considered the best country in the world to have a baby.**

How We Get There

In working toward this vision, the Biden-Harris Administration has developed, for the first time, a national, *whole-of-government* strategy to address our maternal health crisis. This strategy starts with the recognition that a concerted national effort to solve the crisis must begin with clear leadership and action from across the federal government. Addressing our maternal health crisis is not limited to just health care policy or to just one federal agency. That is why the solutions that follow include the best thinking from experts across the government, including: the U.S. Departments of Health and Human Services (HHS), Agriculture (USDA), Defense (DoD), Housing and Urban Development (HUD), Labor (DOL), Justice (DOJ), and Veterans Affairs (VA), the Environmental Protection Agency (EPA), and the Office of Personnel Management (OPM), among others. The Biden-Harris Administration believes that only through this whole-of-government approach—one that considers the entirety of a person's health and experiences over the course of their full life—will we finally be able to make real progress in tackling this longstanding challenge.

The Blueprint that follows is organized under five priority goals. They are:

- *Goal 1:* Increase Access to and Coverage of Comprehensive High-Quality Maternal Health Services, Including *Behavioral* Health Services
- *Goal 2:* Ensure Those Giving Birth are Heard and are Decisionmakers in Accountable Systems of Care
- *Goal 3:* Advance Data Collection, Standardization, Harmonization, Transparency, and Research
- *Goal 4:* Expand and Diversify the Perinatal Workforce
- *Goal 5:* Strengthen Economic and Social Supports for People Before, During, and After Pregnancy

We focus on actions that the federal government will take to address this crisis. These actions support the extensive ongoing work by federal agencies to improve maternal health for people across the country. Additionally, they support the ongoing work of entities and individuals that are on the front lines of maternal care—including health care systems; physicians, nurses, licensed midwives, doulas, intake workers, and other staff; insurers; technology and other private companies; academic institutions; scholars; faith-based and community-based organizations; state and local governments; and advocates, among others.

In addition to supporting the wealth of ongoing initiatives in the maternal health field, these efforts augment the work the Biden-Harris Administration has already undertaken to improve the lives of all Americans. These actions include our National Strategy on Gender Equity and Equality, which sets forth our vision and comprehensive agenda to advance gender equity and equality in domestic and foreign policy, and our National Drug Control Strategy, which aims to address overdose deaths, reduce drug use, and create drug policy centered around individuals and communities. They also include the Executive Order on Transforming Federal Customer Experience and Service Delivery to Rebuild Trust in Government, which directs federal agencies to put people at the center of everything the government does and improve the delivery of government services. Among other goals, this Executive Order aims to improve the way people engage with federal services such as the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), the Supplemental Nutrition Assistance Program (SNAP), and Medicaid, among numerous others. Additionally, the Administration has stood up an interagency policy committee which aims to coordinate activities specifically focused on improving outcomes for pregnant women at risk or involved in the child welfare system.

In March, President Biden also announced his strategy to address the nation's mental health crisis. Many of the actions announced, including bolstering the behavioral health workforce, strengthening parity in mental health and substance use disorder coverage, and embedding mental health and substance use services into community-based settings, will also help improve maternal behavioral health outcomes.

To inform this Blueprint, we solicited input from a range of partners, and importantly, heard from women who have experienced pregnancy and childbirth.[20] Listening sessions and qualitative research helped us ensure that the actions we take center the perspectives of those giving birth—particularly Black, Hispanic, AI/AN, and immigrant women—so that their voices are an integral foundation for our national policy work. Throughout the Blueprint, you will see their stories alongside our Administration's commitments. We thank these women for their time and contribution to this effort.

Partners echoed that the scope and scale of our crisis extends beyond maternal mortality and morbidity; even when maternal health outcomes before, during, and after pregnancy are positive, the experience of pregnancy and delivery in the U.S. may still be traumatic. Women of color, for example, routinely report that their pain is often dismissed or ignored, and their concerns and requests for their delivery experience disregarded.[21, 22] These realities suggest that our maternal health crisis is not just due to a lack of access or resources, but related to structural inequities and biases. Research has shown that disparities seen in maternal health are not fully explained by other social factors that are often correlated with race and geography—such as poor economic outcomes, insurance status, educational disparities, or community-level factors—and instead impact women of color irrespective of their socioeconomic position.[23] Experts also believe that the chronic stress of discrimination—a process known as "weathering"—takes a toll on Black and AI/AN people in ways that result in higher rates of perinatal depression hypertension, preterm birth, and infant mortality.[24, 25]

Accordingly, **this Administration will remain keenly focused on equity,** including the way policies address not only the maternal health crisis, but also the racial biases, persistent disparities, injustices, and inequities that fuel it.

To achieve our vision, every segment of our government and society must do its part. Many state, tribal, and local governments; non-profit organizations; hospitals; health insurance companies; and others have pioneered new interventions and models of care, providing leadership for the nation; others can do more. Congress must, too, play a role in improving maternal health in this country. To that end, we urge Congress to:

- Close the Medicaid coverage gap to help the 4 million people living in the coverage gap in states that have refused to expand Medicaid to gain access to affordable and comprehensive Medicaid coverage;
- Require all states to provide continuous Medicaid coverage for 12 months postpartum, thereby eliminating potentially deadly gaps in health insurance at a critical time for individuals (currently, states are only required to provide coverage for 60 days postpartum, despite research showing that many deaths and complications occur more than 60 days postpartum);
- Make significant investments in other efforts that reduce maternal morbidity and mortality, including the $470 million in the FY 23 President's Budget that expands maternal health initiatives in rural communities; implements implicit bias training for health care providers; creates pregnancy medical home demonstration projects; addresses the highest rates of perinatal health disparities, including by supporting the perinatal health workforce; strengthens data collection and evaluation; and addresses behavioral health disorders. This includes extending and increasing funding for the Maternal, Infant, and Early Childhood Home Visiting Program, which serves families at risk for poor maternal and child health outcomes each year; and

In the document that follows, we outline bold commitments to address this crisis and hope they will fuel others to do so the same. But, these commitments are only the start of the much-needed work ahead. Together, we can make this country's unacceptably high maternal mortality and morbidity rates, and persistent disparities, a thing of the past.

Goal 1:
Increase Access to and Coverage of Comprehensive High-Quality Maternal Health Services, Including Behavioral Health Services.

The first step towards ending the maternal health crisis is to ensure that everyone can access and have affordable coverage of comprehensive health care services, regardless of where they live or how much they earn. Being able to access quality, affordable health care is not a privilege—all people deserve care that is accessible, culturally-responsive, and patient-centered. Too many people in the U.S., however, are shut out of the health care system at the time when they need it most. This includes women who may lack adequate health insurance and/or live too far from health care providers to receive regular and reliable maternal care.

Access to and coverage of comprehensive maternal health services must also include behavioral health services. Perinatal depression—which can occur during or after pregnancy—affects one in seven pregnant women, and the COVID-19 pandemic has exacerbated pregnant and postpartum symptoms of depression, anxiety, post-traumatic stress, and loneliness as well as increasing substance use.[26] Among veterans and military personnel, sexual trauma, depression, and post-traumatic stress disorder can exacerbate poor pregnancy and postpartum outcomes, including behavioral health outcomes.[27, 28, 29] Untreated, behavioral health conditions not only impact an individual's health and quality of life, but they can affect the well-being of the baby and the family. They are a leading underlying cause of pregnancy-associated deaths, including suicides, and drug overdoses or poisoning.[30, 31, 32]

"I had a bout with postpartum depression. I went to the doctors and I didn't realize I lose [Medicaid coverage] in 60 days. I knew it ended but I didn't know when, and I went to the doctor and they said I didn't have insurance."

- Black mother of three

Such deaths could be prevented by improved access to care and appropriate screenings in the prenatal and postpartum periods.[33] Fully addressing the behavioral health needs of pregnant and postpartum women also requires that we address the systemic challenges facing our nation, including expanding access to care by building system capacity in lower resourced areas, and creating a continuum of support. Ensuring these challenges are tackled is a key focus outlined in President Biden's strategy to address the national mental health crisis.

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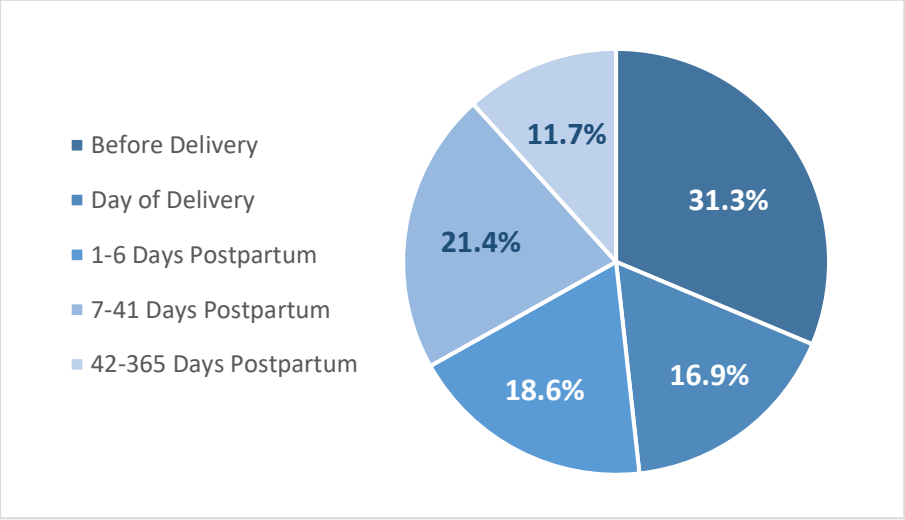
The Problem

Health Care Coverage

Many women, particularly low-income women, experience disruptions in their health coverage during pregnancy and the first year postpartum.[34] Health insurance coverage gaps occur both before and after pregnancy: 25% of women experience an insurance change from preconception to delivery, and 28% experience a change from delivery through 3-6 months postpartum.[35] These coverage gap challenges do not impact all people equally; Hispanic Spanish-speaking (79.5%), American Indian/Alaska Native (50.1%), Hispanic English-speaking (49.3%), and non-Hispanic Black mothers (44.6%) all experience significantly elevated rates of maternal coverage gaps relative to non-Hispanic White mothers (24.7%).[36] These numbers are particularly troubling given that we know over 80% of pregnancy-related deaths occur either before the day of delivery or in the postpartum period (Figure 2).[37]

Figure 2: The Timing of Pregnancy-Related Deaths[i]



Over 40% of all births in the United States are covered by Medicaid. People who enroll in Medicaid often face barriers to accessing timely, high-quality care at various points during their pregnancy as well as in the postpartum period due to a variety of factors, including eligibility and coverage gaps. Data show that roughly half of pregnant women who experienced a gap in coverage during pregnancy eventually enrolled in Medicaid or Children's Health Insurance Program (CHIP) coverage by the month of delivery.[38] Yet, roughly 55% of women with Medicaid coverage at delivery experienced a gap in coverage in the following six months.[39]

There are two important contributors to gaps in maternal health coverage—loss of coverage soon after pregnancy and states' unwillingness to expand Medicaid under the Affordable Care Act (ACA). First, while low-income pregnant women qualify for Medicaid in all states, many lose coverage 60 days after the end of pregnancy. This loss of coverage is dangerous, given research showing that many deaths and complications occur more than 60 days following delivery. To continue their Medicaid coverage after 60 days, women typically must qualify under a different Medicaid eligibility category, often requiring them to have an even lower income.

The American Rescue Plan Act of 2021 provides states with an easy pathway to extend postpartum coverage. This pathway, available under the Medicaid state plan, would allow as many as 720,000 pregnant and postpartum people across the U.S. to be guaranteed Medicaid and CHIP coverage for a full 12 months after pregnancy. Building on earlier efforts to expand postpartum coverage in Illinois, Virginia, and New Jersey, Louisiana was the first state to be approved to extend postpartum coverage via this pathway and 10 additional states plus the District of Columbia have submitted State Plan Amendments and others have announced their intent to do so. We will work with all states to provide full pregnancy-related Medicaid benefits during pregnancy and the extended postpartum period; we also urge Congress to make this option mandatory.

Second, the 12 states that have not expanded Medicaid coverage under the ACA are putting families at risk. Passed in 2010, the ACA expanded Medicaid coverage to low-income individuals with incomes below 138% of the federal poverty level. Many women in Medicaid expansion states who originally qualified for Medicaid coverage based on their pregnancy status can remain enrolled in the program during the postpartum period based on their income. But a dozen states—including populous states like Texas and Florida—have refused these expansion dollars, leaving millions of otherwise eligible individuals uncovered, including countless postpartum individuals.[40] We urge Congress to close this Medicaid coverage gap and help the 4 million Americans currently locked out of Medicaid.

Geography

While solving the maternal health care coverage problem is necessary, it is not sufficient to guarantee full access to necessary health care services. That is because millions of women—many with full health care coverage—remain unable to access quality health care by virtue of where they live before, during, and after pregnancy. These women live in maternity care deserts—counties without hospitals providing obstetric care, freestanding birth centers, or even any individual obstetric providers, including obstetrician or licensed midwives.[41, 42] The rapid rate of hospital closures and obstetrics and gynecology units in rural areas, especially in states that have not expanded Medicaid,[43] contributes to this problem, leaving over 2 million women of childbearing age living in the 1,000-plus maternity care deserts in the United States.[44] Although the majority of these women live in rural areas, approximately one in three live in large metropolitan areas or urban settings.[45]

Similar to the coverage disparities described above, geographic disparities often impact women of color disproportionately. For example, 40% of AI/AN women live on Tribal lands or in highly rural communities far from maternal care providers. These women are twice as likely as White women to report receiving late or no prenatal care during pregnancy.[46] Where a person lives should not dictate their ability to access high-quality maternal care throughout their pregnancy, delivery, and postpartum period.

Actions We Will Take

1.1. Work to ensure women have comprehensive, continuous maternal health insurance coverage during pregnancy, and for no less than one year afterwards. As noted above, approximately 42% of births are covered by Medicaid, but people in many states lose coverage 60 days after the end of pregnancy, and approximately one-third of pregnancy-related deaths happen between seven days and a year postpartum. To improve coverage:

- **HHS will encourage states to take advantage of the American Rescue Plan option to provide 12 months postpartum coverage.** Supporting states to adopt the extended postpartum coverage is among the most impactful commitments made by HHS in this Blueprint, as it will help support continuous access to medical care throughout the postpartum period.
- **HHS will work to reduce gaps in postpartum coverage.** HHS will identify ways that policy, technology, and operations can work better together to help postpartum women understand their coverage options if they lose eligibility for Medicaid coverage, including helping them transition from Medicaid to Marketplace coverage, where appropriate. HHS is currently building data system capacity to better identify people losing Medicaid coverage, enabling HHS to provide targeted outreach to ensure that people successfully transition into Marketplace coverage.

1.2. Serve as a model employer for maternal health care coverage. The FEHB Program covers 8.2 million people, including federal employees and their families. OPM, in conjunction with federal partners, will work to strengthen coverage, benefits, and services around maternal care, raising the bar when necessary to align them to the highest standards across FEHB, HHS (including the Indian Health Service), the VA, and DoD.

1.3. Improve rural obstetric readiness at hospitals and IHS facilities. Many rural counties have lost their hospital-based obstetric services in recent years. In these areas, individuals are more likely to have out-of-hospital births or deliver in hospitals without obstetric units. Facilities without obstetric units should still be "birthing ready" in the event they need to perform an emergency delivery and have triage and transfer protocols in place if needed. To improve rural obstetric readiness:

Actions Congress Must Take

- Require all states provide continuous Medicaid coverage for 12 months postpartum and close the Medicaid coverage gap
- Invest $6 million for CDC to provide direct support to states in order to provide mothers and newborns with a level of care that meets their needs
- Invest $7 million in the nationwide 24-hour maternal mental health hotline
- Invest $10 million to train more health care providers on and increase access to treatment and recovery support services
- Invest $50 million to train community health workers that identify behavioral health needs and link families to local resources

- **HHS will develop guidelines and standards for equipment, medication, staff training, and transport to ensure facilities without obstetric units are still "obstetric ready,"** and is convening stakeholders to inform these efforts. IHS is working with individual facilities to develop and support appropriate staff training and access to necessary supplies and equipment while these guidelines and standards are being developed. HHS will also identify how telehealth can support rural clinicians managing obstetric and neonatal emergencies. For example, IHS is pursuing ways to provide telehealth support via video link for emergency departments without on-site maternity care providers.
- **HHS will expand the Rural Maternity and Obstetrics Management Strategies (RMOMS) Program,** which seeks to enhance access to maternal and obstetric care in

rural communities to improve maternal and neonatal outcomes. The program will be expanded by $4 million in the 2023 Budget, enabling four additional award recipients to implement regional networks to improve access to maternal care for rural communities.

1.4. Strengthen risk-appropriate care in rural and urban areas. Risk appropriate care, also known as perinatal regionalization, is the concept of ensuring that pregnant women and infants receive care in a facility that has the capabilities — including personnel and services — to appropriately meet their health needs. HHS developed the CDC Levels of Care Assessment Tool (CDC LOCATe℠), a web-based, standardized assessment of birthing facilities throughout the state that allows participating states to see the levels of care (e.g., basic care, specialty care) at facilities in their state, as well as the distribution of staff and services. For example, pregnant women with severe heart conditions need care at facilities that have a full range of specialists available to help care for complex medical conditions. CDC LOCATe℠ is based on the most recent guidelines from the American Academy of Pediatrics and the American College of Obstetricians and Gynecologists/Society for Maternal-Fetal Medicine.

CDC is collaborating with the Association of State and Territorial Health Officials to improve risk-appropriate maternal and neonatal care practices in 4 states using data from CDC LOCATe℠. This collaboration will provide capacity building and technical assistance related to data analysis and quality improvement efforts in these states. Within CDC's Safe Motherhood and Infant Health request in the FY 2023 Budget, HHS will use $6 million to provide direct support to states to utilize CDC LOCATe℠ and take action to ensure women and infants get the right care at the right time.

1.5. Expand access to family planning services, including pre-pregnancy health and contraception. Family planning services are a central part of women's health care services. The ability to choose if, when, and how to give birth is essential to an individual's overall health and well-being. Often, unintended pregnancies are associated with delayed prenatal care, which can result in poor maternal and infant outcomes.[47] In addition, access to postpartum contraception is important to increase spacing between pregnancies; short intervals between pregnancies can be associated with adverse health outcomes.[48]

- **Title X Family Planning Program providers.** HHS will enhance access to family planning services including preconception health care, HIV and STI screening and treatment, and contraception through Title X, the nation's family planning program. The program will expand the number of highly qualified providers that participate in the program by 10% in three years by providing additional resources, technical assistance, and training to support the program's priorities on quality, access, and equity.
- **Military health care providers.** The Military Health System (MHS) serves roughly 4.7 million women beneficiaries, including active duty service members, military spouses, and military retirees. To ensure service members have easy access to a full range of contraceptive care, the Military Health System will issue implementing guidance this year requiring walk-in contraceptive clinics at all military medical treatment facilities. In addition, DoD will release a report this year on findings from a 2020 Women's Reproductive Health Survey that sought to better understand service members' preferences, needs, and experiences with reproductive health care, including contraceptive care. Building upon this survey, DoD will develop a health care provider survey to better understand how to support providers in the provision of comprehensive

contraceptive care. DoD will explore key policy and programmatic changes needed to support universal, timely access for service members

- **Veterans.** The Department of Veterans Affairs (VA) is the largest integrated health care system in the nation. VA provided care for approximately 600,000 unique female users in fiscal year 2021 and covered about 6,000 deliveries during that time frame.[49] Those who use VA maternity benefits may be at high risk for adverse pregnancy outcomes, including severe maternal morbidity and pregnancy-associated death, due to prior health comorbidities and social risks.[50, 51, 52] Almost half of the women veterans VA serves (42%) are non-white.[53] VA has the unique opportunity to care for veterans before, during, and beyond pregnancy and connect them to resources to support healthy families including housing support, mental health support, and treatment for substance use disorders. In fact, women veterans are the fastest growing population within VA's health care system, and the population is expected to grow in the next decade.

  VA will ensure that all enrolled veterans of childbearing age who had a primary care visit within the next year are assessed for pregnancy intention as part of their routine care. The goal is to help support preconception planning to identify need for contraception if desired, counsel on pregnancy spacing, and promote optimal health before and after pregnancy for veterans receiving care through VA.

1.6. Reduce uncontrolled hypertension. Hypertensive disorders of pregnancy, observed in 9% of all pregnant women that deliver in a hospital, are increasingly common and are among the leading causes of maternal disease and death in the U.S.[54] Uncontrolled hypertensive disorders can have severe negative implications, such as eclampsia or stroke, for pregnant and postpartum women.[55]

- **AI/AN.** HHS launched a pilot program in early 2022 at six IHS sites to expand utilization of self-monitored blood pressure management equipment. IHS will work to spread utilization of self-monitored blood pressure management across the agency to decrease morbidity from uncontrolled/unmonitored hypertension.
- **Veterans.** VA will create targeted interventions to manage enrolled veterans of childbearing age with hypertension and other known risk factors for developing preeclampsia. This includes providing home blood pressure monitoring equipment to enrolled veterans who are pregnant or postpartum with a diagnosis of a hypertensive disorder, developing veteran and provider-facing education about risk factors for development of preeclampsia, and developing provider-facing education about preconception care, including management of chronic diseases such as hypertension and diabetes in enrolled veterans of childbearing potential.
- **Federal Employees.** OPM will continue to press FEHB carriers to provide coverage of self-monitored blood pressure management equipment (blood pressure cuffs) as part of the Value Based Insurance Design model.

1.7. Improve quality of care provided to pregnant and postpartum women with or at risk for hypertensive disorders of pregnancy. HHS is leading an effort to develop and disseminate self-measured blood pressure monitoring tools and resources to improve the quality of care provided to pregnant and postpartum women with or at risk for hypertensive disorders of pregnancy. The tools will be intended for obstetrical providers, primary care professionals, and

the pregnant and postpartum women they serve. This collaborative effort with the CDC Division of Heart Disease and Stroke Prevention/Million Hearts® and the Division of Reproductive Health and other maternal health partners will improve capacity to prevent and manage hypertensive disorders of pregnancy among OB/GYNs, primary care teams, and public health sectors and to strengthen the partnership between these sectors to combat the disparate maternal morbidity and mortality attributed to cardiovascular disease.

1.8. Facilitate continuity of care for service members and veterans. There is currently no data on how many service members leave the military while pregnant and how they continue pregnancy care after separation. In collaboration with VA, the Military Health System is conducting a study to better understand what actions are needed to identify sources of prenatal care and evaluate access to continuity of pregnancy care to optimize health. DoD and VA, through the VA/DoD Women's Health Working Group will utilize the study to identify avenues to ensure pregnant service members are aware of their prenatal care options upon leaving active service.

1.9. Ensure veterans return to primary care after they deliver. Through its Maternity Care Coordination Program, VA will ensure that a veteran is scheduled for a primary care visit within 12 weeks after their estimated due date. Currently, maternity care coordination lasts for 12 weeks postpartum. By the end of FY 2024, VA will require maternity care coordination and support to continue for one full year postpartum.

1.10. Strengthen supports and access to perinatal addiction services for individuals with substance use disorder (SUD). Maternal SUD has serious negative consequences for both pregnant and postpartum individuals and their children. HHS will partner with hospitals and community-based organizations to implement evidence-based interventions that strengthen perinatal and postnatal support structures for individuals with SUD. HHS will also educate individuals with SUD on biological, emotional, and psychosocial milestones at each stage during pregnancy and the 12 months following birth to reduce stress that could trigger a return to drug use or overdose.

1.11. Keep mothers and infants together. DOJ's Bureau of Prisons (BOP) currently offers residential programs for pregnant inmates. The MINT (Mothers and Infants Nurturing Together) Program is a community-based residential program which is contracted in five locations, and the Residential Parenting Program is a program which is provided though an agreement with the Washington State Department of Corrections. In these programs, pregnant inmates receive prenatal care, prepare for delivery, and bond with their infant after giving birth. The programs allow newborn infants to remain with their mothers postpartum, which is shown to improve both maternal and infant outcomes. BOP will develop a resource tool for use by state, tribal, and local correctional facilities to provide a model for the development of similar programs and services.

1.12. Expand the National Maternal Mental Health Hotline for pregnant individuals and new mothers facing mental health challenges to increase access to mental health care. While maternal mental health conditions are the most common complication of pregnancy and childbirth, these challenges often are stigmatized and do not receive the same attention as physical health conditions. The National Maternal Mental Health Hotline, a national, confidential, 24-hour, toll-free hotline, launched in Spring 2022 and has qualified counselors that provide support in English and Spanish via voice and text. The $7 million requested in the FY

2023 Budget will more than double this initial investment, allowing HHS to expand the hotline's expert staffing and build capacity in its future phases.

1.13. Appoint a head of women's mental health and substance use. HHS will hire a dedicated Associate Administrator for Women's Services in HHS's Substance Abuse and Mental Health Services Administration (SAMHSA) to lead its efforts on promoting positive mental health during pregnancy and in the postpartum period. The Associate Administrator will work across HHS to ensure that federal programs that support pregnant and postpartum women, like Medicaid and child care, incorporate mental health and substance use disorders.

1.14. Expand capacity to screen, assess, treat, and refer for maternal depression and related behavioral disorders. HHS supports real-time psychiatric consultation, care coordination support, and training to frontline health care providers, including in rural and underserved areas. The $10 million requested in the President's FY 2023 Budget will allow HHS to expand to approximately seven more states, doubling the number of states to reach more health care providers and increase access to treatment and recovery support services.

In addition, DoD's Military Health System (MHS) will pilot a reproductive behavioral health consultation service based on the VA's Reproductive Mental Health Consultation Program. This partnership with VA will allow MHS providers to access no-cost support from behavioral health experts on reproductive mental health issues to include pregnancy and postpartum concerns.

1.15. Integrate behavioral health supports in community settings. The $50 million requested in the President's FY 2023 Budget will support efforts to train navigators and community health workers to identify behavioral health needs and link families to local resources, such as medical homes, school based and other community health centers, community-based organizations, and local community social supports.

Goal 2:
Ensure Those Giving Birth are Heard and are Decisionmakers in Accountable Systems of Care

Experts believe that most of the roughly 700 childbirth-related deaths that occur annually—and the tens of thousands of additional severe complications that occur each year—can be prevented.[56] MMRCs are multidisciplinary committees in states and cities that perform comprehensive reviews of maternal deaths within a year of the end of a pregnancy. The most common factors identified by MMRCs as contributing to death were patient/family factors (e.g., lack of knowledge on warning signs and need to seek care) followed by provider (e.g., misdiagnosis and ineffective treatments) and systems of care factors (e.g., lack of coordination between providers). Notably, many of the patient factors identified are dependent on providers and systems of care.[57] These findings illustrate that we need to double down on our quality improvement efforts so that we no longer needlessly lose hundreds of women each year in what is an otherwise *preventable* maternal health crisis.

Moreover, many women go through pregnancy, labor, delivery and the postpartum period without experiencing complications, morbidity, or measurably poor health outcomes, but still have poor and traumatic birthing experiences. For example, many women feel they have limited autonomy over their choice of delivery location, medical interventions in the birthing process, and how their baby is delivered (e.g., vaginally or via caesarean section).[58]

The Problem

Quality of Care and Accountability

States and providers have been active in improving the quality of maternal health care through efforts such as Perinatal Quality Collaboratives (PQCs). PQCs are state or multi-state networks of teams working to improve the quality of care for mothers and babies. State-based PQCs partner with hospitals, providers, nurses, patients, public health, and other stakeholders to provide opportunities for collaborative learning, rapid response data, and quality improvement science support to achieve systems-level change. The CDC has supported state PQCs since 2011. In 2014, the American College of Obstetricians and Gynecologists and HHS entered into a cooperative agreement to form the Alliance for Innovation on Maternal Health (AIM)—a national maternal health quality improvement initiative based on identifying and disseminating best practices for improving maternal

"I didn't feel like the OB really understood the risk [of my previous hemorrhage during birth.] I found myself really having to stress this to her…I spent a lot of time worrying and printing out articles to bring to my OB…She tried to make me feel better but I had to push a lot."

- Black mother of two

health outcomes.[59] AIM has promulgated a series of "safety bundles" that detail treatment policies, safety equipment, training programs, and internal reviews every maternity hospital should adopt, with many of these safety bundles originating, with testing and refinement, within state PQCs.[60] As of 2021, 44 states plus D.C. are enrolled in AIM, with 1,766 birthing facilities participating in AIM.

When implemented fully, the PQCs quality improvement initiatives and AIM measures using safety bundles have been shown to improve outcomes. For example, between 2016 and 2017, data from about 100 Illinois hospitals as part of a larger, statewide Illinois Perinatal Quality Collaborative, showed an increase from 42% to 79% in the number of maternity patients getting treatment for dangerous blood pressure within one hour of diagnosis.[61, 62] Additionally, the AIM program has also served as a foundation to further work through the Safety Program for Perinatal Care which seeks to bolster teamwork and communication skills among providers to complement the implementation of the clinical safety bundles. However, providers are not required to follow these evidenced-based, well-established practices, and many hospitals that have formally enrolled in the AIM program do not disclose how closely they adhere to its recommendations.[63] While individual providers aim to provide the best care possible, few external incentives and limited resources prevent these best practices from being scaled and implemented consistently.

"There's this culture of just not listening to Black women…Most of the time, if someone says they're in pain, they're in pain. They're not making it up. Even if the doctor doesn't have an answer, acknowledging that like…it doesn't make sense, I hear you. That's better than being dismissed."

- **Black mother of one**

As noted earlier, women with disabilities often experience disparities in health care. Research has shown that inaccessible medical diagnostic equipment (MDE) such as examination tables, weight scales, and imaging equipment, is a fundamental barrier to basic women's health care services.[64,65] Because of this, many women with disabilities are receiving inadequate and unequal care around pregnancy and reproductive health.[66] In addition, more than one-fifth of women with disabilities reported difficultly finding a physician who was willing or able to manage their pregnancy.[67] While accessible MDE is required under the ADA, Sections 504 and 1557, the lack of enforceable MDE standards allows for continued, widespread discrimination in health care for people with mobility disabilities.

Moreover, conscious and unconscious bias from health care providers contribute to disparities in quality of care. Patients of color regularly report that health care providers are dismissive of their concerns, and various studies have confirmed that Black and AI/AN patients are treated differently than White patients.[68] Other studies show that some women who are members of religious minority groups will delay care out of a concern that they will not receive care aligning with their religious beliefs.[69] Increased understanding and attention to the biases that maternal health care providers bring to their daily practice are essential, as are enhanced transparency and accountability when there are poor maternal health outcomes.

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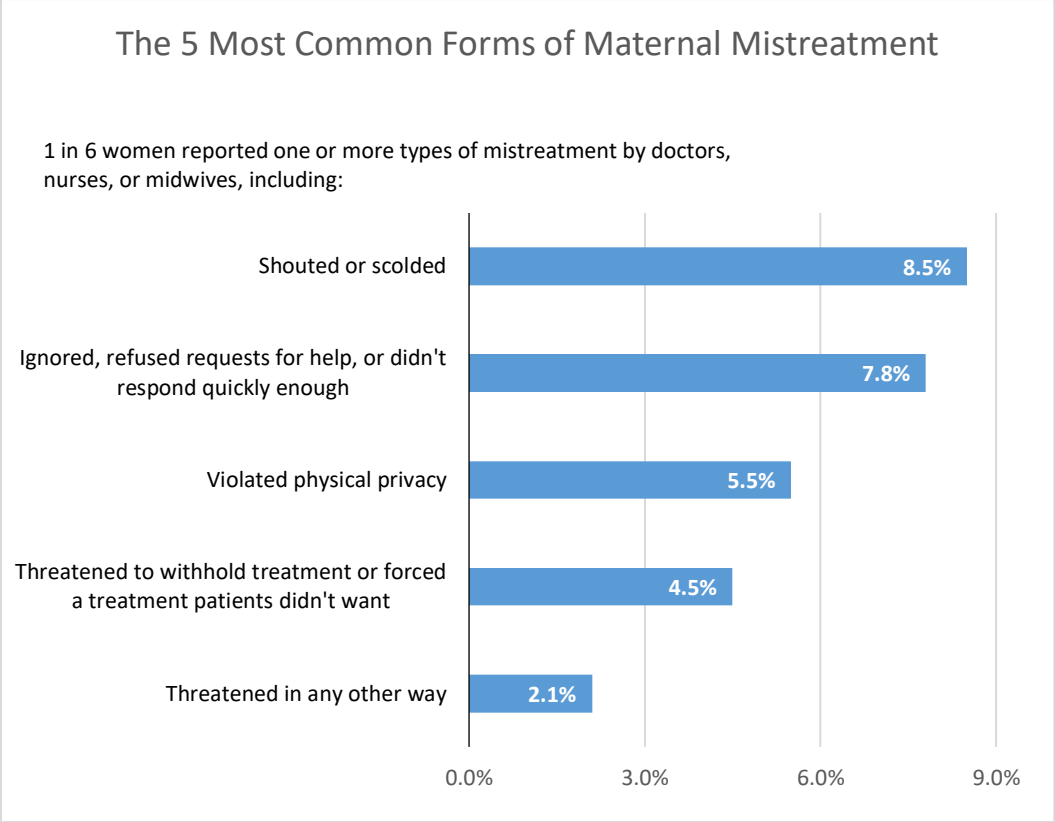
Figure 3: Common Forms of Maternal Mistreatment[70]



Ensuring Women are Heard

Although there is limited quantitative data on the way people experience the maternal health system, the data we do have are troubling. Research found that one in six women reported experiencing mistreatment during pregnancy and childbirth. The most common forms of mistreatment were shouting and scolding (8.5%), ignoring requests for help or not responding quickly enough (7.8%), and violating physical privacy (5.5%) (Figure 3).[71] One California study found that one in four women did not feel encouraged to make their own decisions during their birthing experience.[72] According to that same study, one in seven women reported feeling pressured to have an unwanted medical intervention during childbirth, such as labor induction, epidural analgesia and cesarean birth.[73]

While reports of poor care are too high for all women, they are significantly worse for women of color. According to one study, AI/AN women were most likely to report being mistreated (33%), followed by Hispanic women (25%), Black women (23%), and White women (14%).[74]

The reasons for mistreatment of people during the birthing experience are multifaceted. Racism plays a role in the way people of color are treated and consulted in our health care system. The aforementioned California study found that over one in ten Black women reported that they experienced unfair treatment during their perinatal experience, specifically due to their race or ethnicity.[75] A 2016 study found that about half of White medical students and residents surveyed believed biological myths about racial differences in patients, including that Black patients have

less-sensitive nerve endings and thicker skin than their White counterparts.[76] Enhanced provider training on biases and other unscientific racial stereotypes is undoubtedly an integral piece of improving maternal health in this country.[77]

Actions We Will Take

2.1. Propose requiring hospital participation in maternal health quality improvement activities and urge hospitals to provide equitable, high-quality care and improve accountability.

- **Conditions of Participation.** HHS has proposed the establishment of a publicly-reported "Birthing-Friendly" hospital designation to drive improvements in maternal health outcomes, which would be CMS's first-ever hospital quality designation specifically focused on maternity care. It is intended to be awarded to hospitals with inpatient labor and delivery services that participate in a perinatal quality improvement program and that implement evidence-based patient safety practices. If finalized, beginning in Fall 2023, the designation would be added to a CMS website to assist consumers in choosing hospitals with a demonstrated commitment to providing high-quality maternity care. Through its annual Call Letter to FEHB Carriers, OPM has encouraged carriers to monitor the "Birthing-Friendly" designation process and seek to contract with those hospitals that receive the designation.
- **"Birthing-Friendly" hospital designation.** HHS has proposed the establishment of a publicly-reported "Birthing-Friendly" hospital designation to drive improvements in maternal health outcomes, which would be CMS's first-ever hospital quality designation specifically focused on maternity care. It is intended to be awarded to hospitals with inpatient labor and delivery services that participate in a perinatal quality improvement program and that implement evidence-based patient safety practices. If finalized, beginning in Fall 2023, the designation would be added to a CMS website to assist consumers in choosing hospitals with a demonstrated commitment to providing high-quality maternity care. Through its annual Call Letter to FEHB Carriers, OPM has encouraged carriers to monitor the "Birthing-Friendly" designation process and seek to contract with those hospitals that receive the designation.

2.2. Bolster the voice of communities of color to better understand pregnancy-related death. HHS will increase participation of community members in state MMRCs by developing a roadmap of best practices for community participation in state MMRCs. The roadmap will identify best practices for incorporating state, local, and tribal community organizers advocating for the needs of racial and ethnic minority and other vulnerable individuals into MMRC activities. Within CDC's Safe Motherhood and Infant Health request in the FY 2023 Budget, HHS will support efforts to promote community engagement in MMRCs and increase the diversity of committee membership.

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2.3. Empower AI/AN pregnant and postpartum people and educate providers. HHS will expand the Hear Her™ campaign, which will develop culturally and linguistically appropriate materials for AI/AN communities.[78] The campaign was successfully launched in August 2020 and works to prevent pregnancy-related deaths by sharing potentially life-saving messages about urgent warning signs of pregnancy-related complications, including mental health information. Additional resources have recently been added to better reach providers who serve pregnant and postpartum women. Within CDC's Safe Motherhood and Infant Health request in the FY 2023 Budget, HHS will invest an additional $3 million to significantly expand the Hear Her™ campaign to reach additional audiences through innovative channels, for example working with community-based organizations to implement Hear Her™ in their community. Given their responsibility to provide coverage for qualifying employees of Indian tribes or tribal organizations via the Affordable Care Act, OPM, through its annual Call Letter, has encouraged all FEHB carriers, especially those serving AI/AN communities and other communities of color, to adopt the Hear Her™ campaign.

Actions Congress Must Take

- Invest $3 million in the Hear Her™ campaign to reach more women
- Invest $25 million in Pregnancy Medical Home demonstrations for improved quality and care coordination
- Invest $55 million in state-focused Maternal Health Task Forces, enabling HHS to support 15 more states
- Invest $15 million to improve uptake and impact of perinatal and maternal quality improvement programs
- Invest $55 million in community-based organization-led maternal health initiatives

2.4. Make insurance coverage and costs of pregnancy-related care transparent and easy to understand. The No Surprises Act protects individuals covered under group health plans, group and individual health insurance coverage, and FEHB health benefits plans from receiving surprise medical bills when they receive emergency care, care from out-of-network providers at in-network facilities, and air ambulance services. With this law, HHS, DOL, the Department of the Treasury, and OPM will ensure consumers are protected from certain out-of-network bills. Additionally, the No Surprises Act requires that providers give uninsured and self-pay consumers cost estimates before scheduled services (including pregnancy-related care), allowing consumers to make fully informed decisions regarding their health care.

How will banning surprise medical bills impact pregnant and postpartum people?

Private insurance covers roughly half of all births in the United States,[79] but until recently that coverage often contained an unexpected surprise: an unanticipated bill for services from an out-of-network provider at their in-network facility. A 2021 study of in-network deliveries found that almost one in five privately insured families received an unexpected bill for obstetric or newborn care – often from an out-of-network anesthesiologist who was providing care at the in-network hospital. These bills occurred more frequently when cesarean section births or neonatal intensive care were involved. The surprise bill averaged $744, although for a third of families was over $2,000.[80]

The No Surprises Act (the Act), which took effect January 1, 2022, addresses this situation by requiring that patients receiving certain services from an out-of-network provider at an in-

network hospital, may not be billed beyond their in-network cost-sharing amount. These protections also apply to "ancillary services" furnished at an in-network facility by out-of-network providers, including anesthesiology and neonatology services common to delivery care, as well as emergency medicine, pathology, radiology, and diagnostic services and the services of assistant surgeons, hospitalists and intensivists.[81, 82]

The Act also limits patient payments for emergency services, including emergency labor, received from an out-of-network provider to the costs they would have paid to an in-network provider.

2.5. Empower women with access to their own data. HHS is leading an effort to enable more patients to get automated access to their electronic prenatal, birth, and postpartum health records (including lab results, genetic tests, ultrasound images, and clinical notes) to improve their experience and support better care coordination. While provisions in the 21st Century Cures Act Final Rule have made access to records more readily available via patient portals, many women giving birth still struggle to easily access their maternity care record across the entire episode of care (especially in at-risk or underserved communities). Data siloes and gaps still exist, which impact a person's ability to switch providers, seek care from providers across different health systems, or engage in shared decision-making with their care provider. In the Fall of 2023, HHS will begin a pilot project with a select number of health care systems to test developing and integrating technical solutions between providers to all relevant health care records for a patient.

2.6. Train providers on culturally and linguistically appropriate care, respectful care, and implicit biases.

- **Culturally and linguistically appropriate care.** HHS will promote an accredited free e-learning program called Culturally and Linguistically Appropriate Services (CLAS) in Maternal Health Care. The program is designed for providers and students to build knowledge and skills related to providing CLAS, cultural competency, cultural humility, person-centered care, and combating implicit bias across the continuum of maternal health care. Providers and students can access it on HHS's Think Cultural Health page.[83] Physicians, physician assistants, nurse practitioners, nurses, certified nurse midwives, and certified midwives can obtain two continuing education units (CEUs) for completing the program.
- **Safety Program in Perinatal Care.** With FY 2023 requested funds, HHS will expand the Agency for Healthcare Research and Quality (AHRQ) Safety Program in Perinatal Care (SPPC) to train providers on how to deliver care that both allows individuals to feel empowered to assert their rights and advocate for themselves, and enables providers to listen and trust their patients. As a primary step, AHRQ has initiated a systematic review on respectful maternity care that will support integration of best practices into the existing SPPC teamwork and communication tools. Delivering care in this way is central to patient-centered care, and recognized as an evidence-based implementation strategy for improving maternal and neonatal health outcomes and addressing disparities on the basis of race and ethnicity, age and socioeconomic status, across all aspects of care delivery. This program will be distributed by AHRQ in concert with the Health Resources and Services Administration (HRSA) AIM programmatic framework.

- **Implicit bias training.** With the $5 million requested in the President's FY 2023 Budget, HHS will support the development and implementation of implicit bias training for clinicians that provide maternal health care services. These efforts could include supporting health care providers in identifying and avoiding implicit bias in care settings and engaging the National Academy of Medicine to make recommendations for incorporating bias recognition in clinical skills testing for accredited schools of medicine.

2.7. Address systemic discrimination in health care. The HHS Office for Civil Rights (OCR) provides guidance on preventing discrimination in health care, including maternal health, and enforces violations of anti-discrimination laws. HHS is working to issue a proposed rule that would make changes to the 2020 final rule related to prohibiting discrimination on the basis of race, color, national origin, age, disability, or sex (including pregnancy, sexual orientation, and gender identity), in various health programs and activities. With the additional $21 million requested in the FY 2023 Budget, OCR will bolster its enforcement, technical assistance, and outreach activities by, for example, working more extensively with providers and helping more women.

2.8. Encourage the removal of structural barriers that prevent women with disabilities from receiving adequate reproductive care. To help providers make their practices more accessible to people with disabilities and older adults, the U.S. Access Board issued standards for Accessible Medical Diagnostic Equipment. By adopting these standards, medical providers can expand their patient base while reducing the risk of workplace injuries, liability, and attrition that can result from nurses and nursing assistants physically transferring patients to and from inaccessible examination equipment. HHS will work with providers to support their adoption of these standards.

2.9. Embed equity into Quality Family Planning Guidelines. HHS will also update and center health equity in its Quality Family Planning Guidelines. These recommendations, directed at current and potential family planning providers, include guidance to help clients prevent or achieve pregnancy, basic infertility services, preconception health services, pregnancy testing and counseling, contraceptive services, and sexually transmitted disease services. The guidelines will offer the most recent, effective recommendations to advance client-centered and equitable care, as well as identify the historical and contextual barriers impacting access to and delivery of high-quality family planning services for people of color, LGBTQI+ individuals, people with disabilities, and people with low incomes, among others.

2.10. Support care coordination. With the $25 million requested in the FY 2023 Budget, HHS will implement Pregnancy Medical Home demonstration sites that emphasize quality and care coordination through a team-based approach to care with the goal of reducing adverse maternal health outcomes and maternal death. Pregnancy Medical Homes include aspects of clinical care that address the comprehensive needs of a pregnant mother, including behavioral and social factors that can complicate efforts to achieve healthy birth outcomes.

2.11. Support state innovation efforts. HHS supports state innovation to improve maternal health outcomes by establishing state-focused Maternal Health Task Forces and improving state-level data surveillance on maternal mortality and severe maternal morbidity. With current funding, HHS supports 9 states in this work. With the $55 million requested in the FY 2023 Budget, HHS will reach approximately 15 more states.

2.12. Reduce the stigma of postpartum depression and other mental health disorders. HHS will launch a media campaign in the spring of 2023 to raise awareness for women, families, and the general public about postpartum depression and how we can better support families and improve maternal mental health outcomes. The campaign will include conducting audience segmentation research on destigmatizing messages about postpartum depression treatment by developing first-person narrative videos, testing the videos for increases in intention to report or reporting behavior, and conducting formative research on campaign messages with target audiences.

2.13. Support breastfeeding. Breastfeeding has benefits for both postpartum mothers and babies. For postpartum individuals, benefits include reducing the risk of high blood pressure, diabetes, ovarian cancer, and breast cancer. Infants who are breastfed have reduced risks of asthma, obesity, Type 1 diabetes, respiratory disease, ear infections, sudden infant death syndrome, gastrointestinal infections (diarrhea/vomiting), and necrotizing enterocolitis for preterm infants.[84] Although rates of breastfeeding initiation have increased during the past decade, racial/ethnic disparities in breastfeeding persist, largely due to inequal access to paid leave and other socioeconomic factors.[85]

Through the Reducing Disparities in Breastfeeding Innovation Challenge, HHS will award a total of $800,000 to submissions that identify effective, pre-existing programs that increase breastfeeding initiation and continuation rates, decrease disparities among breastfeeding mothers, and demonstrate sustainability and the ability to replicate and/or expand the program. HHS will also develop and implement a comprehensive strategy to improve disparities in breastfeeding initiation and duration announced in Summer 2022.

2.14. Work with states, cities, and counties to improve quality of care and prevent unnecessary deaths. As noted earlier, the federal government alone cannot solve this problem. Some of our strongest partners in jointly ensuring that people receive high quality care throughout their life are states and local municipalities. To drive broader change and improve maternal health, including the quality of care provided to pregnant and postpartum individuals, partnering with state and local leaders as well as state-based stakeholders including providers, payers, hospitals, advocates, faith, and community-based organizations, is essential. To that end, we will:

- **Work to enroll every state in the AIM program by 2023.** The AIM (Alliance for Innovation on Maternal Health) program is focused on reducing maternal deaths and severe maternal morbidity by engaging provider organizations, state-based health and public health systems, consumer groups, and key stakeholders to implement proven safety and quality improvement strategies. Currently, there are 44 states plus the District of Columbia enrolled in AIM. By 2023, AIM seeks to enroll all 50 states, jurisdictions and U.S. territories. With the $15 million requested in the FY 2023 Budget, HHS will continue to expand reach to a broader array of providers and healthcare settings, support increased penetration in currently enrolled states, and improve systems that track, report, and improve maternity care services.
- **Ensure that Perinatal Quality Collaboratives (PQCs) are operating at full capacity in every state.** In FY 2022, HHS will expand the number of funded PQCs to approximately 22 and expand support for the National Network of Perinatal Quality Collaboratives, as well as explore additional strategies to continue to help states build

their quality improvement initiatives through PQCs. Within CDC's Safe Motherhood and Infant Health request in the FY 2023 Budget, HHS will support PQCs in all 50 states. PQCs enhance their ability to improve perinatal care by expanding the range of neonatal and maternal health issues addressed, including higher proportions of participating hospitals in their state PQC, and working to ensure an equitable distribution of benefits from quality improvement initiatives.

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Goal 3:
Advance Data Collection, Standardization, Transparency, Research, and Analysis

Data and research are foundational to achieving every goal in this Blueprint. Yet, data and evidence are often lacking for women and their clinicians to make informed choices based on the risks and benefits of treating or not treating conditions during pregnancy and postpartum. Further, even where we have robust data collection and evidence about the outcomes connected to certain care models, such as midwifery-led care and freestanding birth centers,[86] it often is not translated into systems change and clinical practice.[87]

The Problem

"I have a friend now who has been delaying having a baby because she's scared she's going to die. She wants to have a plan in place even before she gets pregnant to make sure she and her baby survive the U.S. health care system."

- **Black and Latina mother of two**

The United States has gaps in data related to maternal health.[88] There is no legislative mandate for consistent data collection across our states and territories, and standardizing data definitions and formats across jurisdictions can be challenging due to a lack of common data collection systems.[89] Currently, maternal mortality data are collected, stored, and shared via several federal, state, and local sources including, but not limited to, the Centers for Disease Control and Prevention (CDC), state health departments, and health care systems. Further, data are routinely collected in the provision of care to women and their infants (e.g., birth and death certificates, hospital billing data) and many public programs (e.g., WIC); however, these data are infrequently combined for program evaluation or research. Better leveraging and linking existing data systems could reduce data collection burden and provide a more holistic evaluation of maternal and infant outcomes in and out of health care settings.

MMRCs also play a critical role in our maternal health data collection efforts. As noted earlier, MMRCs are multi-disciplinary committees that convene at the state or local level to comprehensively review deaths of women during or within a year of pregnancy. MMRCs have access to clinical and non-clinical information (e.g., vital records, medical records, social service records) to more fully understand the circumstances surrounding each death, and to develop recommendations for action to prevent similar deaths in the future. Currently, 36 states have voluntarily shared their MMRC data with CDC to allow for further analysis and a broader understanding of pregnancy-related deaths.

Moreover, data often lag—publicly available hospital discharge data can lag 3-5 years, making it difficult for researchers to understand recent trends at the local, regional, and national levels and inform targeted efforts to improve quality of care. Through its Pregnancy Mortality Surveillance System, CDC collects data regarding pregnancy-related deaths from all 50 states, New York

City, and Washington, D.C. Medical epidemiologists review and analyze birth and death records to estimate the number of pregnancy-related deaths for every 100,000 live births. However, reporting the data is voluntary and often lags due to limitations in states for conducting the necessary data linkages. Generally, while we cannot necessarily mandate standardized data reporting from all states without Congressional action, CDC is developing state partnerships and processes for CDC to conduct this linkage that will improve the timeliness and quality of PMSS data collection.

Data must also drive the development of more equitable policies to improve maternal health outcomes for underserved populations. We know that there is incomplete and inconsistent collection of race, ethnicity, and other demographic information in many maternal health data sources.[90] This can make it difficult to assess which populations experience poor outcomes and how best to implement evidence-based interventions that are tailored to the needs of specific populations. There can also be tremendous complexity in obtaining and linking data.

We also recognize that maternal health analyses have not focused enough on key drivers of poor maternal health outcomes such as social determinants of health, environmental stressors, mental health and substance use disorders, and chronic diseases like hypertension.[91] Improving the collection, linkage, and use of these data would help in identifying medical and social contributors to adverse maternal health outcomes that could be addressed through prevention, including better linkages with social and community-based services.

PRAMS collects jurisdiction-specific, population-based data on maternal attitudes and experiences before, during, and shortly after pregnancy. PRAMS surveillance is conducted in 50 sites (46 states, New York City, Washington, DC, Puerto Rico and Northern Mariana Islands) and currently covers about 81% of all U.S. births. While PRAMS provides self-reported data not available in other data resources, linking this survey data with clinical data such as hospital discharges and Medicaid claims as well as other data would provide fuller context of the complex system under which outcomes occur. The Patient Centered Outcomes Research Trust Fund supports this kind of linkage through some existing projects, but more work is needed.

Finally, we have glaring gaps in the evidence base around new medications or interventions because pregnant and lactating women and their infants are often excluded from clinical research on medications and other medical interventions due to concerns about possible harms.[92] Yet, more than 90% of people take at least one prescription medication during pregnancy and the postpartum period, including when breastfeeding.[93] These knowledge gaps leave providers with insufficient information to inform clinical decisions from medication use in pregnancy to safety of medication use during lactation. While there are ongoing efforts, such as NIH's Implementing a Maternal health and PRegnancy Outcomes Vision for Everyone (IMPROVE) initiative, the Task Force Specific to Pregnant and Lactating Women, and the Maternal and Pediatric Precision in Therapeutics (MPRINT) Hub to close some of these gaps, there is a need to continue to bolster these efforts and enhance research to inform clinical practice.

The actions we highlight below help to build a data-driven health system that delivers high-quality maternity care and collects timely, accurate, standardized, and comprehensive maternal health data from states and providers; uses that data to fuel new maternal health research insights; prioritizes funding of research that includes insights regarding pregnant people so we understand treatment approaches and interventions that work and those that do not; enables providers to easily access and deploy those insights at the point of care through delivery of

effective, evidence-based treatment, and continuous quality improvement; and ensures that pregnant women and infants are prioritized in federally-funded research to ensure they benefit from scientific breakthroughs.

Actions We Will Take

3.1. Improve data collection in states, hospitals, health centers, and insurance programs to support better surveillance and quality measurement, and improve outcomes.

Actions Congress Must Take

- Fund MMRCs in all 50 states, tribes, and territories
- Improve data collection and dissemination of data on women's' pregnancy experience by $5 million
- Bolster research and curricula development by minority-serving institutions by $10 million

- **MMRCs.** In 2022, CDC will expand the number of funded MMRCs to include 8 new states, for a total of 38 awards to 39 states, through a Notice of Funding Opportunity. In addition, in 2022 the CDC will strengthen their MMRC data collection analyses. They will make additional data on population- and community-level indicators readily available to all MMRCs, such as the number of mental health care providers per 100,000 population, the violent crime rate, and the prevalence of food insecurity, to better consider the impacts of these factors. CDC will also provide guidance for states on how information from MMRCs, including prevention recommendations, can be leveraged to improve health equity. Within CDC's Safe Motherhood and Infant Health request in the FY 2023 Budget, HHS will expand MMRCs to all 50 states, tribes, and territories and also support funding for community engagement in MMRCs.
- **PRAMS.** In 2023, the CDC, in partnership with state, territories, and local jurisdictions, will launch a new phase of the PRAMS questionnaire. The core questionnaire fielded by all jurisdictions will include information on experiences before, during, and after pregnancy, including on the social determinants of health (e.g., food and transportation insecurity), experiences of discrimination, and respectful care. These data—in conjunction with data collected on behaviors and health concerns during pregnancy such as substance use during pregnancy and postpartum depressive symptoms—will help inform program and policy to improve maternal health. Within CDC's Safe Motherhood and Infant Health request in the FY 2023 Budget, HHS will utilize $5 million to add enhancements to PRAMS by testing and implementing strategies for rapid-data collection and dissemination.
- **Hospitals.** The Maternal Morbidity and Mortality Data and Analysis Initiative at HHS will collect inpatient data from at least 220 hospitals from every state and D.C. to identify drivers of poor maternal and infant outcomes and implement solutions for safety. The project will provide HHS with up-to-date (within the last 12 months), nationally representative, and standardized maternal and infant health data, disaggregated by race and ethnicity. These data will help identify the drivers of maternal and infant mortality and morbidity, decrease disparities, and inform evidenced-based interventions to improve outcomes. Initial results are expected in February 2023.

- **U.S. Core Data for Interoperability (USCDI).** The HHS Office of the National Coordinator for Health IT (ONC) oversees the USCDI, which is a standardized set of health data classes and constituent data elements for nationwide, interoperable health information exchange. It includes versions that reflect expansions over time that follow a predictable, transparent, and collaborative process involving public input. The draft USCDI Version 3 contains a new data class on pregnancy status as well as other data classes and elements important for supporting maternal health. ONC is exploring ways to ensure adoption of standards-based technical innovations and harmonization of data elements tied to improved maternal health outcomes with its federal partners and industry stakeholders.
- **Health Centers.** Starting in 2023, HRSA will coordinate with Health Center Program participants to report deidentified data in alignment with ONC's U.S. Core Data (USCDI) standards. This initiative is designed to collect more and better data on social determinants of health, while also streamlining and improving data quality reporting for health centers. It will enable health centers to tailor their efforts to improve health outcomes and advance health equity more precisely to the needs of specific communities or patients. Data reported will include patient characteristics, diagnoses/services, and clinical quality measures such as cervical cancer screening rates, prenatal care, and low birth weight. Deidentified patient-level data submitted in 2024 will be used to provide targeted technical assistance, improve equitable access to care and clinical quality performance, and advance research efforts to better understand and address disparities, particularly in maternal health outcomes.
- **FEHB Carriers.** OPM will work with contracted health insurance carriers to progressively improve their collection of race and ethnicity data, complementing OPM's broader health data strategy, which aims to better understand equity in health care delivery. This will allow OPM and its carriers to develop interventions for those racial and ethnic groups disproportionately affected by certain conditions (including maternal morbidity and mortality) and track the impact of those interventions on these groups and others. OPM will also analyze race and ethnicity data reported to the National Committee for Quality Assurance (NCQA) on maternal health quality metrics stratified by race and ethnicity for possible inclusion of such measures in its Plan Performance Assessment (PPA) program. Inclusion of a race/ethnicity stratified maternal health measure in the PPA, which is used to determine FEHB carriers' profit margin, would heighten carrier attention on maternal health and incentivize improved outcomes.
- **Medicaid and CHIP.** CMS maintains the Maternity Core Set, a collection of perinatal quality measures from the Child and Adult Core Sets for voluntary reporting by state Medicaid and CHIP agencies. In 2024, CMS will require mandatory reporting by states of all measures from the Child Core Set, including the perinatal measures included on the Maternity Core Set (e.g., low birth weight live births, timeliness of prenatal care) and all behavioral health measures. The perinatal measures on the Adult Core Set will currently remain voluntary (a legislative change is required to make them mandatory). CMS publicly reports core set measure data annually on Medicaid.gov. In addition, CMS includes a few of the Maternity Core set measures in the public-facing Medicaid and CHIP Scorecard and works with an advisory group to identify additional perinatal measures annually.

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3.2 Bolster research and build the next generation of maternal health researchers.

- **The Implementing a Maternal health and Pregnancy Outcomes Vision for Everyone (IMPROVE) initiative.** NIH launched IMPROVE in late 2020 to provide funding opportunities for research that will improve care before, during, and after pregnancy. In 2022, IMPROVE will address the foremost causes of maternal mortality, identifying the biological, psychosocial, and structural factors that contribute to the disparities in maternal health delays or disruption in maternal care. The initiative will also support the development of technologies, devices, and interventions to predict, diagnose, and create evidence-based solutions for women across the country to promote maternal health equity. HHS will also leverage existing NIH programs to increase by at least 3% (from 2020 baseline) the number of maternal health research studies conducted by trainees, career development awardees, or early-stage investigator scientists, including those who are from underrepresented racial and ethnic groups, minority-serving institutions, institutions in underserved areas, or are directly studying maternal health disparities.
- **Research by minority-serving institutions.** With the $10 million requested in the FY 2023 Budget, HHS will fund minority-serving institutions to study health disparities in maternal health outcomes. HHS could also develop curricula for training health professionals on identifying and addressing the risks associated with climate change for vulnerable individuals and individuals with the intent to become pregnant.
- **Rural-focused research.** Pregnant and postpartum individuals in rural areas face unique challenges and disparities in outcomes compared to their urban counterparts. To address this, HHS research on rural maternal health will include analyses of health insurance, utilization, and outcomes comparing maternal and infant health outcomes between rural and urban counties and assessments of the availability of evidence-based maternity care services and supports. HHS will use these findings to inform future funding opportunities in HRSA and across HHS and factor into broader HHS policy assessments so that the needs and unique challenges of rural communities are accounted. This will include promoting the findings to local, state and national stakeholders through a Rural Maternal Health webinar and presentations at conferences and promotion through social media.

3.3. Better understand conditions that impact pregnancy.

- **Risk factors for poor pregnancy outcomes.** The NIH Pathways to Prevention (P2P) program uses an unbiased, evidence-based process to identify research gaps in a scientific area of broad public health importance and works to identify and address risks of maternal mortality and morbidity in the postpartum period, with a special emphasis on risk associated with social determinants of health. This P2P will include an AHRQ Systemic Evidence Review and comprehensive NIH research portfolio analysis on the topic. This P2P program will also include a public workshop titled “Identifying Risks and Interventions to Optimize Postpartum Health” that will be held virtually in the winter of 2022. Further, the P2P workshop will include a follow-up federal partners meeting with stakeholders from across the federal government who will develop a white paper on next steps to reducing maternal morbidity and mortality. Collectively, findings from this P2P will be used to inform future research, policy, and guidelines related to maternal morbidity and mortality.

- **Endometriosis, fibroids, and polycystic ovarian syndrome.** HHS will fund up to eight demonstration projects to implement and evaluate evidence-based interventions to comprehensively identify and treat endometriosis, fibroids, and/or polycystic ovarian syndrome (PCOS), with an emphasis on addressing and reducing disparities in underserved communities. Endometriosis, fibroids, and PCOS increase the risk of pregnancy complications and adverse maternal outcomes including gestational diabetes, preeclampsia, placenta previa, and preterm birth. Additionally, individuals with endometriosis, fibroids, and PCOS are more likely to have a cesarean delivery. HHS will weave this research into clinical practice by November 2023.
- **WIC participation.** USDA recently funded and published an AHRQ systematic evidence review, *Maternal and Childhood Outcomes Associated With the Special Supplemental Nutrition Program for Women, Infants and Children (WIC),* to examine how WIC participation is associated with various maternal, infant, and child outcomes, including maternal morbidity and mortality. USDA held a stakeholder meeting in April 2022 with Federal partners responsible for maternal health research and surveillance to support the development of a WIC and maternal health research plan. With findings from the final report and feedback from the stakeholder meeting with Federal partners, USDA will develop the Fiscal Year 2023 USDA-FNS Research and Evaluation Plan to include opportunities to advance maternal health. Examples may include partnering with other Federal agencies to expand maternal health monitoring and surveillance activities or developing studies to measure the effectiveness of culturally-appropriate services and interventions.
- **Housing assistance.** HUD will collaborate with the National Center for Health Statistics (NCHS) on a joint research project using the National Hospital Care Survey linked with HUD administrative data to better understand the factors that contribute to maternal morbidity among a sample of HUD-assisted women. HUD will also work with HHS to identify opportunities to match housing data with health data to examine structures and processes of integrated maternal health delivery models and maternal and child health outcomes among HUD-assisted families. HUD and HHS will also identify opportunities to promote data collection/tracking of housing status in health care systems, interoperability between data systems, and development of a geospatial product that helps maternal health providers navigate housing assistance.
- **Environmental stressors.** EPA will use new tools and information, such as anonymized electronic health records and data from the National Children's Study, to advance research to characterize and assess the impacts of chemical and non-chemical stressors on women's reproductive health, developmental endpoints, and birth outcomes. Maternal exposures to chemical stressors (e.g., air pollutants, heavy metals), climate stressors (e.g., wildfires, floods, extreme heat), and social and economic stressors (e.g., income, discrimination, access to health care, healthy food, and green space) can cumulatively impact maternal health. By enlisting new data sources and deploying new technologies, the EPA will be able to better understand how these stressors interact. With these findings, EPA will be better able to incorporate the impact of environmental stressors on maternal health into decision-making and communicate with the public health community, including health care providers, about how environmental stressors contribute to cumulative impacts on maternal health. EPA will use new tools and information to characterize and assess the impacts of chemicals on a limited number of health endpoints related to maternal health; the FY 23 President's Budget

would allow EPA to expand its efforts to include characterization and assessment of maternal health impacts associated with climate change and from the combination of chemical and non-chemical stressors.

Goal 4:
Expand and Diversify the Perinatal Workforce

Our maternal health system is under-resourced. The U.S. currently experiences a shortfall of thousands of obstetricians, licensed midwives, family physicians, and other women's health providers, and the gap is expected to grow in the coming decades.[94, 95] As noted previously, 7 million women of childbearing age live in counties without access or with limited access to maternity care and they are giving birth to more than 500,000 infants a year.[96] Notably, fewer than half of all rural counties have a practicing obstetrician.[97] While physicians, nurse practitioners, physicians' assistants, and nurses undoubtedly play an essential role in the maternal health ecosystem, so, too, do social workers, nutritionists, and non-clinical workers, such as community health workers and doulas. For example, access to community-based doulas is associated with improved maternal health outcomes, including lower odds of Cesarean sections and preterm births.[98] Yet, only about 6% of women who give birth receive doula care.

Compounding the lack of providers is the fact that racial and ethnic diversity in many health care professions has not kept pace with the demographic changes in the U.S. population. Greater diversity in the health care workforce can help address persistent racial and ethnic disparities in health care by improving patient experience, increasing patient satisfaction, and improving access to care for underserved patients.[99] Some experts suggest that disparities in maternal health outcomes could be reduced by increasing workforce diversity and having more culturally congruent maternity care in the U.S., with health care providers of color helping to mitigate cultural barriers in the health care system.[100]

The Problem

The Provider Shortage & the Need for Provider Diversity

As noted, there is a shortage of health professionals.[101] Obstetricians are in short supply, as are family physicians who provide obstetric services.[102] By 2030, the number of obstetricians is expected to decrease by 7% while demand is projected to increase by 4%. One study projects a shortfall of up to 48,000 primary care physicians (e.g. family doctors, general practitioners) by 2034.[103] Experts attribute the shortage, at least in part, to physician burnout caused by increasing patient loads, sleep deprivation, and emotional stress, among other factors.[104] The workforce is also aging at an alarming rate, with retirements occurring faster than vacancies can be filled. Nationally, 35% of obstetricians are 55 years and older while less than 20% are under 40-years old.[105]

The challenges facing the obstetrician field do not end there. As the country grows more diverse, the health care workforce has grown increasingly unrepresentative of the women it serves. Nearly 40% of the women in the United States belong to a racial or ethnic minority group.[106] And roughly half of all births in the United States are to mothers of color.[107]

By contrast, studies show that fewer than one fifth of obstetricians come from underrepresented racial and ethnic communities.[108] Obstetricians and other physicians with disabilities are

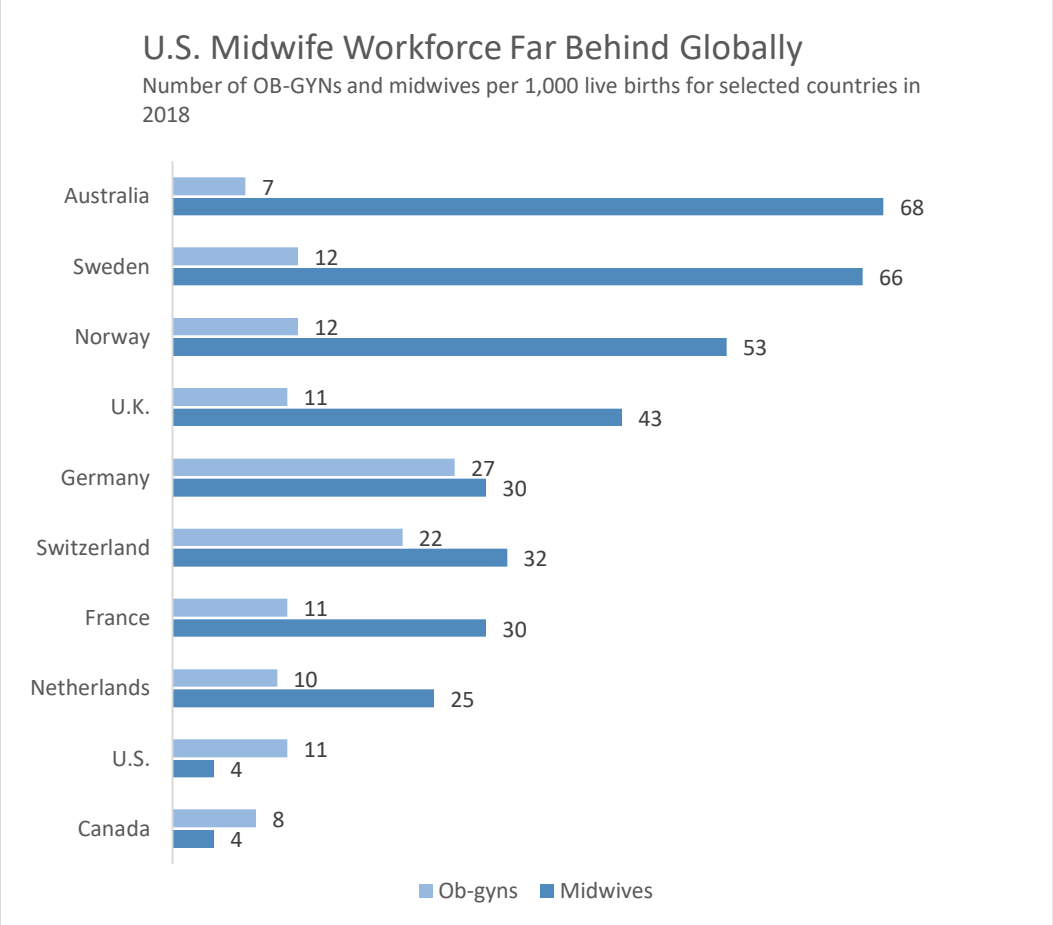
similarly underrepresented, with implications for culturally competent care for women with disabilities.[109, 110] An obstetrician workforce that reflects the diversity of our childbearing population is essential and will be better equipped to navigate—and help eradicate—the persistent disparities we see in maternal health.

Critical Pieces of the Maternal Care Workforce

Midwives

Licensed midwives are clinically trained health care practitioners that assist women in pregnancy and childbirth. Research shows that communities that have carved out a larger role for midwives in the perinatal experience have achieved significantly better results on key measures of maternal and neonatal health.[111] Midwifery can also play a particularly important role in understanding a community's traditions and providing culturally appropriate care, such as for AI/AN communities.[112, 113] Research also shows that midwives provide significant cost savings for mothers, insurers, and taxpayers. For example, one study found that if we could increase our share of births performed by midwives to 20% over the next 6 years—closer to what we see in peer nations—it would generate nearly $3 billion in savings for private insurers and over $1 billion in savings for state Medicaid plans.[114]

Figure 4: Global Midwife Workforce[115,116]



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Countries with significantly better maternal health outcomes than our own have long recognized the benefits of perinatal health providers like midwives. Yet, despite centuries assisting mothers through every stage of their birthing experience,[117] midwives are often relegated to the periphery of our maternal health ecosystem for childbirth. Midwives remain less prevalent in the U.S. than in other peer nations, with only 4 midwives per 1,000 live births (Figure 4). Practicing midwives regularly point to opposition from hospitals, cumbersome licensing requirements, and insufficient reimbursement rates as reasons for this comparative shortfall. For example, while Certified Nurse Midwives (CNMs)—nurse practitioners with a midwife specialty practicing in hospitals—are covered by Medicaid nationwide, Certified Professional Midwives (CPMs)—licensed, independent midwife practitioners who practice outside of hospital settings—are covered in only 14 states. Disparities like these contribute to the difficulty licensed midwives face finding stable, well-compensated work in the United States and result in physicians shouldering more of the clinical burden associated with childbirth.

Doulas

Doulas are nonclinical birth workers trained to provide continuous physical, emotional, and informational support to women in the prenatal, birth, and postpartum periods. Unlike licensed midwives, doulas do not provide clinical support, but instead serve as guides, advocates, and emotional support for mothers as they navigate the maternal health system. Numerous studies and patient surveys have illustrated the value of doulas during childbirth. For instance, the type of emotional support that doulas provide during labor can improve maternal outcomes.[118] Research shows that doulas are associated with lower rates of maternal and infant health complications, lower rates of preterm birth and low birth weight infants, and lower rates of cesarean sections, among other benefits.[119] Moreover, women with doula support regularly report higher levels of emotional satisfaction with their birthing experience and also attest to developing positive relationships with their doulas over the course of their pregnancy.[120]

"I was in labor for a long time with my daughter. Luckily, she was fine, and my doula was there advocating for us throughout the process, while they recommending medications like Pitocin…Through the whole process, it was really wonderful to have our doula there to make decisions with me and the medical team."

- Latina mother of one

However, multiple barriers also impede efforts to expand the doula workforce. Too few pathways to training and certification, poor coverage by insurers, and insufficient reimbursement rates all contribute to a doula workforce that is too small, too expensive, and insufficiently diverse. As described previously, more than 40 percent of all births in the United States are covered by Medicaid.[121] Yet, coverage of doula services is an optional Medicaid benefit. While only four states currently cover doula services, a number of other states are currently exploring similar policies.[122, 123]

Even in states that have provided for doula coverage through Medicaid, complex billing and credentialing requirements and low reimbursement rates often also impede access to doulas, as they may influence the number of doulas available to provide their services. For example, evidence from Oregon and Minnesota shows that both states set initial reimbursement rates for

doula services too low to attract a sufficient number of doulas to serve Medicaid beneficiaries.[124] Oregon reported an increase in participating doulas following its rate increase.[125] Sufficient reimbursement rates are needed to ensure access and encourage more interest in this career path.

Diversity

Embedded in each of these obstacles to expanding our perinatal workforce are concerns about diversity, equity, and inclusion. Multiple studies observe that the support that practitioners like doulas provide is largely limited to women with higher incomes who can afford to pay for such services out-of-pocket.[126] Similarly, both the midwife and doula professions remain overwhelmingly White. Over 80% of doulas in the United States are White.[127] The lack of diversity in clinical providers and non-clinical workers is troubling, especially given studies that show how beneficial care from diverse providers can be, especially for women of color.[128] Consequently, our work in this space must remain laser focused not only on workforce expansion, but also on the diversity that will assist this expansion and ensure that the entire maternal care workforce looks like America.

Although the actions outlined below will not fully address the various challenges facing the licensed midwife and doula workforces, they constitute important first steps toward building the type of holistic, diverse, and affordable perinatal workforce that all women deserve.

Actions We Will Take

4.1. Train more family medicine and OB/GYN providers in underserved settings. HHS will increase the number of maternal health-focused physicians who are trained at community-based health settings and health centers, which provide care to at-risk and underserved populations. This can improve care for at-risk populations and expand the availability of physicians in underserved areas. HHS will also increase the number of primary care physicians providing high quality obstetric care in rural and/or underserved areas through the Primary Care Training and Enhancement—Community Prevention and Maternal Health program, adding more new primary care physicians with obstetric expertise to the field.

HHS will also increase support for family medicine rural residency programs that include obstetrics training by awarding priority points to applicants focusing on developing such programs during the FY 2023 cycle of the Rural Residency Planning and Development Program. The $12.7 million requested in the FY 2023 Budget will support communities in their efforts to develop accredited rural residency programs that train rural physicians and are sustainable through ongoing support from Medicare or Medicaid.

4.2. Expand and diversify the number of nurses and certified midwives in underserved areas. HRSA's Nurse Corps program, which provides loan repayment and scholarships for nurses practicing in rural and underserved communities, will use a $10 million set-aside to continue its Women's Health investment and to support certified obstetrics and gynecology nurses, Advanced Practice Nurses, and Certified Nurse Midwives. HRSA will also develop the maternal care pipeline for midwives through grants to health professions and nursing schools including scholarships to students from underrepresented communities. These will help grow and diversify the number of certified nurse midwives, with a focus on practitioners working in rural and underserved communities.

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4.3. Increase the number of community health workers and health support workers in underserved areas. HRSA's Community Health Worker Program equips individuals with the skills needed to work in underserved communities and assist individuals from disadvantaged backgrounds with accessing care, resources, and support to recover from the COVID-19 pandemic. Through the $226 million ARP investment, HRSA plans to train 13,000 new and current community health workers and other health support workers such as patient navigators, health care aids, peer support specialists, and health education specialists, to support essential public health services and focus on experiential training and employment through registered apprenticeships and job placements.

4.4. Expand access to freestanding birth centers, licensed midwives, and doulas.

- **Expanding coverage.** HHS will continue to work with states to expand coverage of these services wherever possible—including further education on doulas, freestanding birth centers, and their impact on outcomes—in webinars and enhanced collaborative and live learning activities, such as learning communities. HHS released guidance for states on best practices to expand access to community-based childbirth care and freestanding birth centers as well as guidance for midwifery-based models of care and how doulas can be used to provide birthing support in disproportionately impacted communities. This guidance helps states build a stronger network of these providers and facilities, which CMS built on in its guidance from December 2021 on doulas and postpartum Medicaid coverage.

  In addition, OPM, through their annual Call Letter, is encouraging FEHB Carriers to improve reimbursement and expand coverage for certified nurse midwives, freestanding birth centers, and perinatal support services such as doulas and nurse home visits for federal employees and their families.

- **Offer and train doulas.** The DOJ Bureau of Prisons will launch a contracted doula program to be offered in one or more federal women's facilities, providing pregnant inmates with the option to receive doula services and creating pathways for incarcerated women to volunteer to train and become certified as doulas.

  In addition, with the $20 million requested through the President's FY 2023 Budget, HHS will grow and diversify the doula workforce by providing grants to community-based organizations to develop and/or expand programs to recruit doula candidates, support their training and certification, and then employ them as doulas to support improved birth outcomes in the community.

Action Congress Must Take

- Support community-based organizations in building and diversifying the doula workforce by investing $20 million

4.5. Evaluate the impact of doulas and lactation support on service members and their families. In January 2022, DoD launched the TRICARE Childbirth and Breastfeeding Support Demonstration. This demonstration will allow beneficiaries to access doula and lactation services, when care is received in the private sector, that are typically not covered under TRICARE. Results from the demonstration, which concludes in 2026, can be utilized to inform future TRICARE maternity benefits.

4.6. Identify areas within primary care Health Professional Shortage Areas with the highest need for maternity care health professionals and target resources there. HHS will establish criteria to determine within existing primary care Health Professional Shortage Areas which locations have shortages of maternity health care professionals. These Maternity Care Health Professional Target Areas (MCTAs) will be used to guide placement of obstetricians and Certified Nurse Midwives in the National Health Service Corps.

Goal 5:
Strengthen Economic and Social Supports for People Before, During, and After Pregnancy

Health does not exist in a vacuum, and the health care system alone cannot improve maternal health outcomes. Where we are born, live, learn, work, play, worship, and age affect our health. These factors, known as social determinants of health (SDOH), include access to safe housing, transportation, nutritious foods, and physical activity opportunities; education, job opportunities, and income; air and water quality; and protection against discrimination and violence, among others.[129] Despite the major impact they have on our health and well-being, we too often treat health in isolation, ignoring these underlying social, economic, and structural forces that drive our health outcomes.[130] One potential explanation for why high health care spending in the U.S. has not translated to better national health outcomes is that medical care accounts for only 20% of modifiable contributors to improved health outcomes and, as such, is insufficient to improve the nation's population health. The remaining 80% of modifiable contributors that affect health is driven by nonmedical factors.[131] Given that, we are focused on a broader view of maternal health—one that does not simply focus on clinical care, but takes into account the myriad of factors that affect a woman's health across the lifespan and beyond health care.

The Problem

While the factors driving our maternal health crisis are undoubtedly complex and income is not always a protective factor, there is one thing we know for sure: it is much harder for pregnant women to stay healthy when they are hungry, experience violence, are without housing, feel unsafe, lack child care, lack parental leave, and/or lack a steady paycheck. These social and economic forces help explain why our maternal health crisis cannot be solved by the health care system alone. Research suggests that the social determinants of health could account for as much as half of the county-level variation in health outcomes and are a major driver of health disparities.[132, 133] This shows that unless we begin tackling the structural forces driving health inequity—a few of which we highlight below—we will continue to struggle in our fight against maternal mortality and morbidity.

Housing Insecurity

Every year, thousands of women become pregnant, give birth, and move into post-pregnancy while experiencing housing insecurity.[134] And certain populations are more likely than others to experience housing insecurity and homelessness. For example, women veterans are more than twice as likely to become homeless as women who did not serve in the military. This is particularly troubling given the growing body of research that shows how housing instability during the perinatal period is associated with adverse maternal health outcomes, including increased risk for preterm labor, preeclampsia, anemia, and hemorrhage during pregnancy.[135, 136] One study found that compared to women with stable housing, women experiencing housing

insecurity were more likely to experience preterm birth and have longer hospitalizations after delivery, and were more than twice as likely to visit the emergency room within three months of childbirth.[137]

Food Insecurity and Nutrition

Food insecurity—defined as when a household has limited or uncertain access to adequate food[138]—impacts pregnancy as well. Research has shown that both food insecurity and poor diet are associated with both the presence and suboptimal control of cardiometabolic diseases, such as high blood pressure.[139] High blood pressure in pregnancy is associated with poor outcomes for the woman, such as preeclampsia, stroke, and placental abruption, as well as for the child. Food insecurity is also associated with increased risk for developing gestational diabetes,[140] greater gestational weight gain, and pregnancy complications.[141] One study showed that food insecurity during pregnancy leads to stress, disordered eating, and greater postpartum weight in overweight women.[142] As is the case with most social determinants of health, the burdens of food insecurity are not borne equally. Women of color are significantly more likely than White women to be food insecure, with Black and AI/AN women experiencing food insecurity two to three times more often than their White counterparts.[143] Veteran women are also at higher risk, with 28% of women veterans found to be food insecure in 2018.[144]

"I tried to get food assistance. I talked to human services at my school and they said, 'If you can go to school you can get a job.' And I was like, wait, so I can't get government assistance if I don't have a job? And she was like, 'Yes, you can't get help unless you work.' So I had no assistance. When I got a job I was making too much, by like $50, so I just left it alone."

- Black mother of four

Environmental Risks

Nongenetic environmental exposures—such as air pollution, pesticides, metals, and Per- and Polyfluoroalkyl Substances (PFAS) found in products that resist heat, oil, stains, grease, and water—also contribute to maternal complications. Pregnancy represents a particularly sensitive window of susceptibility during which physiological changes to every major organ system increase sensitivity to chemicals that can impact not only a woman's pregnancy, but her long-term health as well.[145] For example, breast development, especially during pregnancy, is sensitive to changes by environmental contaminants, which can contribute to impaired breastfeeding and future breast cancer risk.[146] Environmental stressors have been associated with fibroids, infertility, and increased risk of polycystic ovarian syndrome, which increases risk for hypertensive disorders of pregnancy; they can also result in low birth weight, preterm delivery, congenital malformation, and neonatal mortality.[147] [148]

As we have seen repeatedly, women of color generally have a higher burden of exposures from consumer products, occupations, and characteristics of where they live, residing in closer proximity to sources of water and air pollution than White women.[149] Climate change also has a significant impact on maternal health. For example, climate-related disasters (e.g., wildfires that lead to changes in air quality that impacts asthma and increases the chance of perinatal mortality) and extreme heat pose significant threats to pregnant women, particularly those that are low-income or from communities of color.[150]

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Economic Insecurity

Economic insecurity—including financial instability and the lack of workplace protections and benefits—can exact a significant toll on the physical and mental wellbeing of pregnant women and new mothers. Discrimination against pregnant workers and the lack of workplace supports, including lack of access to affordable and reliable child care, all have been shown to have adverse effects on women's birthing experiences and health outcomes. We similarly know that comprehensive paid family and medical leave and paid sick days are critical for easing the financial burdens on new families and cultivating important bonds between new parents and their children.[151] Recent research shows that in the short term, paid family leave policies are associated with positive health outcomes including better maternal mental and physical health.[152, 153] Over 95% of the lowest wage workers, mostly women and workers of color, lack any access to paid family leave.[154] Paid leave has been shown to reduce racial disparities in wage loss between workers of color and white workers.[155] This Administration has remained steadfast in its commitment to helping families navigate work and family.

Personal Safety

Research shows that repeated exposure to crime and violence is associated with adverse health outcomes. Maternal health is no different. Violence is a significant contributor to deaths among women of reproductive age, including pregnant and postpartum persons.[156] Experts have illustrated a strong correlation between neighborhood-level violent crime and maternal mortality.[157, 158] Research has also shown the negative—and sometimes fatal—repercussions of domestic violence, sexual assault, and other forms of gender-based violence on women's health, including during pregnancy and the postpartum period where women are often uniquely vulnerable to intimate partner violence.[159] That is why any effort serious about addressing our maternal health crisis must take equally seriously women's personal safety. That includes efforts aimed at curbing intimate partner violence and reducing exposure to neighborhood level crime. It also includes attending to the needs of incarcerated mothers and birthing women, who are often forced to go through pregnancy and childbirth in conditions that are unsafe for them or their newborns.

Actions We Will Take

5.1. Streamline federal benefit programs that offer services like housing, child care, financial assistance, and food. People who qualify for certain government programs like Medicaid often meet the criteria to qualify for other programs that provide services like food assistance. We recognize that Americans often navigate services across multiple agencies in specific moments of need, such as when they are having a baby. In such situations, relevant agencies should coordinate their service delivery to achieve an integrated experience that meets customer needs through the exchange of data with appropriate privacy protections.

The Executive Order on Transforming Federal Customer Experience and Service Delivery to Rebuild Trust in Government directed the Secretary of HHS, to the maximum extent permitted by law, to support coordination between benefit programs to ensure applicants and beneficiaries in one program are more automatically enrolled in other programs for which they are eligible. To that end, HHS, in conjunction with HUD and USDA, will build better linkages between federal programs so that pregnant and postpartum women can more easily obtain services that address

their needs outside the doctor's office. This includes services like housing assistance, the Special Supplemental Nutrition Program for WIC, home visits, and child care assistance.

- **Housing.** HUD's Office of Public Indian Housing and Multifamily Housing and HHS will collaborate to connect eligible families that receive housing assistance or reside in public housing with access to maternal and child health programs, such as home visits from a nurse or social worker. HUD's Office of Field Policy and Management will convene HUD, HHS, and USDA partnership meetings in aligned target cities to enhance delivery of maternal health outreach, education, and care for HUD clients. HUD's Office of Special Needs will also provide information and technical assistance to grantees that provide services to women (including youth) experiencing homelessness and to survivors of domestic violence, sexual assault and other forms of gender-based violence. This technical assistance will guide grantees on how to work with HHS-supported maternal health programs (e.g., Healthy Start and Maternal, Infant, and Early Childhood Home Visiting Program), thereby helping connect residents with health education and services to support expectant and new mothers.
- **Child care and temporary financial assistance.** HHS is launching a pilot initiative to identify and dismantle barriers to make it easier for people to access benefits across Administration for Children & Families (ACF) programs, which could include child care assistance, Head Start, Children's Bureau programs, and Temporary Assistance for Needy Families (TANF). The pilot will identify innovative and promising strategies from various grant programs and use data to design tailored solutions to help families access existing benefits and support better coordination across health and human services systems.
- **WIC.** USDA will invest $390 million in American Rescue Plan Act funds to carry out outreach, innovation, and modernization efforts with the goals of increasing WIC participation and retention and reducing disparities in program delivery. These funds will remain available through fiscal year 2024. As part of the investment strategy, USDA will undertake a national outreach campaign to rebrand WIC, working with state and local program providers and community-based partners to implement and evaluate the effectiveness of outreach strategies in increasing WIC participation. USDA will also provide grants and technical assistance to WIC State agencies to modernize the WIC certification experience, with a focus on improving the customer experience through updating business practices, implementing and upgrading technology tools, and adopting human-centered, innovative technology practices.

  Additionally, USDA will invest in modernizing the shopping experience in grocery stores, especially for vulnerable populations, such as those with limited English proficiency, and will expand purchasing options by enabling participants to use their WIC benefits for online ordering. USDA is also undertaking a proposed rulemaking in FY 2022 to update the WIC program food packages to maintain consistency with the healthy dietary patterns recommended by the *Dietary Guidelines for Americans, 2020-2025*. These updates would ensure the nutrient-dense foods provided to WIC participants remain aligned with the latest nutrition science to promote healthy outcomes for pregnant, breastfeeding, and postpartum women and their infants and children. These updates would also provide increased flexibility and value for participants and better accommodate a diversity of cultural feeding patterns.

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5.2. Address the social determinants of maternal health. With $55 million requested in the FY 2023 Budget, HHS will fund community-based organizations to support projects to expand maternal mental health access, develop community needs assessments in consultation with pregnant and postpartum individuals in local communities, increase access to effective digital tools to expand and enhance maternal health care, and expand models that train maternal health care providers and students on how to address implicit bias and racism and screen for social determinants of health.

Actions Congress Must Take

Invest $55 million to address social determinants of maternal health

5.3 Increase awareness of workplace benefits and protections. Many pregnant and postpartum workers are unaware of the protections and benefits they are entitled to in the workplace. For example, tens of millions of workers do not know that they are covered by the Family and Medical Leave Act, which allows many workers to take up to 12 weeks of unpaid, job-protected leave for the birth of a child and to care for the newborn child within one year of birth (or for placement of a child for adoption or foster care), or the Fair Labor Standards Act, which requires eligible employers to provide reasonable break time for expressing breast milk (pumping) and a private place for lactation. Similarly, the Federal Employee Paid Leave Act provides 12 weeks of paid parental leave to covered Federal employees eligible for FMLA in connection with the birth or placement (for adoption or foster care) of a child.

Finally, federal anti-discrimination laws, such as the Pregnancy Discrimination Act and the Americans with Disabilities Act, protect pregnant workers against discrimination in the workplace, and Title VII prohibits sex-based and other discrimination against employees with caregiving responsibilities. Federal employees may also find protection under the Rehabilitation Act, which affords reasonable accommodations and protection from adverse employment actions based on disability (including pregnancy-related medical conditions), and under Executive Order 11478, which prohibits discrimination on the basis of parental status.

DOL will launch a national outreach campaign and target at least two industries and all regions of the country to make both workers and employers aware of these protections. These protections are especially important for working mothers with low incomes, many of whom return to the workplace soon after giving birth and face greater obstacles in obtaining pregnancy accommodations.

5.4. Prevent violence against pregnant and postpartum individuals. The U.S. Preventive Services Task Force recommends that clinicians screen for intimate partner violence and other forms of gender-based violence in women of reproductive age and provide or refer women who screen positive to ongoing support services.[160] To implement this evidence-based practice, HHS will develop and implement a state-level pilot program to incentivize providers to be trained on intimate partner violence during pregnancy and postpartum. The pilot program will include partnerships with domestic and sexual violence organizations at the state and local level to address the intersection of intimate partner violence and substance use during pregnancy and postpartum.

5.5. Standardize leave recommendations for pregnancy loss and neonatal health complications for the Military Health System (MHS). Without standardized guidelines, DoD's MHS found that recommendations for pregnancy loss leave were inconsistent. In

response, the Defense Health Agency Gynecological Surgery and Obstetrics collaboration created and are now implementing leave practice recommendation reference guidelines for pregnancy loss.

5.6. Screen veterans for homelessness, food insecurity, post-traumatic stress disorder, and other factors. VA currently has various screening templates built into the electronic health record that is used for all veterans engaged in primary care at a VA facility. VA will take steps to ensure that all enrolled veterans of childbearing age who have a primary care visit are screened and, if needed, connected to resources for homelessness, food insecurity, intimate partner violence, depression, and post-traumatic stress disorders. VA is committed to ensuring that at least 80% of veterans of childbearing age in the Veterans' Health Administration system that have a primary care visit in 2022 will be screened for homelessness and food insecurity and that 85% will be screened for depression and post-traumatic stress disorders.

5.7. Address adverse effects on maternal health from climate change and other environmental stressors. EPA will launch a Federal Cool Communities Challenge focused on assessing and communicating heat risks and building resilient energy systems. Submissions must focus on equity and underserved communities. The challenge will directly benefit pregnant women by accounting for this demographic in its assessment and by ensuring the Administration works with key partners to get submissions that focuses on messages for pregnant women about the risks from extreme heat. Submissions will be accepted starting in the summer of 2022.

5.8. Educate providers on the impact of environmental exposures. EPA and the Agency for Toxic Substances and Disease Registry (ATSDR) supports the Pediatric Environmental Health Specialty Units (PEHSUs), a national network of 98 experts in the prevention, diagnosis, management, and treatment of health issues that arise from environmental exposures from preconception through adolescence. Starting in FY23, EPA will work with the PEHSUs to improve maternal health by educating obstetricians and other maternal health care providers on how to assess environmental risks such as lead and PFAS, provide effective interventions, and counsel patients on reducing adverse exposures to women of childbearing age, pregnant women, and new mothers. EPA plans to use $900,000 to support the PEHSUs in FY23 and ASTDR plans to use a similar amount; a portion of these funds will support the maternal health work.

5.9. Replace lead service lines. Lead exposure can result in serious health effects to a developing fetus and infants, increases the likelihood of learning and behavioral problems, and also can increase a mother's risk for miscarriage. EPA is investing billions of Bipartisan Infrastructure Law dollars to identify and replace lead service lines around the nation, providing $3 billion this year in the first of five allotments totaling $15 billion. A key priority of the Bipartisan Infrastructure Law is to ensure that disadvantaged communities benefit equitably from this historic investment in water infrastructure. The BIL also dedicates $11.7 billion to projects to improve drinking water quality, including those to reduce lead in drinking water. In addition, this year EPA will provide $25 million to improve drinking water in small, underserved communities. EPA's Lead and Copper Rule Revisions are now in effect to ensure drinking water providers identify lead service lines in their communities. EPA is developing a new rule to further strengthen lead in drinking water regulations, which the agency plans to finalize in 2024.

5.10. Communicate wildfire risks. During pregnancy, people may be increasingly vulnerable to wildfire smoke due to body changes such as increased breathing rates. And during critical development periods, the fetus may experience increased vulnerability to smoke exposures. EPA

is taking action to provide high quality, timely information through its AirNow Mobile App and Fire and Smoke Map, to help people protect themselves during wildfire events.

In addition, this summer, EPA will relaunch its wildfires web page to make it easier for the public to find user-friendly information on taking action before, during and after wildfires to reduce smoke exposure. EPA is also working to make more information on wildfire health risks available in Spanish and will continue to coordinate closely with the CDC on these public health messages. This has been supported in FY22 with EPA staff and a portion of extramural resources, and EPA's funding request for FY23 would enhance EPA's abilities to forecast where smoke will impact people, including vulnerable pregnant people; identify and communicate when and where smoke events are occurring; build local capacity to be Smoke Ready; and provide the public with the tools and resources they need to act quickly and effectively when smoke is in the air.

5.11. Eliminate barriers to well-being, retention, and career advancement for service members. Through the Medical and Personnel Executive Steering Committee's Women in Service Working Group, DoD is reviewing policies that may adversely impact a service member's career advancement due to pregnancy work and training limitations, and as appropriate, recommending updates.

5.12. Hold, for the first time in over 50 years, a White House Conference on Hunger, Nutrition, and Health. In September 2022, the White House will host a Conference on Hunger, Nutrition and Health. The Conference, and the work leading up to it, will accelerate progress and drive significant change to end hunger, improve nutrition and physical activity, reduce diet-related disease, and close the disparities around them. The Conference will launch a national action plan outlining how we achieve these goals. It will also galvanize action by anti-hunger and nutrition advocates; food companies; the health care community; local, state, territorial and Tribal governments; people with lived experiences; and all Americans.

Conclusion

We imagine a future where every person in the U.S. can have a safe, dignified pregnancy and birth and where equitable access to health care before, during and after pregnancy is a right, not a privilege. Our vision includes acknowledging that this work is only possible if we address the systemic biases entrenched not only in our health care system, but in our laws and public policies and in our public and private institutions.

This vision for the future holds us accountable to the urgent work ahead to end our maternal health crisis. It will require not only a bold vision, but commensurate action. And it will require contributions from us all—Congress to act on legislation; state and local governments to enhance existing efforts and innovate around new interventions and models of care; private and public sector partners to make bold investments in research, data, technology, quality improvement, and the perinatal workforce; and individual Americans to raise awareness on the state of maternal health in our country. It will take a commitment from every person who interacts with mothers and families during pregnancy and childbirth—from physicians, midwives, and nurses to doulas, insurers, and hospital staff, among others. We will need our entire government to strengthen the range of policies that ultimately impact the health and well-being of mothers and their families—policies that advance economic security, end food and housing insecurity, improve access to education, and increase access to safe neighborhoods and environments.

To make the real progress that mothers in the U.S. deserve, we will continue to ensure that their voices and experiences are a guidepost. We remain focused not only on every birth that ends in mortality or morbidity—but every birth that leaves mothers and families with trauma or that otherwise leaves diminished trust in our healthcare system. We believe that our vision for the future—in which the United States will be considered the best country in the world to have a baby—is a compelling call to action, and we hope you join us in this work.

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