Increasing Access to U.S. Maternal Mental Health Care

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\textbf{Executive Summary:} The United States has a maternal mortality crisis, and mental health is the leading cause of pregnancy-related death. Perinatal Mood and Anxiety Disorders disproportionately impact people of low socioeconomic status and medically underserved populations. Current government-supported maternal health structures are underfunded, underutilized, and confusing to navigate. Moreover, gaps in the joint federal-state health insurance program, Medicaid, which covers nearly half of birthing people, leave many under- or uninsured. To address the need for robust maternal mental health care, we propose the Department of Health and Human Services (HHS) create a funding source for community-owned maternal mental health centers. These centers would provide mental health services that address immediate needs, underlying causes, and barriers to access. Implementing this program would make significant strides to reduce maternal mortality.

I. Maternal mental health crisis

The U.S. maternal mortality rate has spiked in recent years to 32.9 deaths per 100,000 live births (Hoyert 2023), far exceeding the rate of other high-income countries (Guna, Gumas, and Williams II 2022). The situation is more dire for birthing people from minoritized and low-income groups due, in part, to increased structural barriers to quality care (Hoyert 2023; Singh 2021). Alarming, mental health is the most frequently identified cause of pregnancy-related deaths (22.7%), all of which are considered preventable (Trost et al. 2022). Maternal mortality review committees identify mental health as the underlying cause for deaths of suicide and overdose, as well as those determined to be related to a maternal mental health (MMH) condition, including perinatal mood and anxiety disorders (PMAD) (Trost et al. 2022).

MMH conditions are the leading complication of pregnancy and childbirth, placing 800,000 birthing people in the U.S. at risk of death each year (Fawcett et al. 2019). PMAD, which encompasses distressing feelings of depression and/or anxiety, affects as many as 20% of birthing people (Ayala et al. 2023). Low socioeconomic status is considered the most consistent predictor for PMAD risk (Hansotte, Payne, and Babich 2017). Rates of PMAD are on the rise (Lebel et al. 2020; Bajaj et al. 2022), highlighting the vital need for robust MMH care.

Untreated PMAD can have long-term negative impacts on birthing parents, babies, and families,
and can result in suicide (MMHLA 2020). These conditions also have a staggering financial toll: costs per mother-infant pair approach $32,000 over the first 5 years postpartum, totaling $14 billion nationally (Luca et al. 2020).

II. Perinatal mood and anxiety disorders: Under-detected and under-treated
Existing postpartum care structures often fail to detect and treat PMAD. Under 50% of individuals with PMAD are identified in clinical settings, and less than 25% are treated (Cox et al. 2016; Byatt et al. 2015). Many birthing people, particularly those with lower socioeconomic status, have their PMAD symptoms dismissed by providers as the “baby blues” (Hansotte, Payne, and Babich 2017), normal feelings of postpartum sadness that resolve quickly (Dimes 2021). Ultimately, “failure to screen” and “ineffective treatments” for PMAD contribute to pregnancy-related deaths (Deaths 2018).

Failure to accurately diagnose and treat PMAD disproportionately affects members of minoritized groups and those in poverty (MMHLA 2020, Tabb et al. 2020). In addition to insufficient screening and diagnosis, birthing people living in poverty are less likely to receive treatment due to lack of access, structural barriers, and distrust of the medical system (MMHLA 2020). There is a dire need to address these obstacles to MMH care access (Trost et al. 2022).

Many structural barriers limit low-income and underserved birthing parents’ access to care. Birthing parents report experiencing difficulties navigating state Medicaid insurance policies, including enrolling once pregnant, finding a mental health practitioner who accepts Medicaid, and knowing what services are available (Bellerose, Rodriguez, and Vivier 2022; Shuffrey, Thomason, and Brito 2022). Access issues may be compounded by lack of paid parental leave, which limits the time available for birthing parents of lower socioeconomic status to seek MMH care (Shuffrey, Thomason, and Brito 2022). Transportation and issues with childcare are also major barriers to care access (Abrams, Dornig, and Curran 2009; Bellerose, Rodriguez, and Vivier 2022). Lastly, lack of trust in providers prevents many birthing parents from engaging in care for fear of legal consequences, including having their children removed from their care or arrest (Bellerose, Rodriguez, and Vivier 2022).

III. Current federal landscape
The current administration has pushed to address maternal mortality through Medicaid expansion and investments in a National MMH Hotline and in-home visiting programs, actions that should significantly reduce financial barriers to healthcare coverage. The joint federal-state health insurance program, Medicaid, currently finances over 40% of births in the U.S. (KFF 2021). Through Medicaid, birthing persons with limited incomes can receive mental health screenings and associated treatments, along with other perinatal care. Medicaid expansion following the 2010 Affordable Care Act was associated with lower rates of self-reported pre-pregnancy depression and postpartum depression symptoms as well as increased utilization of mental health care postpartum (Austin et al. 2022, Yoon et al. 2022, Steenland and Wherry 2023, Margerison et al. 2021). However, federal law still only requires states to provide Medicaid coverage through 60 days postpartum, despite the fact that 30% of pregnancy-related deaths occur after this timeframe, and that temporary extensions of coverage allowed by the Families First Coronavirus Response Act saw a threefold increase in maternal mental/behavioral healthcare utilization >90 days postpartum (Trost et al. 2022, Wang et al. 2022).

Recent provisions in the American Rescue Plan Act provide states the option to extend coverage to one year postpartum (“The American Rescue Plan”), but as of September 2023, a fifth of states have not done so (KFF 2021), leaving many birthing parents uninsured. HHS recently created a 24-hour, free hotline for professional counselors to provide real-time, culturally-sensitive support for birthing parents regardless of insurance status along with linkages to care for the insured (HSRA 2022c). Finally, HHS recently invested an additional $16 million into the Maternal, Infant, and Early Childhood Home Visiting (MIECHV) Program to support positive maternal and child health outcomes with a focus on addressing health disparities (HSRA 2022a). This is promising, as several MIECHV programs employ community workers, aim to build trust between workers and families, and strive to ensure continuity of care over the pre- and
post-natal period, all features shown to improve MMH outcomes (Barnett et al. 2018, Sheppard et al., 2004, Mundorf et al., 2018, Hansotte et al, 2017).

IV. Policy options

i. Option 1: Create funding support for community-owned MMH centers

HHS could create a funding program for community MMH centers to serve people below the federal poverty line from the time of conception to one year postpartum. Communities seeking these MMH centers would individually apply to the funding program. A risk assessment to identify MMH care deserts would be performed to help prioritize regions with the highest need and equitably allocate funding. Centers must meet criteria for delivering evidence-based mental health care and offer services to address MMH needs including mental health screenings at every visit, culturally-sensitive therapy, support groups, and treatments. Because PMAD can be caused by anxiety and feelings of being overwhelmed and underprepared (Clinic 2022; M.D.o. Health 2023; C.F.M.M. Health), these centers will also provide structural support in the form of offering birthing classes, lactation services, educational resources, and doula expertise.

Many structural barriers such as transportation, childcare, and cost are reported as instrumental factors inhibiting access to care for low-income and underserved birthing people (Bellerose, Rodriguez, and Vivier 2022; Abrams, Dornig, and Curran 2009). Thus, HHS-funded MMH centers will provide transportation equipped for car seats and telehealth capabilities to address these structural barriers to care. When in-person care is needed, individuals can use the free transportation to see their provider at the Center; and when virtual care is more practical, telehealth options will be available. In either situation, the individual will see members from the same care team who know them and their unique situation. Centers will accept Medicaid insurance, but also be required to use their awarded funding to cover costs for people in states without Medicaid expansion or for those experiencing delays in Medicaid coverage.

Because funding will be requested directly by communities, these centers will be community-owned and run. This way, centers can address community-specific barriers and issues. Evidence supports that similar community-based health programs reduce PMAD for low-income and underserved communities (Mundorf et al. 2018; Barnett et al. 2018). Furthermore, studies have shown that community participation in health services development is crucial, and that different communities may exhibit varying needs, meaning that centers may not be uniform across the country (Haldane et al. 2019). To maintain sustainability across Centers, each must be built and implemented with a community's specific needs in mind.

Advantages

This proposed policy would address critical gaps in MMH care for underserved communities. Services offered will not only provide direct mental health care, but also proactive services designed to address underlying causes of PMAD. With these centers serving people at any stage of pregnancy and up to one year following childbirth, they will address mental health needs for the 33% of people who begin experiencing PMAD symptoms during pregnancy, and the 40% who develop symptoms postpartum (Wisner et al. 2013). Moreover, there are several benefits to community-owned centers. Firstly, services can be tailored to fit communities' needs. Secondly, these community centers will be easier to trust, addressing one reason those of low socioeconomic status and medically underserved people are less likely to follow provider advice or seek care (Sheppard, Zambrana, and O'Malley 2004; Sripad et al. 2022). Lastly, it will foster a greater sense of community, as many parents feel isolated in their struggles (Kent-Marvick et al. 2022).

Disadvantages

Although promising in its scope and reach, this policy option would require a significant amount of funding and support from HHS to cover costs. Projected start-up costs are approximately $1 million per center, although this would likely vary by location and the population served. This figure is based on the initial operating budget of $800,000 in 1990 (adjusted for inflation) of the Northern Manhattan Perinatal Partnership. This non-profit now delivers care to approximately 1800 families annually with an operating budget of $800,000 and offers services outside of the scope of the proposed MMH centers, including Head Start and universal Pre-K programs.
Moreover, because funding to set up these community-owned MMH centers will be individually requested, an office in HHS will be responsible for determining who will receive funding and for how much. Another consideration is that many may not have the workforce infrastructure needed to provide services and staff the center.

**ii. Option 2: Develop a MMH supplement for the Maternal, Infant, and Early Childhood Home Visiting (MIECHV) program and increase funding for the extant program.**

Currently, the MIECHV program serves only 140,000 parents in 71,000 homes across 50 states, the District of Columbia, and five territories - less than ~15% of the families that need this care (HSRA 2022b). MIECHV programs are also not universally required to assess or service maternal health, let alone MMH specifically or its underlying causes (HSRA 2023). By expanding MIECHV and developing a MMH-specific supplement, more eligible families could gain access to MMH services including: in-person mental health screenings; follow-up visits and linkages to care; and home visits by doulas, which have been shown to improve MMH outcomes (Falconi et al. 2022; Zhao et al. 2021). The supplement would focus on the crucial first year postpartum, during which a significant proportion of maternal mortality occurs (Trost et al. 2022).

**Advantages**

Increasing funding for the MIECHV program is expected to reduce downstream spending on government programs and increase recipient families’ individual earnings (HSRA 2022a). A MMH supplement would capitalize on pre-existing MIECHV structures to provide MMH care to birthing parents quickly. It would also take advantage of the established local MIECHV networks and knowledge of community-specific concerns. Because MIECHV programs are administered in every state, including those that have not yet expanded Medicaid coverage, this approach would ensure that in-home MMH care is extended to families without access to affordable insurance (HSRA 2022b).

**Disadvantages**

Expanding funding to MIECHV would not address concerns with the existing model, such as reservations regarding in-home visits and challenges reaching isolated homes. Furthermore, MIECHV could only provide linkages to MMH care for those with insurance, and thus fails to address existing gaps in coverage. Lastly, this program does not create a physical community structure that could foster connections among local caregivers, a potentially valuable component in promoting MMH.

**iii. Option 3: Create an educational campaign on existing MMH resources**

Many structural barriers limit low-income and underserved birthing parents’ access to care (Abrams, Dornig, and Curran 2009), including insufficient educational resources, a lack of awareness about Medicaid coverage and expansion policies, unfamiliarity with mental health services offered by Medicaid, and limited knowledge about MMH Hotline services. We propose implementing an educational campaign aimed at increasing awareness of available resources. The campaign’s main goal would be to bridge the knowledge gap regarding current maternal health coverage and expansion policies, enabling all eligible families to access the necessary support. Primary care providers and healthcare professionals can better educate birthing people about the various MMH care services available, including mental health screenings, birthing classes, support groups, and doula services. This program would also inform eligible families about the extension of Medicaid coverage. Additionally, increased funding for extensive public promotional campaigns can highlight the MMH Hotline including billboard advertisements, public transportation promotions, and social media initiatives. This can be modeled off the recent educational campaign for the 988 mental health hotlines (SAMHSA 2023).

**Advantages**

This option presents a cost-effective solution, reminiscent of the 988 educational campaign., which includes marketing efforts and educational resources aimed at informing the public about utilizing the 988 suicide and crisis lifeline. According to the appropriations bill, there has already been an increase of $3 million for the MMH Hotline (DeLauro 2023). This proposed policy would bridge critical gaps between lack of knowledge and available resources to improve MMH. Many are unaware if their insurance covers mental health services and, due to other societal barriers, cannot use services included in Medicaid coverage (Abrams, Dornig, and...
Curran 2009). Educating birthing people about Medicaid and associated MMH screenings will lift some financial strains. Promoting the MMH Hotline will help connect birthing parents with professional counselors who are culturally sensitive and can provide accessible linkages to care. Hence, through educational campaigns, the Medicaid services, MIECHV program, and MMH Hotline will reach more families.

**Disadvantages**

Although this option offers immediate emergency MMH support, the MMH Hotline might have limited linkage to care without addressing existing gaps in Medicaid expansion policies (KFF 2023). This option also does not address other structural barriers to accessing care. Since a fifth of states have not expanded Medicaid, many will not be able to access some of the services promoted by the educational campaign (KFF 2023).

**V. Policy recommendation**

Each of the policy options presented addresses the domestic issue of MMH care access through different means and therefore are accompanied by unique combinations of ease of implementation and impact level. We recommend Option 1, as it both extends reach to underserved communities and increases accessibility for all communities. Tailoring needs to specific communities would also increase the likelihood of successful mitigation of MMH issues, rather than providing a “one-size-fits-all” approach, as is the current status. Moreover, dedicating HHS funds to create this funding program for community-owned MMH centers addresses gaps in care that increasing funding for existing programs would not solve (e.g., reservations regarding in-home MIECHV visits, preventative services, gaps in Medicaid coverage, etc.). Although substantial funding for these HHS-supported centers would be needed, the potential decrease in overall maternal mortality rate would be well worth considering. Further, since these centers would be community-specific, implementation would be the task of a state or locality, reducing the overall amount of necessary federal input in terms of direct workforce. Because the creation of community-owned MMH centers requires a massive effort, a pilot program would provide a start to assess impact prior to a nationwide rollout.

It is vital that one of these options is considered to reduce MMH mortality. Option 2, although a step down in impact from Option 1, builds off an existing program, which can lower the barrier to implementation. Option 3 introduces an important facet of any outreach – education. Regardless of the option chosen, education is critical to ensure that all birthing parents are aware of existing resources. Ultimately, increasing the reach of MMH care to underserved communities and broadening approaches to care is imperative to reduce maternal mortality. This, in turn, will improve the lives of parents, children, and families across the country.

**References**


KFF. 2021. Births Financed by Medicaid. https://www.kff.org/medicaid/state-indicator/births-financed-by-medicaid/?currentTimeframe=0&sortModel=%7B%22sortColumn%22%3A%22State%22%2C%22sortOrder%22%3A%22asc%22%7D.


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