Approaches to Data Collection and Analysis: Maternal Mental Health
Author: Dakota Thomas

Maternal mental health is one of the most pressing health concerns that the U.S. is facing. It has been exacerbated by the COVID-19 pandemic leading to heightened anxiety, depression, and isolation. To implement effective policies and interventions to address maternal mental health, state leaders should consider these best practices for policies and programs to ensure effective analytical tools and metrics are in place to gauge their success.

> **State leaders may consider funding research on effective interventions to identify and prevent or mitigate maternal mental health problems.**

Policymakers may focus efforts on programs about which there is solid pre-existing evidence and that will strengthen scientific understanding of maternal mental health, using methodical, standardized research designs. In particular, consideration could be given to the theoretical framework a program is using (i.e. why this intervention?); the choice of measurements (what kind of data will the program collect and why?); the constituency of the program (who will benefit and why?); how scalable a program is (how many people could eventually be served and how much would that cost?); and ways to encourage data sharing.

In particular, greater efforts could be made to understand and address the following issues in the maternal mental health care system:

- Address **provider shortages**, which affect an estimated 125 million Americans living in areas without a sufficient number of mental health professionals. These shortages may be due to an aging workforce, low pay, provider preferences for affluent areas over rural/underserved communities, and other factors.

- Research best practices for medication. Women often receive conflicting information about whether to continue using psychiatric medication during pregnancy and how to prevent postpartum psychological problems. More research is needed.

- Focus efforts on barriers to access and social determinants of health. Stigma, lack of insurance, and poverty all create difficulties for mothers who would benefit from treatment. These problems are especially acute in communities of color.

Examples of maternal mental health programs with evidence of positive impact include:

Paid Family Leave has been shown to help women cope with the psychological demands of pregnancy and childbirth. Just 14% of American workers have access to paid leave. **Only eight states and the District of Columbia** have enacted paid parental leave measures.

Child FIRST is a home visitation program for low-income families with children at risk of behavioral health problems (based on factors like maternal depression). After the program, families' involvement with child protective services was reduced by 33%. Additionally, the mother's psychological distress was reduced by an estimated 40-70% and child behavior and language problems were less frequent.

Family Spirit is a home visitation program culturally tailored for Native American teenage mothers. Structured lessons are delivered from 28 weeks of pregnancy up to 36 months postpartum. The program has been shown to reduce maternal depression, increase parenting knowledge, and lower maternal drug use.

Arkansas CARES provides services to mothers with dual diagnoses of substance abuse and mental health problems. Treatment occurs in long-term residential settings with family support and treatment services. Preliminary evidence suggests mothers experience fewer relapses, lower parenting stress, and better family cohesion.

Nurse Family Partnership provides in-home services by nurses for new mothers with low incomes. These 60- to 90-minute visits start at around 16 weeks of gestation and continue until the baby is 20 months old. The visits include education on parenting, social support, and connecting families to other health resources. Mothers participating in the program reported better mental health.

Patient Health Questionnaire 2 (PHQ-2)

Over the past 2 weeks, you have felt down, depressed, or hopeless (true or false).

☐ If true, have you felt this way for (several days, more than half the days, or nearly every day)?

Over the past 2 weeks, you have felt little interest or pleasure in doing things (true or false).

☐ If true, have you felt this way for (several days, more than half the days, or nearly every day)?

An experimental design allows for the strongest possible impact assessment and determination of the causes of the outcomes of interest. Programs can benefit from observational studies and case studies, especially in the early stages of implementation. Programs also may include regular reevaluations and conditions for discontinuing any new programs.

When designing new programs and policies, consider the full system of social support, rather than just the specific audience of the program. For example, if existing programs already target a specific age group (e.g. teen mothers), which age groups are left out? What gaps exist in the existing systems of support and how can they be filled?

Health care systems may partner with social service systems, especially those serving vulnerable communities, for team-based care, secondary services (such as housing and transportation), and tailored community solutions. To the greatest extent possible, these systems also may consider sharing information and standardizing data collection efforts for the greatest impact.

> **State leaders could consider integrating data collection from the outset of a program and data could be used throughout implementation to monitor and evaluate the intervention.**

Program monitoring and evaluation could use standard and well-supported metrics to evaluate maternal mental health and measure the impact of interventions. This allows for better impact evaluation and using standard approaches to measurement across multiple programs allows comparisons among programs. For example, one screening tool that can be used to diagnose maternal depression is the Patient Health Questionnaire 2 (PHQ-2), which asks two questions to new mothers that could be experiencing depression:

- Over the past 2 weeks, you have felt down, depressed, or hopeless (true or false).

- If true, have you felt this way for (several days, more than half the days, or nearly every day)?

- Over the past 2 weeks, you have felt little interest or pleasure in doing things (true or false).

- If true, have you felt this way for (several days, more than half the days, or nearly every day)?

For a discussion of common depression measurement scales to consider using, see **here.**

> **State leaders may consider issues of data availability and coordination in the overall response to maternal mental health.**

Policymakers could set aside resources to fund state-level data collection efforts, giving a clearer picture of the problem. There are no national standards for tracking maternal mental health, but opportunities to expand data collection exist through **current home visitation programs**.

State leaders may consider creating a dedicated state agency or other permanent structure to coordinate the state's efforts at addressing maternal mental health issues; centralize evidence; standardize data collection and information sharing, resources, and training; conduct evaluations; and recommend best practices in order to improve on previous efforts.

The Council of State Governments