Perinatal Mental Health Education and Screening Project

Phase I Final Report

December 2022

MMHLA
Maternal Mental Health Leadership Alliance

MARCH OF DIMES

Funding Provided By

Johnson & Johnson

Sage Therapeutics™

California HealthCare Foundation

Table of Contents

Appendices

Acknowledgements

Funding for the Perinatal Mental Health Education and Screening Project was generously provided by the California Health Care Foundation, Johnson & Johnson, and Sage Therapeutics.

Many thanks to Sixsense Strategy Group for their wise counsel, guidance, and assistance in preparing for and facilitating meetings of the Working Group and many of the Roundtable Discussions.

Most importantly, special thanks to everyone who participated in this project, especially the members of the Working Group, who helped craft the Framework for Screening, and the participants in the Roundtable Discussions, who provided input and feedback to the Framework.

Questions or feedback about the Perinatal Mental Health Education and Screening Project and this report can be directed to Maternal Mental Health Leadership Alliance (Aminat Balogun, abalogun@mmhla.org, Project Manager) or to March of Dimes (NaKedra Campbell, Senior Director, Innovation & Product Development, Office of Mission Impact, ncampbell@marchofdimes.org).

Part I: Executive Summary

Perinatal mental health (PMH) disorders are the most common complications of pregnancy and childbirth, affecting at least one in five pregnant and postpartum people. Tragically, suicide and overdose combined are the leading cause of death for women in the first year following pregnancy. PMH disorders can present at any time throughout the two-year perinatal timeframe from conception through the full year following pregnancy. Pregnant and postpartum patients typically have numerous regularly scheduled clinical visits that provide ample opportunity for providers to educate and screen them for PMH disorders. Many pregnant and postpartum patients interact with community-based providers, such as doulas and lactation consultants, who are also well-positioned to provide education about and screening for PMH disorders.

Although several recommendations for screening for PMH disorders exist, lack of specificity and standardization of patient education and screening—along with systemic racism and bias in the healthcare system—lead to wide disparities and inequities in identifying and treating PMH disorders. Improving both the standardization and consistent implementation of PMH patient education and screening can help ensure the prevention or timely detection and treatment of PMH disorders, translating into better health outcomes for pregnant and postpartum people, their infants, partners, and families.

Existing Issues in PMH Screening

Numerous national medical organizations and governing bodies have made recommendations for PMH screening, and some states and health systems require screening for PMH disorders. However, there is no current standard for ***how***, ***when***, or ***by whom*** PMH patient education and screening should be provided to pregnant and postpartum patients, leading to wide disparities and inequities in screening and treatment.

Furthermore, individuals of color, along with individuals who live in low-income communities, are disproportionately affected by PMH disorders. They are more likely to be impacted by mental health conditions and less likely to be able to access care. These disparities are exacerbated by racial and health inequities that permeate society and the medical and insurance systems in the United States, and by the convergence of multiple other inequities that create complex obstacles to accessing appropriate care.

Perinatal Mental Health Education and Screening Project Overview and Approach

The primary goal of the Perinatal Mental Health Education and Screening Project the ("Screening Project") was:

> To identify and leverage existing touchpoints, national guidelines, and organizational policies to develop a Framework for ***when*** to educate and screen pregnant and postpartum people about PMH disorders during the two-year perinatal period to maximize the likelihood that these disorders are identified, prevented, and treated.

The Screening Project deliberately convened individuals from a diverse range of professions, experiences, and communities; unpacked and acknowledged barriers and equity challenges inherent in the complex medical and mental health systems in the United States; used a data-driven, evidence-informed process; and focused on developing an ideal Framework that would ensure that the majority of pregnant and postpartum people are educated about and screened for PMH disorders.

Proposed Perinatal Mental Health Education and Screening Framework

Participants in the Screening Project agreed that in order to reduce the national burden of PMH conditions, PMH patient education and screening must be more frequent and standard across the perinatal period; should leverage existing touchpoints with pregnant and postpartum people and their clinical and community-based providers; and must be viewed within the larger context of mental health screening over the lifespan. This shared understanding served as the foundation for the Framework developed during the Screening Project. Our analysis of quantitative and qualitative data suggests that patient education and screening for PMH disorders should occur as depicted in the following timeline.

CLINICAL CARE PROVIDERS:	**SHOULD SCREEN**	**PREGNANCY**	At initiation of prenatal care (whenever it occurs) and at least once each trimester.
		AROUND CHILDBIRTH	Prior to discharge from the hospital or birthing center (or prior to release from the care of a home birth professional), with a special emphasis on educating pregnant and postpartum people, their partners, and their families about signs and symptoms of PMH disorders.
		POSTPARTUM	Within the first 3 weeks postpartum, then at all regularly scheduled obstetric and pediatric visits throughout the full year following pregnancy.
COMMUNITY-BASED PROVIDERS:		At least once during the care relationship, and/or per their agency guidelines.	

A visual representation of the Framework is included in Part IV on page 11.

Future Directions for PMH Screening

All participants in the Screening Project recognized that identifying ***when*** to provide patient education and screening for PMH disorders was the best first step to improving the quality of PMH screening. Subsequent work must be done to address the barriers to screening which include ensuring that frontline providers are educated about PMH disorders; that providers are adequately and easily reimbursed for providing patient education, screening, and treatment; that the appropriate national and state infrastructure is in place to serve those impacted by PMH disorders; and that screening tools are streamlined and updated to ensure they are appropriate for our nation's diverse childbearing population.

Statement on Racial Equity

Maternal Mental Health Leadership Alliance and March of Dimes are deeply committed to promoting racial equity in this and all other work products. We acknowledge that the concept of perinatal mental health exists within a society that does not provide equal access or quality of care to many individuals of color and that all efforts to promote the mental wellbeing of the perinatal population must include provisions for promoting racial equity.

Toward this end, we took early and explicit steps to incorporate the feedback of those racial and ethnic groups who are disproportionately impacted by perinatal mental health disorders and who face unequal challenges to accessing appropriate care, namely Black/African American, Latinx, and American Indian/Alaskan Native individuals. Participants shared a wealth of information regarding relevant differences in culture, barriers to physical and mental healthcare, and self-identified solutions to improve care. This information was carefully noted and served to inform the design of the Framework for PMH Education and Screening.

That said, we acknowledge that this project and the resulting Framework do not fully account for the multifaceted needs of these populations. This is particularly true because the project is primarily focused on ***when*** to screen patients and does not provide detailed guidance on how the process of screening can best be altered to reduce the impact of existing racial disparities. In forthcoming phases of the project, we will place an even stronger emphasis on promoting racial equity by continuing to engage diverse communities of color and incorporating specific guidance for how to ensure that these communities are screened for perinatal mental health disorders. The knowledge that we gained throughout the project provides an excellent foundation for further innovation.

If you would like to learn more about our approach or if you have thoughts or guidance that you would like to share, please contact the Screening Project Manager, Aminat Balogun, at abalogun@mmhla.org.

Part II: The Current Landscape of Perinatal Mental Health (PMH)

Perinatal Mental Health (PMH) Disorders are Common and Burdensome

PMH disorders are the most common complication of pregnancy and childbirth, affecting at least one in five pregnant or postpartum people, or 800,000 families each year in the United States.[1,2,3] Tragically, suicide and overdose combined are the leading cause of death for women in the first year following pregnancy, with 100% of these deaths deemed preventable.[4] PMH disorders primarily affect the individual who has given birth, but can also impact partners and adoptive parents.[5,6] Untreated PMH disorders can have long-term negative impact on parents, baby, family, and society.[7,8,9,10,11,12] The estimated cost of not treating PMH disorders is $32,000 per mother/infant dyad (or $14 billion each year nationally) in addressing poor health outcomes of mother and baby, as well as lost wages and productivity of the parent.[10]

Once known simply as "postpartum depression" or the "baby blues," PMH disorders can occur at any time during the two-year perinatal timeframe and include depression and bipolar disorder (with or without psychosis), anxiety disorders, obsessive-compulsive disorder, posttraumatic stress disorder, and substance use disorders.[11] The peak onset of PMH disorders is 3 to 6 months postpartum;[3] however, studies show that PMH conditions can occur during pregnancy and can persist for up to 3 years postpartum.[12] The peak incidence of postpartum suicide is 6 to 9 months postpartum.[4, 13,14,]

PERINATAL MENTAL HEALTH DISORDERS

- Depression
- Bipolar Disorder
- Anxiety Disorders
- Obsessive-Compulsive Disorder
- Posttraumatic Stress Disorder
- Substance Use Disorders
- Psychosis (especially postpartum)

Individuals at increased risk for experiencing PMH disorders include, but are not limited to, those who have a personal or family history of mental illness; have poor or little social support; have experienced a birth trauma such as miscarriage, stillbirth, or severe obstetric complications; have experienced previous sexual trauma; or have a baby in the neonatal intensive care unit.[3,15]

INDIVIDUALS AT INCREASED RISK FOR EXPERIENCING PMH DISORDERS

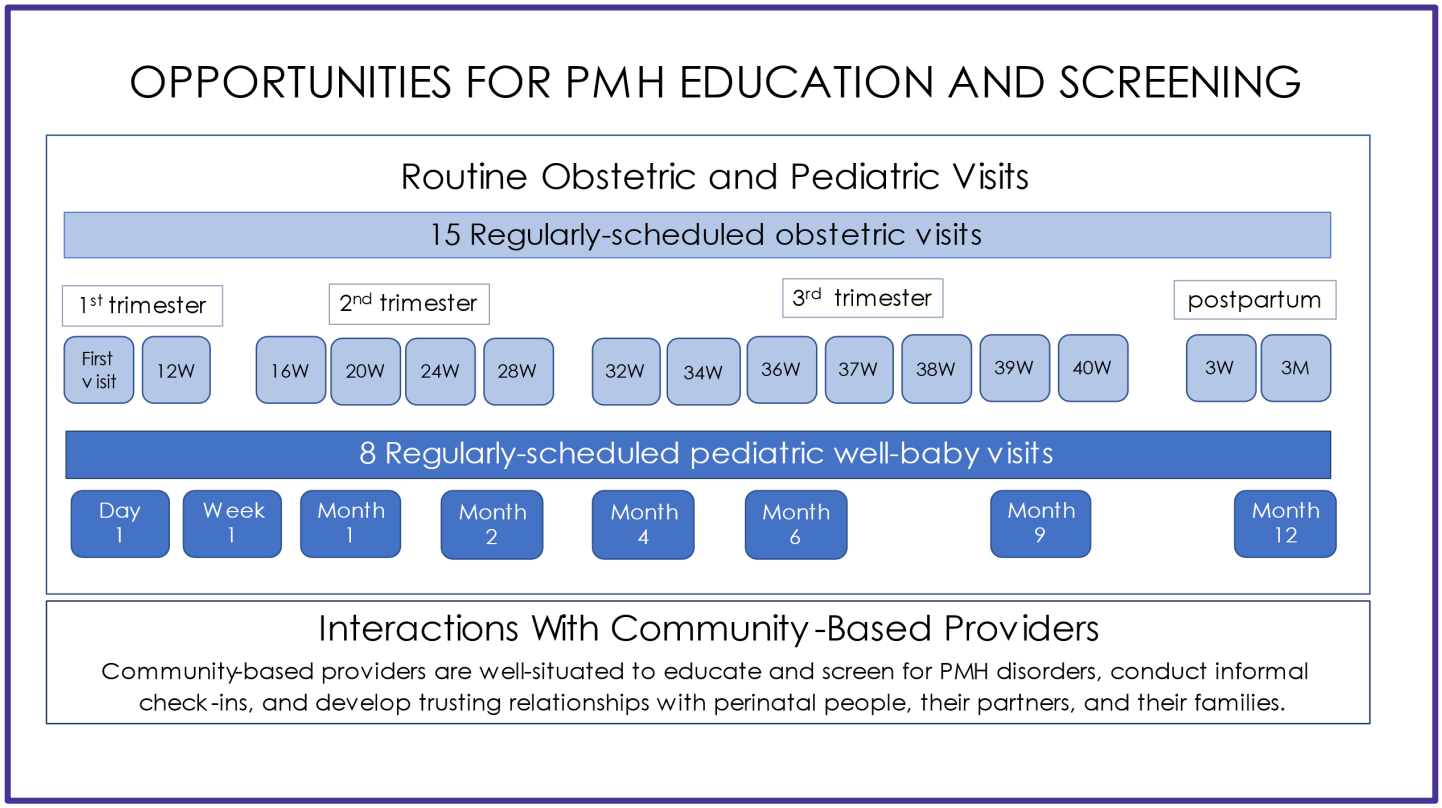
- Individuals of color
- Parents living in poverty
- Individuals who have been incarcerated
- Military mothers (active duty, dependent, veterans)
- Individuals who have experienced fertility challenges
- Parents with a baby in the neonatal intensive care unit
- Those who lack social support, especially from their partner
- Individuals with a personal or family history of mental health disorders
- Individuals who have experienced previous sexual trauma or traumatic birth
- LGBTQ individuals (especially those who identify as non-binary or transgender)

Parents facing racial or economic inequities are also disproportionately impacted by PMH disorders. Not only are these individuals more likely to experience PMH disorders, but they are less likely to be screened or to receive care compared to white or more wealthy counterparts.[15,16,17] Factors driving these disparities include racism and bias in the healthcare system; screening tools that are not culturally- or racially-sensitive; social determinants of health (education, healthcare, economic stability, neighborhood of residence, community, and social context); and barriers to care such as lack of transportation, child care, or paid time off from work. In addition, parents of color and immigrant parents report fear of retribution from Child Protective Services or immigration agencies should they acknowledge they are struggling with mental health conditions.[18,19] Finally, the COVID-19 pandemic has fueled an increase in symptoms of perinatal anxiety and depression.[20,21] **These facts underscore the need for providers to begin educating childbearing individuals about PMH disorders as early in pregnancy as possible, and to screen for these conditions throughout the perinatal timeframe.**

CONSEQUENCES OF UNTREATED PMH DISORDERS	
PARENT	**BABY**
Parents with untreated PMH disorders are more likely to: [7,8,9]	**Children born to parents with untreated PMH disorders are at higher risk for:** [9,10,22]
• Mismanage their own health • Have poor nutrition • Use substances such as alcohol, tobacco, or drugs • Experience physical, emotional, or sexual abuse • Be less responsive to baby's cues • Have fewer positive interactions with baby • Experience breastfeeding challenges • Question their competence as parents	• Low birth weight or small head size • Preterm birth • Longer stay in the NICU • Excessive crying • Impaired parent-child interactions • Behavioral, cognitive, or emotional delays Untreated mental health issues in the home may result in an Adverse Childhood Experience, which can impact the long-term health of the child.[23]

Many Opportunities Exist for PMH Education and Screening

Pregnant and postpartum people with low-risk pregnancies resulting in a live birth generally visit a healthcare provider for at least 15 routine obstetric visits and 8 routine pediatric well-child visits, offering ample opportunity to engage in discussion and screening about mental health (see chart below).[24,25] The time immediately following childbirth (prior to discharge from the hospital or birthing center), provides an important opportunity to educate childbearing individuals, as well as their partners and families, about PMH disorders. Affiliated healthcare providers and community-based providers—such as community health workers, doulas, lactation consultants, representatives from home-visiting programs, peer support specialists, support group leaders, and WIC staff—are also well-positioned to screen for PMH disorders. These non-clinical individuals have more recourse to conduct informal check-ins, and often have more developed and trusting relationships with pregnant and postpartum people and their families than medical personnel in clinical environments.



Note: Guidance from the American College of Obstetricians and Gynecologists (Committee Opinion 736) recommends postpartum follow-up within 3 weeks of childbirth, followed by individual care culminating in a comprehensive postpartum visit at 3 months postpartum. However, almost all the obstetric care providers who participated in the Screening Project reported that obstetricians currently provide the traditional 6-week postpartum visit.

Existing Screening Recommendations Often Lack Specificity

Given the prevalence and severity of PMH disorders, many national organizations that support the birthing population have put forth recommendations for when PMH screening should occur in typical perinatal care (see Appendix B). However, most recommendations are rather general and lack specificity (i.e., "screen once in the perinatal period"), leaving questions about ***how, when***, and ***by whom*** PMH screening should be administered.

Regardless of their specific recommendations, these national organizations generally agree that:

- Screening should take place during pregnancy and at least within the first six months postpartum.
- Healthcare providers should educate pregnant and postpartum people about the signs and symptoms of PMH disorders.
- Providers should have a routine protocol to follow in administering screening tests.
- Systems should be in place to ensure affected individuals have access to care.

CURRENT CLINICAL VISITS & SCREENING RECOMMENDATIONS

OBSTETRIC VISITS — 15 Regularly Scheduled Visits											PEDIATRIC VISITS — 8 Regularly Scheduled Well-Baby Visits											
1st Trimester			2nd Trimester			3rd Trimester				Child-birth	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
1st visit	12 wks	16 wks	20 wks	24 wks	28 wks		32	34	36	Hospital discharge	Well Baby	Well Baby	*OB Appt*	Well Baby		Well Baby			Well Baby			Well Baby
						37	38	39	40													

The American College of Obstetricians & Gynecologists (ACOG) recommends PMH screening at least once during the perinatal period; contacting new parents within 3 weeks postpartum; and screening during a comprehensive visit at 12 weeks postpartum. However, many obstetricians still provide a single 6-week postpartum visit.

Some states and/or hospitals require screening prior to discharge.

The American Academy of Pediatrics (AAP) *Bright Futures'* guidelines recommend PMH screening at well-baby visits at 1, 2, 4, and 6 months.

While it is significant to note that many of the reviewed organizations *agree* with one another on the themes above, most of these recommendations lack specificity with regard to:

- What time intervals during pregnancy and postpartum screening should occur.
- Which care practitioners should implement screening.
- Which mental health conditions should be included in screening.
- Which screening tools should be used.

Furthermore, systems of care do not support communication among the various clinical and community providers who might be conducting PMH screening. Additional barriers to screening from both the patient and provider perspectives are included in Part VI on page 16.

Routine Patient Education and Screening Remains Elusive

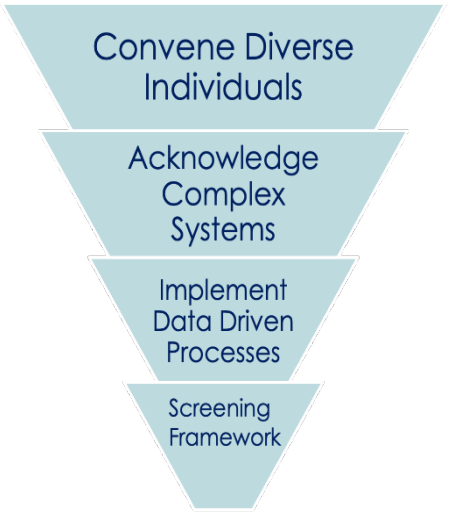
As a result, standard patient education about and screening for PMH disorders remains elusive and inconsistent. Currently, each state, health system, hospital, practice, and provider can choose whether and when to screen pregnant and postpartum people for PMH disorders. This widespread inconsistency leads to unacceptable disparities in identifying and treating PMH disorders.

Part III: Overview of the Perinatal Mental Health Education and Screening Project

The goal of the Screening Project was to identify and synthesize existing PMH screening recommendations into a comprehensive Framework ("the Framework") designed to maximize the likelihood that pregnant and postpartum people and their partners are educated about and screened for PMH disorders throughout the two-year perinatal timeframe including pregnancy and the full year following pregnancy. ***The focus of the Framework is specifically on WHEN to screen for PMH disorders during the perinatal period.***

The Screening Project deliberately:

- convened individuals from a diverse range of professions, experiences, and communities;
- recognized and acknowledged barriers and equity challenges inherent in the complex medical and mental health systems in the United States;
- used a data-driven and evidence-informed process in creating the Framework;
- focused on developing an ideal Framework that would ensure the majority of pregnant and postpartum people were educated about and screened for PMH disorders;
- allows provider discretion to screen at additional times and touchpoints for individuals at increased risk for experiencing PMH disorders.



The Screening Project was composed of four action phases and included participation from a wide range of maternal-child health, mental health, affiliated and community-based providers, as well as individuals with lived experience and individuals representing diverse socioeconomic, racial, and ethnic communities (see Appendix D for participants).

PHASE	ACTIONS	RESPONSIBILITY	TIMING
IA	• Gather and assess existing recommendations • Develop project timeline and work plan • Identify project participants • Secure funding	Core Team	September – December 2021
IB	• Create a Framework for screening and leverage existing touchpoints	Working Group	January 2022
IC	• Refine the Framework by providing insights and feedback through focus groups	Roundtable Discussions	May – October 2022
ID	• Synthesize and analyze data • Finalize Framework • Identify next steps • Produce and share final report	Core Team and Working Group	October – December 2022

Phase IA. Maternal Mental Health Leadership Alliance and March of Dimes convened a Core Team that met between September and December 2021 to gather and assess existing recommendations for PMH screening, develop a project timeline and work plan, identify diverse project participants, and secure funding. Members of the Core Team provided project management and oversight throughout the duration of the project, which included:

- Leading the Working Group sessions in January and November 2022.
- Organizing and facilitating 11 Roundtable Discussions from May to October 2022.
- Gathering and analyzing input from the Roundtable Discussions.
- Incorporating feedback and edits to the Framework.
- Preparing the final report and dissemination plan.

Phase IB. Approximately 35 individuals with relevant professional or personal experience were recruited to participate in the Working Group, which met for two 3-hour facilitated sessions in January 2022. During these sessions, the Working Group developed a Framework* for ***when*** to educate and screen pregnant and postpartum people and their partners for PMH disorders during the perinatal period. The Framework represents the two-year perinatal timeframe and leverages existing touchpoints with clinical and community-based providers as potential opportunities for PMH education and screening. (See Appendix D for details of the Working Group meetings.)

* The Framework was subject to modification based on input from Roundtable Discussion participants.

Phase IC. Small focus groups of 8 to 15 people convened 11 times between May and October of 2022. These two-hour facilitated sessions were designed to review the Framework and gather feedback from diverse communities. Approximately 175 individuals participated in the Roundtable Discussions, including the following:

- Individuals with lived experience.
- Obstetric and pediatric providers.
- Community-based providers.
- Mental health providers.
- Advocates and policymakers.
- Individuals from key professional partners such as March of Dimes, Postpartum Support International, and 2020 Mom.

Collecting and analyzing the feedback of individuals who are disproportionately impacted by PMH disorders was central to the methodology of the Screening Project. The first several Roundtable Discussions focused on gathering the perspectives of such individuals. Focus groups convened persons with lived experience, specifically Black, Latinx, and American Indian/Alaskan Native (AI/AN) people who are disproportionately impacted by PMH disorders and/or underrepresented in current PMH efforts. While we could not include all the diverse perspectives needed to fully represent an ideal sample for this project, we recruited groups of individuals who demonstrate the highest need for PMH screening. Subsequent Roundtable Discussions convened medical and mental health providers.

Participants in each Roundtable Discussion were asked to provide feedback on the following questions:

1. Does the Framework start and end at the right points in time?
2. Is the frequency for screening appropriate?
3. What are the strengths of the Framework?
4. What additional improvements would strengthen the Framework?
5. Any other feedback?

Phase ID. Screening Project staff synthesized and analyzed information from each Roundtable Discussion to update the Framework and identify next steps. Notes from each Roundtable Discussion were shared with respective participants, who were offered the opportunity to provide additional feedback. The Working Group reconvened in November 2022 for a 3-hour facilitated discussion to incorporate feedback from the Roundtable Discussions into the Framework.

GROUP and MEMBERSHIP	RESPONSIBILITY
Core Team • **Adrienne Griffen**, Maternal Mental Health Leadership Alliance (MMHLA), Co-Chair • **Mallory Ward**, March of Dimes, Co-Chair • **Sue Kendig**, National Association of Nurse Practitioners in Women's Health • **Jennifer Payne**, Marcé Society of North America • **Shonita Roach**, Shades of You, Shades of Me **Staff Support from MMHLA** • **Aminat Balogun**, Project Manager • **Mara Child**, Operations & Strategy Director • **Swetha Kota**, Research Associate	• Gather and assess existing screening recommendations • Develop project timeline and work plan • Identify project participants • Secure funding • Lead the Working Group sessions in January and November 2022 • Organize and facilitate Roundtable Discussions from May to October 2022 • Gather and analyze input from the Roundtable Discussions • Incorporate feedback and edits to the Framework • Prepare the final report and dissemination plan
Working Group 35 participants representing: • Individuals with lived experience • Maternal-child healthcare providers • Mental health providers • Community-based providers	• Create a Framework for ***when*** to provide patient education and screening for PMH disorders • Incorporate feedback and edits from Roundtable Discussions
Roundtable Discussions 175 individuals convened in 11 Roundtable Discussions (i.e., focus groups) representing: • Individuals with lived experience • Black, Latinx, and AI/AN individuals • Maternal-child healthcare providers • Mental health providers • Community-based providers • Coalitions and partner organizations	• Provide insights and edits to the Framework

Part IV: Framework and Context for PMH Education and Screening

All participants in the Screening Project agreed that PMH patient education and screening should be frequent, routine, and standard across the perinatal period; should leverage existing touchpoints with clinical and community-based providers; and should be viewed within the larger context of mental health screening over the lifespan.

The Framework is based on the following principles:

- Pregnant and postpartum people are at increased risk for mental health conditions.
- Mental health is as important as physical health.
- Untreated PMH disorders can have negative long-term impact on mother, baby, and family.
- Pregnant and postpartum people interact with both clinicians and community-based providers routinely during the perinatal period, offering ample opportunity for PMH education and screening.
- ***Screening*** must always include ***education***.
- Each provider should address PMH education and screening as if s/he were the only person doing so.

The Framework encourages patient education and screening for PMH disorders to occur as follows, with informal check-ins at all other interactions:

CLINICAL CARE PROVIDERS:	**SHOULD SCREEN**	**PREGNANCY**	At initiation of prenatal care (whenever it occurs) and at least once each trimester.
		AROUND CHILDBIRTH	Prior to discharge from the hospital or birthing center (or prior to release from the care of a home birth professional), with a special emphasis on educating pregnant and postpartum people, their partners, and their families about signs and symptoms of PMH disorders.
		POSTPARTUM	Within the first 3 weeks postpartum, then at all regularly scheduled obstetric and pediatric visits throughout the full year following pregnancy.
COMMUNITY BASED-PROVIDERS:		At least once during the care relationship, and/or per their agency guidelines.	

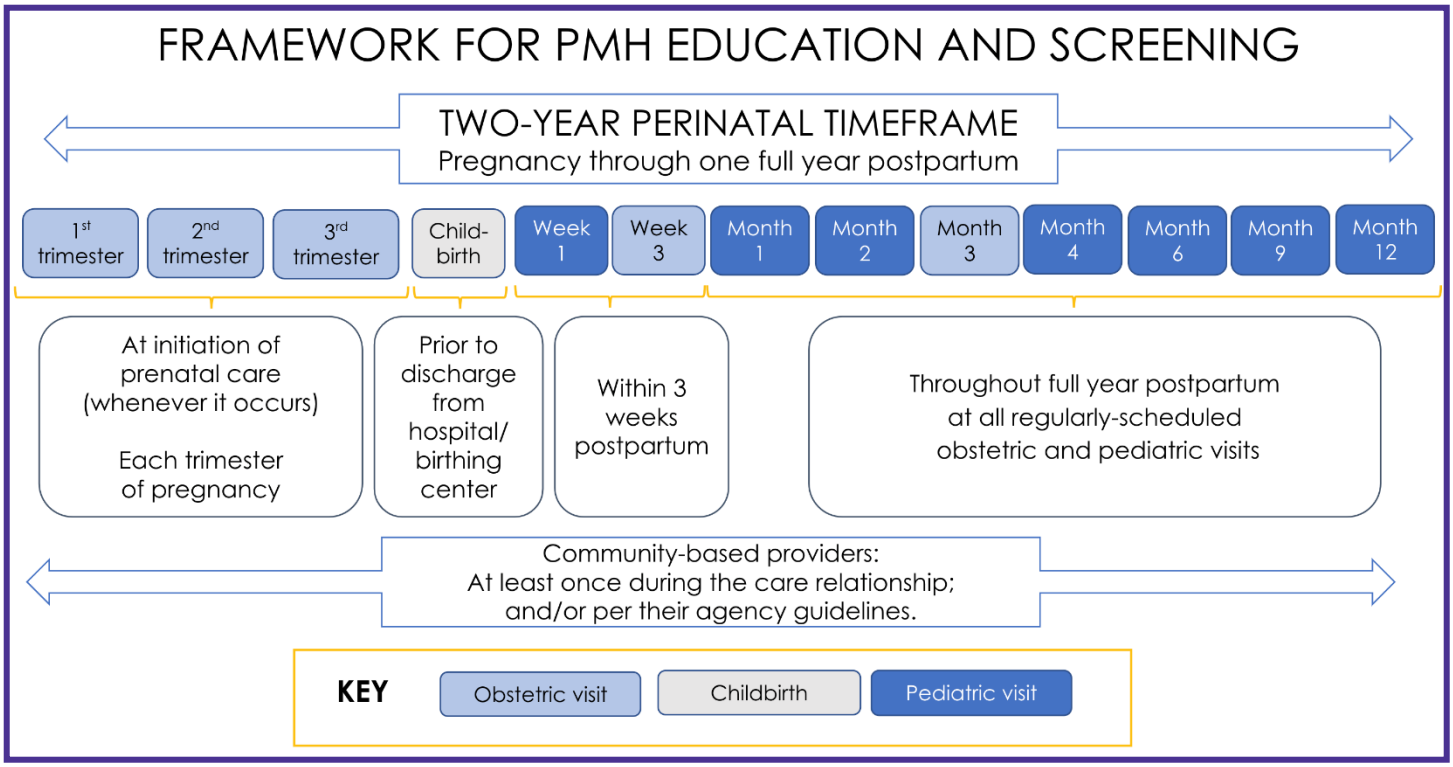
The Framework also indicates that:

- Community-based providers are well-positioned to provide PMH patient education and screening.
- Connections between clinicians and community-based providers need to be strengthened to better coordinate PMH screening and treatment.
- ACOG's most recent guidance (ACOG Committee Opinion 736, dated May 2018) recommends that all postpartum people have contact with their obstetric provider within the first 3 weeks postpartum, with individualized follow-up care as needed, concluding with a comprehensive postpartum visit within 12 weeks following pregnancy. However, feedback from participants throughout the Screening Project indicate that most obstetric providers still provide a single 6-week postpartum visit.

The Framework incorporates PMH patient education and screening into existing clinical appointments and interactions with community-based providers, thereby:

- Leveraging existing touchpoints.
- Standardizing PMH patient education and screening.
- Ensuring that PMH patient education and screening is incorporated into routine care.
- Helping to destigmatize mental health.
- Elevating mental health to be as essential as physical health.
- Addressing PMH conditions as soon as possible.

Framework for PMH Education and Screening



Context for PMH Education and Screening

Several factors must be considered that provide context for PMH patient education and screening:

1. **Mental healthcare should continue across the lifespan.** Although the Framework focuses specifically on the two-year perinatal timeframe, mental health education and screening should be incorporated into care across the lifespan, including primary care, well-woman care, and preconception care.
2. **The Framework is a one-size-fits-most approach**. The Framework leverages existing clinical touchpoints with obstetric and pediatric providers and is designed for the majority of pregnant and postpartum people who experience low-risk pregnancies resulting in live births.
3. **Screening = education + screening with a formal assessment tool**. Screening must incorporate conversation and education, including providing information about PMH disorders, signs and symptoms, results of the screening, and interventions or connections to resources for recovery.
4. **Providers should "screen to intervene."** The Framework assumes that screening will be accompanied by intervention where and when needed. Phase II of the Screening Project will address the availability of resources and care coordination (see p. 18).
5. **Provider discretion**. Those conducting screening must use their discretion about which screening tool to use, when to substitute formal screening for informal check-ins, how to treat or connect patients to resources for recovery, and whether to screen high-risk individuals more often.

The following tables highlight some of the most relevant discussion and rationale employed by the Core Team and Working Group to inform the Framework's design.

PREGNANCY	DISCUSSION / RATIONALE
PMH education and screening should occur at the initiation of prenatal care and at least once during each trimester of pregnancy.	Routine obstetric care includes 15 in-person visits, offering ample opportunity to educate and screen pregnant people for PMH disorders. Early PMH screening is vital to: • Provide a baseline for the patient's mental health; • Underscore that mental health is as important as physical health; • Destigmatize mental health; • Build and strengthen patient-physician relationships and improve both provider and patient comfort in discussing PMH symptoms; • Identify PMH disorders and provide interventions as early as possible to mitigate impact and improve patient outcomes. Of individuals experiencing PMH disorders in the postpartum period, approximately 1/3 enter pregnancy with symptoms of depression and approximately 1/3 develop symptoms of depression during pregnancy. While participants agreed that screening for mental health conditions would ideally occur throughout the life course, they agreed that starting as early as possible in pregnancy was sufficient for the majority of individuals. PMH screening could be paired with existing screening opportunities for physical conditions. For example, PMH screening could occur in the second trimester in conjunction with the anatomy sonogram and in the third trimester in conjunction with the glucose screening.

AROUND CHILDBIRTH	DISCUSSION / RATIONALE
The immediate postpartum period (up to 3 weeks postpartum) provides a significant opportunity for educating new parents about PMH disorders and providing informal check-ins.	While education prenatally or earlier is ideal, the time immediately following childbirth offers an excellent opportunity to educate the perinatal person, the partner, and the family about PMH disorders. Perinatal people and their partners have numerous interactions with clinical and community-based providers at the hospital or birthing center—including obstetric providers, nurses, lactation consultants, and doulas—who can discuss PMH disorders, provide education about signs and symptoms, offer support and encouragement, and provide resources and referrals. In addition, childbirth may be the only time a childbearing person has an interaction with a healthcare provider. Although several states require screening prior to discharge from the hospital or birthing center, and some hospitals and birthing centers provide screening prior to discharge, several participants in the Screening Project commented that the immediate postpartum period might not be the optimal time for formal screening: • Almost all new parents are exhausted and overwhelmed in the hours and days immediately following childbirth while still at the birthing location. Thus, screening at this point might result in false "positives." • The hospital setting can be chaotic with various newborn and postpartum screenings, along with numerous discharge instructions and procedures. Many participants in the Screening Project encouraged frequent informal check-ins with new parents. The first few weeks postpartum are a period of rapid change and stress, with over 85% of postpartum people experiencing the baby blues, which typically resolve without clinical treatment within 2-3 weeks. This same timeframe is also the peak incidence of postpartum psychosis which, although rare, is a medical emergency that often requires the postpartum parent to be hospitalized. The Framework aligns with ACOG's recommendation that all women have contact with their obstetric provider within the first 3 weeks postpartum. However, many participants in the Screening Project note that most obstetricians still provide a single 6-week postpartum visit.

POSTPARTUM	DISCUSSION / RATIONALE
PMH patient education and screening should begin within 3 weeks following childbirth and continue for a full year following pregnancy at all regularly scheduled obstetric and pediatric visits throughout the postpartum year.	New parents are scheduled to have follow-up contact with their obstetric provider in the first few weeks following pregnancy, and 8 regularly scheduled well-baby visits in the first year of baby's life. This clinical schedule offers ample opportunity for PMH education and screening. Conducting PMH patient education and screening at existing obstetric and pediatric visits will help ensure systematic incorporation throughout the entire perinatal period resulting in screening that is routine, standard, and consistent. The Framework aligns with ACOG's recommendation that obstetric care concludes with a comprehensive visit no later than 3 months postpartum. However, many participants in the Screening Project note that most obstetricians still provide a single 6-week postpartum visit. The peak onset of postpartum depression is 3-6 months postpartum, and the peak incidence of postpartum suicide is 6-9 months postpartum.

COMMUNITY-BASED PROVIDERS	DISCUSSION / RATIONALE
Community-based provider visits should occur at the initiation and conclusion of care, with additional screenings per agency guidelines.	Community-based providers are well-positioned to build trust, educate, discuss, and screen for PMH disorders, especially during the third trimester. While it was not possible to depict all the interactions with community-based providers, screening should occur at least at the initiation and conclusion of care. Several home-visiting programs continue well past the first year postpartum; these programs often have specific guidelines for additional screenings.

Part V: Roundtable Discussions

The Screening Project held 11 Roundtable Discussions (small focus groups of 8 to 15 people) from May to October 2022. These two-hour facilitated sessions were designed to review the Framework and gather insights and feedback. Roundtable Discussions included the following participants:

- Individuals with lived experience, including specific focus groups for Black, Latinx, and American Indian/Alaskan Native individuals.
- Obstetric and pediatric providers, including physicians, nurse midwives, nurse practitioners, physician assistants, and nurses.
- Community-based providers, including childbirth educators, doulas, lactation consultants, and home visitors.
- Mental health providers, including psychiatrists, psychologists, social workers, and counselors.
- Advocates and policymakers from the fields of maternal-child and mental health.
- Key partners such as Postpartum Support International, 2020 Mom, and the March of Dimes.

Recognizing the importance of including the voice of individuals with lived experience, and especially individuals disproportionately impacted by PMH disorders, the first several Roundtable Discussions focused on gathering their perspectives. Specific focus groups convened individuals with lived experience and specifically Black, Latinx, and American Indian/Alaskan Native individuals, all of whom are disproportionately impacted by PMH disorders. The input from these focus groups was then used to inform Roundtable Discussions that convened medical and mental health providers.

Participants in each Roundtable Discussion were asked to provide feedback on the following questions:

- Does the Framework start and end at the right points?
- Is the frequency for screening appropriate?
- What are the strengths of the Framework?
- What additional improvements would strengthen the Framework?
- Any other feedback?

Timing and Frequency

In general, participants in the Roundtable Discussions agreed with the timing and frequency for PMH education and screening. A summary of relevant feedback is included in the chart below.

Roundtable Participant Feedback on Screening Starting Point, Frequency, and Ending Point

TIMEFRAME	ROUNDTABLE PARTICIPANT FEEDBACK

Starting Point	• Ideally, screening should begin *before* pregnancy (e.g., family planning or preconception appointments)
	• First prenatal visit—whenever it occurs—is the right time to initiate PMH screening
	  ○ Results from first prenatal visit screening provide a baseline measurement to compare patient status throughout and after pregnancy
	  ○ Identifying symptoms early can result in individuals receiving help sooner

Frequency	• Screening at least once each trimester is important; more frequent screening during pregnancy is desirable • Both screening and education are crucial during the immediate childbirth period • More frequent screening is especially appropriate during the 6- to 12-month postpartum period
Ending Point	• Screening should occur until *at least* 12 months postpartum • Extending screening past 12 months postpartum is strongly suggested

Strengths and Areas for Improvement

The table below summarizes comments and themes expressed repeatedly from participants in the Roundtable Discussions.

STRENGTHS OF THE FRAMEWORK	AREAS FOR IMPROVEMENT
• Is evidence-based. • Includes the entire perinatal period. • Focuses on education as part of screening. • Is multidisciplinary, cross-specialty, and collaborative. • Removes ambiguity by identifying who should screen and when screening should occur. • Aligns with and leverages existing clinical touchpoints with obstetric and pediatric providers. • Emphasizes the importance of mental health as part of overall health. • Elevates mental health to the same level as physical health. • Provides many opportunities to identify PMH disorders. • Ensures all perinatal people are educated about and screened for mental health. • Captures screening history, which can be helpful for future pregnancies. • Allows flexibility for individuals who are at higher risk for experiencing PMH disorders. • Provides a standard of care so that everyone—even those who face barriers to care, such as lack of insurance—are educated and screened.	• The Framework and suggested frequency rely on adequate follow-up and treatment. • Screening for PMH disorders must be viewed as part of screening for mental health across the lifespan (i.e., at all well-woman visits; before and between pregnancies; preconception). • Consider extending the screening period to include preconception and up to 3 years postpartum. • Include emergency department (ED) staff. Many women find out they are pregnant during a visit to the ED. Many women miscarry and end up in the ED. • Include labor and delivery nurses. They have more bedside time with the patient and can gather insights. • Add mental health providers to obstetric or pediatric offices so that treatment is co-located and easy to access.

Part VI: Potential Barriers to PMH Education and Screening

Patients and providers alike face barriers to screening. As a result, pregnant and postpartum people are often not screened properly for PMH disorders, leading to missed opportunities to identify and treat their symptoms.

Patient-Related Barriers to PMH Education and Screening

- Not all pregnant and postpartum people have equitable access to healthcare and PMH screening, increasing the likelihood that these individuals might be overlooked and not receive adequate care. The following groups also face systemic and disproportionate difficulty in accessing healthcare, including mental healthcare:
  - People of color.
  - Individuals of low socioeconomic status.
  - People who live in "maternity care deserts" (i.e., those who live in counties where access to maternity health care services is limited or absent, either through lack of services or barriers to a woman's ability to access that care within counties).
  - Individuals without internet broadband access.
- The ongoing COVID-19 pandemic increases challenges in PMH screening by decreasing opportunities for in-person visits, and thereby exacerbates existing accessibility issues related to PMH screening.
- Some patient groups have specific concerns with screening for PMH disorders. Some racial or ethnic groups may avoid PMH screening due to distrust in the healthcare system or because of the stigma around mental health within their communities. These individuals may also fear that Child Protective Services or immigration agencies may become involved if they acknowledge they are experiencing PMH disorders. The same holds true for individuals experiencing substance use disorders.
- Some individuals are concerned about where PMH screening results are stored, how the data may be used, and how results may impact their lives. For example, someone who screens at-risk for PMH disorders may fear this information could negatively impact future custody of their child(ren).
- Screening tools do not adequately encompass the wide variety of racial, ethnic, cultural, and linguistic differences of pregnant and postpartum patients. In addition, screening tools may be highly gendered, and therefore less inclusive for LGBTQ individuals.

Provider-Related Barriers to PMH Education and Screening

- Providers (including maternal-child healthcare providers, mental health providers, and affiliated providers) are not consistently trained to screen or treat PMH disorders.
- Frontline providers, primarily obstetric and pediatric providers, cite challenges incorporating PMH screening into office workflow and patient records. Many report that they do not have time to fully conduct screening and/or provide guidance for individuals who screen positive.
- Reimbursement for screening is a significant barrier, creating disincentives for providing PMH patient education and screening.
  - Obstetric care is typically "bundled," meaning that obstetric providers are paid a flat fee that covers all care and procedures, but which generally does not include screening for PMH disorders. In addition, there is no standard reimbursement rate for PMH screening during pregnancy—for private or public payors. As a result, some obstetric providers may not receive payment for screening during pregnancy.
  - Although Medicaid reimburses pediatricians for screening for PMH disorders, reimbursement rates are extremely low and filing for reimbursement requires significant administrative time and effort.
- Providers are less likely to screen if they do not have resources and referrals for those at risk of or who are experiencing PMH disorders.
- Linkages between clinical and community-based providers are often inadequate, resulting in poor communication and coordination of care.

Part VII: Executional Considerations

Current assessment methods have limitations.

No screening tool is perfect. The most commonly used screening tools assess for a single PMH disorder. While anxiety and depression are the most common PMH disorders, there are several other conditions that can impact an individual in the perinatal period. No single screening tool exists to screen for all PMH disorders, requiring multiple screening tools to adequately and appropriately screen for the range of PMH disorders. In addition, most screening tools do not account for differences in language, race, ethnicity, or culture. As a result, the frequency and timing of PMH screening becomes compromised if the screening tools being utilized are inaccurate in identifying those at risk for PMH disorders.

Opportunities exist to leverage informal PMH education and screening.

While routine screening with a validated screening tool is the goal, clinical and community-based providers also have many opportunities to discuss PMH disorders with pregnant and postpartum people using an informal approach. Validating statements and curious questions, such as… "Being pregnant or having a new baby can be stressful. How is it going for you/how are you feeling?" acknowledges stress inherent in the childbearing years, helps to destigmatize mental health by focusing on a symptom (stress) rather than a diagnosis (anxiety), and asks a non-threatening open-ended question, all of which can lead to discussion and eventually more *formal* screening.

PMH screening recommendations must consider high-risk groups.

Providers must retain flexibility to tailor screening for high-risk groups, who may require additional or more personalized screenings, including the following:

- Individuals of color
- Parents living in poverty
- Individuals who have been incarcerated
- Military mothers (active duty, dependent, veterans)
- Parents with a baby in the neonatal intensive care unit
- Individuals experiencing high-risk pregnancies
- Members of the LGBTQ community
- Those who lack social support, especially from their partner
- Individuals with a personal or family history of mental health disorders
- Individuals who have experienced previous sexual trauma or traumatic birth
- Those who have experienced fertility challenges or pregnancy-related loss including miscarriage, stillbirth, or fetal demise

Information and educational resources should be used to raise awareness.

Pregnant and postpartum people can be educated about PMH disorders in a variety of ways, including: posters and palm cards in places they receive care; electronic resources such as websites, videos, and digital therapeutics; and lists of resources and referrals provided as part of routine obstetric and pediatric care. However, all participants in the Screening Project agreed that the most important educational interactions are with the obstetric provider, with an emphasis on creating a trusting relationship in which PMH disorders are routinely discussed, thereby normalizing and destigmatizing mental health.

Screening in the immediate postpartum period.

Screening for PMH disorders in the immediate postpartum period (the first 2-3 weeks after birth) is essential for several reasons. First, this period often includes significant adjustment difficulties during the transition to home, as many postpartum people must prioritize care for their new infant and family over their own care. In addition, dramatic hormonal fluctuations during this period often result in the baby blues, a temporary period of emotional lability that impacts up to 85% of postpartum people, but typically resolves without clinical intervention within 2-3 weeks. This same period coincides with the peak onset of postpartum psychosis, which is rare (1-2 births per 1,000) but is a medical emergency, often requiring that the new parent be hospitalized. It is essential that healthcare and mental health providers clearly understand the signs and symptoms of postpartum psychosis, which carries an increased risk of a new parent hurting her/himself and/or the infant.

Part VIII: Recommendations for Next Steps

All participants involved with the Screening Project recognized that identifying ***when*** to provide patient education and screening for PMH disorders was only the first step. Subsequent work must be done to address the barriers to screening identified in Part VI.

Immediate follow-on work should focus on building the capacity of front-line providers (obstetric, pediatric, mental health, and community-based) to provide patient education, screening, and treatment for PMH disorders. This includes ensuring that providers:

- Are educated about PMH disorders, including how to provide patient education, screening, and treatment.
- Are adequately and easily reimbursed for patient education, screening, and treatment.
- Have access to interventions and resources for recovery at both the national and state levels.
- Utilize up-to-date and culturally appropriate screening tools that accurately assess risk for the wide range of PMH disorders.
- Conduct all work through an equity lens to ensure that the most vulnerable parents—namely, individuals of color and individuals who live in poverty—receive proper education, screening, and support.

The table below depicts the proposed future directions for the Screening Project. Phase II will create task forces to address observed barriers to patient education and screening.

SCREENING PROJECT: PHASE II			
Utilize an equity-focused, data-driven, evidence-based approach.			
TASK FORCE #1	**TASK FORCE #2**	**TASK FORCE #3**	**TASK FORCE #4**
Education for Frontline Providers	***Reimbursement for Screening***	***Resources and Interventions***	***Screening Tools***
• Conduct landscape analysis of existing educational opportunities for frontline providers. • Identify opportunities to formalize education around PMH disorders with an emphasis on equity and cultural alignment.	• Conduct landscape analysis of current reimbursement for patient education, screening, and treatment. • Identify ways to ensure frontline providers are adequately reimbursed for patient education, screening, and treatment.	• Conduct landscape analysis of existing high-level (national and state) resources and interventions for those impacted by PMH disorders. • Identify additional assets needed to build out national and state infrastructures to address PMH disorders.	• Conduct landscape analysis of existing screening tools with a specific focus on equity and cultural alignment. • Identify opportunities and efforts to update and/or create more comprehensive, culturally- appropriate, and up-to-date screening tools.
Propose policies to address each barrier.			

Appendix A: Terminology

The following terminology was agreed upon at the start of the Screening Project and used throughout the project's process to ensure that all participants had a shared understanding of perinatal mental health.

BASIC TERMINOLOGY	**Who is included in patient education and screening?** • Pregnant and postpartum people and their partners. **What illnesses are included?** Perinatal Mental Health Disorders: • Depression • Bipolar disorder • Anxiety disorders • Obsessive-compulsive disorder • Posttraumatic stress disorder • Substance use disorders • Psychosis (especially postpartum) **What timeframes are included?** • **Perinatal:** pregnancy through full year following pregnancy • **Pregnancy:** period between conception and birth, fetal loss, or termination • **Postpartum:** full year following pregnancy
SCREENING TERMINOLOGY	**Screening:** Formal assessment using a validated screening tool; always includes education.* **Validated Screening Tool:** A screening tool that has been rigorously tested for effectiveness during pregnancy and the postpartum period. A few validated screening tools for perinatal mental health disorders are the Edinburgh Postnatal Depression Scale (EPDS), the Patient Health Questionnaire-9 (PHQ-9), and the Postpartum Depression Screening Scale. **Informal "Check-in":** Informal assessment through conversation. (E.g., *"Pregnancy / parenting can be stressful and challenging. How is it going for you? How are you feeling emotionally?"*)

*__Note__: Throughout this report, the term "screening" is used as shorthand to describe an interaction between a care provider and a birthing person that includes a conversation about the importance of mental health, the administration of a validated screening tool, discussion of the results of the screening, and opportunities for intervention.

Appendix A: Terminology (cont.)

PROVIDER TERMINOLOGY		
	Obstetric Providers • Obstetricians • Perinatologists • Certified nurse midwives • Certified midwives • Certified professional midwives • Family physicians • Physician assistants • Women's health nurse practitioners • Family nurse practitioners **Pediatric Providers** • Neonatologists • Pediatricians • Family physicians • Physician assistants • Pediatric nurse practitioners • Family nurse practitioners **Hospital Staff** • Labor and delivery nurses • Mother / baby unit nurses • Neonatal intensive care unit (NICU) nursing staff • Lactation consultants • Emergency department staff	**Community-Based Providers** • Community health or birth workers • Care coordinators / navigators • Childbirth educators • Doulas • Lactation consultants • Peer supporter specialists • WIC / SNAP staff* • MIECHV home visitors** • Healthy Start programs **Mental Health Providers** • Psychiatrists • Psychiatric nurse practitioners • Psychologists • Psychotherapists • Social workers • Peer support specialists * Special Supplemental Nutrition Program for Women, Infants, and Children (WIC); Supplemental Nutrition Assistance Program (SNAP) ** Maternal, Infant, and Early Childhood Home Visiting (MIECHV) Program

Appendix B: Existing Screening Recommendations

Several organizations that support the perinatal population have put forth recommendations for PMH screening in pregnancy and/or the postpartum period. The chart below summarizes the screening recommendations from some of the most influential organizations in the field.

Organization	Recommendation(s)
American Academy of Family Physicians (2019)	• **All postpartum women should be screened for depression, including at least once during the perinatal period.** • The general adult population should be screened for depression. Screening should be implemented with adequate systems in place to ensure accurate diagnosis, effective treatment, and appropriate follow-up.
American Academy of Pediatrics (2019)	• The AAP recommends integrating postpartum depression surveillance and screening at the 1-, 2-, 4-, and 6-month visits. • As a notable resource, the American Academy of Pediatrics provides the most robust guidance around PMH screening (as well as screening for intimate partner violence, and maternal drug and alcohol use), with its *Bright Futures* guidelines. The guidelines include details about when to screen and what questions to ask.
American College of Nurse Midwives (2019)	• All perinatal clients should be evaluated for depression and other mental health disorders **at least twice during pregnancy and at regular intervals postpartum using a validated tool**. • All people receiving midwifery care should be assessed for depression and other mental health disorders **during routine visits**. • Every midwifery practice should have a systematic response to a positive screen or risk assessment, including knowledge of treatment modalities and referral to trained mental health providers.
American College of Obstetricians & Gynecologists (2018)	• Perinatal patients should be screened **at least once during the perinatal period for depression and anxiety symptoms using a standardized, validated tool.** • Obstetrician-gynecologists and other obstetric care providers should complete a full assessment of mood and emotional wellbeing during the comprehensive postpartum visit for each patient. • If a patient is screened for depression and anxiety during pregnancy, additional screening should then occur during the comprehensive postpartum visit.
American Medical Association (2017)	• Encourages implementing a routine protocol for depression **screening in pregnant and postpartum women during prenatal, postnatal, pediatric, or emergency room visits**.

Appendix B: Existing Screening Recommendations (cont.)

Organization	Recommendation(s)
American Psychiatric Association (2019)	• **All perinatal patients should be evaluated for depressive, anxiety, and psychotic disorders** throughout the pregnancy and postpartum period. • Recommend screening for depression with a validated screening tool **twice during pregnancy, once in early pregnancy for preexisting psychiatric disorders and once later in the pregnancy and** during **pediatric visits throughout the first six months postpartum** as recommended by the American Academy of Pediatrics. • A systematic response to screening should be in place to ensure that psychiatric disorders are appropriately assessed, treated, and followed.
Mental Health America (2018)	• Universal **screening is beneficial during pregnancy and the first twelve months after birth** if mental health service follow-up is available. • **Maternal depression screening and intervention** should be fully implemented in obstetrics and pediatrics, in addition to adult preventive care visits. • Screening may take place in mental health settings, obstetrical care settings, pediatric care settings, primary care, emergency departments, WIC offices or occupational health settings. • Screening is successful with any of several instruments including the **PHQ-9 and the Edinburgh Postnatal Depression Scale** (EPDS).
United States Preventive Services Task Force (2019)	• Recommends screening for depression and anxiety in adults, **including pregnant and postpartum women.** • Clinicians should provide/refer pregnant and postpartum persons who are at increased risk of perinatal depression to counseling interventions.

Appendix C: Core Group Participants

Name	Professional Affiliation (if applicable)	Position
Adrienne Griffen, MPP	Maternal Mental Health Leadership Alliance (MMHLA)	Executive Director
Mallory Ward, MS, CD(PALS), CGBE	March of Dimes	Manager of Postpartum Initiatives
Sue Kendig, JD, WHNP-BC, FAANP	National Association of Nurse Practitioners in Women's Health	Director of Policy
Jennifer Payne, MD	Marcé Society of North America (MONA)	President
Shonita Roach	Shades of You, Shades of Me	Founder & President
Aminat Balogun, MPH	Maternal Mental Health Leadership Alliance (MMHLA)	Program Manager
Mara Child, MPA, MPH	Maternal Mental Health Leadership Alliance (MMHLA)	Director of Strategy & Operations
Swetha Kota, MPH	Maternal Mental Health Leadership Alliance (MMHLA)	Research Associate

Appendix D: Working Group Participants

The following individuals participated in the working group that helped to generate the framework for perinatal mental health education and screening. This group includes individuals who have lived experience with perinatal mental health, as well as individuals who were previously or are currently employed by organizations with relevant connections to the field. All individuals listed have given consent for their name and professional affiliation (if applicable) to be included in this report; professional affiliation and position reflect their status at the time of their participation in the Screening Project. However, please note that participants' involvement in the Screening Project does not necessarily reflect the opinions or endorsement of their employers.

Name	Professional Affiliation (if applicable)	Position
Bethany Ashby, PsyD	North American Society for Psychosocial Obstetrics and Gynecology (NASPOG)	Secretary/Treasurer
Morenike Ayo-Vaughan, MSW	The Commonwealth Fund	Program Officer, Advancing Health Equity
Nicole Barnett	Not provided	Advocate & Individual with lived experience
Kate Berry, MPP	America's Health Insurance Plans (AHIP)	Senior Vice President of Clinical Affairs & Strategic Partnership
Amritha Bhat, MBBS, MD, MPH	University of Washington	Assistant Professor & Co-Director, Maternal-Child Mental Health Program
Priscilla Briones	Not provided	Advocate & Individual with lived experience
Tanya Burwell Dozier	American Psychological Association (APA)	Assistant Director, Women's Portfolio
Heather Clarke, DNP, LM, CNM, APRN, FACNM	American College of Nurse-Midwives (ACNM)	President
Helen Coons, PhD, ABPP	University of Colorado School of Medicine	Clinical Director, Women's Behavioral Health and Wellness Service Line
Martha Escudero	Not provided	Advocate & Individual with lived experience
Martha Sonsy Fermin, MSW, LCSW	Health Resources and Services Administration (HRSA)	Branch Chief, Maternal and Child Health Bureau
Deepika Goyal, DPN	San Jose State University & Valley Medical Center	Director, Family Nurse Practitioner Program
Carrie Hanlon, MA	National Academy for State Health Policy	Project Director
Lenore Jarvis, MD	Children's National Hospital	Pediatric Emergency Physician and Assistant Professor

Appendix D: Working Group Participants (cont.)

Name	Professional Affiliation (if applicable)	Position
Lee Johnson III, PhD	Zero to Three	Senior Policy Analyst, Infant and Early Childhood Mental Health
Anna King, LCSW, PMH-C	Maternal Mental Health NOW	Clinical Training Specialist
Amy Kohl	American College of Nurse-Midwives (ACNM)	Director, Advocacy & Government Affairs
Emily Miller, MD, MPH	Northwestern University Feinberg School of Medicine	Associate Professor of Obstetrics and Gynecology
Amy Mullins, MD, CPE, FAAFP	(Former) American Academy of Family Physicians	(Former) Medical Director, Quality and Science
Rebecca Parilla, PhD	National Service Office for Nurse-Family Partnership and Child First	National Clinical Director
Alise Powell	National Birth Equity Collaborative (NBEC)	Senior Policy Analyst
Chris Raines, RN, MSN, WHCNP, PMHNP-BC, PMH-C	Postpartum Support International (PSI)	Board Chair Emeritus
Jessica Roach, MPH	Restoring Our Own Through Transformation (ROOTT)	Founder & CEO
Carol Sakala	National Partnership for Women & Families	Senior Director
Alpa Shah, MD	Marshfield Clinic Health System	Director, Perinatal Mental Health Clinic
Melissa Simon, MD, MPH	Northwestern University Feinberg School of Medicine & United States Preventive Services Task Force (USPSTF)	Vice Chair and Professor Obstetrics and Gynecology
Sharon Sprinkle, RN, MBA, MHA	National Service Office of Nurse-Family Partnership and Child First	Director, Nursing Practice
Jordan Steiger, MPH, LSW	American Hospital Association (AHA)	Senior Program Manager, Clinical Affairs and Workforce
Amy Stiffarm, PhD(c)	University of North Dakota	Advocate & Individual with lived experience
Jonathan Webb, MPH, MBA	Association of Women's Health, Obstetric, and Neonatal Nurses	CEO
Dorian Wingard	Restoring Our Own Through Transformation (ROOTT)	COO & Partner

References

[1] American College of Obstetricians and Gynecologists. ACOG committee opinion no. 757: Screening for perinatal depression. *Obstet Gynecol* 2018;132(5)e:208-12.

[2] Fawcett EJ, et al. The prevalence of anxiety disorders during pregnancy and the postpartum period: A multivariate Bayesian meta-analysis. *J Clin Psychiatry* 2019;80(4):18r12527.

[3] Gavin NI, et al. Perinatal depression: A systematic review of prevalence and incidence. *Obstet Gynecol* 2005;106(5):1071-83.

[4] Trost SL, Beauregard J, Njie F, et al. Pregnancy-related deaths: Data from Maternal Mortality Review Committees in 36 U.S. States, 2017-2019. Atlanta, GA: Centers for Disease Control and Prevention, US Department of Health and Human Services; 2022.

[5] Da Costa D, et al. A prospective study of postnatal depressive symptoms and associated risk factors in first-time fathers. *J Affect Disord* 2019;249:371-77.

[6] Folia KJ, et al. Post-adoption depression: Parental classes of depressive symptoms across time. *J Affect Disord* 2016;200:293-302.

[7] Zhou J, et al. Treatment of substance use disorders among women of reproductive age by depression and anxiety disorder status, 2008-2014. *J Women's Health* 2019;28(8):1068-76.

[8] Field T. Postpartum depression effects on early interactions, parenting, and safety practices: A review. *Infant Behavioral Health* 2010;33(1):1-14.

[9] Sriraman NK, et al. Postpartum depression: What do pediatricians need to know? *Pediatrics in Review* 2017;38(12): 541-51.

[10] Luca DL, et al. Financial toll of untreated perinatal mood and anxiety disorders among 2017 births in the United States. *Am J Public Health* 2020;110(6);888-96.

[11] Kendig S., et al. Consensus bundle on maternal mental health: perinatal depression and anxiety. *Obstet Gynecol* 2017;129(3):422-30.

[12] Putnick DL, et al. Trajectories of maternal postpartum depressive symptoms. *Pediatrics* 2020;146(5):e20200857.

[13] Trost WL, et al. Preventing pregnancy-related mental health deaths: Insights from 14 US Maternal Mortality Review Committees, 2008-17. *Health Affairs* 2021;40(10):1551-59.

[14] California Pregnancy-Related Maternal Mortality Review. CA-PMR Report: Pregnancy-Associated Suicide, 2002-2012. 2019.

[15] Compton MT and Shim RS. The social determinants of mental health. *Focus* 2015;13(4):419-25.

[16] Centers for Disease Control and Prevention, Healthy People 2030. Social determinants of health [Internet]. Atlanta (GA): CDC [cited 2022 April 4]. Available from: https://health.gov/healthypeople/objectives-and-data/social-determinants-health

[17] Sidebottom A, et al. Perinatal depression screening practices in a large health system: identifying current state and assessing opportunities to provide more equitable care. *Ach Womens Ment Health* 2021;24(1):133-44.

[18] Pattani A. Silenced by fear: New moms worry postpartum depression could mean losing their children. WHYY. Published April 5, 2019. Accessed December 7, 2022. https://whyy.org/segments/silenced-by-fear-new-moms-worry-postpartum-depression-could-mean-losing-their-children/

[19] Vo T, Canty L. Global mental health experiences of single mothers: A mixed methods research synthesis. *J Advanced Nursing*. Published online October 13, 2022. doi:10.1111/jan.15461

[20] Davenport MH, et al. Moms are not OK: COVID-19 and maternal mental health. *Frontiers in Global Women's Health* 2020; Jun(1):1-6.

[21] Government Accountability Office. Maternal health: Outcomes worsened and disparities persisted during the COVID-19 pandemic. GAO-23-15871; Oct 2022.

[22] Stein A, et al. Effects of perinatal mental disorders on the fetus and child. *Lancet* 2014 Nov 15; 384(9956):1800-19.

[23] Filletti VJ, et al. Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. The Adverse Childhood Experiences (ACE) study. *Am J Prevent Med* 1998 May;14(4):245-58.

[24] Department of Health and Human Services, Office of the Assistant Secretary for Health, Office on Women's Health. Prenatal care and tests [Internet]. Washington DC; OASH; cited 2022 April 6. Available at: https://www.womenshealth.gov/pregnancy/youre-pregnant-now-what/prenatal-care-and-tests.

[25] American Academy of Pediatrics. AAP Schedule of well-child visits [Internet]. *AAP*; cited 2022 April 6. Available at: https://www.healthychildren.org/English/family-life/health-management/Pages/Well-Child-Care-A-Check-Up-for-Success.aspx.