A Report from the California Task Force on the Status of Maternal Mental Health Care

California's Strategic Plan:
A catalyst for shifting statewide systems to improve care across California and beyond.

April 2017

Suggested Citation:
A Report from the California Task Force on the Status of Maternal Mental Health Care, April 2017.

Acknowledgements:

– The work of the Task Force was supported through grants from The California Endowment and the California Health Care Foundation.

– The Task Force wishes to acknowledge the leadership and time commitment of 2020 Mom in forming and overseeing the functions of the Task Force.

– The Task Force wishes to thank the Central Valley Health Policy Institute at California State University Fresno for its contributions including conducting a comprehensive literature review and organizing Task Force meetings.

– The Task Force acknowledges the significant writing contributions of Erik Fernandez y Garcia, MD, MPH; Emily Dossett, MD; Gretchen Mallios, LCSW, RYT; Stacey Stewart, MPH, CHES; Bridget Frese Hutchens, MSN, RN CNM; and Joy Burkhard, MBA.

– The Task Force thanks the research review committee, including Bridget Frese Hutchens, MSN, RN CNM; Kate DeStefano-Torres, MA, NCC, ACS, LPC; and Rupa Puri Zimmermann, Ph.D.

Dr. Fernandez y Garcia's work on this publication was supported by National Institute of Mental Health of the National Institutes of Health under award number K23MH101157. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

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CALIFORNIA'S CALL TO ACTION

Up to one in five, or 20 percent, of new or expectant mothers will experience a mental health disorder during pregnancy or the first year following childbirth. These disorders include depression, anxiety, and the less prevalent but most severe of the disorders, postpartum psychosis.[1-3] Maternal depression is the most common complication of pregnancy in the United States (surpassing gestational diabetes and preeclampsia *combined*).[4-8]

All women are at risk of maternal stress and Maternal Mental Health (MMH) disorders. However, due to the social determinants of health (the conditions in which people are born, live, and work),[9] the prevalence can soar up to 50 percent among those living in poverty.[10,11]

Untreated MMH disorders significantly and negatively impact the short-and long-term health and wellbeing of affected women and their children. Symptoms lead to adverse birth outcomes, impaired maternal-infant bonding, poor infant growth, childhood emotional and behavioral problems, and significant medical and economic costs.[12-14] Despite these consequences, screening for MMH disorders is not routine across health systems.[15] Even when MMH disorders are detected, treatment occurs in less than 15 percent of identified cases.[16]

This report seeks to summarize California's gaps in MMH care, identify strategies for improvement, and provide a clear call-to-action and framework for coordinating stakeholder responsibilities.

Recommendations align with the following five barriers of the Task Force:

1. Providers lack guidelines, referral pathways, capacity, and support to screen and treat.
2. Medical and mental health insurance and health delivery systems and providers are not integrated.
3. Ob/Gyn screening rates are not measured and reported.
4. Women don't receive adequate MMH support and education.
5. Stakeholder groups lack a framework or road-map for coordinated change.

Recognizing that MMH disorders are treatable and early detection is critical, the California Task Force on the Status of Maternal Mental Health Care (the Task Force) has set the following goals to improve screening rates in California:

By the year 2021:

80% of women are screened for MMH disorders at least once during pregnancy and the postpartum period

By the year 2025:

100% of women are screened for MMH disorders at least once during pregnancy and the postpartum period

Addressing MMH is the shared responsibility of doctors, hospitals, insurers, policymakers, government agencies, and communities. Together, stakeholders can take steps to prevent MMH disorders and close gaps in care. The Task Force urges stakeholders to commit to improving MMH by the year 2025.

ESTABLISHING AN EXPERT TASK FORCE

In response to growing awareness of the problem of untreated MMH disorders and the impact on mothers, children, families, and society, Assembly Concurrent Resolution (ACR) 148 was introduced, at the urging of advocates, by the California Legislative Women's Caucus.

The resolution called for the formation of a Task Force to study, review, and identify:

1. Current barriers to screening and diagnosis.

2. Current treatment options for both those who are privately insured and those who receive care through the public health system.

3. Evidence based and emerging treatment options that are scalable in public and private health settings. The Task Force was also asked to identify the needs of both providers and patients in order to improve diagnosis and treatment.[17]

Following passage of ACR 148 in 2014, the Task Force first convened in June 2015, and concluded its efforts in December 2016.

The Task Force was composed of multi-disciplinary and cross-sector stakeholders representing:

- medicine, mental health, nursing, research, public health, hospitals, insurers, and community based service organizations; and
- mothers, who contributed personal and invaluable perspective throughout the process.

A listing of members and their affiliated organizations is available in Appendix B.

TASK FORCE PROCESS, WORK PRODUCTS, AND SCOPE

Process

The Task Force met for a period of 12 months in both large and small group settings; a calendar of the larger Task Force meeting dates, topics, and presenters can be accessed in Appendix C. A systematic literature review was conducted to provide background on prevalence, prevention, detection, and clinical care. The Task Force also reviewed state-level survey data collected by The California Department of Public Health, California's mental health provider shortage areas, and a statewide listing of psychiatrists that have a special interest and assert having additional knowledge in treating MMH disorders (often referred to as reproductive psychiatrists). To ensure the most salient aspects of MMH care were addressed, the Task Force hosted expert presentations exploring:

- MMH prevalence data
- existing research
- barriers to care
- provider shortage areas
- innovative programs
- public policies both within and outside of California

Work Products

The Task Force consulted professional organization positions, current educational standards, and practicing providers to develop, adapt or encourage the development of the following new resources:

1. **Provider Core Competencies**

   The competencies were developed to address baseline levels of knowledge to recognize and address MMH disorders, among the different types of providers encountering pregnant and postpartum women. These core competencies are noted in Table 2.

2. **A Continuum of Care Reference**

   This figure summarizing critical time frames when providers in various settings should engage with women to address MMH, and is outlined in Figure 8.

3. **Screening: Score "Cut Offs" and Timing Recommendations**

   As a result of Task Force inquiries, Postpartum Support International (PSI) developed recommended guidelines for uniform "cut-off" scores for the two most popular screening tools identifying maternal depression/anxiety as well as screening frequency and intervals. These recommendations are published on page 23 of this report and on the PSI website, www.postpartum.net

4. **A "Menu" of Prevention and Treatment Options**

   To help Ob/Gyns (the provider type who the Task Force deemed should be the "home base" for education, detection, and treatment of mental health disorders) facilitate treatment, the Task Force adapted from the Massachusetts Child Psychiatry Access Program for Moms ("MCPAP for Moms") toolkit, a "Menu" of prevention and treatment options. This range of options should be presented and discussed with women, so they have the opportunity to select interventions that are the most appealing given personal preferences and needs. This resource is listed in Table 4 in this report.

5. **An explicit Call-to-Action for Individual Stakeholder Groups**

   This detailed framework is meant to provide all critical players with a detailed road map or starting point for change. These recommendations are detailed in Appendix A.

Scope & Limitations

The scope of the Task Force's work as outlined in the Assembly Concurrent Resolution was limited to identifying and addressing gaps in systems of care specific to identification, treatment, and prevention of MMH disorders.[17] This pre-specified and limited scope allowed for in-depth analysis of the these topics. However, the Task Force acknowledged there are many important and overlapping issues that deserve further exploration by others. Those issues include intimate partner violence, substance abuse, mental health of partners, including fathers; and special populations (e.g., military families and incarcerated women).

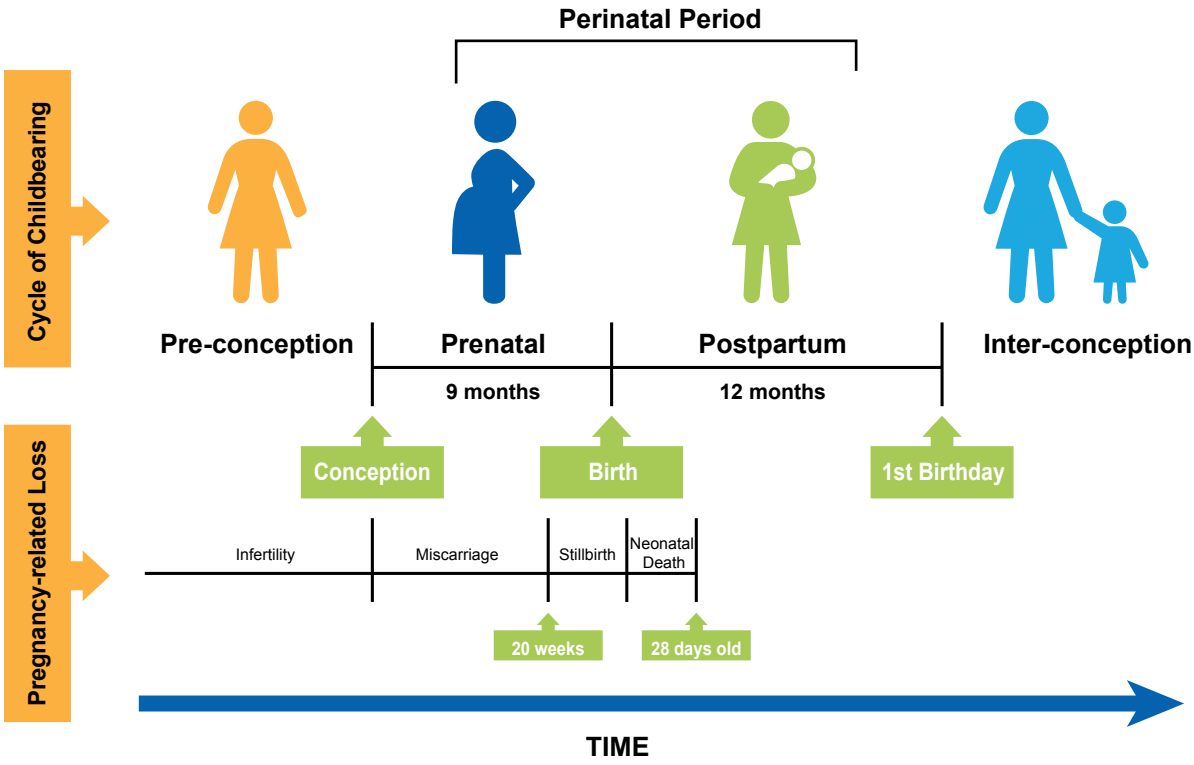
The majority of research in this field has addressed maternal depression; consequently, much of the background and data shared in the report is specific to depression. Despite this, the Task Force was clear that providers must be equipped to detect and address the full range of MMH disorders, including anxiety and psychosis.

MATERNAL MENTAL HEALTH: AN OVERVIEW

Depression is one of the most common mental health disorders, affecting more than 16 million American adults each year, and it is the leading cause of disability worldwide.[18,19] According to the World Health Organization, women experience higher rates of depression than men.[19]

Depression that occurs during pregnancy or within one year following childbirth is commonly referred to as perinatal or maternal depression. Maternal depression is the most common obstetric complication in the United States, affecting up to 20 percent of women (see Figure 1).[1,4]

Figure 1. Maternal Mental Health Disorders Occur During the Perinatal Period



BIRTH LOSS

It is important to note that women who experience perinatal loss (stillbirth, miscarriage, or neonatal death) are also at risk for MMH disorders and are at greater risk for experiencing them during subsequent pregnancies.[20] Given the increased risk, women with a history of perinatal loss should also be screened and provided additional support immediately after a loss and again during subsequent pregnancies.

MOMS' STORIES & PERSPECTIVES

"I would lie in bed and just feel my heart beating and just this rush of adrenaline, every second. I started to feel suicidal. I went to my pediatrician, sobbing; my obstetrician, sobbing; neither of them said anything."

Jo, Los Angeles County

"As African American patients we often feel we are being judged immediately by outsiders, particularly health care providers. We don't open up about anything unless we know we can trust the person. We can't trust someone if they don't know us. A doctor can't know us, unless they talk to us about life and express a genuine interest. If they are just paper pushing, asking required questions it will never happen."

Jessica, Sacramento County

"I had preeclampsia (high blood pressure) during pregnancy. To prevent a stroke, it was recommended I deliver two months early. My baby was just 3.4 pounds and was in the NICU for a month. When we brought him home he weighed exactly four pounds. Instead of focusing my time and energy on caring for a premature baby, I was forced to fight with the insurance company to cover the hospital bills. I had stacks and stacks of bills that were so difficult to manage. It was impossible to tell what was in network, what was out of network, what applied to the deductible and what didn't.

We ended up taking a cash advance on our credit card to pay the medical bills and I was forced back to work earlier than I was ready for. I remember interviewing for jobs and crying my eyes out. I wanted to be home caring for my son. Instead, I received a job that had a rigorous three-month training schedule that was out of state - out of state and away from my baby with just a few weekend visits. I felt so frustrated and angry that I was in this position and struggled to balance work and home. This was a period of time riddled with anxiety, frustration, and depression that I had never experienced before. I had heard of baby blues but had no idea what postpartum depression was until I went through and snapped out of it. The postpartum depression lasted for over a year."

Joanna, Los Angeles County

"Their screening was horrible. Basically, you get to your appointment - there is a list of questions to fill out by yourself. [Then] they ask if you've been to the emergency room, if your pharmacy is still the CVS on Lighthouse, then in the same tone - do you feel hopeless and depressed? That was the only question they asked me regarding postpartum depression. I didn't feel hopeless, so I answered no. I didn't feel depressed so I answered no. For me, I identified with anxiety and rage, things like that. I needed to learn to speak their language so I would register on their radar to get help."

Deborah, Monterey County

"When I had anxiety after the birth of my third child, I knew this wasn't going to be one of those things I could just live with, like a headache. I couldn't make it through the day, let alone care for a newborn or my other children. I was reluctant to take any medication, and finally after recognizing things weren't getting better I knew I had to do something. I called my Ob/Gyn who prescribed something over the phone, but the drug made my vision blurry and my head spin. I then went to a marriage and family therapist, who wasn't trained to treat maternal mental health disorders and who told me to "remember there is no proverbial bear, and I should try to relax." Finally, a postpartum doula gave me the name of a reproductive psychiatrist, a profession I did not know existed. In my first meeting with my psychiatrist, we put together a plan to get me back to myself. In addition to providing me drug treatment, she provided talk therapy directly so I didn't need to find another therapist, and coached me on the importance of exercise, healthy eating, and sleep. She explained the medications I'd be taking, and why they would be beneficial (one for sleep, one for anxiety) and addressed my concerns about taking medication. With a plan in place, and regular visits, my path to recovery began."

Peggy, San Diego County

"When I was 16 years old my mother passed away after being diagnosed with a rare form of cancer for the second time. I fell into a deep grief, and a depression that went undiagnosed for three years. Before losing my mother, I had thoughts of suicide because I felt this life was too much for me to live through. Nothing came of those thoughts but after my mother passed away, those feelings became stronger. The years came and went and with therapy and antidepressants I was able to fight through the depression.

Fast forward to 2008, I became pregnant. Soon after my daughter was born, those feelings of depression came back. At first I thought it was the normal depression I dealt with before, but it wasn't. I was feeling overwhelmed as a first time mother. I felt pressure from my culture (I'm Japanese) to be a perfect mother and to do it all on my own. My daughter had colic for the first couple of months, so I hardly slept and wouldn't accept help from my family. I was also in an unhealthy relationship with my daughter's father, and eventually I left. After hearing about another new mother in my circle who had committed suicide, I knew I needed to get help. I was diagnosed with postpartum depression. My doctor offered a therapist for free for one year and also put me back on medication. Now, after 4 years of therapy, I am strong again."

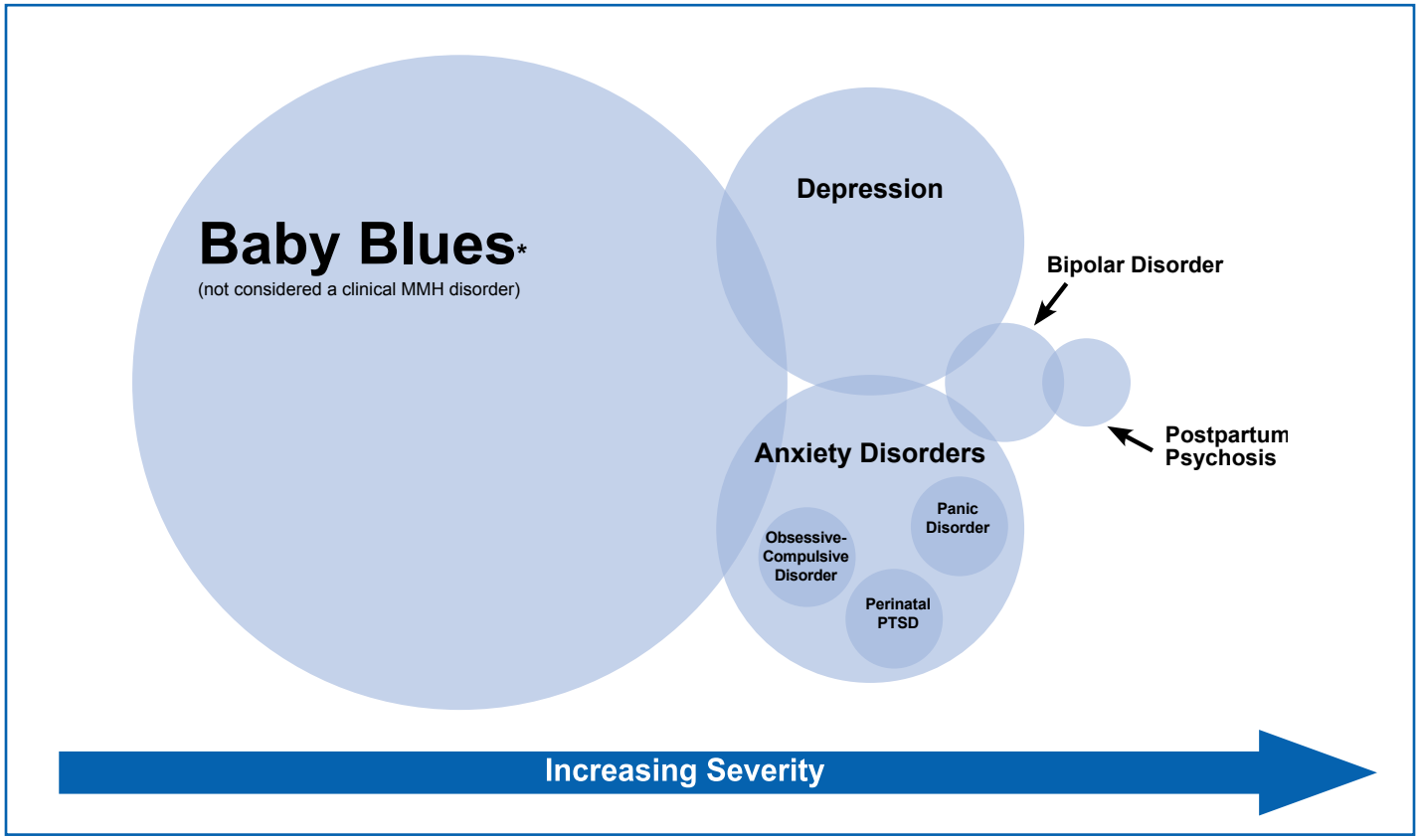
Theresa, Tulare County

ONSET AND RANGE OF MMH DISORDERS

While the phrase "postpartum depression" is sometimes used to describe any MMH disorder, it's important to note that there is a range of separate and distinct disorders, including anxiety disorders. With reported rates as high as 20 percent, perinatal anxiety is nearly as prevalent as depression.[2] In fact, anxiety is often a precursor to depression and these disorders frequently co-occur.[21,24]

Maternal mental health disorders encompass a range of mental health conditions with varying severity and prevalence, including depression, anxiety disorders, and postpartum psychosis,[1-3] as noted in Figure 2.Illnesses can occur for the first time during the perinatal period, or they can exist even before conception, continuing or worsening during the perinatal period. Women who have had prior episodes of depression or anxiety are especially vulnerable at any time during the perinatal period.[21,22]

Figure 2. Severity and Prevalence of MMH Disorders[1,3,24-28]



Though studies often isolate postpartum or perinatal depression, more recent research suggests over 80 percent of women with postpartum depression had a history of past depression. And what the authors of the study called "pure postpartum depression" was less common, with less than 20 percent of mothers having symptoms restricted to the postpartum period. When depression was restricted to the postpartum period, women experienced milder symptoms.[23]

MMH disorders are distinct from the "Baby Blues," which can occur up to two weeks postpartum and is marked by increased emotional sensitivity, weepiness, and/or feeling overwhelmed. The "Baby Blues" is not considered a mental health disorder because it is common (affecting an estimated 80 percent of new mothers), short in its duration (resolves untreated within two weeks), and is generally less severe.[29]

Table 1 summarizes mental health disorders occurring during the perinatal period, describes associated symptoms, and highlights the prevalence during pregnancy and following childbirth.

Table 1. Prevalence of Maternal Mental Health Disorders[1,3,24-28]

MMH Disorder	Prevalence in Pregnancy	Prevalence in Postpartum	Description
Major Depressive Disorder	5.6%	7.1%	Low mood or disinterest for 2+ weeks; changes in sleep, appetite, energy, and concentration; possible suicidal thoughts/actions and can include psychotic features, though extremely rare; severity can range from mild to severe
Minor Depression	7.3%	12.1%	Same symptoms as major depressive disorder, though fewer in number or for a shorter duration of time
Generalized Anxiety Disorder	0 - 11%	6 - 10%	6+ months of worry that is excessive most of the day, most days; accompanied by multiple physical symptoms; severity can range from mild to severe
Panic Disorder	0.2 - 5.7%	1.4 - 10.9%	Panic attacks (10-15 minutes of intense anxiety with racing heart, sweaty palms, shortness of breath, etc.) that occur frequently enough to impair functioning
Obsessive-Compulsive Disorder	0 - 5.2%	2.7 - 3.9%	Intrusive thoughts that cause anxiety (obsessions), followed by behaviors - often rigid or ritualistic - aimed at making obsessions go away (compulsions)
Perinatal Post Traumatic Stress Disorder (PTSD)*	n/a	3.1%	Results from perceived traumatic birth experience; flashbacks, nightmares, increased arousal, anxiety, a feeling of detachment
Bipolar Disorder	2.8%	2.8%	Characterized by manias of highs or irritable mood, agitation, less sleep; sometimes has psychotic features of hallucinations and/or delusions; may or may not also have depressive episodes
Postpartum Psychosis*	n/a	0.1-0.2%	Sudden onset of symptoms which may include disruption of thought processes, hallucinations, delusions, perceptual disturbances, paranoia, amnesia, and severe disruption of ordinary behavior Symptoms usually appear within 2 to 4 weeks of delivery, but can start as early as 2 to 3 days after delivery (and can occur anytime in the first year); women with bipolar disorder are at increased risk

* Refers to diagnoses associated with pregnancy and occurring in postpartum; these disorders do not occur in other populations or at other times in the lifecycle.

An In-Depth Look at Postpartum Psychosis

Significantly less prevalent than maternal depression and anxiety, the most severe MMH disorder is postpartum psychosis (also referred to as puerperal psychosis).[3,30] It is very rare; one to two out of every thousand women who deliver a baby will experience psychosis each year.[3] It is a severe episode of mental illness which begins suddenly in the days or weeks after having a baby and is considered a psychiatric emergency. Symptoms vary, can change rapidly, and may come and go. Symptoms can include high mood (mania), depression, confusion, extreme agitation, impulsive behavior, impaired judgement, hallucinations, and delusions.[3,30]

Psychosis looks markedly different in childbearing women; one mother might believe God wants her baby to be sacrificed as the second coming of the Messiah, a second may believe she has special powers, and a third may fear that her baby is defective.[30,31] This serious mental illness has potentially lethal consequences, including suicide and filicide or infanticide.[140] Fillicide is defined as child murder by the mother and infanticide is defined as killing an infant within the first year of life.[31]

While the cause of postpartum psychosis has not been found, several interesting studies find links with both thyroid dysfunction and autoimmune dysregulation. Studies also link personal history of trauma to increased risk of psychosis.[32-35] Other factors can elevate the risk of postpartum psychosis, including sleep deprivation in susceptible women, hormonal shifts after birth, and the presence of other psychiatric disorders.[13] Some authors consider postpartum psychosis to be tied to bipolar disorder until proven otherwise. Mothers with a history of bipolar disorder or postpartum psychosis have a 100-fold increase in rates of psychiatric hospitalization in the postpartum period.[30]

Postpartum psychosis is not currently categorized as a distinct disorder in the American Psychiatric Association's Diagnostic and Statistical Manual (DSM-V), the manual used by mental health professionals and others, including the media. This lack of recognition has led to the use by various organizations and experts of differing definitions. Brief psychotic disorder, psychotic disorder not otherwise specified, and affective disorders are commonly used to diagnose postpartum psychosis. Some DSM-V disorders, such as those aforementioned, permit the specifier "with postpartum onset" if the symptoms occur in mothers within four weeks of birth.[27]

POSTPARTUM PSYCHOSIS AND THE MEDIA

In part, because postpartum psychosis is not listed as a distinct disorder in the DSM-V, media covering tragic cases of infanticide in the postpartum period often mistakenly label the disorder as postpartum depression, rather than postpartum psychosis, which perpetuates confusion among mothers and families and may prevent those suffering from possible depression or anxiety from speaking up about their symptoms.

Due to the nature of the condition, including symptoms waxing and waning, there is no screening tool for psychosis though there is a screening tool for bipolar disorder, the Mood Disorder Questionnaire, or MDQ, which assesses among other things for mania. Therefore, it's important for women and their health care providers to learn about their risk factors and look for sudden onset of symptoms immediately after birth (50 percent of cases will experience onset by day three postpartum).[36,37] Due to rapidly changing symptoms and potential for harm, it is best to treat psychosis in an inpatient setting. Treatment generally involves psychopharmacology, though other treatments, such as electroconvulsive therapy, should also be considered.[37,38]

MMH RESEARCH IS EVER-CHANGING

Harvard's Massachusetts General Center for Women's Mental Health website and blog **(www.womensmentalhealth.org)** is often considered the go-to resource for staying up-to-date with the latest research in MMH for both researchers and clinicians alike.

Risk Factors for Depression

Although anyone can experience a MMH disorder, there are certain factors that increase the risk for depression within the general population, which also elevate risk among pregnant and postpartum women, including:

- Personal or family history of depression[39]
- Major life changes, trauma, or stress[39]
- Some physical illnesses and medications[39]

In addition to these risk factors, the following risk factors place a woman at higher risk for developing depression, specifically during pregnancy (the prenatal period):

Risk Factors for Prenatal Depression

- Anxiety[4]
- Lack of social support/isolation (family and friends to share experiences with; practical support with life's challenges)[4]
- Prior birth loss[20]
- Unintended pregnancy[40,41]
- Low socioeconomic status[4,42]
- History of domestic violence (either as victim or perpetrator)[43,44]
- Younger age (e.g., Teen pregnancy)[4]
- Older age (e.g., Over age 40)[45]
- History of premenstrual syndrome (pms)[46]
- Body dissatisfaction in third trimester[47]
- Untreated thyroid disorders[48,49]
- Single relationship status and/or poor relationship quality[11,28,50-52]
- Poor health status and chronic conditions prior to pregnancy, particularly for women of color[53,54]

The same factors that place a woman at higher risk for prenatal depression also place her at risk for postpartum depression, as do these additional factors specific to the postpartum period or identified in research specific to the postpartum period:

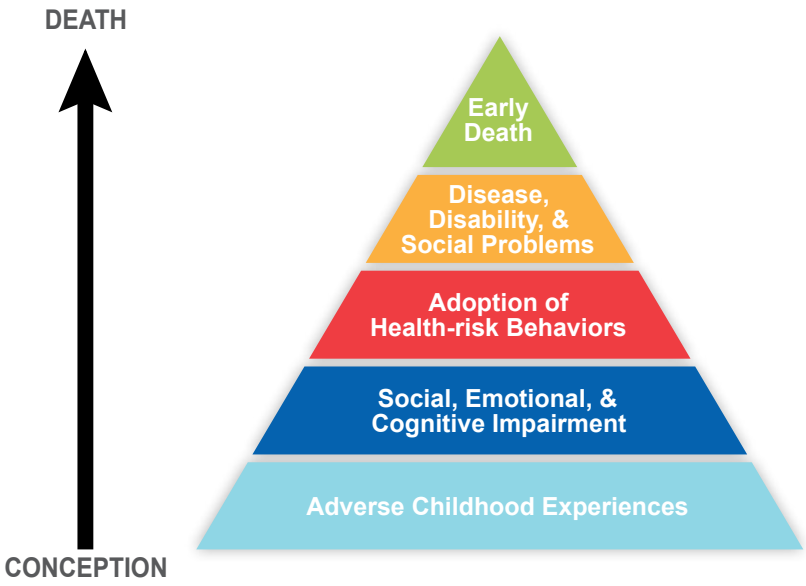
Risk Factors for Postpartum Depression

- Depression or anxiety during pregnancy[4]
- Stressful life events[49]
- Perfectionism/fear of making a mistake[55]
- Traumatic birth experience[56]
- Preterm birth/infant admission to neonatal intensive care unit (nicu)[57,58]
- Breastfeeding problems[59]
- Multiple births[60]
- Infants with colic/significant fuss patterns and sleep deprivation[62,63]
- Living in a city/increased isolation[64]

Childhood Trauma Increases Risk

Further, adults who experienced chronic sustained forms of trauma during childhood (i.e., adverse childhood experiences or ACEs), such as child abuse, neglect, or other household dysfunctions, have an increased risk of depression in adulthood,[66] as shown in Figure 3. In California, adults with four or more ACEs are four times more likely to have a depressive disorder, demonstrating the long-term consequences of early childhood adversity.[67]

Figure 3. Adverse Childhood Experiences (ACEs) Increase Risk of Depression as an Adult



RACE AND ETHNICITY AND MMH RISK FACTORS

Research on race/ethnicity and Postpartum Depression (PPD) is mixed with some studies showing differences between racial and ethnic groups,[61,68] and some showing no difference.[10, 88, 93] This is likely due to the influence of socioeconomic status which is estimated to be a stronger influence on PPD than race/ethnicity.[107]

Two frameworks rooted in the public health and sociological fields help to explain some of the risk factors for MMH disorders and offer insight into prevention opportunities:

Social Determinants of Health include interconnected factors which are outside of the individual, most prominently resources and support (or lack of) at the individual, neighborhood, and community levels. These include public safety, clean water and air, the availability of food, jobs, quality schools, and affordable housing, all of which impact the nature of social interactions and relationships. The conditions in which people live shape physical and mental health and help explain why up to half of all women in low socioeconomic settings will experience maternal depression.[9-11,69]

Life Course Perspective (LCP) is a multidisciplinary approach to understanding the mental, physical, and social health of individuals, which incorporates both life span and life stage concepts that determine the health trajectory of the individual and future generations. The lack of protective factors at key junctions in an individual's life, such as childhood and pregnancy, threaten to perpetuate the cycle of adversity, including risk of poverty, adverse health outcomes, and/or mental illness, through adulthood and subsequent generations.[70]

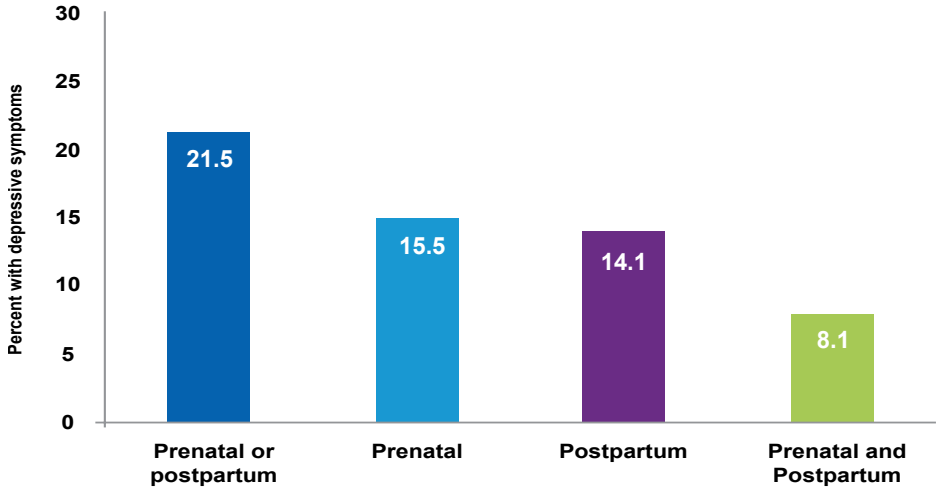
Addressing the conditions of daily life at each stage of life, from preconception to adulthood, provides opportunities to improve physical and mental health as well as to reduce the risk of the mental health disorders associated with social inequalities.[9,70]

DADS CAN SUFFER TOO - PATERNAL DEPRESSION AND ANXIETY

Research estimates between 4 and 25 percent of men will suffer from depression in the postpartum period. In fact, maternal and paternal depression often coexist; maternal depression has consistently been found to be the biggest predictor for depression in fathers. When transitioning to parenthood, 10 percent of fathers report a significant elevation of anxiety levels. The father's anxiety and depression may even translate into violent behaviors toward his partner. One study found that among mothers in the postpartum period, one-fourth reported violence from their partners with 69 percent being the first occurrence. Given the importance of the partner's psychological support as a protective factor for postpartum depression, low support from fathers who experience postpartum depression may cause a mother to become more vulnerable to stress and MMH disorders. Consequently, it's important to consider these factors during the assessment of the mother's support system, and recognize the father's situation could be a stressor versus a support.[65]

The California Department of Public Health conducts an annual, statewide-representative survey of women with a recent live birth, called the Maternal and Infant Health Assessment (MIHA). MIHA findings are generally consistent with similar research conducted on the national level. The data demonstrate that in California, approximately one in five women experience depressive symptoms during pregnancy or postpartum (21.5 percent),[71] as shown in Figure 4. As previously noted, this makes maternal depression, not to mention the other MMH disorders, the leading complication of pregnancy (or maternal morbidity).

Figure 4. Percent of Women with Prenatal or Postpartum Depressive Symptoms[71]



Data Source: MIHA is an annual population-based survey of California residents with a live birth. Data from MIHA 2012-2013 were combined, resulting in a statewide sample size of 13,820. Prevalence (%) estimates are weighted to represent all women with a live birth who resided in California in 2012 and 2013.

Prepared by: California Department of Public Health: Center for Family Health: Maternal, Child and Adolescent Health Program: Epidemiology, Assessment and Program Development Branch.

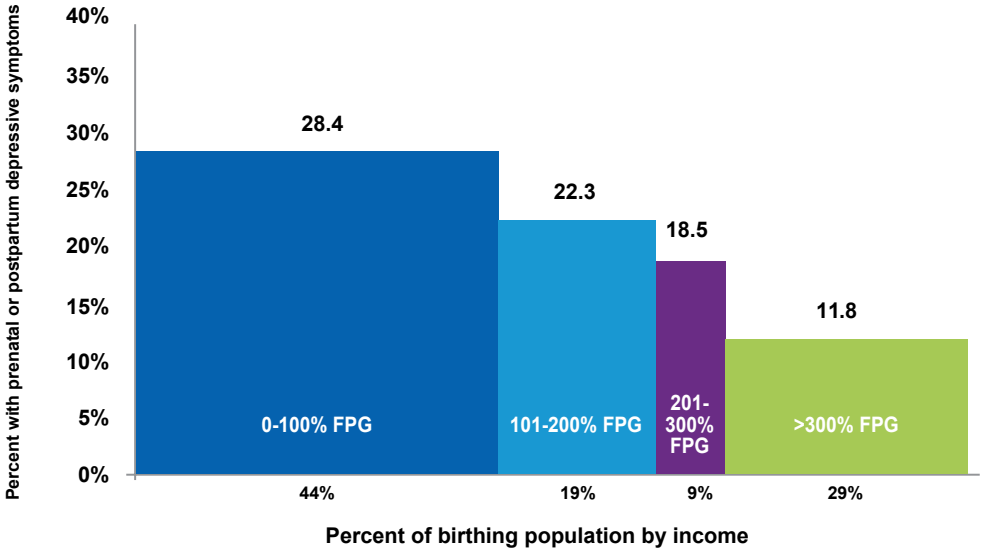
Maternal Depression in California: Poverty

Low socioeconomic status is the single greatest predictor of MMH disorders in the United States. Among those living in poverty, the prevalence can soar up to 50 percent in some communities versus 15 to 20 percent among the general population.[10,11] California has the highest poverty rate in the nation with 4 in 10 Californians living in or near poverty.[72]

In fact, MIHA data show the highest prevalence of depressive symptoms during or after pregnancy was found among Black and Hispanic women, women of lower educational attainment, women utilizing Medi-Cal, and women in poverty.[71] Figure 5 illustrates the inverse relationship between income and maternal depression. The large proportion of California's birthing population (44 percent) with income levels at or below the federal poverty guideline (FPG) experience the highest prevalence of maternal depressive symptoms (28.4 percent), while symptoms decrease significantly (to 11.8 percent) among those with income exceeding 300 percent FPG.[71]

California has the highest poverty rate in the nation.

Figure 5. Prevalence of Perinatal Depressive Symptoms and Distribution of Population by Income Category[71]



Data Source: MIHA is an annual population-based survey of California residents with a live birth. Data from MIHA 2012-2013 were combined, resulting in a statewide sample size of 13,820. Prevalence (%) estimates are weighted to represent all women with a live birth who resided in California in 2012 and 2013.

Notes: Width of bar and percent below the bar reflects percentage of total population in each income group. Percent on top of each bar reflects the percent of women with perinatal depressive symptoms, among women in each income group.

Prepared by: California Department of Public Health: Center for Family Health: Maternal, Child and Adolescent Health Program: Epidemiology, Assessment and Program Development Branch.

Maternal Depression in California: Other Risk Factors

Additionally, women who experienced childhood hardships, such as the inability to obtain basic needs, were disproportionately more likely to experience depressive symptoms during or after pregnancy (See Figure 3 Adverse Childhood Experiences Increase Risk of Depression as an Adult). Women who were victims of intimate partner violence, whose partner was in jail, were separated from their partner, or lacked emotional or practical support during pregnancy also had extremely high prevalence of maternal depressive symptoms. And women with unwanted pregnancies were nearly four times more likely to experience maternal depressive symptoms than women who had wanted to be pregnant at the time they conceived.[71] Detailed MIHA data have been summarized in Table 5, presented in Appendix D.

CALIFORNIA IS PRIORITIZING MATERNAL MENTAL HEALTH

Maternal mental health has gained attention across California in recent years. In fact, 35 of 61 counties and local health jurisdictions identified MMH as a problem in their community during the statewide needs assessment conducted for the 2015 Title V Maternal and Child Health Block Grant, including:[73]

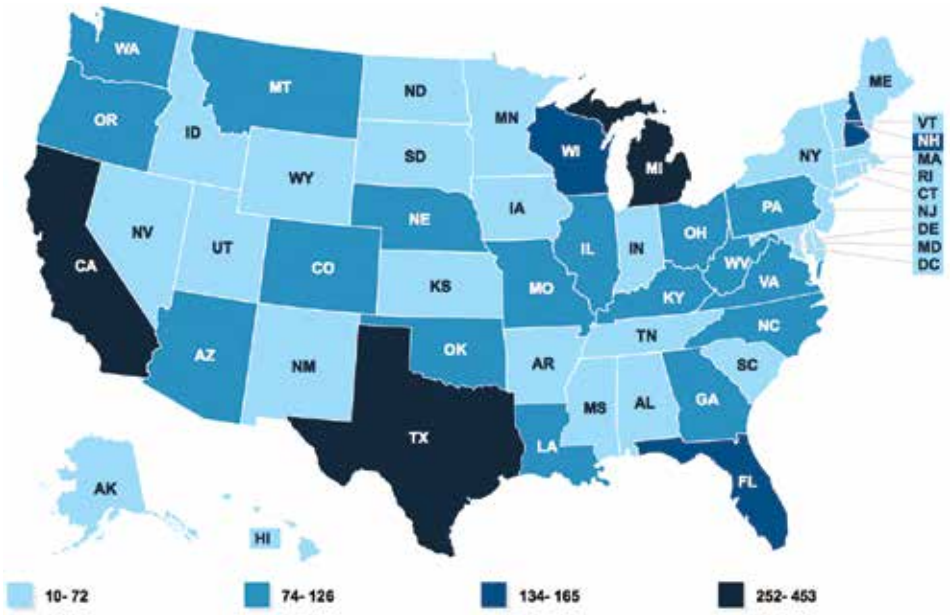
Alameda
Amador
City of Berkeley
Butte
Calaveras
El Dorado
Humboldt
Lassen
Los Angeles
Marin
Merced
Modoc
Nevada
Orange
City of Pasadena
Placer
Riverside
Sacrameno
San Luis Obispo
San Mateo
Santa Barbara
Santa Clara
Santa Cruz
Shasta
Sierra
Solano
Sonoma
Trinity
Tulare
Ventura
Yolo
San Benito
San Diego
San Francisco
San Joaquin

SHORTAGE OF MMH PROVIDERS

There is a shortage of mental health specialists, including psychiatrists, throughout the United States. The federal agency, Health Resources and Services Administration (HRSA) uses Health Professional Shortage Areas (HPSA) to designate areas and population groups that are experiencing a shortage of health professionals. For mental health, HPSA includes areas where the population to provider ratio exceeds 30,000 to 1 (20,000 to 1 if there are unusually high needs in the community).[74] In California, there are currently 387 designated areas with too few mental health providers and services. At this time, just 48 percent of the state's mental health care needs are able to be met. For example, to remove the HPSA designations, California would need to increase the number of psychiatrists by at least 145 practitioners.[74]

Figure 6. Mental Health Care Health Professional Shortage Areas (HPSAs)[75]

California has the highest number of mental health shortage areas in the nation, followed by Texas.



WHAT IS A REPRODUCTIVE PSYCHIATRIST?

A reproductive psychiatrist is a medical doctor with special interest and skills in diagnosing and treating psychiatric disorders that may be related to a woman's reproductive life cycle, including menstruation, pregnancy, and menopause.[76]

To further complicate matters, there is the added shortage of mental health providers with interest and skills in treating MMH disorders, including reproductive psychiatrists, and an inability to easily identify them.[75] There currently aren't boards that test for proficiency of MMH professionals, including reproductive psychiatrists, however, Postpartum Support International (PSI) maintains a list of mental health providers who organization representatives believe may be qualified to treat MMH disorders, including reproductive psychiatrists. Based on a review of the list provided on December 8, 2016, Figure 7 illustrates that only 11 of California's 58 counties include at least one reproductive psychiatrist.

Figure 7. Availability of Reproductive Psychiatrists in California, by County

Table 2: MMH Core Competencies for Health Care Providers

The Task Force developed the following chart which depicts the knowledge and skills needed to diagnose, refer, and treat MMH conditions by provider type including reproductive psychiatrists.

Ob/Gyn, Nurse-Midwife, Primary Care Physician, and PCP Extender/Prescriber Core Competencies:

- Understand signs and symptoms of the range of MMH disorders and which factors place a woman at high-risk for an MMH disorder
- Develop knowledge about the valid screening tools for depression, anxiety, and bipolar disorder; where to locate; how to select and use; and when to screen for bipolar disorders
- Recognize the recommended frequency of screening during pregnancy and postpartum
- Understand how to interpret screening results
- Demonstrate ability to assess for safety including suicidality and postpartum psychosis which includes an increased risk of suicide and infanticide
- Develop knowledge of the menu of prevention/treatment options (drug and non-drug treatments including non-clinical alternative practices)
- Recognize which medications are safe to start or continue in pregnancy or while breastfeeding; when multiple medications are being utilized or when multiple medications may be needed, seek a specialized reproductive mental health consultation
- Develop knowledge of how to counsel women with existing psychiatric illness who are planning pregnancies and taking medication
- Learn about and refer to the local network of MMH services
- Understand that trouble breastfeeding can be a risk factor for anxiety and depression, and some agents used to help increase breast milk supply may trigger anxiety

Nursing (Registered Nurses, Public Health Nurses, and Advanced Practice Nurses) Core Competencies:

- Understand signs and symptoms of the range of MMH disorders
- Be able to apply the nursing process of assessment, diagnosis, planning, implementation, and evaluation for a patient population that may be experiencing a wide range of MMH disorders
- Recognize factors that place a woman at high risk for an MMH disorder and be able to intervene within the specific nursing role
- Be familiar with validated screening tools for depression and anxiety and follow agency protocols in the selection and use of such tools
- Develop and implement care plans using screening results and following agency protocols on screening and interventions
- Be familiar with the menu of prevention/treatment options (drug and non-drug treatments including non-clinical alternative practices) and referral pathways
- Recognize when patient should be seen by an MD
- Recognize and refer to the local network of MMH services available in community
- Recognize that breastfeeding challenges can be a risk factor for anxiety and depression; be familiar with resources to support a mother's decision to continue or discontinue breastfeeding, especially when medications are involved (i.e., psychotropics, antibiotics, and/or agents used to increase or decrease milk supply

Non-MD, Behavioral Health Providers Core Competencies:

- Understand signs and symptoms of the range of MMH disorders and which factors place a woman at high-risk for an MMH disorder
- Develop knowledge about the valid screening tools for depression, anxiety, and bipolar disorder; where to locate; how to select and use; and when to screen for bipolar disorders
- Understand how to interpret screening results
- Develop knowledge of the menu of prevention/treatment options (drug and non-drug treatments including non-clinical alternative practices)
- Practice MMH evidence-based psychotherapy (cognitive behavioral therapy, interpersonal therapy, etc.)
- Recognize when to refer to psychiatry and which psychiatrist is appropriate
- Demonstrate ability to appropriately counsel women with psychiatric illness who are planning pregnancies and taking medication
- Recognize and refer to the local network of MMH services available in community
- Understand that trouble breastfeeding is a risk factor for anxiety and depression; certain medications used to treat mental health disorders are safe for use while breastfeeding; other agents used to help increase breast milk supply may trigger anxiety; and certain medications are safe to continue while breastfeeding while specialized psychiatric consultation is sought

General Psychiatrists Core Competencies:

- Understand signs and symptoms of the range of MMH disorders, including postpartum psychosis and which factors place a woman at high-risk for an MMH disorder
- Develop knowledge about the valid screening tools for depression, anxiety, and bipolar disorder; where to locate; how to select and use; and when to screen for bipolar disorders
- Demonstrate competence in assessing for safety, particularly suicide and infanticide, and instituting appropriate acute treatment in pregnant and newly postpartum women
- Understand how a differential diagnosis (distinguishing of a particular disease or condition from others that present similar symptoms) differs for pregnant and postpartum women versus the general population
- Develop knowledge of the menu of prevention/treatment options (drug and non-drug treatments including non-clinical alternative practices)
- Recognize the importance of social support and appropriate psychotherapy and how to develop a plan for assisting patients in accessing these resources
- Demonstrate competency in counseling women on the risks of untreated relapse versus the risks of potential medication use in pregnancy and lactation
- Understand which medications are safe to continue in pregnancy or while breastfeeding versus which medications need to be changed immediately
- Demonstrate ability to appropriately counsel women with psychiatric illness who are planning pregnancies and will need treatment, whether pharmacological or not
- Demonstrate ability to appropriately counsel women of childbearing age on methods of birth control, their effects on psychotropic medication or symptoms, and where to go for family planning
- Develop knowledge of when to seek specialized consultation from a reproductive psychiatrist
- Recognize and refer to the local network of MMH services available in community
- Understand that trouble breastfeeding can be a risk factor for anxiety and depression; and some agents used to help increase breast milk supply may trigger anxiety

Reproductive Psychiatrists Core Competencies:

All competencies required of general psychiatrists plus:

- Demonstrate ability to manage complex medication regimens in pregnancy
- Provide pre-pregnancy and postpartum consultation to MDs, for women with severe mental illness and those on complex medication regimens
- Serve as a resource through expert consultation with a team of providers, including prenatal care, pediatric, social service, and other behavioral health providers

Community Health Workers, Lactation Consultants, Doulas, Home Visitors, Childbirth Educators, Peer Support Leaders, etc. Core Competencies:

- Understand signs and symptoms of the range of MMH disorders and which factors place a woman at high-risk
- Develop knowledge about the valid screening tools for depression and anxiety. Understand where to locate these screening tools and how to select and use them
- Understand recommended frequency of screening during pregnancy and postpartum and suggested ‘cutoff’ scores to identify who may have potential anxiety or depression
- Be familiar with and follow agency protocols for different types healthcare workers involved in addressing MMH, which include prevention and treatment resources and referral pathways
- Understand that trouble breastfeeding can be a risk factor for anxiety and depression; and some agents used to help increase breast milk supply may trigger anxiety

WOULD CREDENTIALING BOARDS HELP?

There are board certification processes in place for mental health providers who specialize in serving children and adolescents, including certification through The American Board of Clinical Child and Adolescent Psychology and the certification process for child and adolescent psychiatrists offered through the American Board of Psychiatry and Neurology, respectively. Additionally, there are specialty boards for providers supporting women with lactation and eating disorders for example, including the International Board of Lactation Consultant Examiners and the International Association of Eating Disorders Professionals.

Because the field of MMH is still emerging, there aren't yet board certification processes for those mental health providers who specialize in MMH. The lack of testing boards for behavioral health providers and psychiatrists who specialize in MMH means there is no credential that is issued to help referring providers and patients know who is qualified to treat. This also means that health insurers, and the government agencies that regulate them, are not able to assess whether they have adequate networks to serve the perinatal population.

CONSEQUENCES AND COSTS OF UNTREATED MMH DISORDERS

The Cost to Society

Maternal depression contributes to the $210.5 billion economic burden the U.S. faces each year for major depressive disorder, though the degree to which it contributes to the overall burden has not been quantified. The costs of untreated depression include absenteeism from work, lost productivity, direct treatment costs, and expenditures related to suicide.[77] Additionally, untreated maternal depression negatively impacts employment and household income, potentially burdening the public assistance system.[8]

According to Wilder Research in a 2010 report, the annual cost of not treating a mother with depression is $7,200 in lost income and productivity; an additional $15,300 can be attributed to the child, totaling $22,500 per mother/child dyad.[14] Of the estimated 500,000 women that give birth in California each year, we can expect 100,000 to have a MMH disorder.[4,78] Using these figures, the annual cost of untreated maternal depression in California can be estimated at $2.25 billion dollars.

The Annual cost of untreated maternal depression in California is estimated at $2.25 billion dollars.

WHAT IS INFANT MENTAL HEALTH?

Infant mental health focuses on the optimal social and emotional development of infants and toddlers within the context of secure, stable relationships with caregivers.[79] Maternal mental health and infant mental health are frequently lumped together as "maternal and infant mental health," recognizing the mother-baby or child connection, often referred to as the "dyad."

The Impact on Families and Children

Untreated maternal depression, together with other MMH disorders, has devastating impacts on a mother's health, functioning, and the stability of her family. It also has been shown to negatively affect the physical and mental health of her children. Even mild to moderate distress during pregnancy can have serious adverse health effects on a fetus, and research suggests untreated depression and anxiety during pregnancy are a leading cause of preterm birth and low birthweight babies.[13]

Regulation of the emotional states of the newborn, through standard bonding activities of soothing and playing, stimulate a growing infant's autonomic nervous system by releasing the beneficial hormone oxytocin. Repeated experiences of these positive effects on the nervous system reduce the levels of the stress hormone cortisol and lay the foundation for social and emotional health. Functional impairments that stem from maternal depression interfere with the mother's ability to participate in these positive developmental interactions.[80,81]

Children born to mothers experiencing depression have changes in their brain architecture that seem to negatively affect their learning, behavior, and mental health.

Maternal depression and anxiety are a stronger risk factor for childhood behavioral problems than smoking, drinking, or domestic violence.[82] Furthermore, impaired maternal bonding and developmental delays are associated with negative outcomes in the child's mental learning, health, and overall functioning well into adulthood.[83-85]

Low income families are disproportionately affected by MMH disorders; some reports estimate that more than half of all infants living in poverty are being raised by mothers with some form of depression.[86] Low socioeconomic status also makes it more difficult to obtain appropriate and successful treatment, further compounding the negative outcomes of untreated maternal depression on affected mothers and their children.[87]

MMH & EPIGENETICS

The study of genes and the variation of gene expression based on external or environmental factors is called epigenetics. This field has received close attention, in conjunction with the Life Course Model, as epigenetics asserts that exposure to stressful events or circumstances can turn certain genes on or off, thereby influencing the capacity for resiliency, illness, and/or the overall health status of an individual. Exposure to adverse events, including maternal depression, can influence both short and long term health status of the individual. With respect to maternal depression, researchers have found changes to the brain of the developing fetus due to exposure to maternal depression in utero. These changes are associated with increased rates of preterm delivery, lower birth weight, elevated cortisol, and lowered levels of serotonin in early infancy. Additionally, research has demonstrated that a mother's depression during pregnancy can result in alterations to the DNA of the developing fetus. In this case, the mother transmits the trauma and stress of the psychological condition that she is experiencing into the biology of her offspring. Therefore, decreasing the rates of fetal exposure to prenatal depression or anxiety is essential in protecting the next generation.[89-92]

THE MMH CONTINUUM OF CARE: FROM IDENTIFICATION THROUGH TREATMENT

Women should be informed of MMH disorders and be assessed for risk prior to pregnancy, and screening and support should be provided throughout the perinatal period. The Task Force developed Figure 8 to help illustrate critical timeframes which require assessment, screening, and support from health care providers and the specific actions for each provider type.

Figure 8. Women Should Be Screened and Supported at Various Times During Their Reproductive Years

Pre-conception

- Women should be informed of the prevalence, signs, and symptoms of all MMH disorders.
- Mental health assessments should be conducted, including screening for depression, anxiety, and bipolar disorder. This should also include discussing risk factors (e.g., mental health history, family history of mental illness) and general promotion of health (e.g., exercise, promotion of sleep, adequate Folic Acid, Omega-3s, and Vitamin D). A thorough assessment should also include discussion about premenstrual syndrome (PMS) and untreated thyroid disorders which indicate higher risk.
- Women should be counseled on pregnancy prevention if they are not actively trying to conceive.
- Women who have psychiatric histories and/or who are currently on psychiatric medications should receive preconception counseling on how to maintain mental health and stability during pregnancy, including medication management where appropriate.

Pregnancy

- If not conducted on a preconception basis, a mental health assessment should be conducted during pregnancy.
- Women should be informed/reminded of prevalence, signs, symptoms, and risk factors of all MMH disorders and how to obtain help should symptoms be present or arise later.
- Screening should occur for depression and anxiety, and screening for bipolar disorder if screening didn't happen at a recent pre-conception visit.

Inpatient: High Risk Pregnancy, the Immediate Postpartum, NICU

- Women should be screened for maternal depression and anxiety, and screening for bipolar disorder if screening didn't happen at a recent pre-conception visit or during pregnancy.
- Women should be informed of prevalence, signs, symptoms, and risk factors of all MMH disorders and how to obtain help should symptoms be present or arise later.
- Women with bipolar disorder should be monitored for potential psychosis including sudden onset immediately after birth.

Postpartum

- Women should be screened for maternal depression, anxiety, and bipolar disorder if screening didn't happen at a recent preconception visit, during pregnancy, or while inpatient.
- Women should be informed of prevalence, signs, symptoms, risk factors, and how to obtain help should symptoms be present or arise later.
- Women with bipolar disorder should be monitored for potential psychosis including sudden onset immediately after birth.

EMERGENCY ROOMS MUST BE PREPARED

The rate of emergency department visits related to depression, anxiety, or stress reactions increased 56 percent between 2006 and 2013. During the same period, visits related to psychoses or bipolar disorders increased 52 percent while visits related to substance use disorders increased 37 percent.[104] Emergency room nurses and physicians should be trained to identify signs and symptoms of MMH disorders including postpartum psychosis, and should screen for maternal depression and anxiety. Staff should also be informed of regional inpatient and outpatient MMH treatment programs.

SCREENING TO DETECT MMH DISORDERS

MMH disorders are treatable, and early detection is important. Identification of mental health disorders occurs through a questionnaire completed by the patient referred to as a "screening tool." Several screening tools have been developed and identified by researchers as appropriate or "validated" to use during the perinatal period.

The most commonly used questionnaires (screening tools) are:

- PHQ-9 (the Patient Health Questionnaire) has nine questions used to detect depression.[95]
- Edinburgh Pregnancy/Postnatal Depression Scale (EDPS) is a 10-question survey to detect depression which also includes two questions about anxiety.[94]
- When the PHQ-9 is utilized, the Generalized Anxiety Disorder (GAD-7) or another validated perinatal anxiety screening tool, such as the Perinatal Anxiety Screening Scale (PASS), should also be used to detect possible anxiety.[137,138]
- MDQ (the Mood Disorders Questionnaire) is used to detect bipolar disorder.[38]

Providers who screen patients for depression and anxiety at various times of their lives are most likely to use the PHQ-9 and GAD-7, validated for use across the lifecycle, while those who are focused on the perinatal period may prefer to use the EDPS, where questions are specific to the perinatal period.

When mania is suspected, the MDQ can be used to diagnose bipolar disorder, which places a woman at higher risk of postpartum psychosis.[38] Currently, there is no tool or test to diagnose a psychotic episode, in part because symptoms can come and go, or wax and wane.[30] Therefore, it's critical for family members and providers to understand the symptoms of psychosis.

Universal Screening Is Now Recommended

Using research-validated screening tools for identifying women who may be struggling with MMH disorders, is now universally recommended. In January 2016, the U.S. Preventive Services Task Force (USPSTF) released a revised recommendation for depression screening of all adults, including pregnant and postpartum women.[95] This came after the American Congress of Obstetricians and Gynecologists (ACOG) issued a specific recommendation in May 2015 that Ob/Gyns screen patients at least once during the perinatal period for depression and anxiety symptoms using a standardized, validated tool.[4] Other leading authorities, including the Centers for Medicare and Medicaid Services (CMS), have published additional guidance for screening in the pediatric setting; current screening recommendations are summarized in Table 3.

Table 3. National Clinical Recommendations for Maternal Depression Screening

U.S. PREVENTIVE SERVICES TASK FORCE (USPSTF)[95]	Recommends screening for depression in the general adult population, including pregnant and postpartum women. Screening should be implemented with adequate systems in place to ensure accurate diagnosis, effective treatment, and appropriate follow-up. The USPSTF acknowledges that there is little evidence regarding the optimal timing for screening or intervals and states that more evidence for all populations is needed to identify ideal screening intervals. The USPSTF notes that a pragmatic approach in the absence of data might include screening all adults who have not been previously screened, and using clinical judgment in consideration of risk factors, comorbid conditions, and life events to determine if additional screening of high-risk patients is warranted.
AMERICAN CONGRESS OF OBSTETRICIANS AND GYNECOLOGISTS, COMMITTEE ON OBSTETRIC PRACTICE (ACOG)[4]	Recommends that clinicians screen patients at least once during the perinatal period for depression and anxiety symptoms using a standardized, validated tool. Screening should be coupled with appropriate follow-up and treatment when indicated.
COUNCIL ON PATIENT SAFETY IN WOMEN'S HEALTH CARE[96]	Health care providers should (1) obtain from every woman an individual and family mental health history (including past and current medications) at intake, with review and update as needed; (2) conduct validated mental health screening during appropriately timed patient encounters to include both during pregnancy and in the postpartum period; and (3) provide appropriately timed awareness education to women and family members or other support persons.
AMERICAN ACADEMY OF PEDIATRICS (AAP), BRIGHT FUTURES AND MENTAL HEALTH TASK FORCE[32]	The primary care pediatrician, having a longitudinal relationship with families, has a unique opportunity to identify maternal depression and help prevent untoward developmental and mental health outcomes for the infant and family. Screening can be integrated into the well-child care schedule and included in the prenatal visit. This screening has proven successful in practice in several initiatives and locations and is a best practice for primary care providers caring for infants and their families. Intervention and referral are optimized by collaborative relationships with community resources and/or by co-located/integrated primary care and mental health practices. The Bright Futures Periodicity table suggest screening should occur by 1 month, and at 2 months, 4 months, and 6 months postpartum.
AAP/ACOG GUIDELINES FOR PERINATAL CARE[32]	Prior to delivery, patients should be informed about psychosocial issues that may occur during pregnancy and in the postpartum period. A woman experiencing negative feelings about her pregnancy should receive additional support from the health care team. All patients should be monitored for symptoms of severe postpartum depression and offered culturally appropriate treatment or referral to community resources. Specifically, the psychosocial status of the mother and newborn should be subject to ongoing assessment after hospital discharge. Women with postpartum blues should be monitored for the onset of continuing or worsening symptoms because these women are at high risk for the onset of a more serious condition. The postpartum visit approximately 4-6 weeks after delivery should include a review of symptoms for clinically significant depression to determine if intervention is needed.
CENTERS FOR MEDICAID AND MEDICARE SERVICES (CMS)[97]	Maternal depression screening during the well-child visit is considered a pediatric best practice and is a simple way to identify mothers who may be suffering from depression and may lead to treatment for the child or referral for mothers to other appropriate treatment.

Screening Intervals and "Cut Off" Scores

Other than the American Academy of Pediatrics (AAP) Bright Futures guidelines which address frequency of screening in the postpartum period, the Task Force found no other organizations have issued recommendations about screening frequency and no organizations that address score cut-off thresholds. As a result of conversations brought about by the work of the Task Force, Postpartum Support International (PSI), a nonprofit MMH education and support organization, developed a depression screening statement with recommendations for cut-off scores and the ideal timing for screenings.

The new protocol endorses using an evidence-based tool such as the EPDS or PHQ-9. The recommended cut-off score identifying an MMH disorder is 10.[98]

Universal depression screening is recommended by Postpartum Support International, with timing as follows:

OB/GYN

1. First prenatal visit
2. At least once in second trimester
3. At least once in third trimester
4. Six-week postpartum obstetrical visit (or at first postpartum visit)
5. Repeated screening at 12-month annual well-woman exam

PEDIATRICIAN

At 3, 9, and 12-month pediatric well-child visits

PRIMARY CARE

At 6 and/or 12-months postpartum[98]

LOW INCOME WOMEN MAY NOT SEE AN OB/GYN

It's important to note many low income women don't receive prenatal care, however most deliver at hospitals and will take their infants to well-child visits.[99] Therefore, hospitals and pediatricians may be the first opportunity for many women to be screened for maternal depression or anxiety.

Screening Is Not As Simple As Handing A Woman A Questionnaire

Establishing trust prior to screening is an essential first step. It's important for screening providers to first inform expectant mothers of the prevalence, symptoms, and risk factors of MMH disorders to help normalize the disorders. Women should also be informed that there are a range of treatment options and that with treatment and support, they will get better. Raising awareness can help eliminate confusion and shame among women and their families, should symptoms arise.[76] Additionally, screening methods that seek to establish trust prior to evaluating for maternal depression have been cited as an as previously noted.[87] Mothers may be reluctant to admit depressive symptoms out of fear of being judged or even a fear that the screening provider will notify Child Protective Services of mental health problems leading to loss of custody. This issue is complex. On one side, providers generally deny that this occurs, and screening implementation studies reveal good uptake by mothers with no such reports.[100] However, the fear that this could occur is well-documented, especially in low income and minority populations.[101]

Screening methods that seek to establish trust prior to evaluating for maternal depression have been cited as an essential first step.

KAISER OB/GYNS IMPLEMENT UNIVERSAL SCREENING

One California health care system, Kaiser Permanente Northern California (KPNC), a health insurer that employs its own clinical staff and owns its facilities (i.e., a closed system), has overcome many challenges and now includes universal depression screening as a routine part of perinatal care. The model includes collaboration with KPNC's behavioral health providers when necessary.

"What we learned is that clinicians can use the depression screening scores to open the conversation about MMH disorders without women feeling stigmatized. Following these scores over time has made it easy for obstetricians to see if their patients are feeling better."

Tracy Flanagan, MD
Director, Women's Health KPNC and Task Force Member

ISOLATION AND PRACTICAL SUPPORT

Research suggests that focusing on reported perception of social isolation may be useful in identifying pregnant women at risk for developing postpartum depression.[103] Questionnaires like the Artemis Center for Guidance's Postpartum Social Support Screening Tool can help identify women who perceive they are isolated and have low support.[139]

TREATMENT OF MATERNAL DEPRESSION AND ANXIETY

The most widely recommended components for treating MMH disorders are psychotherapy and pharmacotherapy. However, studies show that women prefer talk therapy over pharmacological interventions during and after pregnancy, due to fear of any unknown adverse impacts of medication on the developing child.[105,106]

Despite this, a survey of Ob/Gyns and family practitioners who were treating maternal depression identified their top three preferences for treatment of postpartum depression as antidepressants (96 percent), counseling conducted by themselves (64 percent), and referral to social workers or psychologists (54 percent).[102] Likewise, one study found that among women diagnosed with depression during and after pregnancy, antidepressants were the most common form of treatment, likely due to difficulty in identifying referral pathways and barriers to using mental health insurance.[106]

Women prefer talk therapy over pharmacological interventions.

Apart from pharmacological and psychotherapy treatments, research has been conducted on various alternative treatments such as yoga, meditation, social support interventions, and peer-to-peer interventions. And additionally, positive results have been documented from postpartum treatment that includes mother/child "dyadic" interactions.[80] A range of overlapping, evidence-based treatment options are available, and Ob/Gyns and other providers should present this "menu" of options based on symptom severity and discuss patient preference. The "menu" of treatment options can be viewed in Table 4, which was adapted from the MCPAP for Moms Adult Provider Toolkit.[108]

HOSPITALS CAN ALSO SOLVE FOR TREATMENT SHORTAGES

Because most deliveries occur at hospitals, hospitals are in a unique position to address treatment access shortages. There are roughly ten hospital based treatment programs in the United States, providing intensive outpatient behavioral services (which provides 6-8 weeks of services for 5 days a week, potentially tapering down to 3 days a week) and inpatient services specific to maternal mental health disorders. Additionally, hospitals often host support groups for breastfeeding, and new baby care and can both identify those at risk in these settings and provide group or one-on-one therapy lead by Licensed Clinical Support Workers (LCSWs) or Registered Nurses (RNs) trained to treat maternal mental health disorders through talk therapy.

INSURER REIMBURSEMENT

There has been some recent debate as to whether behavioral health insurers are reimbursing mental health providers, including therapists and psychiatrists (MDs) at sufficient rates. Insurers are encouraged to assess whether there are enough maternal mental health providers in their networks and should consider whether reimbursement rates are high enough to attract providers with appropriate training into their networks.

Table 4. A Menu of Treatment Options: Stepped Care, Evidence Based Prevention and Treatment Options for Maternal Mental Health

This "menu" of treatment options was adapted from the MCPAP for Moms Adult Provider Toolkit, to note the range of overlapping evidence-based prevention and treatment options that are available.

Prevention Strategies & Treatment Options[103]	Limited to no symptoms	Mild symptoms	Moderate symptoms	Severe symptoms
– Self-care, including sleep-hygiene and grooming, as desired	x	x	x	x
– Nutrition including adequate omega-3 fatty acids, vitamin D, folate	x	x	x	x
– Exercise	x	x	x	x
– Dyadic mother-baby support for dysregulated baby; crying, sleep, feeding problems	x	x	x	x
– Consider as augmentation: complementary/alternative therapies (bright light therapy, acupuncture, massage, yoga, meditation)	x	x	x	x
– Reducing isolation by getting outdoors/outside of the home	x	x	x	
– Reducing isolation by socializing and community support (including receiving emotional support from partner, friends, family or others; attending support groups or new baby care/parenting classes, home visiting, community health workers)	x	x	x	x
– Practical support (from partner*, friends, family*, or postpartum doula with household duties and baby/child care)	x	x	x	x
– Support groups for depression/anxiety		x	x	x
– Therapy for mother – Dyadic therapy for mother/baby		x	x	x
– Consider medication		x	xx**	xx**
– Consider inpatient hospitalization when safety or ability to care for self is a concern			x	x

Treatment options in each column may overlap.
*This may include fathers or grandparents taking job-protected unpaid leave under the Family Medical Leave Act. **Strongly consider.

THE APA AND ACOG REAFFIRM GUIDELINES

In 2014, the American Psychiatric Association (APA) and American Congress of Obstetrics and Gynecology (ACOG) reaffirmed their 2009 report on the management of depression during pregnancy, which addresses risks of depression and treatment with antidepressant medications to mothers and infants. The report offers treatment algorithms and guidance for clinicians providing treatment during the perinatal period.[109]

MOTHERTOBABY, A RESOURCE FOR HEALTH CARE PROVIDERS

MotherToBaby is a service of the Organization of Teratology Information Specialists, offering evidence-based information about which medications are safe to use during pregnancy or while breastfeeding. Support includes the mothertobaby.org website, a series of fact sheets, and the ability to contact an expert via phone, text, or email.

www.mothertobaby.org

A Mother's Barriers to Care

Though there are many treatment options available to women, the same factors that place a woman at higher risk of developing an MMH disorder, together with her symptoms, impair her ability to be diagnosed and seek treatment. Specifically, depression and anxiety increase isolation and/or avoidance, decrease attendance and participation in health care, and lower one's ability to follow through on treatment recommendations.[110] Even if a mother is screened, diagnosed, and receives a referral, she may not receive care. One study reported that less than 15 percent of identified cases received further assessment and follow-up treatment.[16]

Less than 15% of women receive treatment.

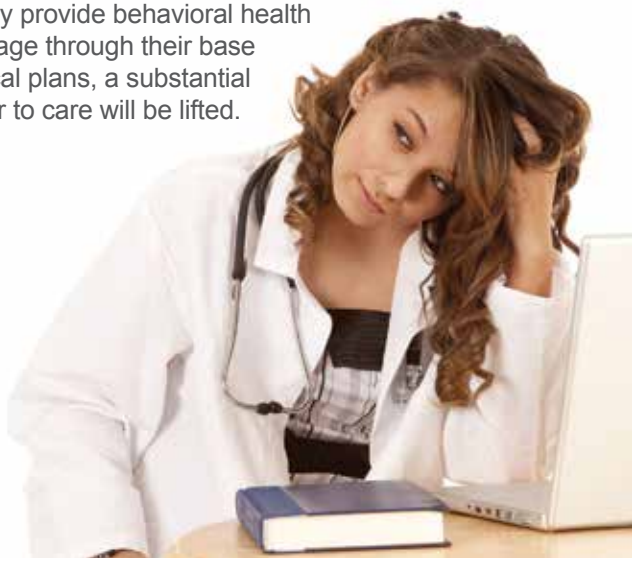
The most frequently cited barriers to treatment for women of low socioeconomic status are those stressors that can also contribute to maternal depression. Lack of childcare, lack of transportation, lack of insurance, high out of pocket expenses, and lack of financial flexibility create structural barriers for many women.[113-115] Low health literacy has also been shown to delay self-reporting of symptoms and contribute to women's refusal to engage in pharmacological treatment.[112] Additionally, previous experiences of feeling judged by health care providers can lead to general mistrust and avoidance of the health care system, particularly mental health services.[113]

Systemic Barriers to Care

In addition to the mental health provider shortages previously addressed in this paper, both patients and screening providers are faced with an additional systemic barrier, our bifurcated mental health and medical care delivery systems. This non-singular system was created in large part, and inadvertently, through insurance practices. America's health care system was largely built around the employer-based insurance system of payment. Initially in the U.S., employers were insuring against loss of life, limb, and catastrophic injury ("indemnity" insurance plans). As such, our system was built around physical injuries rather than mental illnesses. Later, at the request of employers, specialty insurance companies were formed to provide optional contracts covering care for vision, dental, and mental health and substance abuse, often referred to as "behavioral" health. Such bifurcation of insurance and thus of the health care system creates significant added and unnecessary complexity for providers and patients when accessing care. Because many medical conditions co-exist with behavioral conditions and one may cause another, forward-thinking health insurers are beginning to bring mental health 'in house.'[116,117] When health insurers directly provide behavioral health coverage through their base medical plans, a substantial barrier to care will be lifted.

"Though there has been a movement toward 'integrating' mental health care into medical systems, including primary care, significant barriers persist. In a large part, this can be attributed to having separate medical and mental health insurance companies, which require separate provider contracts/networks and separate benefit policies for patients; mental health is 'carved-out.'"

Joy Burkhard
2020 Mom



Why One California Insurer Integrated Mental Health

One Medi-Cal managed care health insurer, the Inland Empire Health Plan (IEHP) overcame many of these hurdles by innovating and pulling behavioral health 'in house' in 2010.

Prior to innovating they found:

Mental health parity and the Affordable Care Act are not enough; coordination of care between medical and behavioral providers and insurers was not sufficient; whole-person care can't happen in a segregated system.

After bringing behavioral health into their medical plan, they found:

Increased access to behavioral health services that were cost-neutral to the plan; improved coordination of physical and behavioral care; medical cost offsets for high-risk and high-cost populations; the plan could infuse behavioral health expertise within their infrastructure for crisis calls; the network of behavioral health providers grew in capacity and was recognized as the best in their service area and in the well-integrated model of care, open access to behavioral care pays for itself in medical care offsets.

Medi-Cal "Carve-Outs" Further Complicate Matters

Another complicating factor is at play within California's Medicaid system, Medi-Cal. While managed care health plans are responsible for mental health coverage (which is generally provided by a specialty mental health insurer, as noted above), "severe" mental illness is addressed through and is the financial responsibility of the departments of mental health throughout California's individual counties and jurisdictions.[118]

MEDI-CAL AND MENTAL HEALTH

"The state's Comprehensive Perinatal Service Program (CPSP) provides additional nutrition, health education, and psychosocial services through participating Medi-Cal Ob/Gyn providers to Medi-Cal eligible women from the date of pregnancy through the last day of the second month after delivery. The model is based on evidence that pregnancy and birth outcomes improve when these services are provided. The CPSP approved Medi-Cal Ob/Gyns and Medi-Cal Managed Care (MCMC) contracted health plans are required to follow the current American Congress of Obstetrics and Gynecologists (ACOG) standards as the minimum standards for obstetrical services provided to Medi-Cal pregnant women."[119]

"Whole person care" (WPC) pilots are anticipated to start in the summer of 2017 and are part of an agreement between California and the federal government. The pilot program gives the state flexibility to try to improve Medi-Cal by blending physical care, mental health care, and social services. WPC pilots are expected to have a positive impact on prevention and early intervention for all mental health disorders, including MMH disorders.[120]

RECOMMENDATIONS FOR CATALYZING CHANGE

Multiple barriers impede the ability to access, receive, and provide care, creating challenges for patients and providers alike. After hearing from experts including program leaders and researchers on evidence-based practices, reviewing available literature, and gaining a deep understanding of the MMH landscape in California, the Task Force identified the following five key barriers and a total of 12 specific recommendations for addressing these barriers:

BARRIER 1. Providers lack guidelines, referral pathways, capacity, and support to screen and treat.

BARRIER 2. Medical and mental health insurance and health delivery systems and providers are not integrated.

BARRIER 3. Ob/Gyn screening rates are not measured and reported.

BARRIER 4. Women don't receive adequate maternal mental health education nor general support as mothers.

BARRIER 5. Stakeholder groups lack a framework or road-map for coordinated change.

BARRIER 1. Providers lack guidelines, referral pathways, capacity, and support to screen and treat.

Though the American Congress of Obstetrics and Gynecology (ACOG) now recommends screening, and the American Academy of Pediatrics (AAP) promotes asking every postpartum woman how she is feeling, prior research indicates pediatricians and Ob/Gyns are concerned with being completely responsible for screening and care.[4,32,121] Both physician types have reported systemic barriers that prevent them from screening including: incomplete training to diagnose, counsel, and treat maternal depression, and subsequent lack of confidence in their ability to diagnose, counsel, and treat maternal depression; lack of referral pathways; and reimbursement challenges.[122,123]

Because patients should be assessed prior to conception and screened during pregnancy, and because early intervention is critical, Ob/Gyns, in particular, must be in a position to serve as the 'home base' for MMH care. This includes conducting a mental health assessment prior to pregnancy in childbearing age women including screening for depression, anxiety, and bipolar disorder during the mental health assessment. Ob/Gyns should also screen for depression and anxiety during pregnancy and the postpartum period, provide MMH educational materials; inform women about the menu of treatment options including how some of the options can help lower risk, and provide medication when needed (if a women is not already under the treatment of a psychiatrist with special interest in skills in treating pregnant and postpartum women), and provide referral pathways for talk therapy and to a reproductive psychiatrist when face to face treatment is needed. Ob/Gyns should present the "menu" of prevention and treatment options (noted in table 4) based on symptom severity to patients, acknowledging patient preferences.

RECOMMENDATION 1

California Ob/Gyns and other obstrectic providers should be prepared to serve as the 'home base' for MMH and should immediately adopt the screening and treatment guidelines of ACOG and the Council on Patient Safety in Women's Health Care.

SHOULD OB/GYNS BE PAID MORE TO SCREEN AND TREAT/REFER AND HOW DOES "VALUE BASED" PAYMENT COME INTO PLAY?

It's a conundrum. Ob/Gyns face high levels of burnout but receive a flat payment for all obstetric care they provide through pregnancy and the postpartum visit often referred to as the "global OB fee".[111] Ob/Gyns cite there is not enough time to screen, they do not receive training in MMH, and are not reimbursed appropriately to take on this extra workload. Some believe Ob/Gyns should be paid more to screen, treat, refer, and, when in a clinic setting, manage a patient's ongoing care to wellness when there is staff to support such management.[124]

Value based payment models are designed to promote ideal clinical outcomes while keeping care affordable. High quality care tends to be more affordable since it's evidence based, well-coordinated, and effective. Examples of value based payment models include a hospital or physician "bundled payment" (also referred to as global rates or case rates) and accountable care organizations (ACOs) which are groups of doctors, hospitals, and other providers who come together voluntarily to give coordinated high quality care to their Medicare patients (older and disabled Americans are eligible for Medicare).

Integrating mental health services into a clinic or medical group setting with value based payment contracts is often more feasible than implementing these payment models in individual doctor practices. This is due to the significant returns in health improvement and cost associated with identifying and managing comorbidities, or co-occurring medical and behavioral diseases/disorders.

There are several opportunities for value-based arrangements in obstetrics and gynecology. For example, some practices are engaging in risk-based contracts tied to birth outcomes. Due to the increasingly understood linkages between mental health and full term delivery, a group whose payment is dependent on positive outcomes may find the investment in screening, treatment, and care coordination financially beneficial. Moreover, expanding Ob/Gyns' value to women may include mental health screening as part of a comprehensive preventive approach to care.

Critical to implementing value based models are standardized metrics which can be linked to payments. The National Quality Forum (NQF), the National Committee for Quality Assurance (NCQA), and Leapfrog are among groups influential in establishing nationally recognized metrics. It is vital these organizations consider the criticality of MMH and their powerful role in advancing change through incentive based payment metrics

The Task Force recognizes that Ob/Gyns and other obstretric providers cannot be solely responsible for identifying, treating, and/or referring women with MMH disorders for treatment. To overcome provider shortages, other health care providers, such as pediatricians, lactation consultants, home visitors, and others interacting with mothers and families during this time must also be prepared to screen, treat, and/or refer women. These providers shall meet the core competencies outlined by the Task Force.

RECOMMENDATION 2

Though Ob/Gyns and other obstrectic providers must serve as the "home base" for education, screening, treatment and referral, all health care providers must be in a position to screen and detect MMH disorders and when needed, refer women back to their Ob/Gyns or other local treatment options.

Although defining core competencies is the first step in clarifying roles and expectations, this alone is not enough. There is a national shortage of MMH providers, and even when available, they can be difficult to identify. There is no credentialing system to identify mental health providers who specialize in MMH, which means it is hard to identify who is qualified to treat these disorders. Without a credential, insurers are unable to assess whether they have adequate provider networks.

RECOMMENDATION 3

Leaders from boards and/or education and advocacy organizations should develop certification boards for mental health providers who specialize in MMH by the year 2021.

To help identify providers who meet the core competencies created by the Task Force and to further promote the field of MMH, the Task Force recommends the development of two national certification boards to test for MMH provider proficiency, one for reproductive psychiatrists and one for talk therapists and other non-prescribing clinicians.

UNTIL BOARDS ARE CREATED...

Some communities have developed a workaround to address the lack of a credential for MMH providers by vetting regional experts and creating their own directories for health care providers and families. The non-profit organizations Maternal Mental Health Now and Postpartum Health Alliance developed a directory of MMH providers in Los Angeles and San Diego Counties, respectively.[125,126]

Insurers can also play a role on a temporary basis by asking mental health providers whether they have completed certificate-based training in MMH and have a minimum number of practice hours treating MMH conditions. These questions can be asked on the credentialing application completed by providers when they wish to join an insurer's network. Insurers can also ask all existing mental health providers to complete a similar questionnaire to determine if they qualify. Those providers who meet these minimum designations can be listed as "MMH" providers in the insurer's provider directory.

Given that the shortage of psychiatrists and reproductive psychiatrists is likely to persist for some time, new models for accessing psychiatric expertise must be considered. "Telehealth" is one proven model that has addressed provider shortages. Provider-to-provider consulting is a type of telehealth whereby a diagnosing provider can consult with a provider with specialized training, including discussing evidence-based treatments centered on the patient's clinical needs and preferences. In the case of MMH and access to reproductive psychiatrists, such consults can address complex cases, drug regimens, and safety during pregnancy and lactation. Access to this expertise is invaluable for expanding treatment access and supplying the "lifeline" that obstetrical providers need to feel comfortable detecting and treating complex cases.

WHAT IS TELEHEALTH?

In California, telehealth is defined as: "a mode of delivering health care services and public health via information and communication technologies to facilitate the diagnosis, consultation, treatment, education, care management, and self-management of a patient's health care while the patient is at the originating site and the health care provider is at a distant site."[127]

RECOMMENDATION 4

Provider-to-provider reproductive psychiatric consult program(s) should be piloted and the results reported to the legislature, promulgating a new statewide provider resource implemented by the year 2021.

Massachusetts has become a leader in addressing MMH provider shortages. The Massachusetts Child Psychiatry Access Program (MCPAP) was launched in 2005 because children were unable to access psychiatric care and pediatricians were not equipped to manage children's psychiatric needs. In 2014, the success of this program prompted the creation of MCPAP for Moms, designed to build capacity for Ob/Gyns and other clinicians caring for women during the perinatal period.[108]

MCPAP for Moms builds providers' capacity to address MMH disorders through:

1. trainings and toolkits on screening, assessment, and the range of treatment options,
2. care coordination to link women with individual services in her community, and
3. telephonic access to perinatal psychiatric consultation.

Results: In the first 18 months, MCPAP for Moms enrolled 87 Ob/Gyn practices, conducted 100 trainings, and served 1,123 women. Of telephone consultations provided, 64 percent were with obstetric providers/midwives and 16 percent were with psychiatrists.[108]

Finances: MCPAP for Moms costs $8.38 per perinatal woman per year ($0.70 per month) or $600,000 for 71,618 deliveries annually in Massachusetts. The program is funded by the Department of Mental Health through private health insurer assessments and the state's general fund to allocate funding for Medicaid beneficiaries.[108]

WHAT IS THE ECHO MODEL?

The ECHO model™ creates ongoing learning communities where primary care doctors receive support and develop the skills they need to treat a specific condition, such as hepatitis C or chronic pain. Expert specialist teams from an academic 'hub' are linked with primary care clinicians in local communities to participate in weekly teleECHO™ clinics, which serve as virtual grand rounds. Often combined with mentoring and patient case presentations, this model breaks down the walls between specialty and primary care and builds treatment capacity.[128]

WHAT IS E-CONSULT?

eConsult is a web-based system developed by L.A. Care, a Medi-Cal managed care insurance plan that allows Primary Care Providers and specialists to securely share health information and discuss patient care. The program doesn't yet include access to reproductive psychiatry.

Even with appropriate assistance from clinical experts, Ob/Gyns lack capacity to manage ongoing patient care needs. This includes overseeing a patient's care to determine if she is able to access appointments and fill prescriptions, for example. This lack of capacity also serves as a deterrent to screening.

RECOMMENDATION 5

Insurers should develop MMH case management programs to oversee women's treatment access, reporting back to the Ob/Gyn.

Similar to programs offered for other disorders or diseases, health insurers should offer case management programs for MMH to offset Ob/Gyn capacity challenges. These programs should assist with scheduling appointments with MMH therapists, monitoring patient care access, and providing patients with coaching around nutrition, exercise, and sleep. Results should be reported to the referring Ob/Gyn or Primary Care Provider.

BARRIER 2: Medical and mental health insurance and health delivery systems and providers are not integrated.

Overly complex and bifurcated medical and mental health insurance and delivery systems further complicate treatment access and disrupt the MMH continuum of care. A heart condition is covered under a health insurer's medical policies and provider contracts; the Task Force urges health insurers to consider treating the mind in the same way by bringing mental health in-house, including mental health benefits in all medical care benefit contracts (not as carve-outs), and expanding medical provider contracts to reimburse for MMH services provided by Ob/Gyns, primary care providers, and birthing hospitals.

RECOMMENDATION 6

In order to lay the groundwork for provider behavioral health integration, medical insurers should first bring mental health in-house, include mental health benefits in all medical care benefit contracts, and expand medical provider contracts to reimburse for MMH services.

BARRIER 3: Ob/Gyn screening rates are not measured and reported.

The maternity care measure set developed by American Congress of Obstetrics and Gynecology (ACOG), the American Medical Association (AMA), and the National Committee for Quality Assurance (NCQA) in 2012 suggests a review of the Ob/Gyn medical record to see if screening with a validated tool occurs once during pregnancy and once again during the postpartum period.[129] Though this measure was intended to promote and monitor screening rates, the measures have not been endorsed or implemented by measurement bodies like the National Quality Forum (NQF) or the National Committee for Quality Assurance (NCQA). A system for collecting and reporting provider rates on frequency of screening and subsequent outcomes already exists. The NCQA's Healthcare Effectiveness Data and Information Set (HEDIS) administers data collection through health insurers and involves reviews of medical records or insurance claims submission data. Results are published annually. Currently, ninety percent of insurers participate in the HEDIS program.[130] Unless such bodies endorse and adopt an MMH measure, leading to reporting of MMH screening (or treatment) rates, insurers, employers, and others will not be aware of the true scope of the problem and MMH improvement efforts will not be prioritized.

RECOMMENDATION 7

National accrediting and measurement bodies should develop and adopt HEDIS measure(s) for screening and treatment of MMH disorders by the year 2021.

The Task Force urges national bodies, including NQF and NCQA, to develop and implement HEDIS measure(s) for screening and treatment of MMH disorders, making it possible to report rates to employers, insurers, and the state of California, thereby spurring intervention and improvement.

BARRIER 4: Women don't receive adequate maternal mental health education nor general support as mothers.

The increase in media coverage and in women speaking out about MMH disorders in recent years is encouraging; still, health care providers, women, and the public in general are not adequately informed about the prevalence, risk factors, and biological underpinnings of MMH disorders. Since women are not routinely informed of these disorders by their health care practitioners, many have reported that they believed their symptoms were a normal part of childbearing.[112] Despite this belief, the stigma surrounding mental illness and MMH disorders can serve as an added barrier to seeking help.[113,114]

RECOMMENDATION 8

The California Department of Public Health should develop a statewide culturally and linguistically appropriate awareness campaign to normalize and destigmatize MMH disorders after treatment shortages have been addressed and before the year 2022.

With necessary legislative and financial support, the California Department of Public Health (CDPH) is urged to develop a campaign to raise awareness and combat stigma, including incorporation of educational materials for use in provider offices. The campaign should incorporate the Blue Dot, the universal symbol for MMH, and shall be developed in consultation with MMH advocacy organizations.

Campaign rollout should occur only after plans for improving access to care have been implemented and proper referral pathways are in place. Widespread adoption can be fostered through community coalitions, county and local health jurisdictions, local Mental Health Services Act (MHSA) plans, and stakeholder groups such as the California Hospital Association, the California Mental Health Services Authority (CalMHSA), and the Pacific Business Group on Health.

The Blue Dot

Photo Credit:
Los Angeles Times.

Peggy O'Neil Nosti, a San Diego county resident, developed the blue dot symbol which was adopted by both the National Coalition for Maternal Mental Health and Postpartum Support International as the official symbol of MMH awareness.

Yolo County, California was the first to develop the traveling blue dot. The dot travels with leaders from the perinatal mental health collaborative to meetings with various stakeholder groups and has been used to promote MMH through social media and as a visual representation in public settings.

SUPPORT FOR CALIFORNIA'S MENTAL HEALTH PROGRAMMING

The CalMHSA (developed through the passage of Proposition 63 in 2004) provides the Department of Health Care Services with funding support for counties' local departments of mental health programming. These funds can further interventions, including prevention, in women's mental health.

California counties can become members of the CalMHSA to receive support with program development and implementation. Several member counties have incorporated MMH services into their mental health Prevention and Early Intervention (PEI) plans.[131]

RECOMMENDATION 9

Local communities should form new or employ existing coalitions to address MMH, including correcting local treatment shortages/referral pathways, disseminating educational materials and awareness campaigns, and improving support resources for mothers.

Recognizing that mothers need more support, that barriers and resources vary across regions, and that local communities must be involved in addressing MMH, the Task Force recommends that individuals and organizations focused on maternal and child health, such as county or local departments of health, hospitals, and others, form or employ existing local community coalitions as a vehicle for addressing MMH. Coalitions offer a unique opportunity to convene stakeholders such as Ob/Gyns, mental health professionals, Women, Infants and Children (WIC) centers, hospitals, county departments of public and mental health, insurers, and other entities serving mothers and children.

The Task Force recommends that coalitions initially conduct a needs assessment to identify local assets and gaps in treatment services and then develop a community action plan. Activities may include outreach, education, prevention, capacity building, advocacy, and systems change. Coalitions may also advocate for family-friendly policies, such as paid family leave, affordable childcare, and home visiting; and they may support the dissemination of California's public awareness campaign materials. Many resources are available to facilitate this process, including tools and support from the California Health Collaborative, 2020 Mom, and others.

As part of their action plans, community coalitions are urged to identify existing social services to aid with housing, transportation, childcare, and more. When basic needs are not met, distress can aggravate symptoms and undermine treatment efficacy. Resources should be shared widely with Ob/Gyns, pediatricians, and community-based organizations interacting with perinatal women to empower providers to screen and refer to any necessary available resources.

Additionally, community coalitions should consider applying the concepts of social determinants of health, adverse childhood events, epigenetics, and the life course model, to the identification of high risk populations, particularly low income communities who face the greatest risk.

THE CALIFORNIA BLACK INFANT HEALTH (BIH) PROGRAM

Located in 15 counties and local health jurisdictions where more than three quarters of African-American live births occur in California, the BIH Program aims to improve health among African American mothers and babies and to reduce disparities by empowering pregnant and mothering African American women to make healthy choices. Within a culturally-affirming environment and honoring the unique history of African American women, the BIH Program uses a group-based approach with complementary client-centered case management to help women develop life skills, learn strategies for reducing stress, and build social support. BIH clients participate in weekly group sessions (10 prenatal and 10 postpartum) designed to help them assess their strengths and set health-promoting goals for themselves and their babies.[132]

Women and families in the U.S. face high levels of stress. Yet, there are some actions that employers and policymakers can consider and employ to help reduce stress. Flexible working arrangements, paid maternity and paternity leave, and other such policies should be assessed for immediate implementation.

RECOMMENDATION 10

Family-friendly policies and resources which aim to reduce maternal stress should be considered by employers, communities, and the state legislature.

Though employers and policy makers can implement policies to reduce maternal distress, and medical providers and their staff play a foundational role in identifying and treating MMH disorders, the Task Force understands that cultural nuances of various populations (e.g., non-English proficient mothers, new immigrants, and African American women) may lead mothers to first turn to a non-clinician for support. Women in need may interact with trusted sources at church, a community center, mommy and baby groups, or even their hairstylists, for example.[133,134] Community organizations and businesses serving women during pregnancy or the postpartum period should be aware of MMH disorders and local MMH services. They should also recognize when the patient's Ob/Gyn and/or Primary Care Provider may be in the best position to assist the mother, despite cultural or other barriers. These community resources as well as other retail organizations serving pregnant and postpartum women should post public awareness materials, such as those that will be developed by the Department of Public Health, as recommended by the Task Force.

RECOMMENDATION 11

Churches, Community Centers, Businesses and others serving women who are pregnant or in the postpartum period should be aware of MMH disorders, their prevalence and symptoms, and be prepared to assess for trouble and refer to an Ob/Gyn or another community resource.

BARRIER 5: Stakeholder groups lack a framework or road-map for coordinated change.

Addressing MMH is the shared responsibility of doctors, hospitals, insurers, policymakers, government agencies, communities, and others. Together, stakeholders can take steps to prevent MMH disorders and improve systems of care. However, until now there hasn't been a clear and comprehensive call-to-action and framework for defining and coordinating stakeholder responsibilities and stakeholder actions are often dependent upon each other.

In addition to the formation of community coalitions among multiple stakeholders, moving the needle toward improved MMH requires commitment, contribution, and collaboration from numerous state and national stakeholder groups, agencies, and organizations. A detailed call-to-action framework is included in Appendix A, providing explicit guidance for sharing responsibilities among MMH stakeholder groups, including: obstetrics, pediatrics, psychiatry, lactation, nursing, a variety of public health agencies, insurers, employers, hospitals, researchers, foundations, elected officials, and community based organizations.

RECOMMENDATION 12

Stakeholder groups, such as state agencies, the insurance community, hospitals, funders, and health care provider trade associations, and others should use the framework developed by the Task Force to guide efforts to close gaps in MMH care.

During the past 18 months, the Task Force has worked to identify needs and build consensus around recommendations for addressing MMH care in California. These efforts do not end with the dissemination of this report; rather, this milestone serves as a new beginning as stakeholder groups cooperate to implement recommendations and drive measurable improvements in MMH care for women and their families as a new beginning as. These stakeholder recommendations provide a framework for change for stakeholder groups to implement and drive measurable improvements in MMH care for women and their families. Detailed recommendations for each stakeholder group are listed in Appendix A, Stakeholder's Call to Action.

CONCLUSION: CALIFORNIA'S VISION FOR THE FUTURE OF MMH

The health of California rests on the health of California's communities. Communities thrive when mothers thrive. MMH disorders are the most common complications of pregnancy and that these disorders have serious immediate and long-term health consequences for the over 500,000 mothers and their babies born in California each year. Working together, stakeholders have the opportunity to prevent, intervene early and treat with a menu of options, MMH disorders, providing an opportunity to impact lives and save the state over 2 billion dollars a year.

To assist providers and stakeholders in moving forward to address MMH, the Task Force developed, called for or adapted resources to create the following work products or resources:

Communities thrive when mothers thrive.

1. **Provider Core Competencies**
The competencies were developed for different types of providers likely to encounter women experiencing MMH disorders, as noted in Table 2.

2. **A Continuum of Care Reference**
This figure summarizing critical timeframes when providers should engage with women to address MMH, outlined in Figure 8.

3. **Screening: Score "Cut Offs" Timing Recommendations**
As a result of Task Force inquiries, Postpartum Support International (PSI) developed this resource, which will likely evolve over time and may be addressed by other provider associations or organizations. The results are published on page 20 of this report and on the PSI website, www.postpartum.net

4. **A "Menu" of Prevention and Treatment Options**
To help Ob/Gyns, the provider type who the Task Force deemed should be the "home base" for a mental health assessment prior to pregnancy, education, screening, treatment and referral as needed, the Task Force adapted from the MCPAP form Moms toolkit, a "Menu" of treatment options that Ob/Gyns should be aware of and ready to provide or direct women towards recognizing a woman's individual treatment preferences. This resource is listed in Table 4 in this report.

5. **An explicit Call-to-Action for Individual Stakeholder Groups**
This detailed framework is meant to provide all critical players with a detailed roadmap or starting point for change. These recommendations are detailed in Appendix A.

Over an 18 month period, the California Task Force on the Status of Maternal Mental Health Care worked to identify needs and build consensus around recommendations for addressing MMH in California. The Task Force report highlights the importance of addressing five key barriers to change with 12 distinct recommendations:

BARRIER 1

Providers lack guidelines, referral pathways, capacity, and support to screen and treat.

RECOMMENDATION 1

California Ob/Gyns and other obstrectic providers should be prepared to serve as the 'home base' for MMH and should immediately adopt the screening and treatment guidelines of ACOG and the Council on Patient Safety in Women's Health Care.

RECOMMENDATION 2

Though Ob/Gyns and other obstrectic providers must serve as the "home base" for education, screening, treatment and referral, all health care providers must be in a position to screen and detect MMH disorders and when needed, refer women back to their Ob/Gyns or other local treatment programs.

RECOMMENDATION 3

Leaders from boards and/or education and advocacy organizations should develop certification boards for mental health providers who wish to be recognized as MMH specialists by the year 2021.

RECOMMENDATION 4

Provider-to-provider reproductive consult program(s) should be piloted immediately and the results reported to the legislature in order to promulgate a new statewide provider resource to be implemented by the year 2021.

RECOMMENDATION 5

Insurers should develop MMH case management programs to oversee women's treatment access, reporting back to the Ob/Gyn.

BARRIER 2

Medical and mental health insurance and health delivery systems and providers are not integrated.

RECOMMENDATION 6

In order to lay the groundwork for provider behavioral health integration, medical insurers should first bring mental health in-house, include mental health benefits in all medical care benefit contracts, and expand medical provider contracts to reimburse for MMH services.

BARRIER 3

Ob/Gyn screening rates are not measured and reported.

RECOMMENDATION 7

National accrediting and measurement bodies should develop and adopt HEDIS measure(s) for screening and treatment of MMH disorders by the year 2021.

BARRIER 4

Women don't receive adequate MMH support and education.

RECOMMENDATION 8

The California Department of Public Health should develop a culturally and linguistically appropriate statewide public awareness campaign to normalize and destigmatize MMH disorders after treatment shortages have been addressed, and before the year 2022.

RECOMMENDATION 9

Local communities should form new or employ existing coalitions to address MMH, including correcting local treatment shortages/referral pathways, disseminating educational materials and awareness campaigns, and improving support resources for mothers.

RECOMMENDATION 10

Family-friendly policies and resources which aim to reduce maternal stress should be considered by employers, communities, and the state legislature.

RECOMMENDATION 11

Churches, community centers, business and others serving women who are pregnant or in the postpartum period should be aware of MMH disorders, their prevalence and symptoms, and be prepared to assess for trouble and refer to an Ob/Gyn or another community resource.

BARRIER 5

Stakeholder groups lack a framework or road-map for coordinated change.

RECOMMENDATION 12

Stakeholder groups, such as state agencies, the insurance community, the hospital community, the employer community, funders and health care provider trade associations, should use the framework developed by the Task Force to guide efforts to close gaps in MMH care (Appendix A).

Implementation Steering Committee

As implementation of these recommendations will take effort, dissemination of this report serves as a milestone for identification of a path forward for partners to prioritize and implement change to drive measurable improvements for all women and families in California.

To provide appropriate oversight and guidance to various stakeholders, the Task Force has appointed a Steering Committee, which will be privately funded, to facilitate statewide implementation of these recommendations including outreaching stakeholder groups, coordinating efforts where needed and addressing which solutions may require state-level legislative change.

The Task Force calls on all stakeholder organizations noted in Appendix A, Stakeholder's Call to Action, to review their organization's call to action and issue a written response addressing their specific call to action and any robust alternatives as soon as possible but no later than the Summer of 2018. Responses should be sent to the attention of The California MMH Task Force Implementation Steering Committee to: **info@2020mom.org.**

Task Force set the following aggressive goals to gage progress:

By the Year 2021

80% of women are screened for MMH disorders at least once during pregnancy and the postpartum period

By the Year 2025

100% of women are screened for MMH disorders at least once during pregnancy and the postpartum period

Recognizing that MMH disorders are the most common complications of pregnancy and that these disorders have serious immediate and long-term health consequences for mothers and their babies, the Task Force urges:

All stakeholders should immediately intensify efforts to promote education, support, screening, and treatment for MMH disorders during pregnancy and the postpartum period. The Task Force urges stakeholders to commit to closing California's MMH gaps by the year 2025.

INDEX OF APPENDICES

Appendix A. Individual Stakeholder Groups, Call To Action Framework

In addition to community coalitions being formed with multiple stakeholders, moving the needle toward improved MMH requires commitment, contribution, and collaboration from numerous state and national stakeholder groups, agencies, and organizations. A detailed call-to-action for MMH stakeholders provides guidance for sharing responsibilities, including:

Obstetric Community

Ob/Gyns and Nurse Midwives

- Understand the core competencies for Ob/Gyns as noted in this paper.
- Appoint a staff member to serve as the champion for identifying local treatment resources in your community, calling the Postpartum Support International warmline as needed, and learning which providers accept various insurance plans.
- Encourage the hospitals you deliver at to provide training to staff and and Obstetric Providers and offer a treatment resource (support group, therapist, access to a reproductive psychiatrist).

American Congress of Obstetrics and Gynecology (ACOG)

- Continue to serve as a champion for MMH, including lobbying for federal legislation, convening thought leaders, and guiding the development of tools for Ob/Gyns and other stakeholders through the Council on Safety in Women's Health Care.
- Address MMH at the annual ACOG conferences beginning in 2017.

American Congress of Obstetrics and Gynecology (ACOG) District IX (CA)

- Understand the core competencies for Ob/Gyns as noted in this paper.
- Issue practical recommendations for Ob/Gyns as 'home base' as noted in this report. These recommendations should address preconception/pregnancy mental health assessment; screening, including recommended periods for screening during pregnancy and the postpartum; billing, including how to bill for screening when a woman returns after the final postpartum visit through a year postpartum; and understanding birth trauma and how Ob/Gyns can mitigate it through open, sensitive, and frequent communication during birth.
- Address MMH via conferences, website, and other opportunities beginning no later than 2017.

American Board of Obstetrics and Gynecology (ABOG)

- Review the core competencies for Ob/Gyns addressed in this paper and update testing as needed. Provide practical Continuing Medical Education (CME) opportunities to assist with implementation based on current evidence-based guidelines including screening, referral, and treatment.

Pediatric Community

Pediatricians

- Understand the core competencies for pediatricians as noted in this paper.
- Appoint a staff member to serve as the champion for identifying local treatment resources in your community.
- Encourage the delivery hospitals you work with to provide training to staff and pediatricians and to offer a treatment resource (support group, therapist, access to a psychiatrist).
- Implement future updated recommendations from the AAP or local chapter of AAP to address screening using a validated scoring tool, including screening frequency, billing guidance, medical record documentation/mother's privacy, and more.

The American Academy of Pediatricians

- Continue to serve as a champion for MMH, including lobbying for federal legislation and convening thought leaders.
- Consider revisiting the clinical report entitled "Incorporating Recognition and Management of Perinatal and Postpartum Depression into Pediatric Practice" issued by the Committee on Psychosocial Aspects of Child and Family Health (2010) and supporting its dissemination and implementation.
- Address MMH at the annual AAP conferences beginning in 2017.

The American Academy of Pediatrics, California Chapters

- Consider working with the AAP to issue practical recommendations for pediatricians by the end of 2017 addressing screening, including recommended periods for screening during the postpartum, how to bill for screening for both privately insured and MediCal patients, and whether/how to document the result in a medical record.
- Address MMH through conferences, website, and other educational forums beginning in 2017.

The American Board of Pediatrics

- Review the core competencies for Pediatricians addressed in this paper, update testing as needed. Provide practical Continuing Medical Education (CME) opportunities to assist with implementation based on current evidence-based guidelines including screening, referral, and treatment.

Psychiatric Community

Psychiatrists

- Understand the core competencies for psychiatrists and reproductive psychiatrists as noted in this paper.
- Promote future medical students to consider careers in reproductive psychiatry.

American Psychiatric Association

- Issue a revised position statement on MMH disorders in 2018.
- Address MMH disorders at annual conferences beginning in 2018.

California Psychiatric Association

- Address MMH disorders at annual conferences beginning in 2018.
- Consider legislative advocacy opportunities working with 2020 Mom and other Task Force members.

American Board of Psychiatry and Neurology (ABPN)

- Review the core competencies for psychiatrists and update testing and provide practical Continuing Medical Education (CME) opportunities to assist with implementation based on current evidence-based guidelines for screening, referral, and treatment.
- Review the core competencies for reproductive psychiatrists and create a subspecialty exam in women's reproductive mental health.

Accreditation Council for Graduate Medical Education

- Review core competencies for medical doctors addressed in this paper and require minimum levels of MMH education regarding current evidence-based guidelines including screening, referral, and treatment.

Lactation Community

Lactation Consultants

- Become familiar with the core competencies developed for lactation consultants as noted in this paper.
- Become familiar with local treatment resources, including contacting Postpartum Support International's warmline for resources, as needed.
- Take Introduction to MMH course, and consider certificate-based training in MMH.
- Encourage International Board of Lactation Consultant Examiners (IBLCE) to incorporate MMH training into boards and continuing education.
- Encourage Lactation Education Accreditation and Approval Review Committee (LEARRC) to incorporate MMH training into their curriculum for a program in lactation.

International Board of Lactation Consultant Examiners (IBLCE)

- Review the core competencies for lactation consultants addressed in this paper and update testing.
- Provide Continuing Education Recognition Point (CERPs) opportunities to assist with proper understanding of MMH disorders, specifically the interplay between breastfeeding and these disorders, and screening and treatment pathways.

Nursing Community

Nurses

- Understand the core competencies for nursing as noted in this paper.

Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN), Including the California Section

- Serve as a champion for MMH, including addressing MMH via website and through other appropriate opportunities.
- Address at annual AWHONN conference(s) beginning no later than 2018.

American College of Nurse-Midwives (ACNM)

- Review the core competencies for Ob/Gyns and Obstetric providers addressed in this paper and update testing as needed.
- Provide practical continuing education opportunities to assist with implementation based on current evidence-based guidelines including screening, referral, and treatment.
- Serve as a champion for MMH, including addressing MMH via, website through other appropriate opportunities.
- Address at the annual conference beginning no later than 2018.

National Council of State Boards of Nursing (NCSBN)

- Review the core competencies for nursing addressed in this paper and adjusts the National Council Licensure Examination (NCLEX) testing.

Medicaid & Public Health Community

California Department of Public Health (CDPH)

- Upon obtaining funding as necessary, promote MMH opportunities to county and local health jurisdictions, including offering technical assistance to the counties and jurisdictions that have prioritized MMH in their needs assessment.
- Develop a statewide MMH public health strategy, including but not limited to community level stakeholder engagement and action planning, development of a statewide awareness campaign to be implemented widely within countries/jurisdictions; partner with CalMHSA.
- Include the creation or adoption of educational materials and promotion of these materials for use in provider offices and other settings in conjunction with public awareness campaign.
- Integrate MMH awareness, messaging, and resources into existing CDPH programs (e.g. Black Infant Health, Nurse Family Partnership, Comprehensive Perinatal Services Program) by end of 2017.
- Coordinate policies and programs relating to MMH with the California Department of Health Care Services.

MCAH Action

Represents the County and Local Jurisdiction Maternal, Child and Adolescent Health (MCAH) Directors

- Promote MMH learning, networking, and leadership opportunities including sharing MMH best practices among directors.

California Department of Health Care Services (DHCS)

DHCS finances and oversees the state's Medi-Cal (Medicaid) program

- Issue a memorandum addressing the importance of early detection and treatment of MMH disorders and address Medi-Cal payment for screening of MMH disorders, specifically Ob/Gyn and pediatric screening.
- Develop a comprehensive plan to address MMH for Medi-Cal patients, including coordinating with existing stakeholders and updating the DHCS website to include reference to MMH disorders and information on how services are provided and coordinated.
- Enable payment of mental health services rendered outside of the primary care visit in a Federally Qualified Health Care Center (FQHC) when the primary care provider/FQHC doesn't have an LCSW or other mental health provider trained in MMH available for same day services.

Health Insurance Community

California Department of Managed Health Care (DMHC)

The DMHC is the regulator of managed care health insurance plans, like HMOs

- Consider role in promoting a provider-to-provider psychiatric consult program including reproductive psychiatry as noted in this paper, to address insurer network access and adequacy and the limitations due to shortages of psychiatrists.
- Until testing board are developed and credentials issued, consider how MMH providers should be addressed and identified in annual health plan provider access filings and in provider directories as discussed in this paper.
- Consider efforts to promote insurance integration of mental health services into medical insurance companies, medical benefits and provider contracts.

California Department of Insurance (CDI)

The CDI is the regulator of health insurance plans, like PPOs

- Consider role in promoting a provider-to-provider psychiatric consult program including reproductive psychiatry as noted in this paper, to address insurer network access and adequacy and the limitations due to shortages of psychiatrists.
- Until testing boards are developed and credentials issued, consider how MMH providers should be addressed and identified in annual health plan provider access filings and in provider directories as discussed in this paper.
- Consider efforts to promote insurance integration of mental health services into medical insurance companies, medical benefits and provider contracts.

California Association of Health Plans (CAHP)

CAHP is the trade association for managed care health plans/insurers

- In partnership with the Association of California Health and Life Insurance Companies (ACHLIC), as appropriate, and the DMHC, address shortages of psychiatrists and other behavioral health providers through practical win-win solutions such as an MCPAP for Moms-like model for tele-psychiatry.
- Encourage plans to adopt the recommendations noted under the Health Insurers heading below.

Health Insurers

- Fold behavioral health care into medical policies and provider contracts to eliminate fragmentation and reduce medical costs and reimburse Ob/Gyns, birth hospitals and medical groups for MMH care.
- Until a national HEDIS measure is adopted, consider voluntarily implementing a HEDIS-like measure to identify how often Ob/Gyns are screening for maternal depression using the measure listed in the Maternity Care Measure Set developed by ACOG, the AMA, and NCQA.
- Develop a case management program for MMH, providing Ob/Gyns and other treating providers with assistance overseeing treatment.
- Implement an awareness campaign for providers and members, utilizing the state's awareness campaign materials or in partnership with a MMH non-profit organization.
- Continue to pilot and implement value based payment methodologies, such as bundled payment including MMH screening and treatment.

Behavioral Health Specialty Insurers

- Adopt an attestation to identify mental health providers who have a minimum number of certificate-based training hours/fellowship hours, and practice hours in MMH until such time that a board organization tests/certifies these professionals.

National Committee for Quality Assurance (NCQA)

NCQA is the accrediting body of health insurance companies

- Urgently develop and adopt HEDIS measure(s) for MMH starting with an Ob/Gyn screening rate process measure.

National Quality Forum (NQF)

NQF serves as the body of multi-stakeholder experts that builds consensus on quality measures.

- Urgently promote and endorse a HEDIS measure(s) for MMH starting with an Ob/Gyn screening rate process measure.

Employer Community

Pacific Business Group on Health

- Develop a working group to raise awareness and address MMH disorders among member employers.
- Collect information relative to the cost of untreated maternal depression as it relates to extended disability leave and absenteeism of employees.
- – Promote state-based solutions as outlined in this paper, including addressing the shortage of access to mental health providers with interest and skills in treating MMH disorders and advocating for development of a HEDIS measure for MMH.

Employers

- When purchasing health insurance, ask insurers:
  - for policies that “carve in” mental health, including open access to mental health care and affordable out of pocket expenses for patients,
  - to identify vetted MMH specialists in their provider directories,
  - to screen expecting mothers in their high risk maternity programs pre- and postpartum, managing their access of vetted care providers, and
  - to provide a case management program for MMH disorders.
- Promote MMH awareness by adopting materials to be developed by the California Department of Public Health, or another reliable source.
- Consider implementing family-friendly policies, including paid maternity and paternity leave, if it is not available to families currently; recognize the impact of improved MMH, including productivity and return to work.
- Follow any forthcoming findings from the Pacific Business Group on Health, relative to MMH.

Hospitals

- Implement policies and practices to promote non-traumatic birth, including guiding Ob/Gyns who deliver at the hospital.
- Train staff that interact with pregnant mothers about MMH disorders.
- Implement MMH screening starting with mothers with infants in the NICU, women who are inpatient due to high-risk pregnancies, and those who have difficulty breastfeeding when identified inpatient or in hospital-based outpatient programs.
- Implement supportive policies and practices for women experiencing stillbirth or who have infants in the NICU. Consider developing peer support groups, partnering with community agencies or and other hospitals.
- Participate and potentially serve as the organizer of a multiple stakeholder community coalition to address MMH.
- Develop or partner with "mother-baby" outpatient day and/or inpatient MMH treatment programs.
- Train Emergency Room staff to screen women in the perinatal period for depression and anxiety, when to screen for bipolar disorders, and to understand the symptoms of psychosis.

Other MMH Allies

Researchers

- Leadership organizations for researchers, such as the Marcé Society, are encouraged to address the research gaps identified in the Agency for Healthcare Research and Quality's report: Efficacy and Safety of Screening for Postpartum Depression.[135]
- Leadership organizations for researchers, in partnership with other organizations like ACOG are encouraged to develop treatment continuum criteria using models like the American Society of Addiction Medicine model as references.[136]
- To precisely combat stigma, continue to research and work towards identification of a medical test, such as a blood test, to identify depression, anxiety, or other MMH disorders.

Foundations

- Partner with and support statewide and local communities in effectuating change in MMH.
- Consider partnering with and funding state initiatives to implement the Task Force recommendations.
- Consider funding advocacy efforts, including legislative advocacy, necessary to implement recommendations fully.

Legislature

- Develop a Select Committee on MMH to assess ongoing legislative needs and opportunities in support of the statewide goal of 100% screening by 2025.
- Consider the need for a provider-to-provider reproductive psychiatry access program and the legislative infrastructure that may be needed to support a statewide program.
- Consider family-friendly policies that promote support and stress reduction during pregnancy and the postpartum period including expansion of paid family leave.
- Consider efforts to certify/license Community Health Workers, so the preventive health care services they provide can be reimbursed through health care payment systems so services are sustainable vs grant dependent.

Fathers and Partners

- Understand the risk factors, prevalence, and symptoms associated with MMH disorders.
- Help to develop a system of support during pregnancy that can be engaged after birth, including emotional and practical support (e.g. caring for other children, house cleaning, meal preparation, promotion and protection of sleep).
- Recognize that fathers and partners are also at risk for depression and anxiety during this time.
- If concerns arise, learn treatment options and local resources. Contact Postpartum Support International (PSI's) warmline for local treatment resources.

Community Based Organizations

- Consider hosting or joining a community coalition addressing MMH.
- Assist in disseminating the forthcoming public health awareness campaign materials.
- Ensure staff working with the perinatal population are meeting identified core competencies for community based organization staff, including recognizing risk factors, building trust, conducting screening, and being familiar with local treatment and resources.
- Ensure there is a champion for legislative advocacy, when legislative support is needed. Legislative efforts shall consider the larger mental health framework in California and be in partnership with other advocacy organizations, which might include the March of Dimes, First 5, NAMI and Children First.
- Work with the Task Force to appoint a Steering Committee to oversee the implementation of the overarching Task Force recommendations, etc. The Steering Committee shall appoint a member of the Task Force as Chairperson.
- With appropriate funding and resources, facilitate scheduling and logistics of the Steering Committee meetings.
- Provide direct support to stakeholders and monitor the adoption of recommendations, reporting progress to the Steering Committee. Supporting stakeholders should involve regular meetings with stakeholder group leadership.

Appendix B: Task Force Members & Contributors

Task Force Members

Angelica Alvarez	Program Director El Sol Neighborhood Education Center
Carol Berkowitz, MD, FAAP, FACEP (Pediatrician)	Executive Vice Chair Department of Pediatrics Harbor UCLA Medical Center Distinguished Professor of Pediatrics David Geffen School of Medicine at UCLA
Stephanie Chandler	Program Manager California Health Collaborative
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Genevieve Thomas Colvin, IBCLC (Lactation Consultant)	President of the BOD for Breastfeeding USA/ Program Manager of Breastfeed LA Breastfeeding USA/ Breastfeed LA
Emily Dossett, MD, MTS (Psychiatrist)	Reproductive Psychiatrist Assistant Clinical Professor, LAC+USC Director of Women's Mental Health Program
Erik Fernandez y Garcia, MD, MPH, FAAP (Pediatrician)	Associate Professor of Clinical Pediatrics UC Davis School of Medicine
Tracy Flanagan, MD (Ob/Gyn)	Director, Women's Health, KPNC Chair, Ob/Gyn Chiefs Group, KPNC Dept. of Ob/Gyn, Richmond Med. Ctr.
Elizabeth "Liz" Fuller	Consultant Legislative Women's Caucus
Justin Garrett	State Director of Advocacy & Government Affairs March of Dimes
Sandra Naylor Goodwin, PhD, MSW	President and CEO California Institute for Behavioral Health Solutions
Janice LeRoux	Executive Director First 5 Placer
Sheree Lowe, MPH	Vice President, Behavioral Health California Hospital Association
Elliott Main, MD (Ob/Gyn)	Medical Director California Maternal Quality Care Collaborative
Gretchen Mallios, LCSW	Licensed Clinical Social Worker & Pres. Board of Directors Post-partum Health Alliance
Brynn Rubinstein, MPH	Senior Manager, Transform Maternity Care Pacific Business Group on Health
Laura Sirott, MD (Ob/Gyn)	Private Practice & ACOG District IX Vice Chairman, Co-chair Legislative Committee ACOG District IX
Beth Stephens- Hennessy, RNC, MSN, CNS	Perinatal Clinical Nurse Specialist Sutter Health
Stephanie Teleki, PhD	Senior Program Officer High-Value Care California HealthCare Foundation

Technical Assistance Consultants & Standing Contributors

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Anna Sutton, RN, PHN, MSN	Assistant Director, Public Health Nursing Yolo County Health and Human Services Yolo County Perinatal Mental Health Collaborative Chair
Jessica A. Walker, IBCLC, RADT	Executive Director, Mom in Me Network

Executive Committee

Joy Burkhard, MBA	Founder and Executive Director, 2020 Mom
John Capitman, PhD	Executive Director of Central Valley Health Policy Institute Nickerson Professor of Public Health at California State University Fresno
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Lauren Lessard, PhD, MPH	Research Director Central Valley Policy Institute
Bruce W. Spurlock, MD	President and CEO of Cynosure Health Solutions

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Marisol Aviña, MPA	Program Manager, Prevention – Healthy California The California Endowment
Stephanie Teleki, PhD	Senior Program Officer High-Value Care California HealthCare Foundation

Appendix C: Task Force Calendar of Topics & Speakers

1. **Tuesday, June 23, 2015, 11:00am - 4:00pm: Kick off at Capitol Building in Sacramento**

   Press Conference & MMH Overview

   - Emily Dossett, MD, reproductive psychiatrist & Task Force member
   - Diana Barnes, PsyD, psychologist in private practice, author & Task Force consultant

2. **Thursday July 23, 2015, 9:00am - 11:15am: Webinar**

   Screening Tools, Evidence Based & Emerging Treatment Modalities

   - Wendy Davis, PhD, Executive Director at Postpartum Support International

   Documentary screening of Dark Side of the Full Moon

   - Maureen Fura, producer

3. **Thursday, September 10, 2015, 9:00am - 11:15am: Webinar**

   Barriers to Diagnosis & Treatment, MMH in California, Racial/Cultural Disparities & Solutions

   - Joy Burkhard, MBA, Executive Director at 2020 Mom
   - Heather Forquer, MPH, California Department of Public Health
   - Alinne Barrera, PhD, researcher
   - Marguerite Morgan, PhD, Program Director at Arbor Circle Michigan

4. **Thursday, October 22, 2015, 9:00am - 11:15am: Webinar**

   Access: Finding Qualified Treatment Providers, Case Studies & Best Practices

   - Raul Martinez, Esq., a father's story of loss
   - Nancy Byatt, DO, MS, MBA, FAPM, reproductive psychiatrist, MCPAP for Moms
   - Maria Muzik, MD, MS, reproductive psychiatrist; Lisa A. Hammer, MD, IBCLIC, Ob/Gyn at University of Michigan Health System's Briarwood Family Medicine Center

5. **Thursday, November 12, 2015, 9:00am - 11:15am: Webinar**

   Hospital & Insurer Considerations

   - Jenny Mae Phillips, JD, LLM, California Department of Managed Health Care, measuring access in insurer networks
   - Pec Indman, EdD, MFT, a therapist's perspective on barriers to joining insurance panels
   - Alinne Barrera, Ph.D., how women want to receive medical information during the perinatal period
   - Stuart Lustig, MD, MPH, Medical Director, Joy Burkhard, Compliance Manager; Cigna Behavioral of California Health, Cigna's adoption of HEDIS-like measurement of Ob/Gyn Screening, and more
   - Alene Blum, HROB, Marguerite Sandova, RN, Leolyn Bischel, RN, Inland Empire Health Plan, integrating medical and behavioral systems internally

6. **Thursday, January 14, 2016, 11:00am - 3:00pm: in Sacramento**

   Part 1: Prevention, Reducing Triggers through Medical Interventions & Social Policy, Legislative Initiatives in Other States

   Part 2: Public Health Programs & Best Practices in FQHCs, Home Visiting, L.A. County Integrated Services Pilot, and Community Coalition Support

   Part 3: Other Working Models: Tri-PPD (Family Practice Study), Mother Nurture Southern California, Mothers Care Northern California and Discussion on Scalability

   Part 4: Work Stream Breakouts & Group Reporting

   Part 5: Distribution of Final Survey, Interview Findings & Draft White Paper Background/Themes

   – Beth Buxton, MSW, MA, California Department of Public Health
   – Amina Foda, MPH, California Department of Public Health
   – Lauren Lessard, PhD, California State University-Fresno

7. **Thursday, February 18, 2016, 9:00am - 11:15am: Webinar**

   White Paper Review, Prevention and Medical-Behavioral Integration Opportunities & Challenges

   – Cindy-Lee Dennis, PhD, (via webinar recording), University of Toronto, Prevention and Peer Support
   – Jürgen Unützer, PhD, University of Washington, the IMPACT Model

8. **Thursday, March 28, 2016, 11:00am - 3:00pm: in Sacramento**

   Updated White Paper Draft & Work Stream Breakouts to Develop Final Recommendations

9. **Thursday April 28, 2015, 9:00am - 11:15am: Webinar**

   Discussion of Proposed Goals and Measures, Core Competencies, Partner Strategies and Overarching Recommendations

10. **Thursday, May 19, 2015, 10:00am - 2:30pm: in Sacramento**

    Reactions to White Paper Documents, Presentation & Recommendations

Assessment Table 5. Perinatal Depression Symptoms by Maternal Characteristics[71] (MIHA)

Perinatal Depressive Symptoms by Maternal Characteristics*
Maternal and Infant Health Assessment (MIHA) Survey, 2012-2013

	Prenatal Symptoms			Postpartum Symptoms			Either Prenatal or Postpartum Symptoms			Both Prenatal and Postpartum Symptoms		
	Prevalence Estimate (%)	95% Confidence Interval	Annual Population Estimate	Prevalence Estimate (%)	95% Confidence Interval	Annual Population Estimate	Prevalence Estimate (%)	95% Confidence Interval	Annual Population Estimate	Prevalence Estimate (%)	95% Confidence Interval	Annual Population Estimate
All Women	15.5	14.3 - 16.7	75,800	14.1	13.0 - 15.2	69,100	21.5	20.2 - 22.8	105,000	8.1	7.3 - 9.0	39,800
Race/Ethnicity												
Black	23.2	18.2 - 28.2	6,500	18.5	14.0 - 22.9	5,100	28.6	23.4 - 33.9	8,000	13.0	9.1 - 17.0	3,600
Hispanic	19.1	17.2 - 21.0	45,700	15.4	13.8 - 17.1	36,900	24.9	22.8 - 27.0	59,300	9.7	8.4 - 11.1	23,300
Asian/Pacific Islander	10.2	7.4 - 13.0	7,300	12.4	9.5 - 15.4	8,800	17.8	14.2 - 21.4	12,600	4.9	3.3 - 6.5	3,500
White	10.3	8.8 - 11.8	14,500	11.9	10.2 - 13.6	16,500	16.1	14.3 - 18.0	22,500	6.1	4.8 - 7.4	8,500
Prenatal Insurance												
Medi-Cal	20.3	18.5 - 22.1	49,400	17.6	15.9 - 19.3	42,800	25.8	24.8 - 28.8	65,200	11.1	9.7 - 12.5	27,000
Private	8.9	7.5 - 10.2	18,900	10.6	9.1 - 12.1	22,500	14.5	12.8 - 16.2	30,900	4.9	3.9 - 6.0	10,600
Language												
English	13.4	12.0 - 14.8	36,900	13.4	12.1 - 14.8	37,000	19.2	17.6 - 20.8	52,900	7.6	6.5 - 8.7	21,100
Spanish	20.5	17.6 - 23.4	19,700	14.8	12.5 - 17.1	14,300	25.0	23.0 - 29.1	25,100	9.3	7.4 - 11.1	8,900
Spanish and English	17.8	14.0 - 21.6	10,500	14.4	10.9 - 18.0	8,500	23.4	19.0 - 27.8	13,800	8.8	6.3 - 11.4	5,200
Education												
<High School	24.1	20.6 - 27.7	20,500	17.7	14.6 - 20.9	15,000	30.2	26.4 - 34.0	25,700	11.6	9.1 - 14.2	9,900
High School	19.3	16.6 - 22.0	20,100	14.9	12.7 - 17.1	15,500	24.3	21.4 - 27.1	25,200	10.0	8.1 - 11.8	10,400
Some College	14.1	12.4 - 15.9	20,500	15.5	13.5 - 17.4	22,400	21.8	19.6 - 24.0	31,500	7.8	6.5 - 9.1	11,300
College Grad	9.1	7.3 - 11.0	13,900	10.2	8.3 - 12.0	15,500	14.3	12.1 - 16.4	21,700	5.1	3.6 - 6.6	7,800
Family Income (% of FPL)												
0-100%	21.9	19.8 - 24.1	43,500	17.9	16.0 - 19.9	35,600	28.4	26.1 - 30.8	56,400	11.4	9.9 - 13.0	22,700
101-200%	16.4	13.8 - 19.0	14,300	15.5	12.9 - 18.1	13,500	22.3	19.4 - 25.3	19,400	9.6	7.5 - 11.7	8,400
201-300%	10.7	7.4 - 14.0	4,300	12.1	8.7 - 15.5	4,800	18.5	14.2 - 22.8	7,400	4.3	2.6 - 6.0	1,700
> 300%	6.7	5.1 - 8.2	8,700	8.7	6.9 - 10.5	11,400	11.8	9.8 - 13.8	15,500	3.5	2.3 - 4.7	4,600
Childhood Hardships												
No money for basic needs**	25.1	22.2 - 28.0	26,100	22.8	20.0 - 25.6	23,800	34.0	30.8 - 37.2	35,300	14.0	11.7 - 16.2	14,600
Stressors during Pregnancy												
Intimate partner violence (IPV)***	41.7	36.2 - 47.3	16,500	37.6	32.2 - 43.1	14,800	52.6	46.9 - 58.2	20,800	26.8	21.7 - 31.8	10,500
Respondent or partner went to jail	40.6	29.6 - 51.5	4,400	32.4	22.6 - 42.2	3,500	47.9	37.3 - 58.4	5,200	25.0	15.8 - 34.3	2,700
Separated or divorced from partner	39.8	34.2 - 45.4	15,000	25.1	20.6 - 29.7	9,500	46.4	40.7 - 52.1	17,400	18.7	14.7 - 22.6	7,100
No practical or emotional support	32.3	25.8 - 38.8	8,100	30.7	24.0 - 37.5	7,700	41.8	34.7 - 49.0	10,500	21.2	15.5 - 26.9	5,300
Had to move due to lack of money for rent or mortgage	31.2	26.0 - 36.5	11,600	30.6	24.9 - 36.3	11,300	43.6	37.7 - 49.5	16,100	18.3	13.9 - 22.7	6,800
Respondent lost job	31.3	26.0 - 36.6	12,500	29.2	23.9 - 34.5	11,600	41.1	35.5 - 46.8	16,400	19.4	14.8 - 23.9	7,700
Husband or partner lost job	27.3	22.8 - 31.9	14,000	24.8	20.2 - 29.4	12,700	35.9	30.9 - 41.0	18,400	16.2	12.5 - 20.0	8,300
Pregnancy Intention												
Wanted to get pregnant then	9.5	8.4 - 10.7	25,900	10.6	9.3 - 11.8	28,600	15.0	13.5 - 16.4	40,500	5.1	4.3 - 6.0	13,900
Wanted to get pregnant later	19.7	16.9 - 22.4	23,900	16.0	13.5 - 18.4	19,300	25.7	22.8 - 28.7	31,100	10.0	7.9 - 12.0	12,000
Didn't want to get pregnant then or in future	36.3	29.9 - 42.8	11,100	25.7	20.1 - 31.4	7,900	42.3	35.7 - 48.8	12,900	19.8	14.7 - 25.0	6,100
Wasn't sure what I wanted	22.9	19.2 - 26.6	14,500	19.8	16.3 - 23.4	12,600	30.9	26.7 - 35.1	19,600	11.9	9.3 - 14.4	7,500
Breastfeeding												
1 month exclusive breastfeeding	12.4	10.9 - 13.9	24,000	11.0	9.6 - 12.5	21,400	17.1	15.3 - 18.8	33,100	6.3	5.2 - 7.4	12,300
3 month exclusive breastfeeding	9.3	7.4 - 11.3	9,200	8.9	7.1 - 10.8	8,700	13.9	11.6 - 16.3	13,600	4.4	3.1 - 5.6	4,300

*Prevalence estimates of perinatal depressive symptoms measures are among the women in each row.
**Respondent reported that it was very often or somewhat often hard for her family to pay for basic needs like food or housing throughout her childhood until age 13.
***Physical and psychological/emotional IPV during pregnancy

Data Source: MIHA is an annual population-based survey of California resident women with a live birth. Data from MIHA 2012-2013 were combined, resulting in a statewide sample size of 13,820. Prevalence (%), 95% confidence interval and estimated number of women in the population with the characteristic, i.e. numerator of the percent rounded to the nearest hundred, are weighted to represent all women with a live birth who resided in California in 2012 and 2013. The annual population estimate is a two-year average.

Prepared by: California Department of Public Health, Center for Family Health; Maternal, Child and Adolescent Health Program; Epidemiology, Assessment and Program Development Branch

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