

# Comprehensive Integrated Care Model to Improve Maternal Mental Health

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## ABSTRACT

In this article, we describe an integrated care model in a perinatal psychiatry program to improve access to care for women who have mood changes during the perinatal period. A nurse-practitioner trained in psychiatry and obstetrics is embedded in the obstetric clinic, and perinatal nurses, often the first professionals to recognize women who are experiencing mood changes, can easily refer women for follow-up. Barriers, lessons learned, and goals for implementation are described.

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Perinatal depression, defined as an episode of depression with onset during pregnancy (antenatal depression) and/or within 4 weeks after birth (postpartum depression), is exceedingly prevalent and poses serious implications for the mother, child, family, and health care system at large (American Psychiatric Association, 2013). It has been estimated that between 14% and 23% of women will experience episodes of depression during pregnancy, 11% will develop symptoms within 72 hours after birth, 16.7% will develop symptoms within 3 months after birth, and 21.9% will experience symptoms within the first 12 months after birth (Elisei, Lucarini, Murgia, Ferranti, & Attademo, 2013; Gaynes et al., 2005). Most mothers with depression do not receive appropriate treatment. In a recent study, researchers found that 30% to 50% of women are identified with perinatal depression in clinical settings, 14% to 16% receive some treatment, 6% to 9% receive adequate treatment, and 3% to 5% experience a remission of symptoms (Cox, Sowa, Meltzer-Brody, & Gaynes, 2016). These statistics highlight the need for allocation of resources to treat these women.

In integrative care models, providers from multiple subspecialties provide comprehensive care for patients. Historically, psychiatric care providers have collaborated with primary care providers (Katon et al., 1995), and

significant improvement in depression and anxiety outcomes demonstrated the success of these models (Archer et al., 2012). More recently, psychiatrists have begun to collaborate with other medical specialists. Because many women, particularly young women, use obstetricians-gynecologists as their primary care providers (Scholle & Kelleher, 2003), collaboration between obstetricians-gynecologists and psychiatrists is natural.

Women with depression may present to the obstetrics and gynecology care setting with physiologic complaints, physical symptoms, or requests for preventive care that make diagnosing depression challenging (Cerimele et al., 2013). Collaboration among departments has been shown to result in a better understanding of the diagnosis, greater uptake of treatment, improvement of symptoms, and improved patient satisfaction (Gjerdingen, Crow, McGovern, Miner, & Center, 2009; Katon et al., 2015; Melville et al., 2014; Yawn et al., 2012). The American Academy of Pediatrics and American College of Obstetricians and Gynecologists recommended screening for depression at the first prenatal care visit and the first visit after birth (2012), thereby acknowledging the emergent need for a better model of care. The purpose of this article is to describe the development of an integrative model of care in an obstetrics and gynecology setting

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**Integrative care models for patients with psychiatric problems have been implemented in primary care settings; however, there is a need to expand into obstetrics and gynecology settings.**

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that was expanded to a specialized perinatal psychiatric inpatient unit.

### The Integrative Care Model for Perinatal Mental Health

The obstetrics and gynecology clinics within our health care system are the primary settings for obstetric and gynecologic care. These clinics provide a range of services, from midwifery services for women who experience low-risk pregnancies to maternal-fetal medicine services for women who experience high-risk pregnancies. Women are seen in multiple locations, and approximately 3,000 women are seen each year for pregnancy care. In 2005, the obstetrics and gynecology department initiated universal screening with the Edinburgh Postnatal Depression Scale (EPDS) and a new perinatal psychiatry program developed in the Department of Psychiatry in response to increased awareness of the prevalence rates of perinatal mood disorders. All mothers were screened at their 6-week postpartum visits and referred as needed on the basis of validated EPDS cutoff scores (Cox et al., 2016).

#### Screening

Women with scores between 6 and 9 on the EPDS were prompted for return visits, and the EPDS was readministered. Women who scored 10 or greater were educated on stress management and coping skills by the obstetrics and gynecology staff and evaluated for the need to seek additional psychiatric services, including medication management. As more women were identified for risk of perinatal mood disorders, the increased number of referrals began to overwhelm the current psychiatric providers with experience in this area. At that time, these providers included two psychiatrists and two to three resident providers per rotation. In addition, it became clear that variability existed in the comfort level of the obstetrics and gynecology providers to initiate psychiatric referrals and in the consistent use of the EPDS (Delatte, Cao, Meltzer-Brody, & Menard, 2009). These providers also expressed concerns that women would not follow up with their psychiatric referrals because of fear, stigma, child care challenges, service costs, and so forth. On the basis of these

issues, it became apparent to many stakeholders that a new, collaborative model was needed to improve care for these women.

#### Embedding a Psychiatric Provider in the Obstetrics and Gynecology Clinic

The administrators within the obstetrics and gynecology and psychiatry departments sought an integrated solution to this problem and decided to embed a perinatal psychiatric provider in the obstetrics and gynecology clinic. Specifically, a decision was made to target the high-risk clinic to address the complex needs of this patient population through increased support and access to mental health care. Women qualify for high-risk status on the basis of myriad health issues, including mental health. A specialized psychiatric nurse-practitioner with a broad skill set that included prescriptive ability and therapeutic training was thought to be the best choice to liaise with the high-risk obstetrics and gynecology team and provide timely psychiatric consultation and ongoing care. A nurse-practitioner dual-trained in women's health and psychiatry was hired to provide psychiatric consultations and served as an educational resource for the obstetrics and gynecology providers on perinatal mood disorders.

The use of an integrated mental health provider was relatively novel in this health care system, and, subsequently, a number of identified barriers were addressed, including billing mechanisms, support staff, and physical office space. The relevant stakeholders negotiated solutions: the obstetrics and gynecology department agreed to support 50% of the salary for the psychiatric provider, and the psychiatric department handled billing and prior approval for women seen by the psychiatric provider in the clinic. All parties agreed to pilot and reevaluate the model in 6 months.

At the 6-month evaluation, the results were positive. With a specialized psychiatric nurse-practitioner now integrated in the obstetrics and gynecology clinic, women who scored 10 or greater on the EPDS were quickly evaluated, and the disposition of women with more severe symptoms, such as suicidal ideation, was more easily facilitated. Timely treatment of perinatal mood disorders was shown to improve functionality, reduce EPDS scores, and reduce morbidity and mortality rates (England, Bullard, & George, 1994). More women were seen within 1 week of referral, and, with this additional support, obstetrics and gynecology providers became more comfortable

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