**POSTER PRESENTER**

**POSTER #4**

**IMPROVING MATERNAL DEPRESSION SCREENING WITH A SMARTPHONE APPLICATION IN A VULNERABLE POPULATION: PRELIMINARY RESULTS**

Tram N.B. Nguyen, BS1; Sarah Ricketts, MD2; Henry Chung, MD1,2

1. Albert Einstein College of Medicine. 1300 Morris Park Ave, Bronx, NY 10461
2. Montefiore Care Management Organization. 200 Corporate Blvd, Yonkers, NY 10701

**BACKGROUND**: The depression rate during and after pregnancy is approximately 7 – 12.7% and likely higher in low income and minority populations. Maternal depression has been associated with fewer and later prenatal visits, preterm birth, low birth weight, intrauterine growth restriction, and preeclampsia. However, rates of peripartum screening for depression remain low in clinical practice. To address this problem, we piloted a patient-centered, HIPAA compliant smartphone application at two Montefiore OB clinics located in the Bronx to facilitate periodic screening for mood, substance use, and psychosocial stressors. The app also delivers medically accurate patient education materials throughout pregnancy, and patients can use the chat feature to communicate with the healthcare team.

**METHODS**: Eligible patients are pregnant women less than 28 weeks gestation who speak English/Spanish and own an iOS/Android smartphone. Upon enrollment, patients are to complete 1) the PHQ-8 for depression detection and severity measurement, 2) a screening for problems with housing, food, legal issues, and violence, and 3) a screening for current substance use. Depression screening is repeated in each trimester, at 2 weeks postpartum, and 3 months after delivery. Patients who screen positive have the option to receive further assessment and treatment from a telephonic behavioral healthcare team, and a face-to-face visit with a psychiatrist if needed. All enrolled patients receive weekly articles on common pregnancy-related topics.

**RESULTS**: At the time of reporting, of the 39 patients enrolled, 46.2% have completed the PHQ-8 compared to the usual screening rate of 14%, 41% have completed the Social Determinant Questionnaire, 51.3% have read one or more articles, and 25.6% have used the chat feature.

**CONCLUSIONS**: Preliminary results suggest using a smartphone application improves maternal depression screening rates, provides a fuller psychosocial context for each patient case, and promotes medical literacy. The next steps are identifying barriers to enrollment and engagement and evaluating patient satisfaction.

**CONTENT CATEGORY**: Patient Care

**KEYWORDS**: *smartphone, obgyn, primary care, depression, substance use*