

A. Award category: Innovative Programs in Care

B. Program objectives and overview of innovation

The primary objectives of the **NorthShore MOMS Program** are to increase detection of maternal mental health disorders and reduce barriers to care for these women. During the last 15 years, the program has instituted numerous novel strategies and innovations to accomplish this objective. Key innovations unique to the **MOMs Program** include:

1. ***Universal perinatal depression screening*** for all pregnant and postpartum women receiving care - 5000 per year. All women screening at risk receive individual mental health outreach and tailored referral plans. We use the multi-lingual Edinburgh Postnatal Depression Scale as our screening tool but are ***in the process of transitioning to an innovative Computerized Adaptive Testing (CAT) that allows for greater precision for depression detection while also screening for anxiety, and mania and can also serve as a treatment tracking tool*** (Attachments A-B). ***All elements of this innovation are delivered personally to our patients' smartphones!***
2. ***Our 866-364-MOMS Line*** is truly a one-of-a-kind resource for the entire State of Illinois, providing access to licensed mental health professionals 24 hours a day, 7 days a week (Attachment C).
3. ***Our extensive network of community-based resources*** includes therapists, psychiatrists, support groups, home visiting programs, doulas, lactation consultants and online resources. We make every effort to reduce barriers to care by tailoring referrals by insurance, location and other factors including warm hand-offs to maximize referral uptake.
4. ***Our curriculum for Physician and Nursing education*** - To create a next generation of primary care physicians and nurses equipped to recognize and treat perinatal mood disorders, we actively engaged in medical students and residents with the University of Chicago and with our nurse colleagues.
5. ***Our research that pilots our innovative interventions*** – We are testing the feasibility and acceptability of a text-based smart phone intervention for perinatal depression (Attachment D). We are also evaluating MomMoodBooster to deliver cognitive behavioral therapy via smartphone and collaborating to test a Chat-Bot intervention for depressed women that is also delivered by smartphone.

C. Program accomplishments and key personnel:

The MOMS program is embedded within the Department of Obstetrics and Gynecology at NorthShore University HealthSystem and has excellent linkages to the Departments of Psychiatry and Pediatrics.

Key Innovations to date include:

- **2003** – 866-364-MOMS Line established and universal depression screening implemented
- **2005** – Program evaluation launched to identify areas for improvement
- **2006** – Universal depression screening expanded to outpatient pediatric care settings, so screening can be accomplished further into the postpartum timeframe
- **2007** – Partnership with inpatient psychiatry unit to provide support and discharge planning for inpatient perinatal women
- **2008** – Hiring of bilingual clinical coordinator to expand services offered to the Spanish-speaking population
- **2010** – Incorporation of perinatal depression screening into the Electronic Health Record (EHR)
- **2013** – Creation of No Mom Left Behind perinatal psychiatry clinic embedded within NorthShore's Evanston Hospital-based Public Aid obstetric clinic (Attachment E)
- **2015** – Pilot computerized adaptive testing (CAT) for depression screening and symptom monitoring in the perinatal population
- **2016** - Pilot to expand MomMoodBooster intervention for smartphone-based application
- **2017** - Universal depression screening expanded to the Infant Special Care Unit for mothers who have delivered preterm infants

Personnel that drive the program include:

1. **Jo Kim, PhD, Program Director**, has been involved with the program since its inception and assumed its leadership in 2006. She is a Clinical Psychologist and Clinical Associate Professor at The University of Chicago and oversees all clinical, research and educational components of the program.
2. **Laura La Porte, LCSW, Program Coordinator**, leads programmatic research activities and measures outcomes. She is a highly skilled clinician, providing direct service to at-risk screening women and hotline callers alike.
3. **Suzanne Caulfield-Quiros, LSW, Bilingual Clinical Coordinator**, oversees the screening and outreach programs and provides bilingual (Spanish) clinical services to NorthShore's substantial Latina population. She also manages the maintenance and expansion of the program's community-based resource network.
4. **Richard K. Silver, MD, Chairman, Obstetrics & Gynecology**, helped create the program and has a strong commitment to its continued success through departmental support of its research, educational and clinical initiatives.
5. **Skilled Hotline Staff** – Fifteen Master's and Doctoral-level Perinatal Mental Health Clinicians provide 24/7 coverage of the 866-364-MOMS Line.

D. Source of initial and sustained funding/support

Initial funding for program was provided by a generous gift from Dr. Charles Mudd and Joan Mudd, parents of Jennifer Mudd Houghtaling. Sustainability funding has been secured from Illinois Department of Human Services (2012-Present); Satter Foundation (2013-Present); NorthShore University HealthSystem (2005-Present); North Suburban Healthcare Foundation (2014-2016); Illinois Department of Healthcare and Family Services (via Michael Reese Health Trust; 2006-2009); and individual donors.

E. Length of time in operation and sustainability plans

The program has been in operation since 2003, with many innovative services added regularly as noted in Section C. Sustainable funding for the program, a hallmark of our success requires multiple partnerships including public and private collaborations and a tenacious approach to create new partnership sources.

F. Summary of results and evidence of impact

- **88,000** perinatal depression screens administered with **6,400** women identified as at-risk and provided with phone outreach from our licensed mental health professionals
- **8,600** calls to our 866-364-MOMS hotline; **431** callers guided to the nearest emergency department based on their acute presentation, for urgent psychiatric referral
- **188** women received psychiatric care through the No Mom Left Behind perinatal psychiatry clinic for low-income women
- **55** perinatal women admitted to inpatient psychiatric unit provided with support, psycho-education and discharge planning assistance
- **32** professional society conference presentations
- **9** peer reviewed publications in high impact journals

G. Discussion of scalability

All of the program's elements are designed to be readily expanded to other settings. We are committed to sharing our best practices through training, national presentations, publications and consultation. In partnership with 2020 Mom we hope to reach a much broader audience to share our innovative models and guide others in adopting them. Elements of the program currently under development with high potential for scalability include computerized adaptive testing for screening and treatment by smartphone and use of mobile health technology for perinatal mood disorders screening and intervention.