



Mount Sinai

MATERNAL HEALTH MATTERS

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BACKGROUND

The United States has the highest rate of maternal deaths among developed countries, 60 percent of which are preventable with better access to prenatal and postpartum care and self-management of chronic diseases.

The reasons for race and place disparities in maternal health outcomes are complex. Recent studies attribute them to a high burden of pre-existing chronic illness, chronic stress, and racial bias in health care.

The postpartum period has also been recognized as a critical time period to improve women's healthcare. Yet, postpartum visits are poorly attended and lead to gaps in contraceptive care, mental healthcare, and continued care for chronic conditions.

Aims:

Understand the lived context for Mount Sinai's prenatal and postpartum patients and community in New York City (NYC) in New York State (NYS)

Translate findings into education for health care providers and the community at large

Provide support systems for OB patients during their pregnancy and postpartum with digital health solutions to engage patients and improve care



EVALUATION

Process and impact indicators will be collected monthly and analyzed quarterly

Process Evaluation:

Measure	Source
Stakeholder analysis, literature review, epidemiological and community resource mapping	Project staff report
# of patients interviewed and saturation point achieved	Project staff report
Patient demographics	Electronic medical record
Community partner experience and satisfaction	Survey/interviews
Clinic staff experience and satisfaction with educational program	Survey/interviews
# of patients participating in mobile-health texting program	Project staff report
Texting program participants end-of-program experience	Survey
# of successful telehealth visits conducted	Hospital Administration Data

ACTIVITIES AND PROGRAM

- Design and conduct qualitative inquiry (in-depth interviews) with prenatal/postpartum women to understand their experiences of clinical care, social support, community resources, chronic condition and self-management
- Educate health care providers based on assessment findings
- Perform outreach to community organizations
- Design a six-week text-message postpartum support program for pregnant women to provide educational, social, and logistical support
 - General pregnancy population
 - Pregnancy population with hypertension
- Use tele-health video visits for nutritional counseling
- Collaborate with a local food pantry for monthly waiting-room programming

Impact Evaluation: Digital Health Program:

Measure	Source
Postpartum appointment attendance rate	Hospital Administration Data
# of additional visits, emergency room encounters	Electronic medical record
# received postpartum glucose testing, if needed	Electronic medical record
# attended BP check visit, if scheduled	Electronic medical record
# attended wound check appt, if scheduled	Electronic medical record

METHODS

- Stakeholder analysis of local and regional maternal health programming and policies
- Literature review and research planning, including NYS Task Force Report review; review of epidemiological data from NYC for important health outcomes
- Community assets/resource mapping
- Mixed methods approach to explore the barriers, needs, and assets of prenatal and postpartum women, their families, and their communities and design of supportive measures with digital health solutions

NEXT STEPS

- Randomize postpartum patients into text message intervention and control groups
- Ongoing program development, informed by the community, including a community health worker program to coach patients through the pregnancy and postpartum periods
- Design toolkit for health care providers of patient support systems as informed by patient interviews

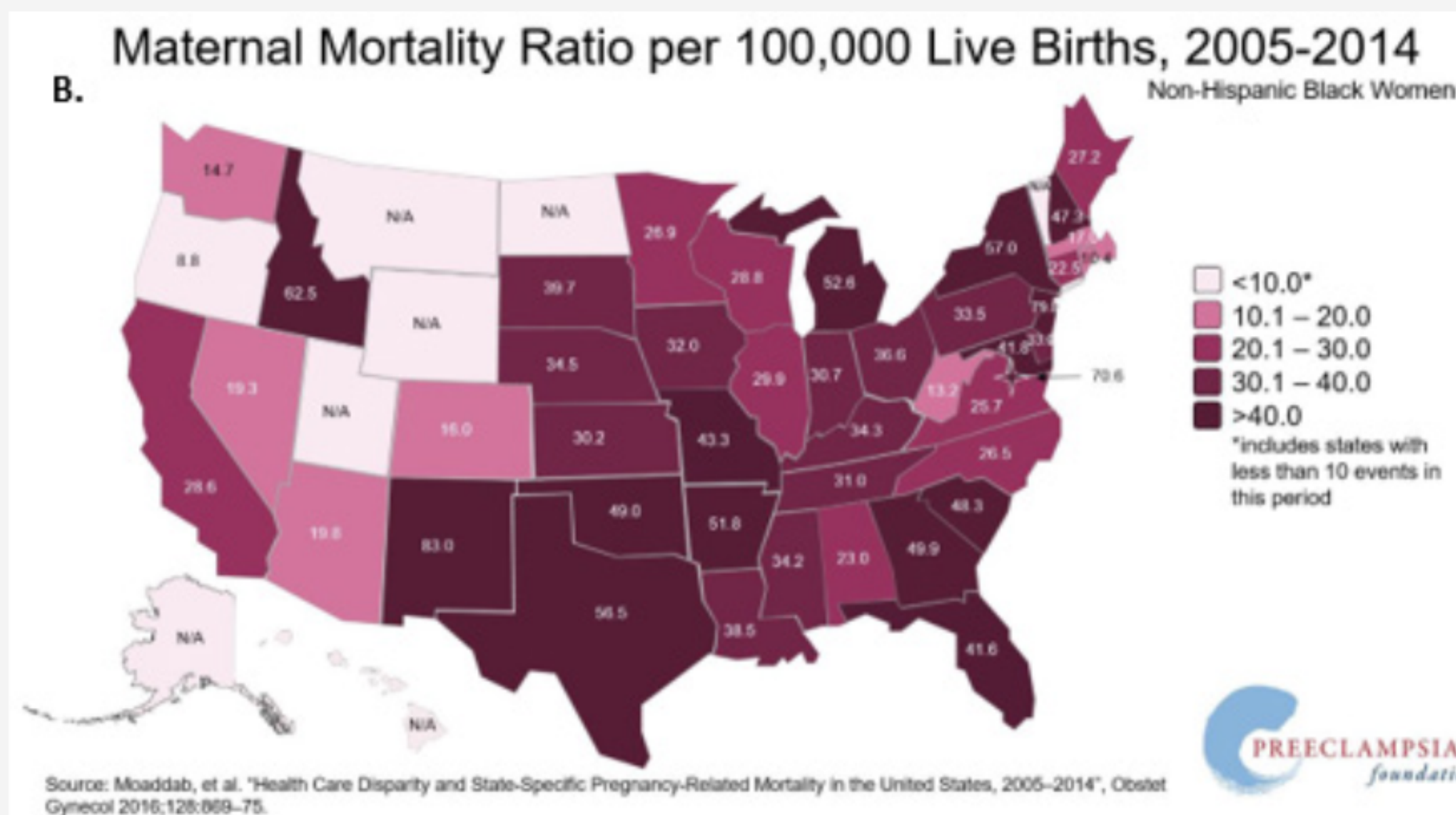


Figure 1: A. State by state comparison of the overall incidence of maternal mortality ratio/100,000 live births. B. State by state comparison of the overall incidence of black maternal mortality ratio/100,000 live births. (Reproduced with permission from the Preeclampsia Foundation).

State by state comparison of the overall incidence of black maternal mortality ratio/100,000 live birth. In NYS, the MMR among women of all races is 20.4 (not shown)

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• GBD 2015 Maternal Mortality Collaborators. Global, regional, and national levels of maternal mortality, 1990–2015: a systematic analysis for the Global Burden of Disease Study 2015. *Lancet* 2016; 388: 1775–812.

• Howell, Elizabeth A., Natalia Egorova, Amy Balbierz, Jennifer Zeitlin, and Paul L. Hebert. "Black-White Differences in Severe Maternal Morbidity and Site of Care." *American Journal of Obstetrics and Gynecology* 214, no. 1 (January 2016): 122.e1–122.e7.

• New York City Department of Health and Mental Hygiene (2016). *Severe Maternal Morbidity in New York City, 2008–2012*. New York, NY.