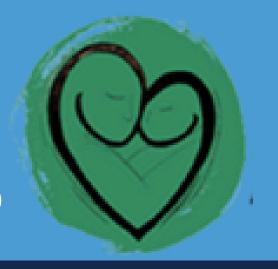
ACURE4Moms Study

(Accountability for Care through Undoing Racism & Equity for Moms)



Maternal Health Disparities

- The maternal mortality rates across the country are 3x higher for black versus white women
- Severe maternal morbidity (SMM) was 112-115% higher for Black women than White women.
 - No change in Black-White disparity between 2006-2015.
- Socioeconomic factors and comorbidities do not explain these differences

CDC. Report from nine maternal mortality review committees 2019 Fingar, et al. HCUP Statistical Brief #243. Sep 2018



How to decrease health disparities?

- Lack of proven interventions to decrease Black-White inequities in maternal health.
 - ACCURE* intervention:
 - Practice-based intervention that addresses institutional and implicit biases within medical care.
 - Developed by the Greensboro Health Disparities Collaborative and UNC.
 - Reduced Black-White inequities at Cone Health & University of Pittsburgh for early-stage lung and breast cancer.
 - Increased Black treatment rates by $\sim 10\%$, while improving care for all patients.

*ACCURE=Accountability for Cancer Care through Undoing Racism and Equity

Cykert, et al. J Natl Med Assoc 2019



ACCURE Interventions

Transparency Components

- Retrospective analysis, by race, of EHR data from 2007-2011
- Automated Real-Time Registry with Early Warning System for missed appointments and unachieved milestones

Accountability Components

- Nurse Navigator specially trained in exploring and responding to patients social and belief-specific barriers, and using ACCURE's Realtime Registry
- Site-specific Clinical Feedback
 Reports, according to race and comorbidity status, delivered by
 ACCURE Physician Champion to
 clinicians
- Healthcare Equity Training + quarterly booster sessions for practice staff



Evidence: Community-Based Doulas

- A Cochrane Review of 26 RCTs found doula support reduced:
 - Cesarean birth
 - Instrumented birth
 - Duration of labor
 - Baby with low 5-minute
 Apgar
 - Depressive symptomatology
 - Negative feelings about childbirth experiences

- A study done on the YWCA
 Greensboro Healthy Beginnings
 Doula Program compared women
 who chose to use vs not use a
 doula from Jan 2008-Dec 2010.
- Doula-assisted mothers were:
 - 4x less likely to have a low birth weight (LBW) baby
 - 2x less likely to experience a birth complication involving themselves or their baby
 - More likely to initiate breastfeeding

- The Family Birth and Health Center in DC was able to reduce LBW by half by:
 - Connecting patients to
 Perinatal Care Coordinators
 starting at the beginning of pregnancy until 1 year
 postpartum
 - Providing midwifery and doula support
 - Providing transportation services, home visits,
 - Centering pregnancy strategies



ACURE4Moms Study Partners

Stakeholder Advisory Board (Oversight of Study Design and Dissemination)

5 patients of color who have experienced low birth weight or severe maternal morbidity 4 community-based doulas

3 Greensboro Health Disparities Collaborative members 3 payer representatives (BCBS, United, Wellcare)

1 representative from NC Medicaid

Tara Owens Shuler (NC Division of Public Health: Perinatal Health Manager)

Tonya Daniel (NC Division of Public Health, Baby Love Plus Program Supervisor)

Tina Sherman (MomsRising)

Ami Goldstein (President, NC Affiliate of American College of Nurse-Midwives)

Velma Taormina (President, NC Obstetrical and Gynecological Society)

2 NC Provider Support Network Perinatal Regional Champions

1 Prenatal Practice QI Nurse

University of North Carolina at Chapel Hill (Primary Study Oversight)

Jennifer Tang (Co-PI)

Rachel Urrutia (Co-PI)

Samuel Cykert (Co-I)

Kate Menard (Co-I)

Wanda Nicholson (Co-I)

Sarah Verbiest (Co-I)

MAHEC OB-GYN (Racial Equity Training)

Dolly Byrd (Co-I)

Bill Gist (Co-I)

Amanda Murphy (Co-I)

SistasCaring4Sistas
(Doula Training & Oversight
for Western NC)
Cindy McMillan (Co-I)

Momma's Village (Doula Training & Oversight for Eastern NC)

Angela Malloy (Co-I)

NC AHEC Practice Support Program (Practice Facilitation)

Chris Weathington (AHEC Practice Support)

NC HIEA (Dashboard & Maternal Warning System Set-up)

Christie Burris (Executive Director)



ACURE4Moms Study Design

- Four arm cluster RCT of 40 practices:
 - 1) Standard Care Management (Control Arm) → 10 practices
 - 2) Data Interventions-Only (**Data Arm**) → 10 practices
 - 3) Community-Based Doula Support-Only (Doula Arm)→ 10 practices
 - 4) Data Interventions + Doula Support (Data+Doula Arm)→ 10 practices



ACURE4Moms Study Aims & Outcomes

 Aim 1: Compare proportion of Black women who deliver a low birthweight baby between Arms (Primary Outcome).

• <u>Aim 2:</u> Compare **# ED visits and hospitalizations** during pregnancy and up to 1 year after delivery between Arms.

• Aim 3: Explore trends in **self-reported racism** during pregnancy and up to 4 months after delivery between Arms through patient surveys.



Practice Participation Benefits

- All practices would receive:
 - Support from NC AHEC Practice Facilitators & UNC OB/GYN Consultants to help clinic workflow
 - IT/Informatics Support to help monitor OB outcomes & indicators
 - Support collecting data to assist with pay-for-performance guidelines
 - Payment for acquisition of data (\$13,500 over 2 years)
 - Staff compensation for completing study surveys & interviews (\$100/interview)



Data Arm Benefits

- Quarterly Maternal Healthcare Equity & Education Training (MHEET) sessions over 2 years for practice staff
 - 9 total sessions: each 1 hour except for a 1.5-2 hour Implicit Bias Training
- Early Warning System to alert practice of patients who have:
 - Missed visits without rescheduling within predetermined time periods
 - Elevated BPs, with no repeat BP recorded in the EHR within 2 weeks
 - Risk factors for preeclampsia but have not been started on baby ASA after 1st TM
- Data Dashboards that show patient outcomes stratified by race
- IT set-up and support for the Dashboard and Warning System



Community-Based Doula Arm Benefits

- Partnership with local Doulas in supporting patients at risk for LBW:
 - High risk patients identified via algorithm/points system and referred to doula partners
- Participate in shared patient care with Doulas:
 - Doulas attend 2 prenatal visits at the practice with clients
 - Also perform home visits before and after delivery, are available for text/phone support, and provide peer support groups sessions
 - Doulas provide up to 24h of L&D support, including 2 hours postpartum
- Doula support paid for by the study for 2 years
 - ~6 births/month or 144 births total/practice
- Quarterly Maternal Healthcare Equity & Education Training (MHEET) sessions for practice staff



Practice Champion Expectations

- 3 Practice Champions per practice: 1 Provider, 1 Nurse, 1 Admin staff.
- Be familiar about the study aims and design and help promote them among clinic staff.
- Attend the 2-day **REI Phase 1 Training** if interested and have not previously attended (*if randomized to Arms 2, 3, or 4*).
 - Paid for by ACURE4Moms
- Attend the practice's 9 quarterly 1-hour Maternal Healthcare Equity Education
 & Training (MHEET) sessions over the 2 years of study implementation (if randomized to Arms 2, 3, or 4).
 - All practice staff are invited to attend the MHEET sessions



Practice Champion Expectations

- Meet with the study team to discuss study-related issues and review practice data (*if randomized to Arms 2 or 4*) on a quarterly basis.
- If randomized to Arms 3 or 4, be a contact if issues arise between the study doulas & clinic.
- Help the practice to develop QI or clinical workflows as needed to address any clinical improvement needs identified during the study.
- For the Nurse Champion/Navigator, if randomized to Arms 2 or 4, login (or delegate a nurse to login) to the practice's Warning System to address alerts, preferably on a weekly basis.

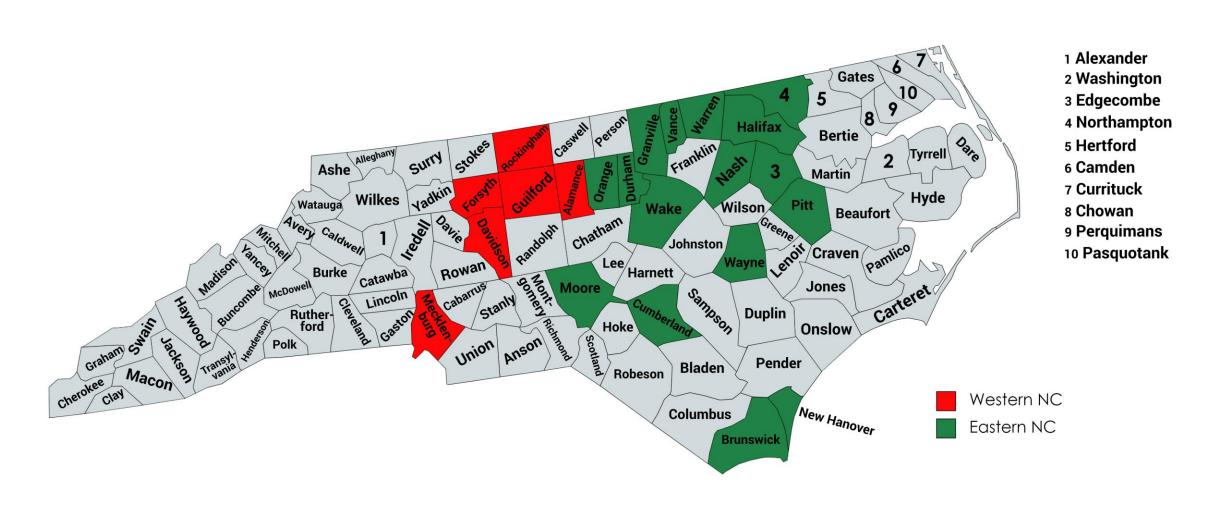


Practice Criteria

- Be willing to be randomized to 1 of the 4 Arms
- Have at least 7-8 deliveries of Black women per month
- No existing Disparities Dashboard, Maternal Warning System, or Community-Based Doulas at the practice
- Willing to become a Full Participant with the NC HIEA (if not already)



Current Map of ACURE4Moms practices by County



Timeline

- Apr 1, 2022: award starts
- June 30, 2022: submission to UNC IRB
- Aug 2023: UNC IRB approval
- Aug 2023-present: contracting with 40 practices to implement study
- May 2023: onboard first practices
- Dec 2023: onboard final practices
- May 2025: Arm 1 sites begin implementation of desired interventions
- Mar 2027: award ends



Questions?

- Rachel Peragallo Urrutia: <u>rachel_peragallo@med.unc.edu</u>
- Jennifer Tang: jennifer_tang@med.unc.edu
- Angela Malloy: angela@mommasvillage.org
- Cindy McMillan: cindy@sistascaring4sistas.org

