

# ACURE4Moms Study

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



SCHOOL OF MEDICINE

Obstetrics and Gynecology

# Maternal Health Disparities

- The maternal mortality rates across the country are 3x higher for Black versus White birthing people.
- Severe maternal morbidity (SMM) was 112-115% higher for Black versus White birthing people.
  - 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 ~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 Real-time Registry
- Site-specific **Clinical Feedback** Reports, according to race and co-morbidity status, delivered by ACCURE **Physician Champion** to clinicians
- **Healthcare Equity Training** + quarterly booster sessions for practice staff

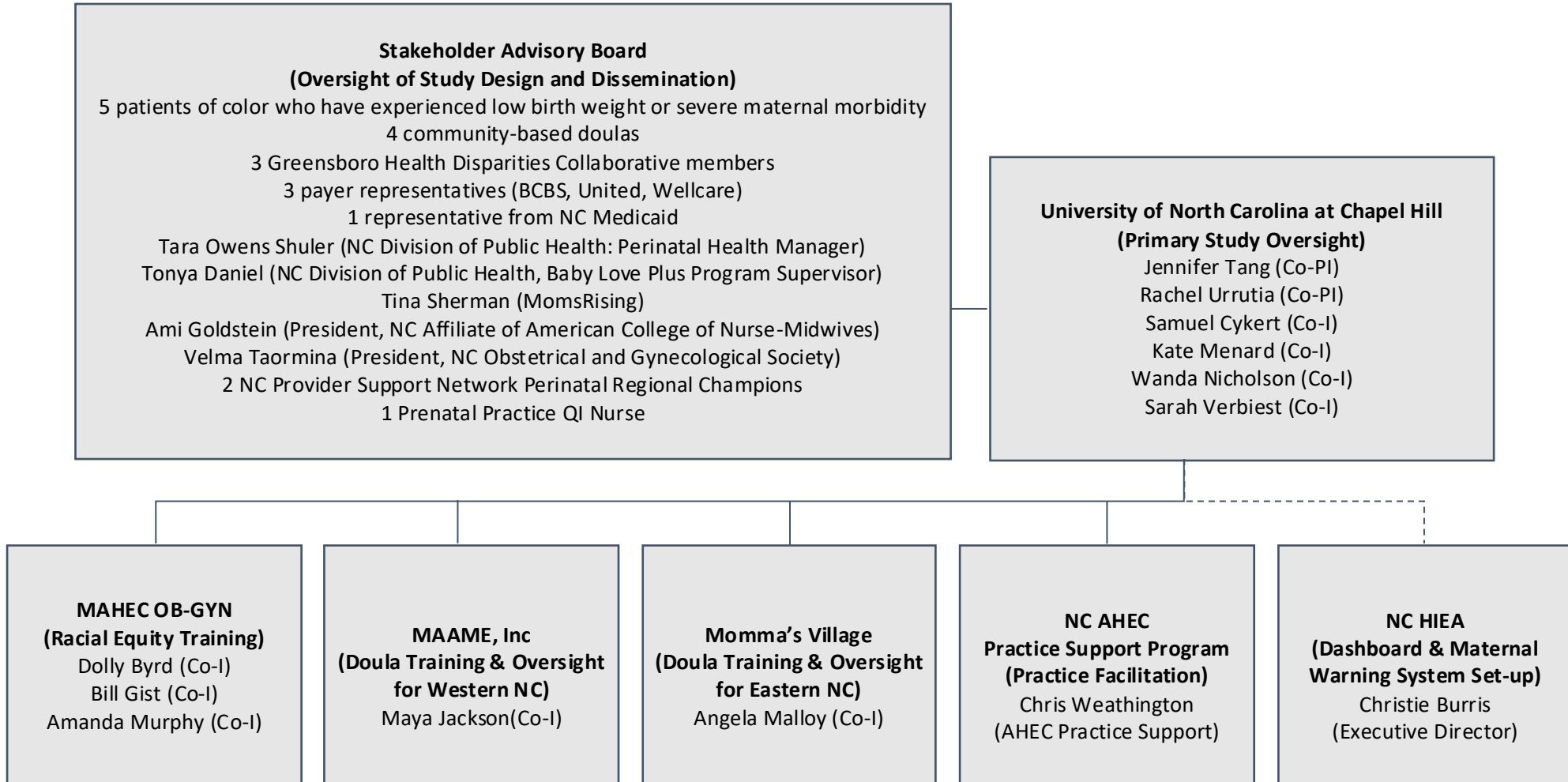


# Evidence: Community-Based Doulas

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| <ul style="list-style-type: none"><li>• A Cochrane Review of 26 RCTs found doula support reduced:<ul style="list-style-type: none"><li>• Cesarean birth</li><li>• Instrumented birth</li><li>• Duration of labor</li><li>• Baby with low 5-minute Apgar</li><li>• Depressive symptomatology</li><li>• Negative feelings about childbirth experiences</li></ul></li></ul> | <ul style="list-style-type: none"><li>• 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.</li><li>• Doula-assisted mothers were:<ul style="list-style-type: none"><li>• 4x less likely to have a low birth weight (LBW) baby</li><li>• 2x less likely to experience a birth complication involving themselves or their baby</li><li>• More likely to initiate breastfeeding</li></ul></li></ul> | <ul style="list-style-type: none"><li>• The Family Birth and Health Center in DC was able to <b>reduce LBW by half</b> by:<ul style="list-style-type: none"><li>• Connecting patients to <b>Perinatal Care Coordinators</b> starting at the beginning of pregnancy until 1 year postpartum</li><li>• Providing midwifery and <b>doula support</b></li><li>• Providing transportation services, home visits,</li><li>• Centering pregnancy strategies</li></ul></li></ul> |
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# ACURE4Moms Study Partners



# ACURE4Moms Study Design

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- 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

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- Aim 1: Compare proportion of Black women who deliver a **low birthweight** baby between Arms (**Primary Outcome**).
- Aim 2: 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 1<sup>st</sup> 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



# Current Map of ACURE4Moms practices by County



- 1 Alexander
- 2 Washington
- 3 Edgecombe
- 4 Northampton
- 5 Hertford
- 6 Camden
- 7 Currituck
- 8 Chowan
- 9 Perquimans
- 10 Pasquotank

■ Western NC  
■ Eastern NC



# Timeline

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- Apr 2022: study funding started
- Aug 2022: UNC IRB approval of study
- Jun 2023: 1<sup>st</sup> practices onboarded
- **Aug 2024: 39 practices onboarded**
- 2025-2027: Arm 1 sites implement desired interventions after 2 years in the study
- Mar 2027: study funding ends



# Questions?

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