OVERVIEW

Moderator
- Senator Toi Hutchinson, Illinois

Panelists
- Michael D. Warren, MD MPH FAAP, Associate Administrator, Maternal and Child Health Bureau, HHS
- Joia Crear-Perry, MD, President, National Birth Equity Collaborative
- Rick Foster, MD, Executive Director, Alliance for a Healthier SC

Legislative Respondents
- Representative Emilia Sykes, Ohio
- Representative Cindy Ziemke, Indiana
Improving Maternal and Infant Health in the United States
National Conference of State Legislatures - Legislative Summit
August 06, 2019

Dr. Michael D. Warren, MD, MPH, FAACP
Associate Administrator
Maternal and Child Health Bureau (MCHB)

Vision: Healthy Communities, Healthy People
Infant Mortality in the United States

Leading Causes of Infant Death (2017)
1. Birth defects
2. Preterm birth and low birth weight
3. Maternal pregnancy complications
4. Sudden infant death syndrome
5. Injuries (e.g., suffocation)

2017 Infant Mortality Rate=5.8 (22,000 infant deaths)
In 2017, the infant mortality rate for black infants achieved the same rate as for white infants.

The same rate as for white infants in 1980.

Thirty-seven years later.
Infant Mortality in the United States
Every year, about **700** women die from pregnancy-related causes during or within one year after pregnancy.
Pregnancy-Related Mortality in the United States

Death can happen up to a year after delivery.

- 33% 1 week to 1 year after delivery
- 31% During pregnancy
- 36% During delivery and up to 1 week afterward

Source: CDC. https://www.cdc.gov/vitalsigns/maternal-deaths/index.html
Severe Maternal Morbidity in the United States

Every year, over 50,000 women experience severe morbidity during delivery hospitalizations, including hysterectomy, organ failure, and other complications.
In 2016, over half of all counties had limited or no access to hospital-based obstetric services or obstetric providers.

In 2016, 12.2% of annual births (~500,000) were to women who have limited or no access to maternity care in their counties.

Maternal Health Pyramid

- Deaths
- Near Misses
- Severe Maternal Morbidity
- Maternal Morbidity Requiring Hospitalization
- Maternal Morbidity Resulting in Emergency Department Visit
- Maternal Morbidity Resulting in Primary Care Visit
- Maternal Health
- Preconception Health
Life Course Approach

“Upstream” Thinking
# Levels of Prevention

<table>
<thead>
<tr>
<th>PRIMARY Prevention</th>
<th>SECONDARY Prevention</th>
<th>TERTIARY Prevention</th>
</tr>
</thead>
<tbody>
<tr>
<td>An intervention implemented before there is evidence of a disease or injury</td>
<td>An intervention implemented after a disease has begun, but before it is symptomatic.</td>
<td>An intervention implemented after a disease or injury is established</td>
</tr>
</tbody>
</table>

Adapted from: Centers for Disease Control and Prevention. A Framework for Assessing the Effectiveness of Disease and Injury Prevention. MMWR. 1992;41(RR-3); 001. Available at: http://www.cdc.gov/mmwr/preview/mmwrhtml/00016403.htm
Department of Health and Human Services (Operating Divisions)

<table>
<thead>
<tr>
<th>Department of Health and Human Services (DHHS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration for Children and Families (ACF)</td>
</tr>
<tr>
<td>Administration for Community Living (ACL)</td>
</tr>
<tr>
<td>Agency for Healthcare Research and Quality (AHRQ)</td>
</tr>
<tr>
<td>Agency for Toxic Substances and Disease Registry (ASTDR)</td>
</tr>
<tr>
<td>Centers for Disease Control and Prevention (CDC)</td>
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<tr>
<td>Centers for Medicare and Medicaid Services (CMS)</td>
</tr>
<tr>
<td>Food and Drug Administration (FDA)</td>
</tr>
<tr>
<td>Health Resources and Services Administration (HRSA)</td>
</tr>
<tr>
<td>Indian Health Service (IHS)</td>
</tr>
<tr>
<td>National Institutes of Health (NIH)</td>
</tr>
<tr>
<td>Substance Abuse and Mental Health Services Administration (SAMHSA)</td>
</tr>
</tbody>
</table>
Mission:
Improve the health and well-being of America’s mothers, children, and families.
Key MCHB Support to States & Communities

• Title V/Maternal and Child Health (MCH) Services Block Grant to States
  ▪ 56 million people in FY2017
    ✓ 86% of all pregnant women, 99% of infants, 55% of children
  ▪ Partial or complete funding support for maternal mortality activities

• Maternal, Infant, Early Childhood Home Visiting (MIECHV) Program
  ▪ Evidence-based, voluntary home visiting programs for at-risk pregnant women and parents with young children
  ▪ 930,000 home visits in FY2018
    ✓ 150,000 participants, 896 US counties
Key MCHB Support to States & Communities

• **Healthy Start Initiative: Eliminating Disparities in Perinatal Health**
  - Focus on communities with highest infant mortality rates
  - Support community-driven efforts to decrease infant mortality
  - In FY2019, the program’s 100 grantees will serve women, children, and families in 34 states, D.C., and Puerto Rico

• **Collaborative Improvement and Innovation Network (CoIIN) to Reduce Infant Mortality**
  - Public health quality improvement approaches focused on safe sleep, social determinants, preconception health, early prenatal care
MCHB Focused Investments for Maternal Health

• Alliance for Innovation on Maternal Health (AIM)
  ▪ Hospital and clinic-based safety bundles

• New Funding in FY2019
  ▪ State Maternal Health Innovation Awards
  ▪ AIM Community Care
  ▪ Funding to support clinical providers at Healthy Start sites
MCHB Focused Investments for Maternal Health

• **Screening and Treatment for Maternal Depression and Related Behavioral Disorders**
  ▪ Address critical and growing mental/behavioral health issues with limited funding

• **Women’s Preventive Services Initiative & Bright Futures**
  ▪ Provides blueprint for preventive care

• **National Survey of Children’s Health**
  ▪ Provide national and state-level estimates on key child health indicators
MCHB Focused Investments for Maternal Health

• **MCHB Remote Pregnancy Monitoring Challenge**
  ▪ Tech-based innovations to improve the ability of prenatal care providers to monitor pregnant women’s health remotely, as well as empower women to make informed decisions about their own care

• **MCHB Opioid Use Disorder Challenge**
  ▪ Tech-based innovations to improve access to quality health care for pregnant women and new mothers struggling with opioid use disorder (OUD)
Paradigm for Improving Maternal and Child Health

Accelerate
Upstream
Together
What Can You Do?

• Get to know your Title V/Maternal & Child Health Director
  ▪ [https://mchb.tvisdata.hrsa.gov/](https://mchb.tvisdata.hrsa.gov/)
  ▪ Click on “State Contacts”

• Think upstream

• Collaborate
Contact Information

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Associate Administrator
Maternal and Child Health Bureau (MCHB)
Health Resources and Services Administration (HRSA)
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Web: mchb.hrsa.gov
Connect with HRSA

To learn more about our agency, visit

www.HRSA.gov

Sign up for the HRSA eNews

FOLLOW US:  

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YouTube
Addressing Infant and Maternal Mortality

NCSL, August 2019
Joia Crear-Perry MD, Founder/President
Mission

NBEC creates solutions that optimize Black maternal and infant health through training, policy advocacy, research and community centered collaboration.

Vision

All Black mothers and babies thrive.

Core Values:

Leadership, Freedom, Wellness, Black Lives, Sisterhood
birth equity (noun):

1. The assurance of the conditions of optimal births for all people with a willingness to address racial and social inequalities in a sustained effort.

Joia Crear-Perry, MD  
National Birth Equity Collaborative
Maternal Mortality in the U.S.

- Maternal Mortality rates in the U.S. have been rising since the 1990s
- The disparity in maternal mortality between black and white women continues to widen

Source(s):
Health Disparities

**Avoidable differences** in health outcomes that are **closely linked** with social, economic and environmental **disadvantage**.

Office of Minority Health, 2011
Health Equity

The fair distribution of health determinants, outcomes and resources within and between segments of the population, regardless of social standing.

Health Equity

Everyone has a fair and just opportunity to be healthier.

Acknowledgements

• Intersectionality
• Centering marginalized communities
• Structural racism
• Culture and place
• Social determinants of health
Adopting a Common Framework

What are “Social Determinants of Health”? 

“The social determinants of health are the conditions in which people are born, grow, live, work, and age. These circumstances are shaped by the distribution of money, power, and resources at the global, national, and local levels. Examples of resources include employment, housing, education, health care, public safety, and food access.”

Source: World Health Organization (http://www.who.int/social_determinants/sdh_definition/en/)
### Maternal Mortality/Morbidity

**Risk factors**

<table>
<thead>
<tr>
<th>Clinical</th>
<th>Social</th>
</tr>
</thead>
</table>
| • Eclampsia  
• Cardiac disease  
• Acute renal failure  
• Preconception BMI  
• Chronic conditions  
• Serious obstetric complications  
  o Blood transfusion  
  o Ventilation  
  o Hysterectomy  
  o Heart failure | • Housing  
• Income  
• Neighborhood safety  
• Air quality and environmental stresses  
• Food Insecurity  
• Access to quality, comprehensive health care services  
• Low educational attainment  
• Unemployment and rigid scheduling |
State Innovations for Maternal Mortality

California Maternal Quality Care Collaborative

• 2006-2013, MM rate fell by 55 percent, from 16.9 to 7.3 deaths per 100,000 live births.
• Currently, the rate is 4.5, the lowest by far of any state.
• Black:white mortality disparity increased
• Alliance for Innovation in Maternal Health (AIM) Patient Safety Bundles are modeled after CMQCC developing successes.
• State challenges are brought to scale in national initiatives.
Legislative Action for Maternal Health

Preventing Maternal Deaths Act of 2017
• Bipartisan supported
• Signed into law Dec. 2018

Health Resource & Services Administration (HRSA)
• Maternal & Child Health Bureau (MCHB)
• Funding for maternal health programs
• $35-40M investment
• Rural health, national-level technical assistance, community based AIM bundle
## Concurrent Programs

<table>
<thead>
<tr>
<th>Program</th>
<th>Description</th>
<th>Funded by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternal Mortality Review Committees*</td>
<td>a standard and comprehensive system primarily operating at the state level. MMRCs identify, review, and analyze maternal deaths; disseminate findings; and act on the results.</td>
<td>CDC</td>
</tr>
<tr>
<td>Perinatal Quality Collaboratives</td>
<td>state or multi-state networks of teams working to improve the quality of care for mothers and babies.</td>
<td>CDC</td>
</tr>
<tr>
<td>Alliance for Innovation in maternal health</td>
<td>a national data-driven maternal safety and quality improvement initiative based on proven implementation approaches to improving maternal safety and outcomes in the U.S.</td>
<td>HRSA</td>
</tr>
<tr>
<td>Title V</td>
<td>federal block grant program, a key source of support for promoting and improving the health and well-being of the nation’s mothers, children, including children with special needs, and their families.</td>
<td>HHS</td>
</tr>
<tr>
<td>Title X</td>
<td>the only federal grant program dedicated solely to providing individuals with comprehensive family planning and related preventive health services.</td>
<td>HHS</td>
</tr>
</tbody>
</table>
“Preventing Infant and Maternal Mortality: State Policy Options”

**Strengths**
- Comprehensive resource list and references
- Overview of effective policies
- Great breakdown of concurrent programming and data alignment challenges
- Focus on racial disparities

**Opportunities**
- Highlight policies created and led by community-based organizations
- Explicit mention of explicit racism
- Explicit examples of institutional racism
- More recommendations for multisectoral legislative collaborations for maternal health initiatives
HEAT Vision and Mission

Louisiana

• **Vision**: True equity in our health programs, policies, and outcomes for all

• **Mission**: To develop powerful partnerships and a capable workforce to address structural inequities, particularly racism, that lead to health disparities
HEAT’s Commitments

➢ To foster thoughtful dialogue among staff members of all backgrounds, in order to heal divisions and strengthen capacity for engagement with difficult topics;

➢ To provide BFH staff with trainings that encourage self-reflection and awareness of the different levels at which racism operates and perpetuates health disparities; and

➢ To develop learning opportunities that are accessible to BFH staff in all roles in all regions.
NYC Standards for Respectful Care at Birth

Sexual and Reproductive Justice Community Engagement Group (SRJ CEG) Birth Justice Initiative

Birth Justice Defenders
• 40+ Residents educating and advocating for respectful care during pregnancy and childbirth

Birth Justice Champion Providers
• Provider allies who develop provider-focused activities to increase knowledge and implementation of best practices for respectful care at birth.
ACOG- Council on Patient Safety in Women’s Healthcare
AIM Patient Safety Bundles

Racial Equity

Opioid Abuse
Mothers Voices Driving Birth Equity
National Birth Equity Collaborative
Funded by the Robert Wood Johnson Foundation

BACKGROUND
Women in the US are dying in pregnancy and childbirth at unprecedented rates. The community closest to the pain and suffering through disparate deaths and complications are Black mothers and birthing people. Disrupting birthing narratives and care required cultural shifting from mother/individual blame to provider/systems accountability. Cultural transformation demands the capacity for providers and systems to listen to, understand, and respond to community voices in sharing stories of disrespectful and dismissive care and service gaps.

PURPOSE
To develop and apply a community informed theoretical model in the creation and testing of a participatory patient-reported experience metric (PREM) of mistreatment and discrimination in childbirth.

There is no metric for patient-reported experience of mistreatment and discrimination in childbirth and pregnancy developed by, for, and with impacted Black communities, mothers, and scholars.

Research & QI Methodologies
Reproductive Justice
Cultural Humility
Research Justice

OBJECTIVES
• Facilitate and sustain opportunities for Black mothers to be valued, seen, & heard in semi-structured focus group interviews
• Develop a community informed theoretical model in collaboration with Black mothers/birthing people based on group interviews
• Map existing theoretical constructs onto those identified from Black mothers and CBs to inform the co-creation and co-testing of a PREM of respect, mistreatment, and discrimination
• Utilize the PREM in systems accountability, quality improvement, patient advocacy and interprofessional education

Systematic analysis and disruption of hierarchy, all knowledge construction and power in QI, clinical research, and public health

Maintaining and amplification of community voice and knowledge

Co-development of shared language, vision and understanding of respectful and equitable care

Catalyze and testing of best practices that lead to micro-level fusing, strong decision making, and skill behaviors among mothers, clinicians, and health systems
Thank you

Founder President
drjoia@birthequity.org

@birthequity
SC Birth Outcomes Initiative: a collaborative model for improving maternal & child health
2018 County Health Rankings

Health Outcomes Map

Health Outcomes = Today’s Health

Health Factors Map

Health Outcomes = Tomorrow’s Health

HealthierSC.org
SC Infant Mortality Rate

Trend: Infant Mortality, South Carolina, United States, 2018 Annual Report

- Number of infant deaths (before age 1) per 1,000 live births (5-year average)
- South Carolina
- United States

**SOURCE:**
- CDC WONDER Online Database, Underlying Cause of Death, Multiple Cause of Death Files, NCHS public-use data
SC Low Birth Weight Rate

Trend: Low Birthweight, South Carolina, United States, 2018 Annual Report

- Percentage of infants weighing less than 2,500 grams (5 pounds, 8 ounces) at birth
- South Carolina
- United States

SOURCE:
- CDC/NCDSWCH: Child Health, Vitality and Risk in our State

@HealthierSC   #HealthierSC
HealthierSC.org
SC Preterm Birth/LBW Equity Gap

FIGURE 5.7
Low Birthweight, by Race/Ethnicity

Percent

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Non-Hispanic White</th>
<th>Non-Hispanic Black</th>
<th>Non-Hispanic Other</th>
<th>Hispanic/Latino</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent</td>
<td>7.5%</td>
<td>14.6%</td>
<td>9.2%</td>
<td>6.8%</td>
</tr>
</tbody>
</table>


Preterm Birth, by Race/Ethnicity

Percent

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Non-Hispanic White</th>
<th>Non-Hispanic Black</th>
<th>Non-Hispanic Other</th>
<th>Hispanic/Latino</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent</td>
<td>9.6%</td>
<td>14.8%</td>
<td>9.6%</td>
<td>9.3%</td>
</tr>
</tbody>
</table>
Teen Birth Rates - SC

**FIGURE 5.16**
Teen Birth

Rate per 1,000 females

<table>
<thead>
<tr>
<th>Year</th>
<th>South Carolina</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>53.6</td>
<td>41.5</td>
</tr>
<tr>
<td>2010</td>
<td>46.8</td>
<td>36.9</td>
</tr>
<tr>
<td>2013</td>
<td>29.3</td>
<td>23.8</td>
</tr>
<tr>
<td>2016</td>
<td>23.8</td>
<td>20.3</td>
</tr>
</tbody>
</table>

Note: Ages 15-19.

**FIGURE 5.17**
Teen Birth, by Race/Ethnicity

Rate per 1,000 females

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Rate per 1,000 females</th>
</tr>
</thead>
<tbody>
<tr>
<td>non-Hispanic White</td>
<td>20.1</td>
</tr>
<tr>
<td>non-Hispanic Black</td>
<td>28.3</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>38.2</td>
</tr>
</tbody>
</table>

Note: Ages 15-19.
Adequate Prenatal Care Rates-SC

- Non-Hispanic white = 80.0%
- Non-Hispanic black = 70.7%
- Hispanic = 62.3%

**FIGURE 5.13**
Mothers Who Received at Least Adequate Prenatal Care

Healthy People 2020 Goal - 77.6%

South Carolina 71.0%

Note: Adequacy of prenatal care is defined using the Kotelchuck Index, also called the Adequacy of Prenatal Care Utilization Index.
South Carolina Pregnancy-Related Death by Race, 2013-2017

Rate per 100,000 live births

- South Carolina: 24.7
- White: 13.7
- Black and Other: 46.3
- Healthy People 2020 Goal: 11.4
“Individually, we are ONE DROP. Together, we are AN OCEAN.”

- Ryunosuke Satoro
South Carolina Birth Outcomes Initiative (BOI): Working together for healthier moms and babies in South Carolina

• A multi-sector, public/private partnership focused on improving the health of all SC moms and babies
• Collective voice and action at the policy, program and practice levels
• Core leadership team and dedicated workgroups for each strategic priority area
• Active engagement of Medicaid agency and Blue Cross Blue Shield (BCBS) of SC
SC Birth Outcomes Initiative

SC DHHS (Medicaid) → BOI Vision Team → SC Hospital Association
March of Dimes
BlueCross BlueShield
SC DHEC

Perinatal Quality and Safety → Behavioral Health → Care Coordination → Newborn Care → Baby Friendly → Data
SC BOI: Key Accomplishments

• Early elective delivery (EED) prevention- >75% reduction
• Baby Friendly Hospital designation- 15 hospitals/47% of SC births (highest rate in US)
• SC Milk Bank- 100% human milk for preterm infants
• SimCoach mobile simulation training for all birthing hospitals/medical staffs
• Early prenatal Screening, Brief Intervention, and Referral to Treatment (SBIRT) screening for all pregnant women
• Immediate post-partum in-hospital access to long acting contraceptives (LARCs)
SC BOI: key Accomplishments

• CenteringPregnancy group prenatal care program- 45% to 60% reduction in preterm births
• Telehealth-based medication assisted treatment (MAT) for pregnant women w/ opioid use disorder
• Neonatal Abstinence Syndrome (NAS) home management program- mother/baby bonding during treatment
• Safe Sleep promotion program- linked to legislative action requiring in-hospital video viewing by every mom
• Maternal health improvement program- linked to the Alliance for Innovation on Maternal Health program (AIM)
SFY 2018 BY-THE-NUMBERS:

SC BOI Medicaid Initiatives

• Medicaid covered over 60% of births in SC, over 75% in rural counties, and over 80% of African American births.

• Nearly 19,000 female Medicaid recipients of reproductive age received a LARC: IUD or implant. Of these, almost 2,200 were inpatients.

• Approximately 11,000 female Medicaid recipients of reproductive age participated in the SBIRT behavioral screening and intervention initiative.

• About 1,300 Medicaid recipients participated in CenteringPregnancy group care program.

Data Sources: For LARC, SBIRT, and Centering, Medicaid claims data were pulled February and April 2019 using IBM Corporation, Truven Health Analytics LLC. Advantage Suite®, Ad hoc Report Writer. SC RFA UB-04 delivery records as of February 2019 were used to determine the percentage of births covered by Medicaid. SFY Medicaid claims data as of February 2018 were used to determine the percentage of births covered by Medicaid.

Recommended Citation: López-DeFede, A. & Gareau, S. (2019). Mothers & Babies: New Numbers New Measures. Findings presented at the June 2019 South Carolina Birth Outcomes Initiative meeting, Columbia, SC.
Preterm birth by race

<table>
<thead>
<tr>
<th>Race</th>
<th>CP</th>
<th>IPNC</th>
<th>SC Medicaid</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>5.2%</td>
<td>11.7%</td>
<td>14.3%</td>
</tr>
<tr>
<td>White</td>
<td>8.3%</td>
<td>9.8%</td>
<td>10.3%</td>
</tr>
</tbody>
</table>
SC BOI: The Next Stage of Our Journey

• Medicaid 1115 waiver- expanded population eligible for Maternal and Child Health (MCH) coverage; extension of Post-Partum coverage to 12 months

• Full implementation of maternal health program statewide

• Rural MCH improvement plan:
  ➢ Piloting of Centering group pregnancy care in rural community
  ➢ Primary care-based prenatal care supported by telehealth
  ➢ Enhanced global reimbursement for rural MCH providers

• Expanded and enhanced telehealth-based services:
  ➢ Home-based maternal/infant assessment and monitoring

• Comprehensive MCH equity-stratified data portal
Representative Emilia Sykes, Ohio
NCSL Maternal and Child Health Fellow

Representative Cindy Ziemke, Indiana
NCSL Opioid Policy Fellow
PANEL DISCUSSION AND Q & A
ADDITIONAL RESOURCES

- NCSL Maternal and Child Health Legislative Tracking Database
- Maternal Mortality Article, State Legislatures Magazine, NCSL
- NCSL Policy Brief, Preventing Infant and Maternal Mortality: State Policy Options