Housekeeping

• Thank you for joining us today. All lines have been muted to eliminate background noise
• Questions will be addressed at the end of the webinar via the chat box or Q&A
• The webinar recording will be available on the CMQCC website
• Other questions: contact vcape@Stanford.edu
Improving Birth Care, Experiences and Outcomes for, by, and with Black Mothers – a Quality Improvement Approach

Elliott Main, MD
Medical Director
California Maternal Quality Care Collaborative
Professor, Department of OB/GYN
Stanford University School of Medicine
CME Credit Information

- Anthem Blue Cross (Anthem) supports this important work and continuing provider education
- Each webinar participant will receive one (1.0) continuing medical education (CME) unit approved by the American Association of Family Physicians
- Information will be shared at the end of the webinar on how to obtain
About Anthem

- In California, Anthem has been a leading health benefits company in the state since 1937
- Anthem serves over 1.2 million members for the Medi-Cal program in 29 counties
- Strong focus on mobilizing community partnerships to collectively reduce health care disparities
Learning Objectives:

Upon completion of the learning activity, the learner should be able to:

1. Recognize the contributing factors in the variation in maternal morbidity and Caesarean rates in California
2. Demonstrate an understanding of CMQCC’s California Birth Equity Collaborative
3. Translate knowledge into an action plan to further increase self-awareness of birth equity within the learner’s local environment
Disclosures

- DR. MAIN DOES NOT HAVE RELEVANT FINANCIAL RELATIONSHIPS WITH COMMERCIAL INTERESTS.
About CMQCC

- Multi-stakeholder organization established in 2006: providers, state agencies, public groups with focus on Maternal Care
- Hosts California Maternal Mortality Review Committee
- Sister organization with CPQCC (neonatal care)
- Developer of QI toolkits: Early Elective Delivery, OB Hemorrhage, Preeclampsia, VTE, CVD in Pregnancy, and First Cesarean Prevention
- Leads multiple QI Collaboratives (Hemorrhage, HTN, Support for Vaginal Birth)
- Established Maternal Data Center in 2012
Driving Maternity QI at Scale

**TOOLKITS**
Evidence-based toolkits on leading causes of preventable maternal morbidity and mortality

**MATERNAL DATA CENTER**
Near real-time benchmarking data to support hospitals’ quality improvement

**IMPLEMENTATION**
Coaching on how to implement best practices and sharing among member hospitals

**ENGAGEMENT**
Engaging partners around aligned goals and promoting patient awareness
CMQCC Current Projects

**Supporting Vaginal Birth / Reducing Primary Cesareans Collaborative (>90 hospitals)**
- Learning collaborative
- Unit Culture and Provider Attitudes Survey
- Multi-media teaching tools for labor support skills

**Rapid-cycle Data Center:**
- Active members: 213 / 237 hospitals, >95% of CA births (now also WA and OR facilities)
- Developer of perinatal quality metrics
- Public reporting of 4 measures
- User Education and Support for all 3 states

**Sustainability**
- Refresher programs for Hemorrhage and HTN
- Hospital check –up and coaching
- QI Academy for building team QI capacity
- Working with The Joint Commission

CMQCC
CMQCC Current Projects (continued…)

- **Perinatal Sepsis**
  - Taskforce ➔ QI Toolkit

- **Opioid Use Disorder/MAT**
  - Toolkit and metrics
  - Learning collaborative
  - Access to treatment

- **QI Academy: teaching practical tools for change**
  - Expanding QI capacity for hospital teams

- **Pilot Improving Racial Equity**
  - Partnerships: Community—Project—Hospital
  - Assessment and evaluation
  - Education and learning collaborative
Health Disparities and Health Inequities Among Black Mothers and Infants

First, some language discussion
Equality vs. Equity?

Equality

Equity
Equity vs. Disparities

- Health equity and health disparities are intertwined
- Health equity means social justice in health (i.e., no one is denied the possibility to be healthy for belonging to a group that has historically been economically/socially disadvantaged)
- Health disparities are the metric we use to measure progress toward achieving health equity

Braveman P. What are health disparities and health equity? We need to be clear. Public Health Reports 2014; 129:5-8.
Health Disparity (Healthy Person 2020)
- …a health difference that is closely linked with economic, social, or environmental disadvantage. Health disparities adversely affect groups of people who have systematically experienced greater social or economic obstacles to health…
- The quantity that separates a group from a reference point, often measured from the most favorable group rate

Health Inequity (Boston Public Health Commission)
- Difference in health that is not only unnecessary and avoidable but, in addition, are considered unfair and unjust
- Rooted in social injustices that make some population groups more vulnerable to poor health than other groups
Preterm by race/ethnicity: United States, 2013-2015 Average

Percent of live births

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hispanic</td>
<td>9.1</td>
</tr>
<tr>
<td>White</td>
<td>8.9</td>
</tr>
<tr>
<td>Black</td>
<td>13.3</td>
</tr>
<tr>
<td>American Indian/Alaska</td>
<td>10.5</td>
</tr>
<tr>
<td>Native</td>
<td></td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>8.5</td>
</tr>
<tr>
<td>Total</td>
<td>9.6</td>
</tr>
</tbody>
</table>

1.5X

March of Dimes, PeriStats (May 1 2019. (based on data from NCHS)
Infant mortality rates by race/ethnicity: United States, 2011-2013 Average

Rate per 1,000 live births

- Hispanic: 5.1
- White: 5.1
- Black: 11.3
- American Indian/Alaska Native: 8.3
- Asian/Pacific Islander: 4.0
- Total: 6.0

2.8X

March of Dimes, PeriStats (May 1 2019. (based on data form NCHS)
Contributors to Health and Health Care Inequities

Health system factors
- Health services organization, financing, delivery
  - QI

Structural factors
- Poverty/wealth
- Unemployment
- Stability of housing
- Food security
- Racism
- Implicit/explicit biases
- Meeting demands
- Multidisciplinary teams

Provider factors
- Knowledge and attitudes
- Competing demands
- Implicit/explicit biases

Patient factors
- Beliefs and preferences
- Race/ethnicity, culture, family
- Education and resources
- Biology

Adapted from Kilbourne et al, AJPH 2006 and Allison Bryant MD MGH
Maternal Mortality Rate, California and United States; 1999-2013

California: ~500,000 annual births, 1/8 of all US births

Maternal Deaths per 100,000 Live Births

HP 2020 Objective – 11.4 Deaths per 100,000 Live Births

How can QI Projects Affect Equity?

A rising tide raises all boats!

I know of a few more boats, but they’re all full of holes!
Important Case Study:

Breast Cancer Mortality Among Non-Hispanic Blacks and Non-Hispanic Whites in Chicago: 1990-2005

Adapted from:
Possible Outcomes of QI Projects for Equity

- Neutral: More of the same
- Narrowing: Shows Improvement
- Widening: Gap worsens

Many Projects: Childhood Immunizations
NYC Maternal Mortality
Maternal Mortality Rate, By Race/Ethnicity
Three-Year Moving Averages; 1999-2013

California Only Data

Maternal Mortality Ratio
(per 100,000 live births)

Mortality Disparity Ratio

White, Non-Hispanic
African-American, Non-Hispanic
Hispanic
Asian, Non-Hispanic
AA-W Mortality Disparity Ratio

Maternal Mortality Rate, By Race/Ethnicity
Three-Year Moving Averages; 1999-2013

California Only Data

Neutral
More of same
Rates of Severe Maternal Morbidity & Select Risk Factors Among Racial/Ethnic Groups, **California**, 2008-2015 Q3 (8+ years)

<table>
<thead>
<tr>
<th>Total sample (with known race): ~3.1 million</th>
<th>Hispanic/Latina</th>
<th>Non-Hispanic White</th>
<th>Asian/Pacific Islander</th>
<th>Non-Hispanic Black</th>
<th>American Indian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mothers (approx.)</td>
<td>52%</td>
<td>29%</td>
<td>13%</td>
<td>5.5%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Severe Maternal Morbidity (SMM)</td>
<td>1.5%</td>
<td>1.2%</td>
<td><strong>1.8X</strong></td>
<td>2.2%</td>
<td>1.9%</td>
</tr>
<tr>
<td>Severe Maternal Morbidity Excluding Cases with Blood Transfusion alone</td>
<td>0.6%</td>
<td>0.5%</td>
<td><strong>2.0X</strong></td>
<td>1.0%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Pre-preg. Obesity</td>
<td>27%</td>
<td>17%</td>
<td>8%</td>
<td>30%</td>
<td>35%</td>
</tr>
<tr>
<td>Pre-preg. Comorbidity</td>
<td>6%</td>
<td>8%</td>
<td>6%</td>
<td>14%</td>
<td>11%</td>
</tr>
<tr>
<td>Maternal Age ≥35 years at Delivery</td>
<td>14%</td>
<td>23%</td>
<td>30%</td>
<td>14%</td>
<td>12%</td>
</tr>
<tr>
<td>Total Cesarean</td>
<td>33%</td>
<td>33%</td>
<td>33%</td>
<td>38%</td>
<td>34%</td>
</tr>
</tbody>
</table>
California Birth Equity Collaborative: Improving Care for, by and with Black Mothers: Background and Planning
Why are birth outcomes for Black Women so much worse?

Usual explanation by doctors and nurses is that black women have more obesity, more hypertension, more diabetes, and more social disadvantages...
What If We Looked At B:W Disparity In Severe Maternal Morbidity (SMM) Only Among College Graduates?

And adjusted for age, BMI and other clinical and demographic risk factors…

Black-White disparity in SMM is highest among college graduates (2.2x higher than whites)

Looking At Absolute Rates:
- SMM rate in Black women with college degrees: 2.4%
- SMM rate in White women without high school diplomas: 1.6%

California linked data: 2010-2015 Q3
Adjusted rates of severe maternal morbidity for black and white women by black-serving hospital status

Severe Maternal Morbidity (SMM) Black to White Ratios by Hospital 2015-2016

Statewide rates:
- Total: 1.6%
- White: 1.2%
- Black: 2.4%

California Hospitals With At Least 150 Black Births (N=90, with 85.6% of Black Births)
Low-Risk First-Birth Cesarean (NTSV) Black to White Ratios by Hospital 2015-2016

Statewide rates:
- Total: 25.3%
- White: 24.8%
- Black: 30.0%

California Hospitals With At Least 150 Black Births (N=90, with 85.6% of Black Births)
Themes from Literature and Stakeholders

- Fear and lack of trust between black women and the clinicians that care for them
- Lack of shared acknowledgement, perspectives and understanding of diversity, equity and inclusion
- Lack of shared language and meaning between black families and the clinicians that care for them
- Inability to assess disparities because they are not reliably measured and acknowledged
- Lack of effective meaning and sustainable collaboration and coordination between community and hospital.
Serena Williams’ Story of Not Being Listened To

Despite history of multiple PE, her doctors and nurses minimized her PP complaints and refused a CT scan (later positive for multiple small PE)

Lt. Comdr. Shalon Irving PhD

Nothing Protects Black Women From Dying in Pregnancy and Childbirth

Not education. Not income. Not even being an expert on racial disparities in health care.

by Nina Martin, ProPublica, and Renee Montagne, NPR News, Dec. 7, 2017, 8 a.m. EST
Unfair Treatment Due to Race or Ethnicity
by Race/Ethnicity, California, 2016

BASE: ALL WOMEN WHO ANSWERED THIS QUESTION (n = 2,502)

During your recent hospital stay when you had your baby, how often were you treated unfairly because of your race or ethnicity?

- Black
  - Sometimes: 8%
  - Usually: <1%
  - Always: 3%
  - Total: 11%

- Asian/Pacific Islander
  - Sometimes: 6%
  - Usually: 2%
  - Always: <1%
  - Total: 8%

- Latina
  - Sometimes: 4%
  - Usually: <1%
  - Always: 1%
  - Total: 5%

- White
  - Sometimes: 1%
  - Usually: 1%
  - Total: 2%

Notes: “Never” not shown. Not all eligible respondents answered each item. P < .01 for differences by race/ethnicity.

California
Listening to Mothers
2017 –
Unfair Treatment
Experience of Harsh Treatment by Race/Ethnicity, California, 2016

BASE: ALL WOMEN WHO ANSWERED THIS QUESTION

During your recent hospital stay when you had your baby, did a nurse or maternity care provider ever...

... use harsh, rude, or threatening language? (n = 2,511)
- Black: 9%
- Asian/Pacific Islander: 9%
- White: 8%
- Latina: 7%

... handle you roughly? (n = 2,514)
- Black: 11%
- Asian/Pacific Islander: 11%
- White: 8%
- Latina: 7%

8% Overall

Notes: Not all eligible respondents answered each item. Differences by race/ethnicity were not significant.
CA Birth Equity Collaborative

Aim: To improve birth care, experiences and outcomes by, for and with Black mothers

- In partnership with the Black community, multi-disciplinary, multi-organization team effort
- To build tools and QI strategies for changing the medical system: hospitals, physicians, staff, outpatient
- To pilot in a QI collaborative with a variety of CA hospitals, starting in the next months

Karen A. Scott, MD, MPH
OB/GYN with years of working with CBO’s to improve maternity care, and a University educator on racial justice
Two-year pilot goal: To partner with community stakeholders and hospitals in the development and testing of the following:

- **Community-informed model to develop patient-reported experience metric (PREM)**
- **Online interactive, interprofessional education modules**
- **Best practices for developing effective, sustainable community-hospital partnerships**

- Raise awareness & knowledge
- Increase providers’ understanding
- Transform patient-centered communications
Keys to success

- Create a shared language and understanding about what birth equity means
- Acknowledge & amplify the resilience of community informed knowledge
- Establish strategies to create and assess sustainable and respectful community-hospital partnerships
- Identify opportunities for education advancing a culture of birth equity
- Create community-informed patient experience measures
Transform Patient Voices into Action

- Co-develop with Black Community
- Culture humility framework
- Community informed knowledge
  - Respectful and dignified care in relationships, interactions, communication and shared decision making between patients and hospitals, and communities and hospitals
- Patient reported experience: stories and on-going measure reporting to drive QI
Mobilize and Connect Partners: Community-Hospital Engagement

Structural Changes to Establish On-going Connections / Relationships
Educate/Train All Staff

- Raise awareness & knowledge
- Increase cultural sensitivity
- Recognize bias (implicit and explicit)
- Provide effective patient-centered communications to transform shared decision making
- Develop peer leadership and coaching
Hospital QI – Advancing Equity

Racial Disparities Gap Analysis Report

Measure: Low Risk Cesarean Birth: NTSV (Nulliparous, Term, Singleton, Vertex) PC-02 Current
Definition: NTSV: Cesarean deliveries among “NTSV” births: 1) Nulliparous (first births); 2) Term (≥37 week gestation); 3) Singleton (no twins or other multiples); 4) Vertex (baby head presenting)
Target: Healthy People 2020 Goal = 23.9% NTSV rate

Severe Maternal Mortality: SMM
Definition: SMM: Delivering mothers who had major complications with: diagnoses typical for an ICU admission; major surgeries such as hysterectomy; or significant procedures such as blood transfusions.

2017 Measure Analysis of Drivers

<table>
<thead>
<tr>
<th>2017 Measure Analysis of Drivers</th>
<th>White</th>
<th>Black</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL SMM RATE</td>
<td>1.9%</td>
<td>4.9%</td>
</tr>
<tr>
<td>Portion from each underlying cause:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hemorrhage (all types)</td>
<td>23.1%</td>
<td>40.0%</td>
</tr>
<tr>
<td>Hypertensive Disorders</td>
<td>9.5%</td>
<td>6.7%</td>
</tr>
<tr>
<td>Cardiac disease</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Sepsis</td>
<td>0.0%</td>
<td>9.7%</td>
</tr>
<tr>
<td>Transfusion</td>
<td>14.3%</td>
<td>34.0%</td>
</tr>
<tr>
<td>Other</td>
<td>4.8%</td>
<td>4.9%</td>
</tr>
<tr>
<td>TOTAL DENOMINATOR</td>
<td>210</td>
<td>206</td>
</tr>
</tbody>
</table>

Recommendation: Review individual numerator cases in the Maternal Data Center to identify opportunities for improvement.
www.datacenter.cmqcc.org
Measures of success

Working together the CA Birth Equity Collaborative, communities, hospitals, and advisors will:

- Show improvement in respect and dignity PREM
- Demonstrate best practices for respectful & culturally response partnerships
- Engage hospital staff in completion of e-learning modules
- Effective use of equity dashboard by hospitals
- Advance a culture of birth equity
Translate the AIM Equity Bundle into a QI Toolkit

Key Recommendations

- Collection of self-identified race/ethnicity/language
- Disparities dashboard
- Maternal mortality and morbidity reviews
- Community participation in quality and safety committees
- Bias training--PLUS
- Promoting culture of equity
- Increase provider diversity

www.SafeHealthCareForEveryWoman.org
Roadmap to Reduce Disparities

1 Linking Quality and Equity
2 Creating a Culture of Equity
3 Diagnosing the Disparity
4 Designing the Activity
5 Securing Buy-in
6 Implementing Change

University of Chicago
Robert Wood Johnson

https://www.solvingdisparities.org/tools/roadmap
Actions you can take immediately

- Learn about birth equity – see resource list
  - Robin Diangelo. *White Fragility—Why it’s so hard for white people to talk about racism*. Boston Beacon Press. 2018

- Examine your organization’s data—by race!

- Talk to your patients and community organizations—and partner with them!

- Engage your hospital’s leadership
Resources
(for more see: https://www.cmqcc.org/qi-initiatives/birth-equity/resources)

- Why Texas is the Most Dangerous U.S. State to Have a Baby https://www.governing.com/topics/health-human-services/gov-maternal-infant-mortality-pregnant-women-texas.html
- Lost Mothers: Maternal Care and Preventable Deaths https://www.propublica.org/series/lost-mothers
- Pregnancy Related Deaths: https://www.cdc.gov/reproductivehealth/maternalinfanthealth/pregnancy-relatedmortality.htm
- Maternal Health Care is disappearing from rural America https://www.scientificamerican.com/article/maternal-health-care-is-disappearing-in-rural-america/
Thank you!!

Questions?

Visit: www.CMQCC.org

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