

# Maternal Morbidity and Mortality Web Meeting 4

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### Welcome



#### **Agenda**

- Welcome and Opening Remarks
- Meeting Objectives
- Roll Call
- Objectives of the Recommendations Report
- Review of Frameworks
- Committee Discussion
- Opportunity for Public Comment
- Next Steps



#### **Meeting Objectives**

- 1. Review purpose and objectives of the measurement frameworks and recommendations report
- 2. Discuss content and development of measurement frameworks
- Discuss measures and measure concepts that can stem from the frameworks



#### **Standing Committee**

- Lekisha Daniel-Robinson, MSPH (Co-chair)
- Elizabeth Howell, MD, MPP (Co-chair)
- Timoria McQueen Saba (Co-chair)
- Angela Anderson, CNM, DNP, FACNM
- Katherine Barrett, MPH
- Debra Bingham, DrPH, RN, FAAN
- Emily Briggs, MD, MPH, FAAFP
- Beth Ann Clayton, DNP, CRNA, FAAN
- Charlene Collier, MD, MPH, MHS
- Joia Crear-Perry, MD
- U. Michael Currie, MPH, MBA
- Eugene Declercq, PhD, MS, MBA
- Mary-Ann Etiebet, MD, MBA
- Dawn Godbolt, PhD, MS
- Kimberly Gregory, MD, MPH
- Kay Johnson, MPH, MEd

- Deborah Kilday, MSN
- Elliott Main, MD
- Claire Margerison, PhD, MPH
- Kate Menard, MD, PhD
- Katrina Nardini, CNM, WHNP-BC, MSN, MPH, FACNM
- LaQuandra Nesbitt, MD, MPH
- Nicole Purnell
- Diana Ramos, MD, MPH, FACOG
- Elizabeth Rochin, PhD, RN, NE-BC
- Rachel Ruel, MSW, CLC, Community Doula
- Amber Weiseth, DNP, MSN, RNC-OB
- Amanda Williams, MD, MPH
- Tiffany Willis, PsyD
- Susan Yendro, RN, MSN



#### **Federal Liaisons**

- Girma Alemu, MD, MPH
  - Health Resources and Services Administration
- Wanda Barfield, MD, MPH, RADM USPHS
  - Centers for Disease Control and Prevention
- Renee E. Fox, MD
  - Centers for Medicare & Medicaid Services
- Erin Patton, MPH, CHES
  - Centers for Medicare & Medicaid Services
- Marsha R. Smith, MD, MPH, FAAP
  - Centers for Medicare & Medicaid Services

# Structure for Measurement Frameworks and Recommendations Report



### Structure of the Recommendations Report

- Two Frameworks
  - One for Maternal Mortality
  - One for Maternal Morbidity
- Recommendations for approaches to Maternal Morbidity and Mortality Measurement



#### Requirements of the Recommendations Report

- 1. Detail separate measurement frameworks for maternal morbidity and mortality
- 2. Analyze, synthesize and integrate recommendations of **specific long- and short-term approaches to MMM measurement** 
  - » Including how to use measurement to improve MMM outcomes
  - » *Including* innovative actionable approaches
  - » Including how the measure may be used across disparate state systems
  - » Including how the measure may be risk-adjusted for national comparisons
  - » Short-term approaches should enhance current outcomes
  - » Long-term approaches should consider a 5-year timeframe
  - » Must consider other influencing factors for each specific outcome and disparity



#### An NQF Framework is...

#### A conceptual model for organizing ideas about

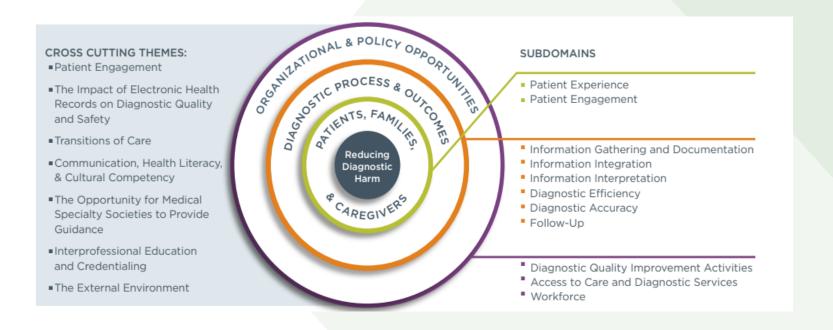
- what is important to measure for a topic area
- how measurement should take place (whose performance should be measured)
- care settings where measurement is needed
- when measurement should occur
- which individuals or organizations should be included in measurement

A structure for organizing currently available measures, areas where gaps in measurement exist, and prioritization for future measurement development

A roadmap on how performance measurement can be used to improve maternal morbidity and mortality outcomes



### The Framework – Diagnostic error



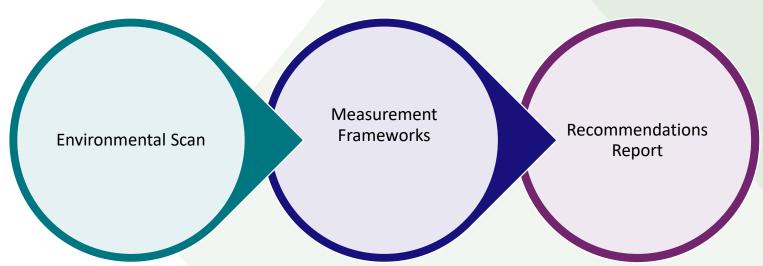


#### **Prioritizing Measures**

- 1. Identify existing measures of maternal morbidity and mortality
- 2. Categorize and prioritize existing measures
- 3. Identify interventions intended to improve maternal morbidity and mortality outcomes and the gaps in care (and measurement they address)
- 4. Identify existing and new measure concepts that address identified gaps in care and measurement



#### **Transition from E-Scan to Framework**



- Definitions
- Summary of Literature
- Risk Factors
- Existing Measures & Concepts

- Domains
  - Sub-domains
    - Measures & Measure Concepts
- Frameworks
- Measures & Measure Concepts
- Final recommendations for measurement

### **Existing Maternal Frameworks**



**Discrimination** 

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Racism

#### Adapted from Dr. Elizabeth Howell

#### Patient Factors

- Socio-demographics: age, education, poverty, insurance, marital status, employment, language, literacy, disability
- Knowledge, beliefs, health behaviors
- Psychosocial: stress, weathering, social support

#### Community/ Neighborhood

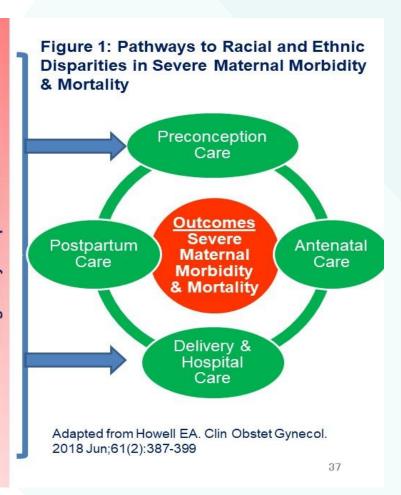
- Community, social network
- Neighborhood: crime, poverty, built environment, housing

#### Clinician Factors

 Knowledge, experience, implicit bias, cultural competence, communication

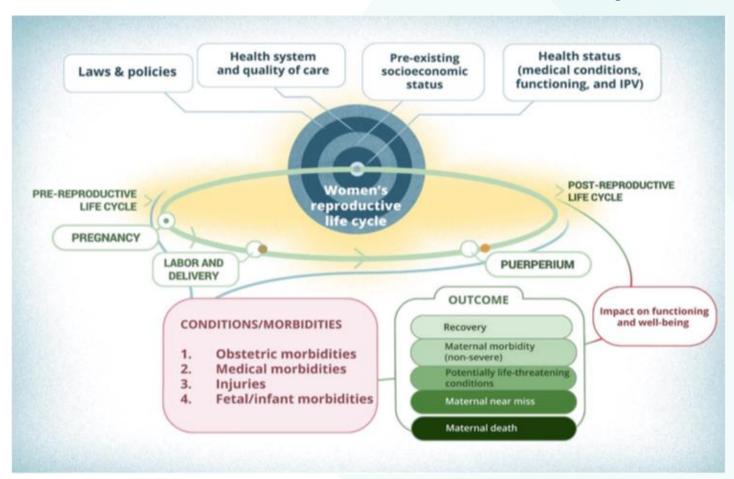
#### System Factors

 Access to high quality care, transportation, structural racism, policy Health status: comorbidities (e.g. HTN, DM, obesity, depression); Pregnancy complications



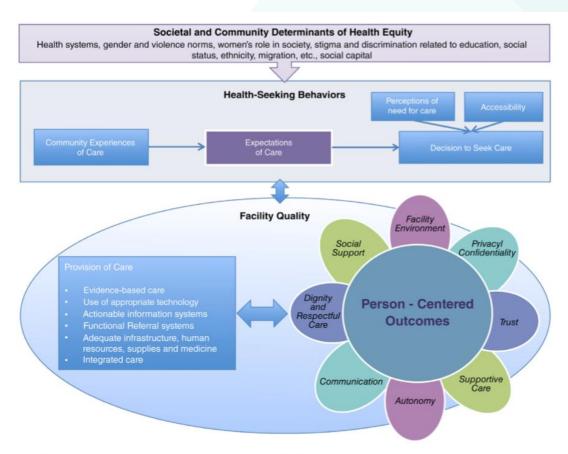


### **WHO Framework for Maternal Morbidity**





# Person-Centered Framework for Reproductive Health Equity





### **Proposed Measurement Frameworks**

#### Cross-Cutting Themes<sup>1</sup>

- Racism & Discrimination
- Social Determinants of Health
- Person-Centered Care

	Morbidity	Mortality
Domains	Sub-do	omains
<ol> <li>Pregnancy – Related</li> <li>Pregnancy – Associated</li> </ol>	Preconception	
	Prenatal	
	Labor & Delivery	
	Post-Partum	
	Future Reproductive Life Cycle	

<sup>&</sup>lt;sup>1</sup> Additional cross-cutting themes from the E-Scan can be included within the Frameworks. Those listed are suggestions



### **Maternal Morbidity Framework**

- What are the critical domains of maternal morbidity measurement?
  - Suggestions
    - » Preconception
    - » Prenatal
    - » Labor & Delivery
    - » Postpartum



### **Maternal Mortality Framework**

- What are the critical domains of maternal mortality measurement?
  - Suggestions:
    - » Pregnancy-related mortality
    - » Pregnancy-associated mortality
    - » Antenatal mortality
    - » Delivery-related mortality
    - » Postpartum mortality/Post-discharge mortality

### **Committee Discussion**



#### **Discussion Questions**

- Developing Two Frameworks
  - What are the key differences in the contributors of morbidity and mortality?
  - What are the key considerations for measurement that should be included in the framework?
- What are the essential domains/subdomains?
- What framework components are overarching?

# **Existing Measures & Measure Concepts**

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# Existing Morbidity Measures **Sub-domain: PRECONCEPTION**

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NQF ID or Measure Source	Measure Title	Measure Description	
NQF 2903	Contraceptive Care  – Most and  Moderately Effective  Methods	The percentage of women aged 15-44 years at risk of unintended pregnancy that is provided a most effective (i.e., sterilization, implants, intrauterine devices or systems (IUD/IUS)) or moderately effective (i.e., injectables, oral pills, patch, ring, or diaphragm) method of contraception.	
NQF 2904	Contraceptive Care – Access to LARC	Percentage of women aged 15-44 years at risk of unintended pregnancy that is provided a longacting reversible method of contraception (i.e., implants, intrauterine devices or systems (IUD/IUS).	
Behavioral Risk Factor Surveillance System	Well-Woman Visit	Percent of women, ages 18 through 44, with a preventive medical visit in the past year	



### Morbidity Measure Concepts **Sub-Domain: PRECONCEPTION**

- Percentage of female clients ages 15 to 44 who are at risk of unintended pregnancy, that adopt or continue use of FDAapproved methods of contraception that are MOST effective or MODERATELY effective
- Percentage of female clients ages 15 to 44 who are at risk of unintended pregnancy, that adopt or continue use of FDAapproved methods of contraception that are long-acting reversible contraception



# Existing Morbidity Measures **Sub-domain: PRENATAL**

NQF ID or Measure Source	Measure Title	Measure Description
NQF 1517 (No Longer Endorsed)	Prenatal and Postpartum Care: Timeliness of Prenatal Care (PPC-CH)	Rate 1: Timeliness of Prenatal Care. The percentage of deliveries that received a prenatal care visit as a member of the organization in the first trimester or within 42 days of enrollment in the organization.
NQF 0582 (No Longer Endorsed)	Diabetes and Pregnancy: Avoidance of Oral Hypoglycemic Agents	This measure identifies pregnant women with diabetes who are not taking an oral hypoglycemic agent.
NQF 1391 (No Longer Endorsed)	Frequency of Ongoing Prenatal Care (FPC)	The percentage of Medicaid deliveries that had the following number of expected prenatal visits:  • less than 21 percent of expected visits.  • 21 percent—40 percent of expected visits.  • 41 percent—60 percent of expected visits.  • 61 percent—80 percent of expected visits.  • greater than or equal to 81 percent of expected visits.
NQF 0014 (No Longer Endorsed)	Prenatal Anti-D Immune Globulin	Percentage of D-negative, unsensitized patients who gave birth during a 12-month period who received anti-D immune globulin at 26-30 weeks gestation.



## Existing Morbidity Measures **Sub-domain: PRENATAL continued**

NQF ID or Measure Source	Measure Title	Measure Description
NQF 0012 (No Longer Endorsed)	Prenatal Screening for Human Immunodeficiency Virus (HIV)	Percentage of patients who gave birth during a 12-month period who were screened for HIV infection during the first or second prenatal care visit.
National Vital Statistics System	Early Prenatal Care	Percentage of pregnant women who receive prenatal care beginning in the first trimester
Pregnancy Risk Assessment Monitoring System	Preventive Dental Visit – Pregnancy	Percent of women who had a preventive dental visit during pregnancy
National Vital Statistics System	Smoking – Pregnancy	Percent of women who smoke during pregnancy



### Morbidity Measure Concepts **Sub-Domain: PRENATAL**

- Proportion of women who receive antenatal assessments by 13 weeks of pregnancy
- Proportion of women with eclampsia treated with magnesium sulphate
- Proportion of women with severe pre-eclampsia who were treated with magnesium sulphate
- Proportion of women with singleton pregnancies and threatened preterm labor who receive corticosteroids
- Proportion of women with threatened preterm labor treated with magnesium sulphate
- Proportion of women who are treated with calcium channel blockers for inhibiting preterm labor
- Percent of women with night blindness in last pregnancy



# Existing Morbidity Measures **Sub-domain: LABOR & DELIVERY**

NQF ID or Measure Source	Measure Title	Measure Description
National Vital Statistics System	Low-Risk Cesarean Deliveries	Percent of cesarean deliveries among low-risk first births
HCUP – State Inpatient Databases	Severe Maternal Morbidity	Rate of severe maternal morbidity per 10,000 delivery hospitalizations
CMS Hospital Compare	Early Elective Delivery	Percent of non-medically indicated early elective deliveries
NQF 0652 (No Longer Endorsed)	Rh immunoglobulin (Rhogam) for Rh negative pregnant women at risk of fetal blood exposure.	Percent of Rh-negative pregnant women aged 14-50 years at risk of fetal blood exposure who receive Rh-Immunoglobulin in the emergency department.
NQF 0471	PC-02: Cesarean Birth (PC02-CH)	Percentage of nulliparous women with a term, singleton baby in a vertex position delivered by cesarean birth (C-section)
NQF 0470	Incidence of Episiotomy	Percentage of vaginal deliveries (excluding those coded with shoulder dystocia) during which an episiotomy is performed.



## Existing Morbidity Measures **Sub-domain: LABOR & DELIVERY continued**

NQF ID or Measure Source	Measure Title	Measure Description
NQF 0473 (No Longer Endorsed)	Appropriate DVT prophylaxis in women undergoing cesarean delivery	Current ACOG and SMFM recommendations call for the use of pneumatic compression devices in all women undergoing cesarean delivery who are not already receiving medical VTE prophylaxis.
NQF 0472 (No Longer Endorsed)	Appropriate Prophylactic Antibiotic Received Within One Hour Prior to Surgical Incision – Cesarean section.	Percentage of patients undergoing cesarean section who receive appropriate prophylactic antibiotics within 60 minutes of the start of the cesarean delivery, unless the patient is already receiving appropriate antibiotics
NQF 0469/0469e	PC-01: Elective Delivery (PC01-AD)	This measure assesses patients with elective vaginal deliveries or elective cesarean births at >= 37 and < 39 weeks of gestation completed.
NQF 1746 (No Longer Endorsed)	Intrapartum Antibiotic Prophylaxis for Group B Streptococcus (GBS)	Percentage of pregnant women who are eligible for and receive appropriate intrapartum antibiotic prophylaxis (IAP) for GBS



### Morbidity Measure Concepts **Sub-Domain: LABOR & DELIVERY**

- Proportion of women undergoing caesarean section who receive antibiotic therapy
- Proportion of women with preterm rupture of membranes (PRM)
   who receive antibiotic treatment
- Proportion of women who are administered uterotonics in the third stage of labor
- Proportion of women delivering at term who had group B streptococcus (GBS) screening at 35 to 37 weeks' gestation
- Proportion of women with term pregnancies and a breech presentation in which external cephalic version is performed or offered
- Proportion of women induced with an indication of post-dates who are at less than 41 weeks' gestation at delivery

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### Morbidity Measure Concepts **Sub-Domain: LABOR & DELIVERY continued**

- Proportion of women with labor induction who give birth after 41 weeks of gestation
- Proportion of women whose second-degree perineal tear or episiotomy is repaired with continuous suture
- Proportion of pregnant women having a planned caesarean section who have the procedure carried out at or after 39 weeks 0 days
- Rate of repeat caesarean section in low-risk women prior to 39 weeks' gestation
- Proportion of unjustified episiotomies
- Proportion of women having perineal shaving on admission to the delivery room
- Proportion of women whose peritoneum is sutured at caesarean delivery



### Morbidity Measure Concepts **Sub-Domain: LABOR & DELIVERY continued**

- Proportion of women who are given an enema during labor
- Rate of uterine rupture
- Proportion of women with prolonged labor
- Births without obstetric intervention
- Instrumental vaginal delivery rate
- Caesarean section before labor
- Caesarean section during labor
- Episiotomy rate
- Incidence of tear of the perineum
- Maternal Intensive Care Unit (ICU) transfer and/or admission



# Existing Morbidity Measures **Sub-domain: POSTPARTUM**

NQF ID or Measure Source	Measure Title	Measure Description
NQF 1517 (No Longer Endorsed)	Prenatal and Postpartum Care: Postpartum Care (PPC-AD)	Rate 2: Postpartum Care. The percentage of deliveries that had a postpartum visit on or between 21 and 56 days after delivery.
NQF 2902	Contraceptive Care — Postpartum Women Ages 15-44 (CCP-AD)	Among women ages 15 through 44 who had a live birth, the percentage that is provided:  1) A most effective (i.e., sterilization, implants, intrauterine devices or systems (IUD/IUS)) or moderately (i.e., injectables, oral pills, patch, ring, or diaphragm) effective method of contraception within 3 and 60 days of delivery.  2) A long-acting reversible method of contraception (LARC) within 3 and 60 days of delivery.
MIPS CQM	Maternity Care: Post- Partum Follow-up and Care Coordination	Percentage of patients, regardless of age, who gave birth during a 12-month period who were seen for post-partum care within 8 weeks of giving birth who received a breast feeding evaluation and education, post-partum depression screening, post-partum glucose screening for gestational diabetes patients, and family and contraceptive planning



## Existing Morbidity Measures **Sub-domain: POSTPARTUM continued**

NQF ID or Measure Source	Measure Title	Measure Description
MIPS CQM, PCMH 2017	Maternal Depression Screening	The percentage of children who turned 6 months of age during the measurement year, who had a face-to-face visit between the clinician and the child during child's first 6 months, and who had a maternal depression screening for the mother at least once between 0 and 6 months of life
Pregnancy Risk Assessment Monitoring System	Postpartum Depression	Percent of women who experience postpartum depressive symptoms following a recent live birth



### Morbidity Measure Concepts **Sub-Domain: POSTPARTUM**

- Proportion of Rh-negative women who are given Anti-D within 72 hours after the birth of a Rh-positive or Rh-undetermined baby
- Proportion of women with severe systemic infection or sepsis in postnatal period, including readmissions



### Morbidity Measure Concepts Multi-Domain or OTHER

- Proportion of health professionals who use double gloves when attending a woman with a blood-borne disease
- Blood transfusion during and/or after delivery
- Incidence of severe maternal morbidity
- Intra hospital women with life-threatening conditions (WLTC) ratio
- Severe maternal outcome ratio
- Maternal near miss incidence ratio
- Met need for EmOC



### **Mortality Measure Sub-Domains**

#### **Suggested Sub-Domains:**

- Antenatal
- Delivery Related Mortality
- Postpartum Mortality / Post-Discharge Mortality



### **Existing Mortality Measures**

Measure Source	Measure Title	Measure Description	Sub-Domain
National Vital Statistics System	Maternal Mortality Rate	Maternal mortality rate per 100,000 live births	
CDC – Pregnancy Mortality Surveillance System	Pregnancy- Related Mortality Ratio	The number of pregnancy-related deaths for every 100,000 live births, defined as the death of a woman while pregnant or within 1 year of the end of a pregnancy from any cause relate to or aggravated by the pregnancy or its management.	



### Mortality Measure Concepts **OTHER**

- Maternal near miss: mortality ratio
- Case fatality rate
- Case fatality rate all complications
- Institutional maternal mortality ratio (per 100,000 deliveries)
- Intra hospital mortality index

# Remaining Open Discussion Items on Environmental Scan



#### **CMS Comments for Discussion**

- What other contributors of morbidity are missing from the environmental scan?
- What areas of policy should be included in the environmental scan?
- Additional general comments from Committee?

### **Opportunity for Public Comment**

### **Next Steps**



#### Next Steps – Environmental Scan & Recommendations Report

Deliverable	Due Date
Environmental Scan	
Environmental Scan Draft #1 – submitted to CMS	June 8, 2020
Environmental Scan Draft #2 – submit to CMS	July 15, 2020
Environmental Scan 21-day Public Comment Period	July 31 – Aug. 20, 2020
Recommendations Report	
Recommendations Report Outline	July 31, 2020
Recommendations Report on Maternal Morbidity and Mortality measurement - Draft 1	February 18, 2021
Recommendations Report on Maternal Morbidity and Mortality measurement - Draft 2	March 18, 2021
30-day Comment period on Recommendations Report on Maternal Morbidity and Mortality measurement	April 6 – May 5, 2021
Final Recommendations Report	August 13, 2021



### **Web Meetings Timeline**

Meeting	Торіс	Date
Web Meeting 5:	Discussion of Scan Public Comments	September 10, 2020
Web Meeting 6:	Continued guidance on measurement frameworks	November 16, 2020
Web Meeting 7:	Finalize frameworks and report	January 26, 2021
Web Meeting 8:	Post-Comment Call and Project Wrap Up	May 26, 2021

### THANK YOU.

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