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# Maternal Morbidity and Mortality Web Meeting 3

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# Welcome



## Agenda

- Welcome and Opening Remarks
- Meeting Objectives
- Roll Call
- Discussion of Environmental Scan Sections
- Opportunity for Public Comment
- Next Steps



## Meeting Objectives

1. Review project accomplishments to date
2. Obtain Committee feedback on key sections of the Environmental Scan
3. Discuss next steps

## 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

# Environmental Scan



## Summary of Committee Comments

- 11 out of 30 members sent comments/edits
- Most comments addressed
  - ▣ Standard Processes of Care
  - ▣ Innovations in Measure Methodologies
  - ▣ Existing Measures
  - ▣ Measure Concepts and Gaps





## Environmental Scan: Outline

- Background
- Project Overview
- Environmental Scan Methodology
- **Overarching Influencing Factors (New)**
- Maternal Morbidity Prevalence/Incidence
- Maternal Mortality Prevalence/Incidence
- Outcomes Assessment
- Standard Processes for Maternal Care Delivery
- Innovations in Measure Methodologies
- Environmental Scan Findings

## Environmental Scan: Discussion Items

Time	Section of Outline for Discussion
12:10pm	Overarching Influencing Factors for Maternal Morbidity and Mortality (30 min.)
12:40pm	Morbidity & Mortality prevalence/incidence (20 min.)
1:00pm	AIM Bundles (20 min.)
1:20pm	Outcomes assessment (20 min.)
1:40pm	Environmental Scan Findings (10 min.) <ul style="list-style-type: none"><li>Existing Measures, Measure concepts and gaps</li></ul>



# Overarching Influencing Factors for Maternal Morbidity and Mortality

- Race
- Racism
  - ▣ Structural Racism
- Discrimination
- Implicit Bias
- Social Determinants of Health
  - ▣ Socio-economic status
  - ▣ Housing Insecurity and Lack of Safe/Healthy Housing
  - ▣ The Built Environment
  - ▣ Food Insecurity and Food Deserts/Food Swamps
  - ▣ Unstable employment or Underemployment



## Influencing Factors

### Discussion Questions:

- Are there other influencing factors that should be included?



# Maternal Morbidity Prevalence/Incidence

## Other Risk Factors of Maternal Morbidity

- Medical Risk Factors
  - ▣ Confounding SMM associations
    - » *“Specific diagnoses and procedures constituting maternal morbidity may be medical risk factors for another type of SMM, confounding associations and challenging risk adjustment.”*
- Non-Medical Risk Factors
  - ▣ Racism
  - ▣ Implicit Bias
  - ▣ Social Determinants of Health



## Other Risk Factors of Maternal Morbidity

### Discussion Questions:

- The non-medical risk factors for morbidity repeat the risk factors mentioned previously (racism, implicit bias and SDoH).
  - ▣ Does the committee agree with this approach?
  - ▣ Are there other non-medical risk factors that should be included?

## Maternal Mortality

- The Environmental Scan describes direct vs. indirect obstetric deaths, then pregnancy-related vs. pregnancy-associated deaths, followed by overall rates/ratios
- The Scan then discusses each of these causes of maternal death
  - ▣ Cardiovascular disease
  - ▣ Infection
  - ▣ Hemorrhage
  - ▣ Thromboembolic Events
  - ▣ Hypertension and Cerebrovascular Accidents
  - ▣ Other conditions
  - ▣ Accidental and Incidental Causes: Suicide, Overdose, and IPV



# Maternal Mortality

## Comments from the Committee:

- To better target maternal mortality and potential causes, consider breaking out to identify timing of death. For example:
  - ▣ Antenatal – can be captured in the hospital or through death certificate data; toughest to capture.
  - ▣ Delivery related mortality – Reliable and easily captured by hospitals.
  - ▣ Postpartum (post-delivery discharge) mortality – state death certificate data; consider other strategies to improve reliability.”
- Maternal mortality that occurs at hospitals, during the delivery is very low and both easily and reliably captured from the record. Complications and morbidity can also be captured from coded data and identified during the hospital stay which may be a better metric as SMM is likely driving deaths post-delivery.





## Maternal Mortality

### Discussion Questions:

- Medical literature and current frameworks have most commonly added suicide – should this also be included in the scan?
- What stance should we be taking on homicide and intimate partner violence with regards to pregnancy-associated mortality?
- What additional resources can guide our information on homicide and intimate partner violence?

## Outcomes Assessment

- Information on the impact of the risk factors as it relates to outcomes (New)
- Morbidity and Mortality Influencing Factors
  - ▣ Patient-level
    - » Health Literacy
  - ▣ Provider-level
    - » Training on implicit bias/SDoH
  - ▣ Hospital-level
    - » Hospital Prevalence of High-Risk Patients
  - ▣ System-level
- Additional Outcomes of Interest
  - ▣ Cesarean Delivery Rate
  - ▣ Surgical Site Infections
  - ▣ ICU Admission (Given Some Attention in SMM Section)
  - ▣ Hospital Readmission Rate
  - ▣ Patient-Centered Outcomes



## Outcomes Assessment

### Discussion Questions:

- Are there other risk/influencing factors that should be included?
- Does the Committee agree with organizing the influencing factors by the levels specified (patient, provider, hospital system)?
- Additional Outcomes of Interest were included – Does the committee agree with these additional outcomes? And should they be specified within this section?



## AIM Bundles

### Comments from the Committee:

- While I am a huge supporter of the AIM bundles, I just want to mention that the adoption rate of these is sporadic and some are very low. How can the NQF improve the use of these materials?
- Are these AIM Bundles or Council on Patient Safety in Women's Healthcare Bundles adopted by AIM?
  - ▣ Additionally, now that these bundles have been implemented across the country there is opportunity to learn and update the bundles to what recommendations/elements work and do not work for hospitals and health systems (Understand the difficulty in maintaining a large volume of evidence-based bundles), many of these bundles are in need of some updating/clarification. Current measurement strategies are difficult for hospitals to manage.
- Can Elliott Main add some more data on implementation of AIM - challenges, metrics used, etc.

## AIM Bundles

### Discussion Questions:

- We currently describe the AIM Bundles in the section on Maternal Standards of Care, then reference it again as a federal initiative that has an impact on measurement.
  - ▣ How are the AIM Bundles primarily viewed in the Maternal Care community – prescriptive, as a preparatory tool? Reflective, as an accountability tool? Or for reporting and benchmarking, as a measurement tool? Do they belong to one of these sections more than the other?
  - ▣ Is there anywhere else in the scan where it's important we discuss all or some components of the AIM bundles?



## Existing Measures

- NQF Measures
  - ▣ 25 total measures
  - ▣ 6 currently carry endorsement



# Morbidity Measure Sub-Domains

## Suggested Sub-Domains

- Preconception
- Prenatal
- Labor and Delivery
- Postpartum

## Committee Consideration

- Should puerperium be considered a distinct sub-domain, separate from postpartum?



## Maternal Morbidity Measures

### Comments from the Committee:

- An important point for committee discussion would be what we are anticipating will be a morbidity measure. Most of the items below are not measuring an outcome but a service. I understand the NQF focus is on quality of service delivery, but I think we should distinguish more clearly between service quality (e.g. % providers asking about a condition); a process measure (e.g. elective cesarean rate); and an actual outcome (e.g. hemorrhage). All of those are important...but different in conception.





## Existing Morbidity Measures

### Sub-domain: PRECONCEPTION

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 long-acting 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 FDA-approved 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 FDA-approved methods of contraception that are long-acting reversible contraception



## Existing Morbidity Measures

### Sub-domain: **PRENATAL**

NQF ID or Measure Source	Measure Title	Measure Description
<b>NQF 1517 (No Longer Endorsed)</b>	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.
<b>NQF 0582 (No Longer Endorsed)</b>	Diabetes and Pregnancy: Avoidance of Oral Hypoglycemic Agents	This measure identifies pregnant women with diabetes who are not taking an oral hypoglycemic agent.
<b>NQF 1391 (No Longer Endorsed)</b>	Frequency of Ongoing Prenatal Care (FPC)	The percentage of Medicaid deliveries that had the following number of expected prenatal visits: <ul style="list-style-type: none"><li>• less than 21 percent of expected visits.</li><li>• 21 percent–40 percent of expected visits.</li><li>• 41 percent–60 percent of expected visits.</li><li>• 61 percent–80 percent of expected visits.</li><li>• greater than or equal to 81 percent of expected visits.</li></ul>
<b>NQF 0014 (No Longer Endorsed)</b>	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
<b>NQF 0012 (No Longer Endorsed)</b>	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.
<b>National Vital Statistics System</b>	Early Prenatal Care	Percentage of pregnant women who receive prenatal care beginning in the first trimester
<b>Pregnancy Risk Assessment Monitoring System</b>	Preventive Dental Visit – Pregnancy	Percent of women who had a preventive dental visit during pregnancy
<b>National Vital Statistics System</b>	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
<b>NQF 0473 (No Longer Endorsed)</b>	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.
<b>NQF 0472 (No Longer Endorsed)</b>	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
<b>NQF 0469/0469e</b>	PC-01: Elective Delivery (PC01-AD)	This measure assesses patients with elective vaginal deliveries or elective cesarean births at $\geq 37$ and $< 39$ weeks of gestation completed.
<b>NQF 1746 (No Longer Endorsed)</b>	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





## 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 labour
- 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



## Other Comments on Environmental Scan

### Standard Processes for Maternal Care Delivery:

- This heading and intro paragraph seem misleading because the standards detailed are primarily for the intrapartum period, not for prenatal or postpartum care.
- I think we must address preconception, antenatal, delivery, and postpartum care. We will never reduce maternal mortality without considering the full care continuum.
- Note that the WHO standards do not include, at least explicitly, reference to care during pregnancy (let alone preconception care) where a number of the problems that lead to morbidity and mortality stem. There's also only brief mention of postpartum care (except for the early postnatal period)



## General Comments on Environmental Scan

- We invite the Committee to speak about general comments on the scan that have not yet been mentioned.

# Opportunity for Public Comment

# Timeline Changes

## Changes to Committee Web Meeting Topics

Meeting		Date
Web Meeting 4:	<b>Recommendations Report &amp; Measure Frameworks</b>	June 25, 2020
Web Meeting 5:	<b>Discussion of Scan Public Comments</b>	September 10, 2020
<del>Web Meeting 6:</del>	<del>Continued guidance on measurement frameworks</del> <b>Cancelled</b>	<del>October 14, 2020</del>
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

## Project Timeline

Deliverable	Due Date
Draft 1 of Environmental Scan Document	June 8, 2020
Draft 2 of Environmental Scan Document	July 15, 2020
21-day Public Comment Period on Environmental Scan	July 31 – August 14, 2020
<b>Final Environmental Scan Document</b>	<b>November 2, 2020</b>
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
<b>Final Recommendations Report</b>	<b>August 13, 2021</b>

# Next Steps



## Environmental Scan Next Steps

- Committee provides additional written feedback on full report, May 22 – June 1
- NQF submits draft #1 to CMS on June 8
- Next Committee Webinar: June 25
  - ▣ Discuss remaining needs on Environmental Scan
  - ▣ Begin work on draft measurement framework
- NQF submits draft #2 to CMS on July 15
- 21-day Public Comment period, July 31 – August 20
- Post-comment Committee call on September 10

**THANK YOU.**

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