Summary of First Technical Expert Panel (TEP) Meeting
Maternal Morbidity Structural Measure

November 19, 2024

Prepared by:
Yale New Haven Health Services Corporation – Center for Outcomes Research and Evaluation (CORE)

This material was prepared by CORE under contracts to the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services. The contents presented do not necessarily reflect CMS policy.

Table of Contents

Background

The Centers for Medicare & Medicaid Services (CMS) contracted with the Yale New Haven Health Services Corporation – Center for Outcomes Research and Evaluation (CORE) to respecify and expand the Maternal Morbidity Structural Measure (MMSM). The CORE contract name is Development, Reevaluation, and Implementation of Outcome/Efficiency Measures for Hospital and Eligible Clinicians, Base Period. The CORE contract number HHSM-75FCMC18D0042, Task Order HHSM-75FCMC24F0042.

The CORE Maternal Morbidity Structural Measure (MMSM) development team is comprised of experts in quality outcomes measure development, and CORE is obtaining expert and stakeholder input on the expansion of the MMSM. As is standard in the measure development process, CORE convened a Technical Expert Panel (TEP) of clinicians, patients, patient advocates, and other stakeholders. Collectively, TEP members brought expertise in clinical maternal care, obstetrical/gynecologic leadership, hospital administration (including chief quality officers or other hospital quality administrators), perinatal quality improvement, health equity and birth justice, statistics and performance measurement, and consumer/patient experience. CORE convened this TEP to support several maternal health projects at CORE; this report reflects the TEP's engagement with and input on the MMSM project.

This report summarizes the feedback and recommendations received from the TEP during the first TEP meeting. The first TEP meeting (August 27, 2024) focused on the measure concept and proposed measure domains. In addition to the feedback shared during the first TEP meeting, TEP members shared feedback via email after the meeting, which is summarized in Appendix D.

Measure Development Team

Rachelle Zribi Williams leads the measure development team for the MMSM project. The measure development team provides a range of expertise in outcome measure development, health services research, perinatal epidemiology, statistics, and measurement methodology. See Appendix A for the full list of CORE MMSM development team members.

The TEP

In alignment with the CMS Measures Management System (MMS), CORE, with CMS approval, held a traditional 30-day call for the TEP, from 9:00am Eastern Standard Time (EST) June 12th to 5:00pm EST July 13th, 2024. CORE solicited prospective TEP members via emails to individuals and organizations representing thought leaders in maternal care, email blasts sent by the CMS Office of Communication, and through a posting on CMS's website. Additionally, the CORE team partnered with SoftDev LLC to recruit patient and caregiver candidates through a targeted

search and structured interview process. Through this process, candidates were successfully identified, recruited, and onboarded. The TEP consists of 24 members, listed in Table 1.

The role of the TEP is to provide feedback and recommendations on key methodological and clinical decisions; their specific responsibilities are outlined below. The appointment term for the TEP is from September 2024 to January 2025.

Specific Responsibilities of the TEP Members

- Complete and submit TEP Nomination Form
- Review background materials provided by CORE prior to each TEP meeting
- Attend and actively participate in TEP conference calls
- Provide input on key clinical, methodological, and other decisions
- Provide feedback on key policy or other non-technical issues
- Review the TEP Summary Report prior to public release
- Be available to discuss recommendations and perspectives following TEP meetings and public release of the TEP Summary Report to CMS

Table 1. TEP Member Name, Affiliation, and Location

Name and Credentials	Organization (if applicable) and Role	Location
Ashley Bates	Person Family Engagement Expert	Quinter, KS
Lori Boardman, MD, ScM	Chief Quality Officer, Orlando Health; Assistant Vice President, Orlando Health Winnie Palmer Hospital	Orlando, FL
Kathryn Burggraf Stewart, MPH	Director of Health Care Ratings, The Leapfrog Group	Washington, DC
Edward Chien, MD, MBA, MA, BS	Department Chair Obstetrics and Gynecology, Cleveland Clinic Health Systems	Lakewood, OH
Lastascia Coleman, CNM, ARNP, MSN, FACNM	President, March for Moms; Clinical Assistant Professor, University of Iowa Hospitals and Clinics; Program Director Midwifery Program and Department Director of DEI Department of Obstetrics and Gynecology, University of Iowa	North Liberty, IA

Name and Credentials	Organization (if applicable) and Role	Location
Marianne Drexler	Person Family Engagement Expert	Durham, NC
Alissa Erogbogbo, MD	Associate Staff Physician Diplomate and Clinical Professor, University of California, San-Francisco	Los Altos, CA
Jodie Franzen, APRN-CNS, RNC-OB, CPHQ, MS	Director Performance Excellence, Duncan Regional Health	Duncan, OK
William (Sam) Greenfield, MD, MBA, FACOG	Professor, University of Arkansas for Medical Sciences; Medical Director Family Health, Arkansas Department of Health	Little Rock, AR
Ron Iverson, MD, MPH	Vice Chair of Obstetrics and Director of Labor and Delivery, Boston Medical Center	Boston, MA
Cassaundra Jah, CPM, LM, IBCLC, PhD	Midwife, Embrace Midwifery Care & Birth Center; Executive Director, National Association of Certified Professional Midwifes	Austin, TX
Cheri Johnson, MSN, RNC-OB	Executive Vice President of Patient Services/Chief Nursing Officer, Woman's Hospital	Baton Rouge, LA
David B. Nelson, MD	Chief Division of Maternal-Fetal Medicine, University of Texas Southwestern Medical Center; Medical Director Maternal-Fetal Medicine, Parkland Health	Dallas, TX
Ushma Patel	Person Family Engagement Expert	Raleigh, NC
Shana Philips	Person Family Engagement Expert	Crown Point, IN
Nicole Purnell	Coalition Program Director, MoMMAs Voices of the Preeclampsia Foundation; PFE Expert	Era, TX
Stephanie Radke, MD, MPH, FACOG	Clinical Associate Professor Department of Obstetrics and Gynecology, University of Iowa Hospitals and Clinics	Iowa City, IA

Name and Credentials	Organization (if applicable) and Role	Location
Lisa Satterfield, MS, MPH	Senior Director Health and Payment Policy, American College of Obstetricians and Gynecologists (ACOG)	Washington, DC
Tanya Sorenson, MD	Executive Medical Director, Swedish Health System Women and Children's	Seattle, WA
Solaire Spellen, MPH	Head of Quality Improvement & Systems Change Irth App Narrative Nation, Inc.; Co-Founder, California Coalition for Black Birth Justice	Brooklyn, NY
Nan Strauss, JD	Senior Policy Analyst for Maternal Health, National Partnership for Women & Families	Brooklyn, NY
Shannon Sullivan, MSW, MHL	President and Chief Operating Officer, Women & Infants Hospital	Providence, RI
Brittany Waggoner, MSN, RN, AGCNS	Infant and Maternal Quality Improvement Advisor, Indiana Hospital Association; Clinical Nurse Specialist, Hendricks Regional Health	Indianapolis, IN
Andrew Williams, PhD, MPH	Assistant Professor, University of North Dakota School of Medicine and Health Sciences; Executive Director and Principal Investigator, North & South Dakota Perinatal Quality Collaborative	Grand Forks, ND

TEP Meeting 1

CORE's MMSM team held its first TEP meeting on August 27, 2024. Topics of discussion included: whether the draft measure domains conceptually capture structural components important for a hospital environment to achieve high quality maternal care; whether any concepts or domains were missing; and what is needed from top hospital leaders to drive high quality maternal care. An additional discussion question regarding approaches to engaging patients and families to support improvement in maternal care, for capture in the patient and family engagement draft domain, was sent via email after the meeting (see Appendix B for the TEP meeting schedule).

This summary report includes a summary of the first TEP meeting for the MMSM and feedback received via email after the first meeting.

TEP meetings follow a structured format consisting of the presentation of CORE's measure development activities, as well as CORE's proposed approach, followed by an open discussion by the TEP members.

First TEP Meeting Overview

Prior to the first TEP meeting, TEP members received detailed meeting materials outlining background on the MMSM, goals for the respecification project, draft domains, as well as key definitions.

During the first TEP meeting, CORE reviewed the current MMSM, the background on structural measures, and the approach to measure respecification of the MMSM (MMSM V2.0), and solicited TEP member's feedback on the proposed draft domains for the MMSM V2.0. Below we summarize what was presented and discussed during the first TEP meeting for the MMSM and feedback received via email following the TEP meeting for discussion question 3. A detailed summary of the discussion can be found in Appendix C.

Project Background and Status

- CORE reviewed the project background for the MMSM, highlighted the definition of severe maternal morbidity and existing disparities in maternal health outcomes in the United States, and noted CMS targeted efforts to improve maternal health.

Expanded Maternal Morbidity Structural Measure (MMSM 2.0)

- CORE provided an overview of structural measures, shared a visual depiction of the MMSM conceptual model, displayed the project timeline and the goals of the MMSM v2.0, and outlined the five draft domains CORE developed:

1. Leadership Commitment
2. Strategic Planning and Organization Policy
3. Accountability and Standards of Care
4. Culture of Learning Health System and Data
5. Patient and Family Engagement

Discussion Questions

TEP members provided feedback on the following questions:

- Question 1: Do the draft domains conceptually capture structural components important to a hospital environment to achieve high quality maternal care? What, if anything, is missing?
    - Overall, TEP participants agreed with the draft domains, and noted the following:
        - A need for detailed and specific attestation statements to limit misinterpretation.
        - Recommendations to embed the following within the domains:
            - Wraparound services, pre-hospital and postpartum periods;
            - Intra-facility and regionalization transfers of care;
            - Feedback loops between hospital teams;
            - Involvement with community organizations particularly, those focused on underrepresented rural, racial, or ethnic populations; and
            - Access to patient services, such as doulas, within the domains.
        - Embedding equity-related and trauma-informed care within the domains.
        - Possibly retitling the "Patient and Family Engagement" domain to "Respectful Care" or "Shared Decision-Making."
- Question 2: What is needed from top hospital leaders (e.g., C-suite executives, hospital governing board) to drive high quality maternal health care within their hospital?
    - TEP participants noted the following:
        - Utilizing objectives and key results that emphasize maternity care and staffing standards.
        - Concretely seeking staff buy-in to advocate for and commit to maternal health quality improvement through leadership involvement in quality improvement meetings and strategic planning processes.
        - Having active involvement from leadership within local and state Perinatal Quality Collaboratives (PQCs).
        - Maintaining an environment of transparency.

        - Accountability through community and patient engagement and collection of patient-reported experience measures (PREMs).
- Question 3: What approaches for engaging patients and families should be considered for the "Patient and Family Engagement" domain that will support improvement in maternal care?
    - TEP participants noted the following:
        - Embed patient and family services within maternal health-related hospital and provider services, such as:
            - Encourage the involvement of partners, grandparents, and other family members in prenatal visits and childbirth education.
            - Add more providers to maternal health services, such as: a family support nurse, bereavement services, a child-life specialist.
            - Add more culturally and linguistically congruent and affordable providers, such as: doulas, traditional birth attendants, care navigators, community health workers, patient advocates, and interpreters; particularly those that are part of the same community as the patient.
        - Utilize Patient-Family Advisory Councils (PFAC) to help drive hospital-level patient/family services and improvements.
        - Enhance hospital-level process to further involve patients and families, and additional trainings for trauma-informed care.
        - Engage communities and community-based organizations, and offer education; mobile, in-home, and telehealth services; celebratory events; and social support groups.
        - Create clear communication between patients and families and hospital providers, especially when an issue or Severe Maternal Morbidity (SMM) event takes place.
        - Empower patients and families to become leaders and advocates within their hospital and community.

Next Steps

CORE will utilize TEP feedback and ongoing input from subject matter experts (SMEs) to draft the measure specifications. CORE will request TEP review of the draft measure specifications and will hold a second meeting to discuss refinement of the measure specifications.

Conclusion

The TEP provided instrumental feedback on the measure concept and draft measure domains. The TEP's feedback will be used to inform draft measures specifications which are under

development. Additional details from the first TEP meeting and feedback received after the meeting are in the Appendix C.

Appendix A. CORE Measure Development Team

Table 2. Center for Outcomes Research and Evaluation (CORE) Team Members - MMSM

Name	Role
Rachelle Zribi Williams	Team Lead
Jacelyn O'Neill-Lee	Project Coordinator
Monika Grzeniewski, MPH	Division Lead, Hospital Research and Development
Katie Balestracci, PhD, MSW	Director, Hospital Research and Development
Valerie Manghir, MPH	Research Associate II
Kerry McDowell, M.Phil.Ed., M.S.Ed.	Project Manager
Lisa Suter, MD	Senior Director, Quality Measurement Programs
Valery Danilack-Fekete, PhD, MPH	Subject Matter Expert (SME)

Table 3. Center for Outcomes Research and Evaluation (CORE) Team Members – Birthing-Friendly Hospital Designation

Name	Role
Onyinye Oyeka, PhD	Team Lead
Jacelyn O'Neill-Lee	Project Coordinator
Monika Grzeniewski, MPH	Division Lead, Hospital Research and Development
Katie Balestracci, PhD, MSW	Director, Hospital Research and Development
Alexandra Stupakevich	Research Associate III
Shefali Grant, MPH	Project Manager
Lisa Suter, MD	Senior Director, Quality Measurement Programs
Valery Danilack-Fekete, PhD, MPH	Subject Matter Expert (SME)

Appendix B. TEP Call Schedule

First TEP Meeting

August 27, 2024; 4:00PM – 6:00PM (EST) (Zoom Teleconference)

Appendix C. Detailed Summary of First TEP Meeting

Participants

- **Yale New Haven Health Services Corporation — Center for Outcomes Research and Evaluation (YNHHSC/CORE):** Kathleen Balestracci, Valery Danilack-Fekete, Shefali Grant, Monika Grzeniewski, Roisin Healy, Valerie Manghir, Kerry McDowell, Jacelyn O'Neill-Lee, Onyinye Oyeka, Alexandra Stupakevich, Mariel Thottam, Rachelle Zribi Williams
- **Technical Expert Panel (TEP) Participants:** Ashley Bates, Lori Boardman, Kathryn Burggraf Stewart, Edward Chien, Lastascia Coleman, Marianne Drexler, Alissa Erogbogbo, Jodie Franzen, William (Sam) Greenfield, Ron Iverson, Cheri Johnson, David B. Nelson, Shana Phillips, Nicole Purnell, Stephanie Radke, Nan Strauss, Shannon Sullivan, Brittany Waggoner, Andrew Williams

Executive Summary

- The purpose of the first TEP meeting was for the Yale New Haven Health Services Corporation – Center for Outcomes Research (CORE) team to review the project background for the Maternal Morbidity Structural Measure (MMSM); review the approach to and draft domains for the expanded MMSM (MMSM v2.0); and obtain TEP feedback on the draft domains for the MMSM V2.0.
- TEP members supported proposed draft domains. They recommended the following:
    - A need for detailed and specific attestation statements to limit misinterpretation.
    - Consideration of the following within measure domains: embedding wraparound services, attention to care continuum pre-hospital and postpartum, intra-facility and regionalization transfers of care, feedback loops between hospital teams, and community involvement and collaboration (particularly with organizations which support underrepresented rural, racial, or ethnic populations; doulas and midwives; etc.) within the domains.
    - Embedding equity-related and trauma-informed care within the domains.
    - Possibly retitling the "Patient and Family Engagement" domain to incorporate concepts of "Respectful Care" or "Shared Decision-Making."
- TEP members noted hospital leaders could be more actively involved in their hospital's maternal healthcare quality improvement by:
    - Utilizing objectives and key results that emphasize maternity care and staffing standards.

- Concretely advocating for and committing to maternal health quality improvement through leadership involvement in quality meetings and strategic planning processes.
- Actively involving leadership within local and state Perinatal Quality Collaboratives (PQCs).
- Maintaining an environment of transparency.
- Accountability through community and patient engagement and collection of patient-reported experience measures (PREMs).

TEP Action Items

- TEP members answered question three through email, *"What approaches for engaging patients and families should be considered for the "Patient and Family Engagement" domain that will support improvement in maternal care?"* (complete)
- TEP members asked to complete meeting experience survey (complete), to review meeting minutes and summary report, and complete doodle poll for next meeting. They will receive a survey on draft measure specifications prior to the next meeting for requested completion.

CORE Action Items

- CORE to email out question three for TEP member response, *"What approaches for engaging patients and families should be considered for the "Patient and Family Engagement" domain that will support improvement in maternal care?"* (complete)
- CORE to send meeting experience survey (complete), draft measure specifications survey, meeting minutes and summary report, and Doodle poll for next meeting.

Detailed Discussion Summary

Welcome and Introductions

- Ms. Jacelyn O'Neill-Lee welcomed the TEP members, stating CORE's appreciation for their attendance and the invaluable expertise and perspectives they each bring to the TEP.
- Ms. Rachelle Zribi Williams reviewed the CMS funding source for the project and reminded members of the confidentiality of meeting materials and discussions until CMS publicly shares information.
- Ms. O'Neill-Lee reviewed the meeting agenda and introduced the speakers for the meeting. Next, TEP members introduced themselves and shared a word or phrase expressing what they are most interested in improving in maternal health care, and any

conflicts of interest (COI). Some of the topics shared by TEP members included: equity, change, transparency, and hope.

Review and Approval of TEP Charter

- Ms. O'Neill-Lee reviewed the TEP Charter, including the responsibilities of TEP members.
    - TEP members voiced no concerns and the TEP Charter was unanimously approved.

Project Background and Status

- Ms. Zribi Wiliams provided an overview of two maternal health projects CORE is soliciting TEP support on. She reviewed the definition of severe maternal morbidity (SMM), statistics outlining disparities in maternal health, and recent national efforts to reduce SMM and improve maternal health, including CMS's development and implementation of both the maternal morbidity structural measure (MMSM) and Birthing-Friendly Hospital Designation (hereafter referred to as the Designation).
- Ms. Zribi Williams provided an overview of the current MMSM, which includes a two-part attestation to assess whether a hospital or health system:
    - Participates in a statewide and/or national Perinatal Quality Improvement Collaborative Program; and
    - Implements patient safety practices or bundles related to maternal morbidity to address complications, including, but not limited to, hemorrhage, severe hypertension/preeclampsia, or sepsis.
- CMS tasked CORE to expand the current measure to include additional hospital structures.
- Dr. Onyinye Oyeka provided a brief overview of the Designation, to orient TEP members for future TEP discussion. She noted CORE will develop a scoring approach for aggregating three quality measures into one composite score for future awarding of the Designation and will seek TEP input on how to ensure the composite score accurately signals a hospital's quality of maternal health care.
    - A TEP member noted concern from state Perinatal Quality Collaborative (PQC) leadership regarding conversations with the National Network of Perinatal Quality Collaboratives (NNPQC) about hospitals receiving the Designation, but not actively participating in their state's PQC, for example not attending meetings or not submitting data. The TEP member questioned if this issue could be addressed through a change in the MMSM to add in assessment or engagement in a state's PQC.

- Dr. Kathleen Balestracci noted CORE and CMS have received similar input and will consider how to further define engagement with a perinatal quality improvement collaborative. She noted that there are challenges with measure validation for a structural measure like the MMSM, but also that there is considerable variation among state-level PQCs in criteria for engagement, and that hospitals may choose to engage with a perinatal quality improvement collaborative other than their state PQCs.

Expanded MMSM (MMSM 2.0)

- Ms. Zribi Williams provided an overview of structural measures, noting they are tools to assess a healthcare system's capacity, systems, and processes used to deliver quality care. She shared a conceptual model of the MMSM, which serves as a prompt for hospitals to evaluate their competencies and practices in place to create the environment for high quality maternal healthcare.
- Ms. Zribi Williams reviewed the project timeline and the goals of the MMSM v2.0:
  - retain the two attestation questions from v1.0,
  - expand the measure to include approximately five domains, each with up to five attestation statements, consistent with other CMS structural measures, and
  - embed health equity within attestation statements and specifications.
- Ms. Zribi Williams reviewed the five draft domains CORE developed based on their Environmental Scan and Literature Review (ES/LR):
  1. Leadership Commitment
  2. Strategic Planning and Organization Policy
  3. Accountability and Standards of Care
  4. Culture of Learning Health System and Data
  5. Patient and Family Engagement

Questions and Discussion

<u>TEP Feedback on Draft Domains</u>

- The TEP provided feedback on discussion question 1**:** Do the draft domains conceptually capture structural components important to a hospital environment to achieve high quality maternal care? What, if anything, is missing?
  - A TEP member noted it will be important for the details of the domains to be well defined. Specifically, the attestation statements for each domain should

truly align with the goals of improving morbidity, mortality, and safety in hospitals.

- A TEP member recommended consideration of wraparound services, and how maternal care does not stop at the hospital and how the measure should consider maternal morbidity which occurs outside the hospital after a delivery.
- A TEP member noted concern hospitals may continue to positively attest to a domain when their practices may not truly adhere to the actions within the domain. They recommended consideration of retitling the "Patient and Family Engagement" domain to "Shared-Decision Making" or "Respectful and Equitable Care."
    - In the chat, the TEP member noted that, under the "Accountability and Standards of Care" domain, that "debriefs" should be split from "drills and simulations."
- A TEP member noted appreciation for the domain "Strategic Planning and Organizational Policy" due to differences in hospital buy-in because of facility size or varying areas of the hospital (i.e., observation, delivery). The TEP member also agreed with changing the title of the "Patient and Family Engagement" domain to "Respectful and Equitable Care."
- A TEP member noted agreement with previous TEP members on the need for an effective mechanism to adequately measure whether hospitals are correctly attesting to these domains and noted the importance to address equity throughout the measure.
- A TEP member suggested an additional domain on external or community collaboration and focus on not only collaborating with community partners, but also the regionalization of hospitals and transfer protocols. The TEP member also agreed with changing the name of the "Patient and Family Engagement" domain, potentially to, "Shared Decision-Making."
- A TEP member noted the importance of how care is perceived in rural locations in the United States, for patients crossing state lines or seeing multiple providers. The TEP member recommended consideration of topics related to care received across health systems as this is an important part of prenatal care, women's health, health networks, and regionalization of care. Additionally, they noted distinct cultural differences across populations served within hospital systems in their rural area. Specifically, in their region, a provider may serve American Indians, new Americans, and rural populations who all have different health outcomes. The TEP member also noted the importance for the measure to explicitly recognize health equity and equitable care within the domains.

- A TEP member noted their appreciation for the "Accountability and Standards of Care" domain, and asked how hospitals are held accountable if they do well with one of the attestation statements but not in another? They asked if debriefing a severe maternal event could be explicitly stated under this domain (they specified patient and family debriefs, but also noted the importance of staff debriefs). In addition, the TEP member asked if the bullet, "Participation in quality improvement collaborative" under the "Culture of Learning Health System" domain could be further defined (i.e., what does participation mean?). Lastly, they asked how hospital results will be made transparent to patients on what it means to meet the Designation?
    - Ms. Zribi Williams noted for the "Accountability and Standards of Care" domain (and the other domains) that a hospital will need to attest "yes" to each attestation statement within the domain to receive credit for the domain.
    - Ms. Zribi Williams noted that the TEP member's question on how a hospital will be transparent on what it means to meet the Designation will be discussed during a future TEP meeting.
- A TEP member noted that for the "Leadership Commitment" domain, it is important to specify how the hospital is making maternal health a core institution value and what that entails. They also noted the importance of adding a commitment to transparency and ensuring the community is aware of efforts and subsequent results. They stated the importance of adding leadership accountability under the "Accountability and Standards of Care" domain, potentially by including a statement holding leadership accountable to performance on certain maternity care metrics during performance reviews or incentive payments.
- A TEP member noted the importance of considering the pre-hospital and postpartum periods up to a year within these domains. They suggested including a statement regarding validation of maternal levels of care. Additionally, they agreed with other TEP members regarding changing the title of the "Patient and Family Engagement" domain and incorporating Patient and Family Advisory Councils (PFACs) within the domain. Lastly, they underscored the importance of assessing internal hospital collaboration between different teams, e.g., nurses, providers, social workers, etc., and recommended adding a statement to assess collaboration across providers.
- A TEP member emphasized adding community involvement within a domain. The TEP member also recommended that resource commitment should reflect

leadership commitment, noting hospital leadership may be competing for resources within a hospital system.

- A TEP member emphasized comments made regarding the "Patient and Family Engagement" domain, noting the Association of Women's Health, Obstetric, and Neonatal Nurses (AWHONN) has a program called "Respectful Maternity Care" that may have specificity beneficial to the domain's attestation statements. They also shared that some states have licensing standards or are working with American College of Obstetricians and Gynecologists (ACOG) to maintain accountability for varying levels of care, which may be beneficial in including accountability-related language to attestation statements.
- A TEP member suggested capturing whether hospitals are engaging with patients and families within the "Patient and Family Engagement" domain. They noted the importance of capturing shared decision-making between the patients and their families.
- A TEP member stated that in order to identify maternal health gaps for patients transferred between lower level into higher level facilities, that hospitals should be asked about their transfer guidelines and program planning for interfacing with departments within a facility (such as "does your facility have a program plan?") and define expectations within the maternal service line and other departments such as obstetric anesthesia, neonatology, and transfusion services. In the context of quality assurance and performance improvement, the TEP member suggested incorporating a statement to demonstrate a closed loop for sharing quality improvement progress and feedback with all staff (including frontline workers).
- A TEP member emphasized wraparound services. Specifically, they expressed the need for a smooth transfer from community birth settings into a hospital and the importance of involving the staff that transferred the patient in the debrief process. The TEP member noted the lack of concepts related to workforce development for culturally congruent caregivers in the measure domains and recommended adding in concepts related to workforce diversity in the attestation statements. Lastly, the TEP member recommended the need for every aspect of the measure to have equity embedded. They noted adding equity throughout the measure will help create cultural capital for hospitals as they will need to assess every attestation question and be aware that health equity is embedded within the measure.
- A TEP member emphasized a previous TEP member's comments regarding leadership commitment and making sure hospital leadership is held accountable. They recommended splitting up the draft second bullet ["Leadership ensures

adequate resources, assessment of outcomes, development of initiatives, notification of SMM events/resolutions"] under the "Leadership Commitment" domain into four separate bullets. In addition, the TEP member noted the value of community feedback to help drive program development, recommending community involvement as a subdomain attestation statement.

- A TEP member highlighted the need for external collaboration to engage organizations and groups outside of the hospital to help with wraparound care. They gave an example of doula agencies with contracts with local hospitals which provide volunteer services and have doulas on call for births and postpartum services. They also agreed with the recommendation to include a statement on cultural competency training. The TEP member emphasized the importance of trauma-informed care, noting that at times, a patient appears non-compliant or aggressive, but with trauma-informed training, a provider can recognize the underlying trauma driving the patient's behaviors.
- A TEP member noted the importance of recognizing the dual goal of the domains: improving outcomes, equity, and experience of care; and how the measure itself will help community members choose the best facility. They questioned what factors influence a prospective patient to choose a facility, noting questions a patient might ask may include, "Do they [the hospital] have evidence-based practices? Do they have respectful maternity care? Do disparities exist? Do they have midwives or doulas available?" In addition, the TEP member noted the importance of adding an attestation statement (potentially under "Accountability and Standards of Care" or "Patient and Family Engagement") that addresses collaboration and responsiveness of working with community partners and community members. They noted the value both of inviting input and addressing feedback, while also incorporating family feedback if a patient did not receive respectful or culturally appropriate care and considering how the facility has ongoing mechanisms to address community and family feedback. The TEP member highlighted the importance of addressing the "whole" person through a holistic-based domain focusing on comprehensiveness of care and supportive services.
- A TEP member noted the importance of detailed attestation statements and what is expected from hospitals, i.e., what does participation in quality improvement and collaboration look like? What is the minimum to be able to attest to this? What does it mean to provide respectful care?
- A TEP member noted agreement with previous comments about how a hospital interacts outside of itself and transfers between prenatal and postpartum care (i.e., an intended at-home birth where the patient is now in a facility); specifically, the systems that need to be in place for success. The TEP member

recommended the "Culture of Learning Health System and Data," may need to be specified to maternal health due to quality improvement programs that do not include maternity service line, particularly if they are a small facility. The TEP member also emphasized the importance of multidisciplinary work, and a facility recognizing a patient as pregnant or having a pregnancy-related problem if they come into an emergency room or to another location of the hospital outside of a maternity service line and treating them appropriately. Lastly, the TEP member recommended consideration of an ability to customize the attestations within the domains for different hospital sizes, locations, and birthing volumes.

- In the chat, another TEP member noted they would consider the attestation domains as applying to all hospitals, regardless of what population they serve or where they are located. They stated that all should be able to offer safe, quality care.
    - The TEP member agreed and explained their comment was more specific to smaller facilities as they have a greater need for simulations given that they have less opportunities to learn in practice and have fewer resources.
    - The TEP member agreed, and added the domains should not include anything which may limit a hospital's ability to provide maternity services as too many are closing their units.

<u>TEP Feedback on Role of Hospital Leadership</u>

- The TEP provided feedback on discussion question 2: What is needed from top hospital leaders (e.g., C-suite executives, hospital governing board) to drive high quality maternal health care within their hospital?
    - A TEP member noted hospital leaders can help advocate for resource allocation and provided an example where rural hospitals are closing because observation care is expensive.
    - In the chat, a TEP member noted that limiting access is a key point, where making standards too arduous will limit access further and further maternity deserts.
        - A TEP member agreed and added the importance of striving to achieve balance. They noted, ideally, rural facilities would focus on their maternity services, however financial constraints can provide challenges, and some leaders lack motivation.
    - A TEP member recommended an attestation statement regarding hospital leadership engaging with perinatal teams.

- A TEP member noted some hospital leadership have expressed being overwhelmed as a barrier to leadership involvement in maternal health care. The TEP member suggested incorporating concepts such as staffing standards (such as meeting AWHONN staffing standards). They noted the important of obtaining C-suite buy-in for quality improvement initiatives and noted leadership participation in maternal health-related meetings would illuminate how hard quality focused teams are working, which may result in additional support from leadership. Lastly, the TEP member noted the importance of PFACs specific to maternal services instead of the entire hospital.
- In the chat, a TEP member noted hospital leadership could attest to participation in the Alliance for Innovation on Maternal Health (AIM) patient safety bundles, and commitment to patient family advisory councils.
- A TEP member also supported inclusion of a PFAC, and the importance of having hospital engagement with community partners such as daycares and supporting involvement of families with community partners. They emphasized the importance considering the hospital location, noting rural communities and urban community have different needs.
- In the chat, a TEP member noted the need for hospital leadership to understand the demands of the maternity-related department, know the skill level of the facility, utilize standardization, and create community partnerships.
- In the chat, a TEP member noted reimbursement remains a key factor for hospital leadership. They shared that obstetrics requires high resources and capital while also being reimbursed lower than other care, which creates challenges for hospitals to offer these services.
- A TEP member noted objectives and key results are main drivers for C-suite engagement.
- A TEP member agreed with leadership adherence to staffing standards. They highlighted how crucial it is for leadership to establish an environment that is transparent and non-punitive for everyone to freely share and become a high reliability organization.
- A TEP member noted the importance of leadership commitment to transparency and accountability. They noted the need for more publicly available performance measures to support community members making decisions on where to obtain care. For accountability, they recommended leadership accountability to listen to patient experience of care, both in terms of community engagement and patient engagement. The TEP member emphasized disparities among people of

color where one in three feel they have experienced mistreatment in giving birth.

    - A TEP member noted an opportunity for leadership to define specific leadership roles for designated services (maternal program manager, maternal medical director, etc.). Additionally, they added the importance of vetting a maternal program plan through a hospital Medical Executive Committee.
    - A TEP member noted patient-reported experience measures (PREMs) as a way for leadership to evaluate quality work and noted the challenges to implement these measures.

- For discussion question 3, due to time constraints, CORE asked for TEP feedback via email: "*What approaches for engaging patients and families should be considered for the "Patient and Family Engagement" domain that will support improvement in maternal care?*".

Wrap-up and Next Steps

- Ms. O'Neill-Lee shared next steps for the project:
    - CORE will incorporate the TEP feedback into draft measures specifications;
    - CORE will send TEP members a survey to provider their experience in the TEP meeting and a survey to share additional feedback on draft measures specifications;
    - CORE will share meeting minutes and summary report to the TEP for review; and
    - CORE will publicly post the TEP summary report.

Appendix D. Email Responses Following TEP Meeting 1

Following the First MMSM TEP meeting, TEP members were asked to answer Question 3 via email. In addition, TEP Members unable to join the meeting live were invited to share feedback on all three questions. The below is a high-level summary of TEP feedback, grouped into themes.

Question 1

Do the draft domains conceptually capture structural components important to a hospital environment to achieve high quality maternal care? What, if anything, is missing?

- TEP members agreed with the majority of domains and components.
- Heath Equity
    - Three TEP members recommended integrating equity, culture, and diversity focused attestation statements within the domains. Specifically:
        - Identifying concrete measures taken to reduce racial inequities in maternal and newborn outcomes and addressing severe maternal or newborn complications through root cause analysis [RCA] or other objective review.
        - For the Strategic Planning and Organizational Policy and Leadership Commitment domains, including designated resources and training specific to equity.
- Patient and Family Engagement
    - Two TEP member agreed with the current Patient and Family Engagement domain and recommended.
        - Including a statement about incorporating PFACs at an organizational and system level.
        - Including a statement about patient and family satisfaction of care versus simply engagement, as it [engagement] does not always equate to satisfaction/acceptance.
- Transparency
    - Two TEP members recommended including transparency and reporting of maternal health metrics and safety. They noted:
        - Patient, community, and other stakeholders struggle to access hospital quality data, and currently available quality metrics are insufficient for transparency.
        - Hospitals should be required to publicly report existing maternal quality measures (such as the Nulliparous, Term, Singleton, Vertex [NTSV]

Cesarean Birth Rate measure) and in order to be designated a birthing-friendly hospital must do well on the existing maternal quality measures.
        - Overall safety (i.e., infection performance) should be considered in the birthing-friendly hospital designation. Hospitals should not be deemed birthing-friendly if they are not performing well on safety measures (including the patient safety structural measure).
- External Collaboration
    - One TEP member recommended adding an external collaboration component within the measure, including an attestation statement related to cross-sector work for systems change, including collaboration and partnership with the community, birth workers, and local community-based organizations.

Question 2

What is needed from top hospital leaders (e.g., C-suite executives, hospital governing board) to drive high quality maternal health care within their hospital?

- Leadership Engagement
    - Incorporation of maternity care quality initiatives in hospital strategic plan and review of strategic plan by hospital leadership (for example the Medical Executive Committee).
    - Active leadership engagement in and support of quality improvement projects and ongoing leadership evaluation of qualitative and quantitative maternal data.
    - Leadership engagement with PFAC and listening to patients' experiences.
    - Accountable for outcomes and safety, for example tying performance incentives and annual leadership reviews to performance on maternal health metrics.
- Leadership Investment in Staffing and Resources for Maternal Care Quality
    - Financial planning for sufficient resources such as equipment, staffing, and training specific to obstetric care and quality.
    - Development of clear protocols, adequate equipment, and regular training for responding to SMM events.
    - Development of transportation systems or partnerships to quickly transfer high risk patients to higher level facilities.
    - Focus on staff development and reduction of staff burnout, particularly for nurses.
    - Recruitment and retention efforts of obstetrical professionals in rural area such as developing incentive programs and partnerships with medical schools.
- Community Partnerships and Patient Access to Care
    - Leadership engagement with community leaders to build partnerships and trust

    - Improved collaboration and development of community partnerships with local organizations to ensure continuity of care and reaching pregnant persons with limited access to the hospital/care.
    - Investing in telemedicine infrastructure to connect rural patients and local providers with larger urban centers.
    - Supporting community education programs on maternal health, prenatal care, and accessing hospital services.
    - Implementation of innovative projects/solutions for ongoing care, such as providing blood pressure cuffs to patients who need ongoing blood pressure management.
- Equity and Culture
    - Leadership engagement in equity and birth justice efforts.
    - Focus on developing community partnerships with organizations which address maternal health equity.
    - Promotion of culturally sensitive care and supporting local cultural practices.
- Quality Improvement Evaluation
    - Tracking maternal health outcomes and utilizing the data to iteratively improve care quality and address challenges.
    - Leadership support and evaluation of quality improvement activities and reviews.
- Other Topics
    - Increased reimbursement rates for maternal services.
    - Leadership participation in advocating for policies and funding to address maternal health challenges at the state and federal levels, particularly for rural areas.

Question 3

What approaches for engaging patients and families should be considered for the "Patient and Family Engagement" domain that will support improvement in maternal care?

- Overall, TEP members noted the importance of equity through embedding cultural and diversity-specific practices within maternal health services.
- Patient/Family Services and Staff
    - Importance of including patient and family services within maternal health-related hospital and provider services. Some of these services include:
        - Encourage involvement of partners, grandparents, and other family members in prenatal visits and childbirth education.
        - Family support nurse dedicated to perinatal services.

        - Bereavement services.
        - Child-life specialist.
        - Culturally congruent and affordable doulas and traditional birth attendants.
        - Culturally competent and linguistically congruent care navigators, community health workers, patient advocates, and interpreters; particularly those that are part of the same community as the patient.
    - Encourage patients and families to participate in bedside shift report or rounding.
- PFAC Engagement
    - Utilizing PFAC feedback to drive hospital-level patient and family services and policies (such as which quality improvement efforts to focus on). When feasible, having a PFAC specific to maternity care.
    - Extend training and mentorship opportunities to families to help them grow as leaders. This could involve incorporating more seasoned patient and family advisors on hospital board's so transparency and trust starts from the top.
    - Including trained patient representatives in Quality Assurance and Performance Improvement (QAPI) or other quality improvement team projects.
- Processes and Trainings
    - Offering flexible scheduling and accommodations (such as transportation services).
    - Hospital staff training on:
        - Trauma-informed care,
        - Implicit bias,
        - Cultural sensitivity,
        - Respectful care, and
        - Patient-centric care and shared decision-making.
- Community Engagement
    - Intentionally engage with communities directly (particularly expectant mothers and their families within marginalized and rural populations) through a culturally appropriate lens (i.e., considering different races, ethnicities, languages, genders, and socio-economic statuses).
    - Evaluating what health outcomes are most important to the community to enhance maternal health services.
    - Holding patient focus groups and community advisory groups to elicit patient and family feedback.
    - Organizing engagement opportunities at local community health fairs, engagement events, schools, community centers and churches.

    - Maintaining partnerships with community-based organizations that have a history and strong relationship with patients and families.
    - Creating community-based education programs that cover prenatal care, nutrition, importance of regular check-ups, etc.
    - Offering home visit programs to visit with expectant and new mothers.
    - Peer support groups to provide new and expectant mothers with emotional support and practical advice.
    - Telehealth and mobile health clinics that offer prenatal classes and consultations.
    - Creating culturally congruent education materials which respect local cultural norms and beliefs about pregnancy and childbirth.
    - Offering celebratory events and social support within the community centering on maternal health and wellness, where both patients and families, community members, local government officials, and organizations participate.
- Communication and Patient Feedback
    - Supporting clear communication between providers and patients and families and debriefing with patients and families after a SMM event.
    - Creating a community safety reporting mechanism separate from existing reporting channels and systematic approach to solicit patient feedback (i.e., text message surveys, easy to-use apps).
    - Once an issue is identified, hospital to provide patient and families with feedback on how their input/experience is used. Hospitals to regularly demonstrate how patient and family input led to changes in maternal care policies, services, or programs.