

Rural IMPACT Sprint

Improving Maternal & Perinatal Access, Care, and Teamwork

Recognition & Early Warning Systems

October 15, 2026

SESSION OVERVIEW

Presenter: Alex Harsha Bangura, MD

This session focused on strengthening early recognition of obstetric (OB) emergencies in rural health settings and emergency departments (ED). Participants explored actionable strategies to improve collaboration and understanding of maternal early warning triggers and systems (MEWT & MEWS). MEWT & MEWS support timely recognition and escalation pathways for maternal deterioration and abnormalities for conditions including hemorrhage, sepsis, cardiopulmonary collapse, and severe hypertension.

KEY TAKEAWAYS

1. Know your MEWT vs. MEWS:

A MEWT (trigger) is a specific clinical finding or vital sign threshold over baseline. [e.g., Estimated Blood Pressure (EBP) >160 mmHg, O2 sat <95%, or pulse increase >20 beats per minute (BPM)]. The MEWS (system) determines treatment algorithms and back up plans.

2. Recognition of Obstetric Emergency is Everyone's Job:

Upon ED admission and triage, screen every patient for pregnancy or birth, including pregnancy loss, within the past year to ensure early recognition of potential obstetric emergencies.

This activates appropriate response protocols and systems of care. Remember that recognizing the signs and symptoms of maternal deterioration and its appropriate pathway is *everyone's* job. Educate all staff who interact with patients, including the front desk

3. ED/Labor & Delivery (L&D) Unit Coordination and Just Culture Reivew:

Establish clear ED/L&D evaluation, escalation, transfer, and handoff protocols. Use cross-departmental debriefs and a Just Culture framework to identify system-level improvements following sentinel events and clinical cases.

LESSONS FROM CLINICAL CASES SHARED:

1. Protocol Access Eliminates Medication Delays: A delay in care is often due to ED clinicians who are unfamiliar with OB order sets or lack direct access to them in the electronic medical record (EMR). Ensure order sets are available system-wide to provide consistent care and single-click sets are accessible to ED physicians.

2. Never Dismiss Isolated Vital Sign Abnormalities: Even if a vital sign (such as an initial oxygen saturation <95%) improves upon repeat, it should not be dismissed. Thoroughly investigate and reassess with a pregnancy-adjusted D-dimer cutoffs or diagnostic imaging.

3. Include Support Services In Case Reviews: Engage laboratory, blood bank, and anesthesia personnel alongside ED and OB teams during post-case debriefs to ensure clear expectations around turnaround times and stabilization priorities.

ADDITIONAL DETAILS

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Learn More: Visit mnpqc.org/initiative/rural-impact-sprint/

RESOURCES SHARED:

- **MNPQC OB Hypertension Sprint: Improvements in Prevention & Identification**
 - The OB Hypertension Sprint was a previous MNPQC quality improvement program that aimed to support participating birthing facility teams in implementing the **Blue Band Project** to improve maternal outcomes and advance the prevention and management of hypertensive disorders in pregnancy.
 - The project helped to identify patients at risk for hypertension more effectively and adhere to evidence-based care protocols.
- **MNPQC Blue Band Patient Experience Survey Results:**
 - The Blue Band survey was initially created in 2023 as a way to understand patient experience and feedback regarding the Blue Bands Project. It originated from the MNPQC Hypertension Initiative, where five participating facilities piloted blue band dissemination and were asked to record data regarding blue band usage.
 - A second iteration of the survey was launched in 2025 to evaluate changes in blue band implementation and patient use.
- **Maternal Early Warning System Implementation Resource Kit:**
 - The Alliance for Innovations of Maternal Health (AIM) Maternal Early Warning System Implementation Resource Kit is a collection of best practices to aid in the early recognition of changes in pregnant and postpartum patients' vital signs and clinical conditions. This resource recommends that a patient be asked at triage:
 - Have you experienced pregnancy loss?
 - Are you currently pregnant or have you been pregnant in the last year?
 - This allows providers to know patient symptoms and activate the response correctly.
- **Apply a Just Culture Approach to Obstetric Emergency Reviews:**
 - Examine system-level factors, communication, coordination, and workflow alongside individual actions.
 - Reviews should focus on learning, shared accountability, and system improvements to prevent recurrence rather than assigning blame to a single individual.

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