



EHR-Embedded Postpartum Hemorrhage Risk and Response Toolkit

EHR Optimization

Overview

Postpartum hemorrhage remains one of the most common and preventable causes of maternal morbidity. This toolkit embeds evidence-based risk assessment and response workflows directly within obstetric care processes in the EHR. By aligning clinical guidance with existing workflows, the model helps teams identify risk earlier, standardize response and improve coordination during high-risk events.

Why This Matters

Although hospitals maintain maternal safety protocols, variation in risk assessment and escalation can limit their effectiveness. Embedding these practices into everyday workflows helps ensure they are applied consistently and reliably, improving outcomes for mothers while strengthening coordination among obstetric, nursing and anesthesiology teams.

How It Works

Implementation integrates several coordinated capabilities within existing obstetric workflows:

- **Automated risk identification:** Dynamic risk scoring is updated during labor and delivery.
- **Embedded clinical guidance:** Prompts guide prevention steps and response actions.
- **Standardized response pathways:** Evidence-based escalation protocols activate within obstetric workflows.
- **Performance monitoring:** Dashboards track trends, variation and outcomes to support improvement.

What It Enables

Hospitals implementing EHR-integrated maternal safety workflows typically pursue improvements in several areas:

- **Maternal outcomes:** Earlier identification and response to hemorrhage risk
- **Clinical consistency:** Standardized care delivery across teams and sites
- **Operational coordination:** Stronger multidisciplinary communication during emergencies
- **Reliability:** Reduced variation in maternal safety practices

Proof in Practice: WakeMed Health & Hospitals

WakeMed Health & Hospitals implemented EHR-integrated PPH risk assessment tools, quantitative blood loss tracking and clinical guidance across its obstetric units. By aligning digital tools with standardized response protocols and multidisciplinary governance, the system strengthened maternal safety across multiple hospitals performing nearly 10,000 births annually. WakeMed reports sustained reductions in severe hemorrhage events and improved team coordination during obstetric emergencies.

Where It Fits Best

This model is particularly relevant for organizations working to strengthen maternal safety and standardize obstetric care:

- Hospitals seeking to reduce maternal morbidity
- Obstetric programs implementing evidence-based safety bundles
- Health systems aligning maternal care across multiple hospitals
- Regional collaboratives focused on maternal quality improvement

Implementation Considerations

Adoption requires alignment between obstetric leadership, nursing teams and informatics groups. Successful programs typically combine workflow design, clinician training and performance monitoring to ensure consistent application of risk assessment and response protocols.

Next Steps

Hospitals seeking to strengthen maternal safety can connect with the West Health Accelerator at AHA's Health Research & Educational Trust to explore peer experiences and practical approaches to embedding postpartum hemorrhage response pathways within existing EHR workflows.