



# OBSTETRIC HEMORRHAGE INITIATIVE (OHI) 2.0



**Florida Perinatal Quality Collaborative**

The Florida Obstetric Hemorrhage Initiative (OHI) 2.0 toolkit is intended to provide guidance to hospitals and obstetric providers in the development of individualized policies, protocols, practices, and materials to improve quality of care and outcomes for patients experiencing an obstetric hemorrhage. This toolkit is not to be construed as a standard of care; rather it is a collection of resources that may be adapted by local institutions to develop and implement their quality improvement initiative. The toolkit is based on the framework from the [Alliance for Innovation on Maternal Health \(AIM\) Obstetric Hemorrhage Patient Safety Bundle](#) and will be updated as additional resources become available.

**Suggested Citation:**

Florida Perinatal Quality Collaborative. (2025). *Florida Obstetric Hemorrhage Initiative (OHI) 2.0 Toolkit: A Quality Improvement Initiative*. Tampa, FL: The Chiles Center at University of South Florida College of Public Health.

**Acknowledgements:**

The FPQC gratefully acknowledges and thanks our partner organizations, including the American College of Obstetrics and Gynecology (ACOG) District XII, Association of Women’s Health, Obstetrics and Neonatal Nurses (AWHONN) Florida Section, and the Florida Department of Health. The creation of this toolkit would not have been possible without the volunteer members of the OHI 2.0 Advisory Committee listed on pages 2-3 of this toolkit.

**Funding:**

This quality improvement (QI) initiative is funded in part by the Florida Department of Health with funds from the Title V Maternal and Child Health Block Grant from the U.S. Health Resources and Services Administration, and the Centers for Disease Control and Prevention.

**Contact:**

Florida Perinatal Quality Collaborative  
The Chiles Center  
University of South Florida  
College of Public Health  
3111 East Fletcher Avenue  
Tampa, FL 33613-4660  
E-mail: fpqc@usf.edu  
Website: FPQC.org

**Copyright:**

© 2025 Florida Perinatal Quality Collaborative. All Rights Reserved.

The material in this toolkit may be reproduced and disseminated in any media in its original format, for informational, educational, and non-commercial purposes only. Any modification or use of the materials in any derivative work is prohibited without prior permission of the Florida Perinatal Quality Collaborative.

## OHI 2.0 Advisors

- Alejandro Rodriguez, MD, Tampa General Hospital
- Amanda Montanez, PharmD, Orlando Health Winnie Palmer Hospital
- Amber Hagenbuch, MSN, RNC-OB, EFM, ONQS, Orlando Health Bayfront Hospital
- Bridget Funk, PhD, RNC-ONQS, CNE, Sarasota Memorial Hospital
- Candy Rouse, DNP, RN, C-EFM FPQC
- Carol Lawrence, PhD, RNC-OB, CBC, Gulf Coast University
- Chasen Croft, MD FACS, University of Florida
- Danielle Carter, MD, FAAFP, St Vincent's HealthCare
- Danielle Moore, MSN, RNC-OB, EFM, Lakeland Regional Hospital
- Delaney Hull, RN, BSN, Florida Department of Health
- Dorian Odems, PhD, MPH, CHES, CARE Lab
- Elizabeth Snyder, MBA, Orlando Health Bayfront Hospital, FPQC Family Lead
- Helen Kuroki, MD, MS-HQS, Women's Care Florida
- Ira Sites, MD, BayCare
- Jasmine Edghill, MD, Tampa General Hospital
- John Caravello, MD, Broward Health, FPQC Clinical Lead
- Karen Francoforte, PharmD, CPh, BCACP, Advent Health
- Kimberly Fryer, MD, Winter Haven Women's Hospital
- Kimberly Huber, MSN, APRN, Winnie Palmer Hospital
- Krista Jackson, MSN, RNC-OB, EFM, ONQS, CNS, Advent Health Orlando
- Kylie Rowlands-Perez, MS, CNM, RNC-OB, EFM, CLC, MSMC
- LaRae Brown, MD, MHA, FACOG, UF Health North
- Lisa Mango, MS, RNC-OB, Orlando Health Winnie Palmer
- Margie Boyer, MS, RNC-OB, EFM, ONQS, FAWHONN Lead RN, FPQC
- Marshara Fross, PhD, MPH, CPH, Center of Excellence in Maternal & Child Health
- Maximiliano Mayrink, DO, MSMC
- Mehmet Genc, MD, PhD, University of Florida
- Nadine Walker, MSN, RN, NE-BC, C-EFM, C-ONQS, REC-C, FAWHONN, Advent Health
- Nancy Travis, MSN, RN, FAWHONN, AWHONN Florida
- Nicole Pelligrino, MPH, MCHES, Florida Hospital Association
- Peter Pelletier, MD, University of Florida
- Rayna Clay, MD, Advent Health Tampa
- Robin Piaggione, MSN, RNC-OB, EFM, ONQS, CBC, Lee Health
- Shakira Henderson, PhD, DNP, RNC, IBCLC, University of Florida College of Nursing
- Shivonne Lane MS, RNC-OB, EFM
- Stacy Carson, Advent Health
- Susan Hale, DNP, RNC-OB, C-EFM, C-ONQS, EBP-C, CHSE, AWHONN National
- Theresa Prescott, BSN, C-EFM, Director LRH
- Tommy Rodgers, National Healthy Start Coalition, Bethlehem Baptist Church
- Vanessa Hux, MD, Lakeland Regional, FPQC Clinical Lead

## FPQC Leaders and Staff

- Lori Reeves, MPH, FPQC Executive Director, Faculty Administrator, USF Chiles Center
- Cole Greves, MD, MBA, FACOG, FPQC Associate Director for Maternal Health
- Margie Boyer MS, RNC, C-EFM, C-ONQS, FAWHONN, FPQC Lead Nurse Consultant
- Linda A. Detman, Ph.D., FPQC Associate Director-Programs & Operations, Research Associate, USF Chiles Center
- Estefania Rubio, MD, MPH, CPH, USF Chiles Center, FPQC Associate Director of Healthcare Data and Informatics
- Estefanny Reyes Martinez, MPH, CPH, USF Chiles Center, FPQC Quality Improvement Analyst
- Sara Stubben, MPH, CPH, USF Chiles Center, FPQC Quality Improvement Analyst
- Shelby Davenport, MPH, CPH, CHES, USF Chiles Center, FPQC Data Analyst
- Alexa Mutchler, BA, USF Chiles Center, FPQC Data Analyst

## Introduction

The OHI 2.0 Toolkit is a dynamic document that includes up-to-date clinical, public health practice, scientific and patient safety recommendations. The information presented here should not be used as a standard of care. Rather, this is a collection of resources that can be adapted by local institutions to develop and implement quality improvement initiatives.

The overall goals of the OHI 2.0 Toolkit are:

1. To aid the development of standardized approaches to identify pregnant and postpartum patients at risk for obstetric hemorrhage, promote recommended screening, prevention, treatment, and education services.
2. To guide and support hospitals in implementing a multidisciplinary team approach to improving identification, clinical care, education and coordinated treatment plans that support obstetric hemorrhage events.

This toolkit will provide maternal, obstetric, and collaborating healthcare providers and staff with the resources to locally develop their own OHI 2.0 policies and protocols with a focus on safe practices and optimizing care and outcomes.

Every US maternity hospital should develop and implement a process to provide respectful, timely, and risk-appropriate care and services for pregnant and postpartum patients affected by obstetric hemorrhage and arrange for the needed continuum of care. Hospitals should also have interdisciplinary teams in place with necessary skill sets and identified roles in screening, care, education, and follow-up for patients who experience an obstetric hemorrhage event. Administration, nursing, obstetric providers, anesthesiologists, pharmacists, social work/case managers, community providers, and others are all critical partners in the interdisciplinary team approach necessary for QI and the provision of quality care. These teams need to train together and practice together to maintain and gain new competencies. Because each hospital and care team has differing resource sets, it is important to develop individualized protocols and processes for each facility. A QI team composed of a core set of team members from the disciplines involved must review current policies/guidelines and data, determine the priorities for improvement, and develop a work plan to address

their needs. Patient and family involvement in this type of QI initiative is important and valuable. Incorporating Emergency Department and EMS team members when possible is also key.

## Background

The Obstetric Hemorrhage Initiative (OHI) 2.0 builds on the success of our first OHI in 2013, which improved hemorrhage risk assessments (from 11% at baseline to 75% in Q1 2015) and increased the use of quantified blood loss for vaginal (4% to 62%) and cesarean deliveries (43% to 67%). Despite these gains, obstetric hemorrhage rates in Florida have risen by 31% from 2017 to 2022, highlighting the need for renewed efforts.

In 2020, obstetric hemorrhage accounted for 9.1% of pregnancy-related deaths in Florida, with the Maternal Mortality Review Committee identifying 75% of these deaths as preventable. As the second leading cause of pregnancy-related deaths in the state, obstetric hemorrhage also contributes significantly to short- and long-term complications for mothers, fetuses, and infants. While rates are rising across all racial groups, non-Hispanic Black patients remain disproportionately affected.

## Key Clinical Updates from ACOG, AIM, and CMQCC

- Expanded guidance on obstetric hemorrhage risk assessment to be completed at admission to L&D, pre-birth, and admission to postpartum.
- Emphasis on recognition of high-risk patients requiring higher levels of maternal care and establishment of transfer processes to facilities at the appropriate level of maternal care.
- Requirement for **cumulative** quantitative blood loss (QBL) at every birth with emphasis on hemorrhage staging and specific escalation plans.
- Updated Medication Guidelines:
  - Tranexamic Acid (TXA): Recommended as adjunctive therapy for Stage 2 postpartum hemorrhage (PPH).
  - Stage 1 PPH uterotonics - first and second line beyond oxytocin:
    - Methylergonovine may be preferred if there is no hypertension due to lower cost and fewer side effects.
    - Carboprost is acceptable for patients without asthma.
    - Misoprostol should be reserved for those with contraindications to the above.
- Advanced PPH management using either intrauterine vacuum-assist device or intrauterine balloon tamponade systems. Either can be used in PPH after vaginal delivery; balloon tamponade can be used in PPH in cesarean delivery.
- Emphasis on early identification and management of iron deficiency anemia.
- Recommended team debrief for all PPH Stage 2 or greater.
- Emphasis on patient debriefs and connection to resources prior to discharge.

## The OHI 2.0 Toolkit

Using elements from the [AIM Obstetric Hemorrhage Patient Safety Bundle](#), FPQC has adapted content around the following components:

- **Primary Drivers:** Major processes, operating rules, or structures that will contribute to moving toward the aim. In this toolkit, the primary drivers are based on three of AIM's Five Rs Framework (Readiness, Recognition, Response). Respectful Care is a universal component of every driver and activity. Reporting & Systems Learning is captured through our data collection system.
- **Secondary Drivers:** Broad concepts that are not yet specific enough to be actionable but are used to generate specific ideas for change.
- **Potentially Better Practices:** Actionable, specific ideas for changing a process. Potentially better practices can come from research, best practices, or from other organizations that have recognized a problem and have demonstrated improvement on a specific issue related to that problem.

## Initiative Foci

Standardization of care practices related to:

- **Readiness:** Ensuring that all units implement standardized protocols and processes for obstetric hemorrhage management. This includes developing stage-based management plans, maintaining rapid access to hemorrhage medications and carts, and conducting team-based training and drills for preparedness.
- **Recognition:** Promoting early identification and accurate assessment of obstetric hemorrhage for every patient. This involves assessing risk levels, using quantitative and cumulative blood loss measurement techniques, managing the third stage of labor, and educating patients about hemorrhage risks and warning signs.
- **Response:** Strengthening the multidisciplinary response for managing obstetric hemorrhage during every event. This includes creating emergency management plans for perinatal and emergency units, conducting post-event debriefs, and providing trauma-informed care (TIC) to support patients and families, including resource provision and follow-up.
- **Respectful Care:** Integrating respectful, patient-centered care into every aspect of the initiative, ensuring that all processes and activities are inclusive and supportive.

## Initiative Goal

By December 2026, OHI 2.0 hospitals will increase by 20% the percentage of patients admitted for delivery with documented:

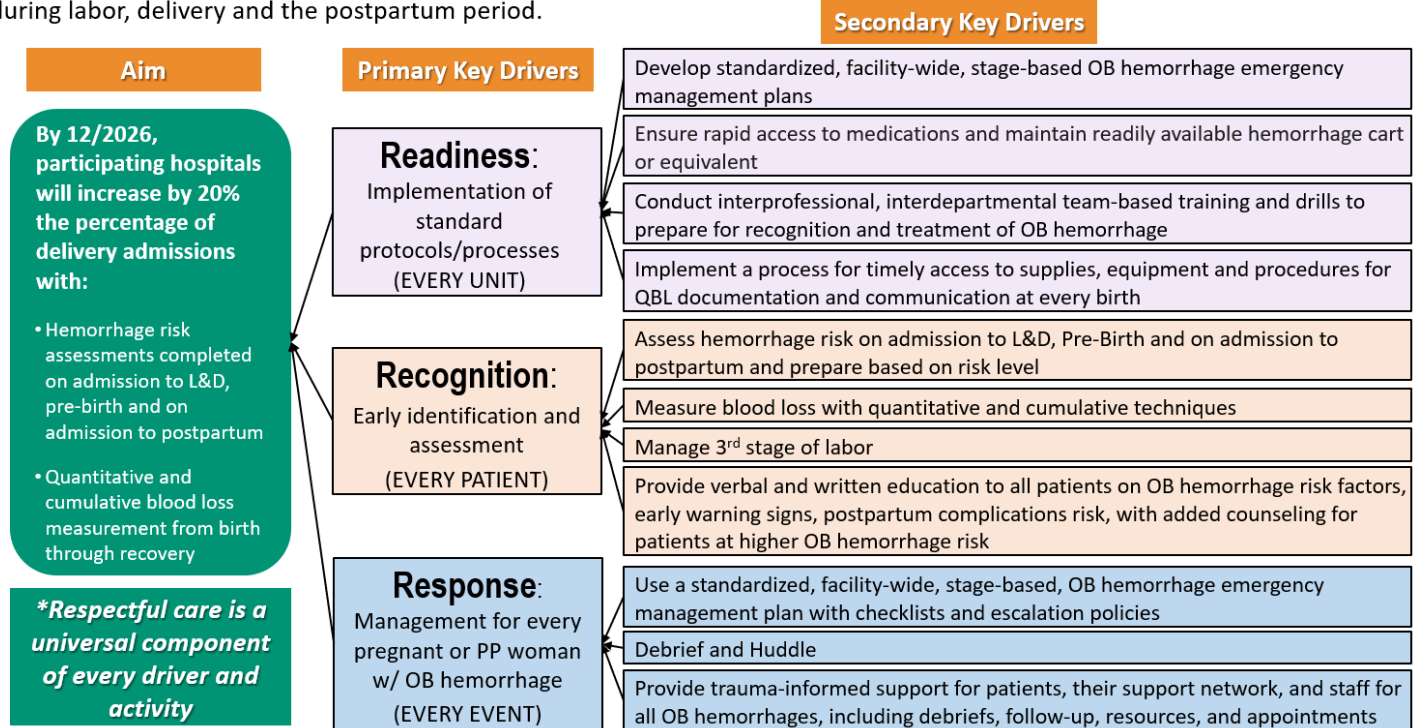
1. Hemorrhage risk assessments completed on admission to labor and delivery, prior to birth and on admission to postpartum.
2. Quantitative and cumulative blood loss measurement from birth through recovery.

Baseline data will be established after the first quarter of hospital data is received by FPQC. Participating hospitals will use the OHI 2.0 toolkit to implement the needed change package in their hospital.

Key Driver Diagram

Obstetric Hemorrhage Initiative

**Global aim:** Improve maternal health through hospital-facilitated timely recognition and treatment of obstetric hemorrhage during labor, delivery and the postpartum period.



Disclaimer

This toolkit is considered a resource. Readers are advised to adapt the guidelines and resources based on their local facility’s level of care and patient populations served and are also advised not to rely solely on the guidelines presented here. This toolkit is a working draft and living document. As more recent evidence-based strategies become available, hospitals and providers should update their guidelines and protocols accordingly. The FPQC will also send out updates as well as revise these materials. Please note the version number in the footer.



### OHI 2.0 Toolkit

Readiness: Implementation of standard protocols/processes			
Secondary Driver	Potentially Better Practices	Evidence/Rationale	Tools/Resources
<p><b>1a: Develop standardized, facility-wide, stage-based OB hemorrhage emergency management plans</b></p>	<ul style="list-style-type: none"> <li>• Develop processes for the management of patients with OB Hemorrhage including:               <ul style="list-style-type: none"> <li>○ Standardized OB Hemorrhage policies/procedures/protocols with checklists and escalation plan</li> <li>○ Process of keeping patient and family informed of any severe event including debrief with provider and nurse and written information provided prior to discharge</li> <li>○ Massive Transfusion Protocols to ensure immediate access to blood products</li> <li>○ A protocol, including education and consent practices, for collaboration with patients who decline blood products but may accept alternatives</li> <li>○ A designated rapid response team co-led by Nursing, Obstetrics, and Anesthesia with membership appropriate to Level of Maternal Care</li> </ul> </li> <li>• Consider establishing a phrase for OB emergencies (digital alert or overhead) to increase team situational awareness</li> <li>• Consider a policy for hospitals without a blood bank on site to ensure O negative blood is readily available for emergencies</li> </ul>	<p><a href="#">The Joint Commission</a>, <a href="#">AIM</a> and <a href="#">AWHONN</a>, and <a href="#">Kawakita et al. 2019</a> recommend assessing every patient with one of the multiple evidence-based risk assessment tools for postpartum hemorrhage.</p> <p><a href="#">ACOG Practice Bulletin 183</a>, <a href="#">AWHONN</a>, and <a href="#">AIM</a> recommend having stage-based policies, procedures, and systems in place at every hospital to be ready for a postpartum hemorrhage.</p> <p><a href="#">ACOG Critical Care in Pregnancy Practice Bulletin 211</a>: ACOG recommends team-based care for patients requiring ICU status and transferring critically ill patients to higher level maternity hospitals when stable.</p> <p><a href="#">ACOG Committee Opinion 664: Refusal of Medically Recommended Treatment During Pregnancy</a>: ACOG recommends directive counseling and preservation of patient autonomy</p>	<ul style="list-style-type: none"> <li>• <a href="#">AWHONN Risk Assessment Tool</a></li> <li>• <a href="#">AWHONN PPH Stages Algorithm</a></li> <li>• <b>Revised ACOG Obstetric Hemorrhage Checklist – coming soon</b></li> <li>• <b>FPQC Post-Birth Bleeding Patient-Facing Flyer – coming soon</b></li> <li>• <a href="#">ACOG Massive Transfusion Protocol</a></li> <li>• <a href="#">ACOG Declination of Blood Products</a></li> <li>• <a href="#">ACOG Obstetric Care Consensus 9: Levels of Maternal Care</a></li> <li>• <a href="#">SMFM OB Emergency Transfer Checklist</a></li> <li>• <b>OB Emergency Transfer Resources – coming soon</b></li> </ul>

	<ul style="list-style-type: none"> <li>• Consider a policy for timely transfer to OR for Stage 2 or greater hemorrhage for additional equipment and personnel</li> <li>• Establish a plan for patients at high risk for OB hemorrhage to be transferred to facilities with resources to provide appropriate level of maternal care</li> <li>• Identify the facilities in close proximity with resources to manage placenta accreta spectrum disorders and establish a transfer agreement in advance to ensure timely transfer</li> </ul>	<p>when patients refuse recommended care.</p> <p><a href="#">ACOG Committee Opinion 590: Preparing for Clinical Emergencies in Obstetrics and Gynecology:</a> Reaffirmed in 2019, ACOG recommends planning for obstetric emergencies including assessing potential emergencies, creating early warning systems, and performing drills and debriefs.</p>	
<p><b>1b: Ensure rapid access to medications and maintain readily available hemorrhage cart or equivalent</b></p>	<ul style="list-style-type: none"> <li>• Maintain a hemorrhage cart or equivalent with supplies, checklists, and instruction cards for devices/ procedures where OB patients are located</li> <li>• Ensure immediate access to 1<sup>st</sup> &amp; 2<sup>nd</sup> line hemorrhage medications in a kit or equivalent per OB Hemorrhage management plan where patients present (OB units, OR, ED, freestanding EDs, etc.)</li> </ul>	<p><a href="#">AIM, ACOG, The Joint Commission, and Kogutt et al. 2022</a> recommend maintaining a hemorrhage cart or equivalent to ensure immediate access to medications and supplies. The use of a hemorrhage cart reduces the time needed to obtain materials to treat a postpartum hemorrhage.</p> <p><a href="#">Shields et al. 2025</a> and <a href="#">Overton et al. 2024</a>: Both intrauterine tamponade balloons and vacuum devices have been shown to be effective at reducing blood loss.</p>	<ul style="list-style-type: none"> <li>• <a href="#">Storage and Stability of PPH Medications</a></li> <li>• <a href="#">CMQCC Appendix R Medications for Postpartum Hemorrhage</a></li> <li>• <a href="#">CMQCC Appendix E OB Hemorrhage Cart, Kits, and Trays</a></li> </ul>
<p><b>1c: Conduct interprofessional, interdepartmental team-based training and drills to prepare for recognition and treatment of OB hemorrhage</b></p>	<ul style="list-style-type: none"> <li>• Ensure that regular drills and simulations are held on all shifts for all OB staff and providers (including anesthesia, blood bank, and support departments) and test all parts of the system</li> </ul>	<p><a href="#">The Joint Commission (Provision of Care 06.01.01 EP 4 and 5)</a> and <a href="#">ACOG Committee Opinion 590</a> recommend ongoing training and drills for all providers in PPH including interdepartmental</p>	<ul style="list-style-type: none"> <li>• <a href="#">AHRQ TeamSTEPPS Rapid Response Module</a></li> <li>• <a href="#">AIM Patient Safety Learning Modules</a></li> <li>• <a href="#">AWHONN Team Debrief Form</a></li> </ul>

	<ul style="list-style-type: none"> <li>• Ensure that simulations include varied forms of patient expression and include debriefs with patient</li> <li>• Include closed loop communication and multidisciplinary participation with role designation in team training</li> <li>• Incorporate evidence-based checklists, algorithms, and tools</li> <li>• Have drills for use of cart and obtaining medications with use of stage-based algorithm and activation of rapid-response team</li> <li>• Have drills for measurement of QBL and use of blood bank dashboard</li> </ul>	<p>trainings and drills at least annually.</p>	
<p><b>1d: Implement a process for timely access to supplies, equipment and procedures for QBL documentation and communication at every birth</b></p>	<ul style="list-style-type: none"> <li>• Perform cumulative quantifiable blood loss (QBL) as part of patient assessment in and across care settings through postpartum phase</li> <li>• Consider assigning a QBL lead at every birth/hemorrhage event</li> <li>• Pair specific QBL total with stage-based algorithms (include triggering of rapid-response team when threshold is met)</li> <li>• Calculate and provide real-time QBL updates to team at every birth</li> <li>• Reinforce with team to begin QBL after amniotic fluid is accounted for. Team should track volume of irrigation fluids to subtract from QBL (See algorithms)</li> <li>• Prepare rooms with calibrated drapes and scales to be available and utilized for every birth <ul style="list-style-type: none"> <li>○ Ensure calibrated under buttocks drapes are available in the OR</li> </ul> </li> </ul>	<p><a href="#">ACOG Committee Opinion 794 Quantitative Blood Loss in Obstetric Hemorrhage</a>: QBL Process maps can help teams improve accuracy. Utilizing standardized assessment steps from birth through postpartum and a cumulative quantification of blood loss process is helpful to accurately identify PPH stage and implement timely interventions.</p> <p><a href="#">Al Kadri et al. 2011</a>: Quantitative measurement of blood loss is superior to visual estimation.</p> <p><a href="#">Toledo et al. 2007</a>: Calibrated drapes improve accuracy of blood loss estimation.</p>	<ul style="list-style-type: none"> <li>• <a href="#">AWHONN QBL Process Map</a></li> <li>• <a href="#">AWHONN QBL YouTube Video</a></li> <li>• <a href="#">CMQCC Appendix M Sample QBL Worksheet</a></li> </ul>

	<ul style="list-style-type: none"> <li>• Use calculation tools and have laminated listed dry weights on cart or use apps with similar information</li> <li>• If available, use QBL alerts in EHR</li> </ul>		
<b>Recognition: Early identification and assessment</b>			
<b>Secondary Driver</b>	<b>Potentially Better Practices</b>	<b>Evidence/Rationale</b>	<b>Tools/Resources</b>
<b>2a: Assess hemorrhage risk on admission to L&amp;D, Pre-Birth and on admission to postpartum and prepare based on risk level</b>	<ul style="list-style-type: none"> <li>• Conduct formal assessment for hemorrhage risk at multiple points on admission, prior to birth, and postpartum and document in EHR with associated alerts <ul style="list-style-type: none"> <li>○ Match risk level to intended delivery hospital level (Transfer to a tertiary care center for suspicion of abnormal placentation)</li> <li>○ Review and document risk during huddles, shift changes, and at times of transfer then note level of risk on census board (Consider color-coding on census board (red, yellow, green) for easy identification)</li> <li>○ Discuss risk assessment and its implications with patient and family (Include birth trauma history in risk assessment). Assess and address any potential bias in the risk assessment</li> </ul> </li> <li>• Consider patient symptoms and concerns voiced as potential serious precursors to hemorrhage event</li> <li>• Screen and treat for anemia on admission and implement a protocol for IV iron therapy in those with moderate to severe iron deficiency anemia</li> <li>• Discuss option of epidural analgesia with high-risk patients</li> </ul>	<p><a href="#">The Joint Commission (Provision of Care 06.01.01)</a>, <a href="#">ACOG (Practice Bulletin 183)</a>, and <a href="#">AIM (Obstetric Hemorrhage Bundle)</a> recommend assessing hemorrhage risk for all patients on admission to labor and delivery and postpartum units.</p> <p><a href="#">ACOG Practice Bulletin 233</a> recommends screening for anemia in first and third trimester and treating with IV iron for severe anemia as needed either before and/or after delivery.</p>	<ul style="list-style-type: none"> <li>• <a href="#">AWHONN Risk Assessment Tool &amp; Postpartum Hemorrhage Stages Algorithm</a></li> </ul>

<p><b>2b: Measure blood loss with quantitative and cumulative techniques</b></p>	<ul style="list-style-type: none"> <li>• Perform quantifiable blood loss (QBL) as part of patient assessment in and across care settings (adapted to capability of hospital) including OB units, OR, ED, freestanding EDs, etc. Assign QBL Lead</li> <li>• Pair specific QBL total with stage-based algorithms (including on postpartum unit with triggering of rapid-response team when threshold is met)</li> <li>• Calculate and provide real-time QBL updates to team</li> <li>• Have specific method for calculating volume of amniotic and irrigation fluids <ul style="list-style-type: none"> <li>○ Make sure scales are available in appropriate rooms with tared weights of pads and drapes</li> <li>○ Use calculation tools and have laminated listed dry weights on cart or use apps with similar information</li> </ul> </li> <li>• If available, use QBL alerts in EHR (include estimated blood loss data if delivery occurred in transit)</li> <li>• Continue QBL in recovery phase to assess for active on-going cumulative blood loss</li> </ul>	<p><a href="#">AWHONN, ACOG, and Al Kadri et al. 2011</a> strongly recommend using quantitative blood loss (QBL) measurements instead of estimated blood loss (EBL) during deliveries and hemorrhages due to QBL's higher accuracy for true blood loss. Studies have shown that visual estimations overestimate blood loss in low volume loss and underestimate losses in high blood loss situations.</p>	<ul style="list-style-type: none"> <li>• See Readiness Section 1d for QBL tools</li> <li>• <a href="#">AWHONN QBL Process Map</a></li> <li>• <a href="#">AWHONN QBL YouTube Video</a></li> <li>• <a href="#">CMQCC Appendix M: Sample QBL Worksheet</a></li> </ul>
<p><b>2c: Manage 3<sup>rd</sup> stage of labor</b></p>	<ul style="list-style-type: none"> <li>• Establish, disseminate, and verify use of a protocol to actively manage third stage of labor (oxytocin at delivery, gentle cord traction, fundal massage)</li> </ul>	<p><a href="#">ACOG Practice Bulletin 183</a></p> <p><a href="#">Begley et al. 2019</a>: Cochrane review on active versus expectant management for women in the third stage of labour.</p>	<ul style="list-style-type: none"> <li>• <a href="#">AWHONN Practice Brief Number 12: Guidelines for Active Management of the Third Stage of Labor using Oxytocin</a></li> </ul>
<p><b>2d: Provide verbal and written education to all</b></p>	<ul style="list-style-type: none"> <li>• Provide communication in the patient's preferred language and support access to</li> </ul>	<p><a href="#">Eaton et al. 2024</a>: Providing patients with verbal and written</p>	<ul style="list-style-type: none"> <li>• <a href="#">AWHONN POST-BIRTH Warning Signs</a></li> </ul>

<p>patients on OB hemorrhage risk factors, early warning signs, postpartum complications risk, with added counseling for patients at higher OB hemorrhage risk</p>	<p>interpretation services; provide educational materials for patients in common languages spoken in your community</p> <ul style="list-style-type: none"> <li>Educate clinicians on providing respectful care by engaging in the lifelong learning of cultural humility, understanding that individuals cannot learn all aspects of any culture, including their own</li> </ul>	<p>handouts on postpartum warning signs increases patient’s knowledge of postpartum risks and decreases distress and doubts about postpartum risks.</p>	<ul style="list-style-type: none"> <li><a href="#">ACOG Respectful Care eModule</a></li> </ul>
--------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------

**Response:**

<i>Secondary Driver</i>	<i>Potentially Better Practices</i>	<i>Evidence/Rationale</i>	<i>Tools/Resources</i>
<p><b>3a: Use a standardized, facility-wide, stage-based, OB hemorrhage emergency management plan with checklists and escalation policies</b></p>	<ul style="list-style-type: none"> <li>Evidence-based medication administration or use of non-pharmacological interventions</li> <li>Perform pelvic exam; after administration of medications, consider non-pharmacologic interventions such as vacuum assist and tamponade devices</li> <li>Include standardized pain assessment tool for patient-reported pain and have clear plans for pain management and evaluation of atypical pain that may represent concealed bleeding</li> <li>Consider activation of obstetric rapid response team if PPH stage 2 or greater</li> <li>Consider surgical interventions, involvement of trauma teams, and/or interventional radiology in cases of non-resolution of bleeding</li> <li>Following stabilization and transfer, continue to monitor patient</li> <li>Consider differential diagnosis of OB hemorrhage and respond accordingly (4 Ts: tone, trauma, tissue, thrombin)</li> <li>Patients may have unanticipated needs identified at time of delivery that may</li> </ul>	<p><a href="#">ACOG Practice Bulletin 183</a>: Uterine atony is estimated to cause 70–80% of PPH and usually should be suspected first as the etiology of PPH.</p> <p><a href="#">ACOG</a> and <a href="#">AWHONN</a> support evidence-based medication administration and use of non-pharmacological interventions. Updated recommendations include consideration of tranexamic acid as an adjunct to medical management and usage of intra-uterine tamponade and vacuum-induced hemorrhage control devices.</p> <p>Trauma, retained products of conception, and coagulation status must also be considered in the differential, in particular when initial management fails. It is important to identify the most</p>	<ul style="list-style-type: none"> <li><a href="#">CMQCC Toolkit version 3.0 pages 113 - 165</a></li> <li><a href="#">ACOG Consensus Statement on Levels of Maternal Care</a></li> <li><a href="#">ACOG Placenta Accreta Spectrum Disorder Clinical and Designation Guidelines</a></li> </ul>

	<p>exceed the resources at their delivering facility. Care should be taken to stabilize and transfer to a facility with resources to provide the appropriate level of maternal care</p>	<p>likely diagnosis or diagnoses to initiate appropriate intervention.</p>	
<p><b>3b: Debrief and Huddles</b></p>	<ul style="list-style-type: none"> <li>• Perform multi-disciplinary debriefing at the following timepoints <ul style="list-style-type: none"> <li>○ After resolution of an acute hemorrhage</li> <li>○ At the time of transfer to reassess hemorrhage risk and to convey risk to the postpartum team</li> </ul> </li> <li>• Incorporate and/or use a standardized checklist for the unit to identify opportunities for improvement</li> <li>• Timely debrief with the provider, patient/family members, and nurse</li> <li>• Refer cases to quality/peer review that meet criteria established by the organization to evaluate the effectiveness of the care, treatment, and services provided by the hemorrhage response team during the event</li> </ul>	<p><a href="#">TJC R3 Report on Provision of Care, Treatment, and Services Standards for Maternal Safety (06.01.01, EP6)</a>: Post-emergency debriefs are valuable for summarizing how well the team followed procedures and to determine if there are opportunities for improvement.</p> <p>It is critical to identify successes and opportunities for improvement in a way that creates a culture of safety and empowers staff to design safe and effective procedures and processes.</p>	<ul style="list-style-type: none"> <li>• <a href="#">AWHONN Sample Team Debrief Form</a></li> <li>• <a href="#">AIM Condition-Specific Questions in Severe Maternal Morbidity Review</a></li> </ul>
<p><b>3c: Provide trauma-informed support for patients, their support network, and staff for all OB hemorrhages, including debriefs, follow-up, resources, and appointments</b></p>	<ul style="list-style-type: none"> <li>• Communicate directly with the patient and family about clinical concerns and planned management, prior to performing any physical interventions such as bimanual pelvic exam, tamponade placement, or speculum exam</li> <li>• Designate a patient and identified support network liaison to provide updates in real-time and include these communications on an emergency checklist</li> <li>• Provide written summary of events following hemorrhage to patient and family. Conduct a patient debrief with provider and</li> </ul>	<p><a href="#">TJC R3 Report on Provision of Care, Treatment, and Services Standards for Maternal Safety</a> emphasizes that women and families should be empowered to know their course of care, diagnoses, dangerous warning signs and when to seek out immediate care.</p>	<ul style="list-style-type: none"> <li>• <a href="#">AHRQ SHARE Approach</a></li> <li>• <a href="#">National Partnership for Maternal Safety: Consensus Bundle on support after a severe maternal event</a></li> <li>• <b>Patient Debrief Tools – coming soon</b></li> </ul>

	<p>RN after the event and include the patient's family in a private setting</p> <ul style="list-style-type: none"><li>• Ensure processes to support infant feeding preferences following hemorrhage</li><li>• Ensure that qualified interpreters are being used with patients and identified support network who need them</li><li>• Screen for maternal depression and PTSD following trauma and arrange for appropriate referrals and support</li></ul>		
--	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--	--