Please complete all information requested.

1) Toolkit name: Postpartum Hemorrhage Prevention Toolkit

2) Project manager contact information

   Name: Dr. Shelly-Ann Hope
   Address: 2041 Georgia Avenue NW, Suite 3C25 Washington, DC 20060
   Phone number: 202-865-7078
   Email address: sahope@howard.edu

3) Team member names and email addresses:

   Dr. Vanessa C Nunes vnunes@huhosp.org, Dr. Calvin Lambert clambert@huhosp.org,
   Dr. Edward Miller, edmiller@huhosp.org, Dr. Rochanda Mitchell rmitchell@huhosp.org

4) Objectives:

   Provide resident educational materials for the Active Management of the Third Stage of Labor, Postpartum Hemorrhage Prevention, Estimating Blood Loss, AIM Bundle
   Perform interdisciplinary postpartum hemorrhage simulations

5) Key words for searches: Postpartum Hemorrhage, Active Management of the Third Stage of Labor

6) Target Audience: Residents

7) Dates of project and timeline:

   April 2015 - Began development of postpartum hemorrhage protocol using AIM and CMQCC Resources
   December 2015 - Began IRB approval and research study on postpartum hemorrhage prevention

8) Venue: Howard University Hospital

9) Contact Person email address (at venue):

   Dr. Shelly Ann Hope, sahope@howard.edu

   (ACOG JF): Vanessa C Nunes, MD (PGY-2)

10) Number of participants (approx): 150-200 (including rotating medical students, nurses)
11) List all supplies needed:
   Laminated Poster for Simulation Center
   Laminated Poster for Operating Rooms

12) Project Prep Time: 3 months
    Number of volunteers needed: 5 (can be 10 at a larger institution depending on resources)
    Delegation of projects/responsibilities:
       Attending Personnel
       Designate an attending point person from Obstetrics and Anesthesia

13) Advertisement (please include sample copies of flyers, emails, media):
    Flyer - Attached
    Visual Aid - Attached

14) Budget:
    Simulation supplies (not budgeted common items)
    Poster printing, lamination - $85 per poster (Fedex Kinkos)

15) Funding (source and amount): Obstetrics and Gynecology Department Grant $50, Hospital Grant - pending

16) Summary:
    Please attach a detailed description of your project. Include an overall summary including positive points of the event, things to improve on, and impact on the community or women’s health. (Limit 750 words)

17) Photography/Pictures (mandatory, limit 5). (Please Attach)
Please attach a detailed description of your project. Include an overall summary including positive points of the event, things to improve on, and impact on the community or women’s health. (Limit 750 words)

Patient safety and quality improvement are an increasingly important part of medicine. They will become even more critical as the Medicare Access and CHIP Reauthorization Act (MACRA) rules phase into effect. This JFIT project is important because it emphasizes interdisciplinary care, quality improvement, patient safety and health care bundles interwoven with resident and medical student education.

Postpartum hemorrhage (PPH) is defined as blood loss greater than 500 mL after vaginal delivery. It is a preventable obstetric emergency and a major cause of maternal mobility and mortality globally, with 99% of maternal deaths occurring in low income countries. In the United States more than 1 out of 4 women experience obstetric complications during labor and delivery including hemorrhage.

According to ACOG, AMTSL is now considered best practice and is the worldwide standard of care. A Cochrane review of five randomized controlled trials comparing active and expectant management of labor involving 6,400 women showed a shorter third stage, reduced risk of severe PPH, anemia, need for blood transfusion as well as additional uterotonics. Active management of the third stage of labor (AMTSL) is a prophylactic intervention performed to reduce postpartum hemorrhage. It comprises three components: administration of a uterotonic immediately following the birth of the baby, controlled cord traction to deliver the placenta and massage of the fundus of the uterus after the placenta is delivered.

A recent study in Obstetrics and Gynecology (2014) showed that a pocket card can be used as a visual aid to improve estimations of blood loss and help providers treat and prevent postpartum hemorrhage. From a resident education and faculty development perspective, protocols for estimating blood loss in obstetrics could be quite helpful when used for quality assurance and for enhancing academics.

The ACOG Alliance for Innovation on Maternal Health (AIM) has patient safety bundles for improving maternal safety and quality care. The postpartum hemorrhage bundle offers a framework to using patient safety bundles to improve patient safety and quality care in a standardized format. The postpartum hemorrhage bundle recommends steps based on the experiences of organizations such as the California Maternal Care Quality Committee (CMQCC) offers extensive resources and implementation guidance on how to implement these safety bundles. They have made public the processes for starting a safety bundle at an institution that may not yet have that in place. This JFIT Toolkit seeks to streamline those necessary steps into an easy to follow toolkit that Junior Fellows can use to start up a patient safety bundle initiative at their own institutions. This can be done in a way that emphasizes interdisciplinary education, resident education and medical student education in the following steps:

Phase 1 - Month one

1. Find a staff attending physician, nursing and resident champion, introductions and set a date for the first meeting
2. Before first meeting review the ACOG AIM bundle e-modules (resident/attending), AWHONN e-modules (nursing) and discuss the findings
3. Find and target an administrator champion
4. Begin recruiting 10 members of nursing, faculty staff attending, residents and medical students to form the Postpartum Hemorrhage Prevention Task force

Phase Two - Month two

5. Set a date in which all involved should have completed the e-modules and set other goals and deadlines
6. Plan for a resident led lecture to the residents, faculty and staff about postpartum hemorrhage and prevention strategies using the CQMCC slide deck
7. Distribute the Visual Aid Pocket Card for Estimating Blood Loss
8. Find volunteers to organize the postpartum crash cart, estimating blood loss simulation/MEWs and postpartum hemorrhage drills/simulations using the CQMCC templates provided

Phase 3 - Month three

9. Set a date in which all providers must be postpartum hemorrhage prevention “Certified” by completing a certain amount of drills/simulations
10. Perform drills and simulations as well as debriefings

17) Photography/Pictures (mandatory, limit 5). (Please Attach)

Figure 1 - Postpartum Hemorrhage Crash Cart Example

Figure 2 - Visual Aid for Estimating Blood Loss Pocket Card

Figure 3 - Simulation photograph

References:
1. AWHONN: http://www.pphproject.org/resources.asp
2. ACOG AIM Obstetric Hemorrhage Patient Safety Bundle: http://safehealthcareforeverywoman.org/patient-safety-bundles/obstetric-hemorrhage/#link_acc-1-3-d
3. CMQCC Patient Safety Bundle for Obstetric Hemorrhage: https://www.cmqcc.org/resources-tool-kits/toolkits
Use of a Novel Visual Aid to Improve Estimation of Obstetric Blood Loss

Zuckerwise, Lisa C.; Pettker, Christian M.; Illuzzi, Jessica; Raab, Cheryl R.; Lipkind, Heather S.
doi: 10.1097/AOG.0000000000000233

Thank You

This PowerPoint document contains the images that you requested.

Copyright Notice

All materials on this Site are protected by United States copyright law and may not be reproduced, distributed, transmitted, displayed, or otherwise published without the prior written permission of Wolters Kluwer. You may not alter or remove any trademark, copyright or other notice.

However, provided that you maintain all copyright, trademark and other notices contained therein, you may download material (one machine readable copy and one print copy per page) for your personal, non-commercial use only. Please refer to this link for further information on how to apply for permission for re-use

Any information posted to discussion forums (moderated and un-moderated) is for informational purposes only. We are not responsible for the information or the result of its practice.
Join us for an interactive workshop that will provide you with practical training and skills

Date: 

Time: 

Location:
Planning for and Responding to Obstetric Hemorrhage

California Maternal Quality Care Collaborative
Obstetric Hemorrhage Version 2.0 Task Force

This project was supported by Title V funds received from the California Department of Public Health; Maternal, Child and Adolescent Health Division
## STAGE 2: OB Hemorrhage

Continued bleeding or Vital Sign instability, and < 1500 mL cumulative blood loss

<table>
<thead>
<tr>
<th>MOBILIZE</th>
<th>ACT</th>
<th>THINK</th>
</tr>
</thead>
</table>
| **Primary nurse (or charge nurse):**
  - Call obstetrician or midwife to bedside
  - Call Anesthesiologist
  - Activate Response Team: PHONE #: __________
  - Notify Blood bank of hemorrhage; order products as directed
| **Team leader (OB physician or midwife):**
  - Additional uterotonic medication: Hemabate 250 mcg IM [if not contraindicated] OR Misoprostol 800 mcg SL
    - Can repeat Hemabate up to 3 times every 20 min;
    - (note-75% respond to first dose)
  - Continue IV oxytocin and provide additional IV crystalloid solution
| **Sequentially advance through procedures and other interventions based on etiology:**
  - **Vaginal birth**
    - If trauma (vaginal, cervical or uterine):
      - Visualize and repair
    - If retained placenta:
      - D&C
  - If uterine atony or lower uterine segment bleeding:
    - Intrauterine Balloon
  - If above measures unproductive:
    - Selective embolization (Interventional Radiology if available & adequate experience)
| **Charge nurse:**
  - Notify Perinatologist or 2nd OB
  - Bring hemorrhage cart to the patient’s location
  - Initiate OB Hemorrhage Record
  - If considering selective embolization, call-in Interventional Radiology Team and second anesthesiologist
  - Notify nursing supervisor
  - Assign single person to communicate with blood bank
  - Assign second attending or clinical nurse specialist as family support person or call medical social worker
| **Do not delay other interventions** (see right column) while waiting for response to medications
  - Bimanual uterine massage
  - Move to OR (if on postpartum unit, move to L&D or OR)
  - Order 2 units PRBCs and bring to the bedside
  - Order labs STAT (CBC/Plts, Chem 12 panel, Coag Panel II, ABG)
  - **Transfuse PRBCs based on clinical signs** and response, **do not wait** for lab results; consider emergency O-negative transfusion
| **C-section:**
  - B-Lynch Suture
  - Intrauterine Balloon
  - **If Uterine Inversion:**
    - Anesthesia and uterine relaxation drugs for manual reduction
  - **If Amniotic Fluid Embolism:**
    - Maximally aggressive respiratory, vasopressor and blood product support
  - If vital signs are worse than estimated or measured blood loss: possible uterine rupture or broad ligament tear with internal bleeding; **move to laparotomy**
  - Once stabilized: Modified Postpartum management with increased surveillance
  - Assign second attending or clinical nurse specialist as family support person or call medical social worker