AHA Members-Only Webcast

*Sustaining Successful Outcomes with the Obstetric Hemorrhage Patient Safety Bundle*

**Presenters:**
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Vice Chair of The Council on Patient Safety in Women’s Health Care
AWHONN Vice President of Nursing Research, Education, & Practice
Objectives

• Describe the current trends in maternal mortality and morbidity
• Describe the national consensus bundles
• Discuss how one hospital has successfully implemented the obstetric hemorrhage bundle at their hospital
• Identify tools and resources that hospital leaders can use to implement the obstetric hemorrhage bundle

*Note: Number of pregnancy-related deaths per 100,000 live births per year.

http://www.cdc.gov/reproductivehealth/MaternalInfantHealth/PMSS.html
Maternal Mortality Ratios in Selected Countries Over the Past 30 Years

- Canada
- France
- Germany
- Israel
- Italy
- Sweden
- USA

Maternal Mortality Ratio per 100,000 live births

- 1980
- 1990
- 2000
- 2008

Pregnancy-Related Mortality Ratio by Race

Pregnancy-Related Deaths 1998-2005

- Hemorrhage: 12.5%
- Thrombotic Pulmonary Embolism*: 10.2%
- Hypertensive Disorders*: 12.3%
- Infection*: 10.7%
- Cardiac: 23.9%
- Other/Unknown: 22.9%

n=4,693

*Women with these primary causes of death may also suffer hemorrhages

Council on Patient Safety in Women’s Health Care

www.safehealthcareforeverywoman.org

Download Severe Maternal Morbidity (SMM) Reporting Forms

Below, please find links to the Severe Maternal Morbidity Reporting forms. We have provided them in both Microsoft Word and Adobe PDF formats. Click on the links below the thumbnail images to download the forms:

Forms with Drop-Down Boxes

- MS Word (Fillable)
- Adobe PDF (Can be completed in-fill)

Facility Administrative Review

- MS Word (Fillable)
- Adobe PDF (Can be completed in-fill)
National Partnership for Maternal Safety
Maternal Safety Bundles

“What every birthing facility in the U.S. should have...”

Obstetric Hemorrhage
Preeclampsia/ Hypertension
Prevention of VTE in Pregnancy
Reducing Primary Cesareans
Women die from postpartum hemorrhage because they do not receive early, effective and aggressive lifesaving treatments.
Obstetric Hemorrhage

READINESS
Every unit
- Hemorrhage cart with supplies, checklist, and instruction cards for intrauterine balloons and compressions stitches
- Immediate access to hemorrhage medications (kit or equivalent)
- Establish a response team - who to call when help is needed (blood bank, advanced gynecologic surgery, other support and tertiary services)
- Establish massive and emergency release transfusion protocols (type-O negative/uncrossmatched)
- Unit education on protocols, unit-based drills (with post-drill debriefs)

RECOGNITION & PREVENTION
Every patient
- Assessment of hemorrhage risk (prenatal, on admission, and at other appropriate times)
- Measurement of cumulative blood loss (formal, as quantitative as possible)
- Active management of the 3rd stage of labor (department-wide protocol)

RESPONSE
Every hemorrhage
- Unit-standard, stage-based, obstetric hemorrhage emergency management plan with checklists
- Support program for patients, families, and staff for all significant hemorrhages

REPORTING/SYSTEMS LEARNING
Every unit
- Establish a culture of huddles for high risk patients and post-event debriefs to identify successes and opportunities
- Multidisciplinary review of serious hemorrhages for systems issues
- Monitor outcomes and process metrics in perinatal quality improvement (OIs) committee
Three geographic regions were selected based on the following criteria:

- High rates of maternal mortality
- No competing OB hemorrhage-related initiatives in the state
- Strong AWHONN leadership
- Partnership opportunities with state health departments, etc.

Supported by a grant from Merck for Mothers
Implementing AWHONN’s Postpartum Hemorrhage Project

www.pphproject.org

Donna Poplawski, MSN, RNC, APN-C
Nurse Manager
Morristown Medical Center
Morristown, New Jersey
Morristown Medical Center

• Perinatal Center in Northwestern New Jersey
• Teaching hospital with Obstetric Residency
• 4300 deliveries annually
• 120 Maternity Center Nurses
• 40 Private Obstetricians
• 5 Obstetric Hospitalists
• Active Maternal Fetal Medicine Department
Readiness

• Hemorrhage cart / box with supplies located in L&D and Mother Baby Units

• Immediate Access to hemorrhage Medications
RN Participation in Hemorrhage Drills

- Morristown Medical Center
- Collaborative Median
- Collaborative Mean
- 50th to 75th Percentile
- 25th to 50th Percentile
Provider Participation in Hemorrhage Drills

- Morristown Medical Center
- Collaborative Median
- Collaborative Mean
- 50th to 75th Percentile
- 25th to 50th Percentile
Recognition and Prevention
Admission Hemorrhage Risk Assessment

Charts with Admission Risk Assessment (%)
Pre-Birth Risk Assessment
Post Birth Risk Assessment

Charts with PPH Post-Birth Risk Assessment (%)

- **Morrystown Medical Center**: 73.3

**Data Key**
- Blue line: Morristown Medical Center
- Orange line: Collaborative Median
- Green line: Collaborative Mean
- Light green area: 50th to 75th Percentile
- Orange area: 25th to 50th Percentile

**Timeline**
- Jul 2014 to Oct 2015
Quantified Blood Loss

![Graph showing quantified blood loss from July 2014 to October 2015 with various data points and trends.](AWHONN.ORG)
Response - Protocols

• Postpartum Hemorrhage protocol in place – Reviewed and updated
• Fourth stage of labor policy already in place
• Massive Transfusion protocol in place – Reviewed and updated
• System Improvements
  – Multidisciplinary Obstetric Quality and Safety Committee
Reporting

Monitor in Obstetric Quality and Safety:

• Massive Transfusions
• Hemorrhages
• Transfusions
• ICU Admissions
• Return to Operating Room
Transfusion Per 1000 Births
MMC 39 vs. 81 PPH Average
Lessons Learned

• 75 Massive Transfusions over last 2 years
• 25 ICU admissions
• ICU Length of Stay decreased from 8 days to 1.5 days
• Rapid recognition of hemorrhage
• Staff and physicians have embraced QBL during hemorrhage
• Activate Massive Transfusion Protocol early
• Patients more stable at time of transfer
Barriers

• Other large projects being implemented

• Experiencing increased census

• Physicians reluctant to participate in Quantitated Blood Loss

• Inconsistent use of debriefing format in spite of focused education
Lessons Learned

• Don’t try to change everything at once!

• Make sure the plan for change comes from the people doing the work!

• The PPH Safety Bundle helped us pull all the threads together into a comprehensive program.

• We’re still not done!
Tools are available from multiple organizations

www.safehealthcareforeverywoman.org
Three geographic regions were selected based on the following criteria:

- High rates of maternal mortality
  DC (51\textsuperscript{st}), GA (50\textsuperscript{th}), NJ (35\textsuperscript{th})
- No competing OB hemorrhage-related initiatives in the state
- Strong AWHONN leadership

Supported by a grant from Merck for Mothers
AWHONN Algorithm

Adapted from CMQCC
AWHONN’s QBL Practice Brief

www.pphproject.org website – Resources tab

http://www.pphproject.org/resources.asp
AWHONN QBL Video

https://www.youtube.com/watch?v=F_ac-aCbEn0&list=UUPrOhL3Od7ZeFDq27ycS00g
The AWHONN PPH education modules will be released nationally
CNE from AWHONN
CME from ACOG

*On-line
*Self-paced
*Team training
*Certificate of completion
A Customized PPH Preparedness Report allows hospital leaders to compare their hospital’s preparedness score to the scores of hospitals within their state and with all hospitals in the database. The preparedness elements are based on national consensus recommendations (hemorrhage bundle).

A Customized Improvement Plan is developed by using hospital individual sub-scores.

Live Reporting ensures that hospitals can continue to review their report as new data are entered by other participating hospitals.
PPH Preparedness Survey Overview (continued)

- Questions are grouped into the following sub-categories:
  - Definitions, Policies & Procedures, and Protocols
  - Risk Assessments
  - Quantification of Blood Loss
  - Medications, Equipment and Medical Procedures
  - Debriefs, Drills, Support Programs, and Other QI Items
Questions?

“We agree that patient-centered and safe care of the mother and child enhance quality and is our primary priority…”


Endorsed by AAFP, AAP, ACNM, ACOG, ACOOG, AWHONN, SMFM