AHA Members-Only Webcast

Sustaining Successful Outcomes with the Obstetric Hemorrhage Patient Safety Bundle

Presenters:
Debra Bingham – Vice Chair, Council on Patient Safety in Women's Health Care; Vice President of Nursing Research, Education and Practice, AWHONN
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Moderator:
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December 7, 2015

American Hospital Association

Debra Bingham, DrPH, RN, FAAN
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

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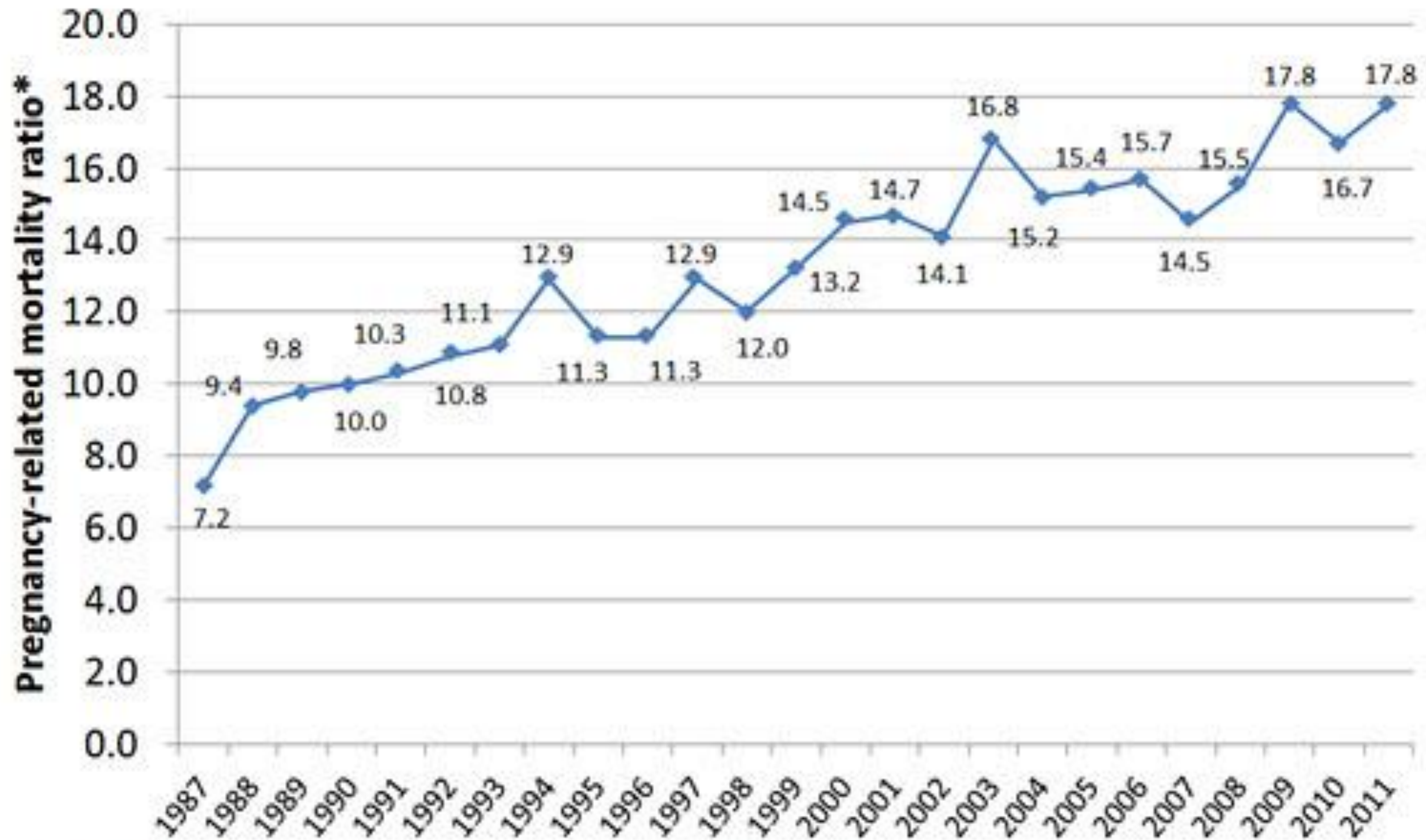
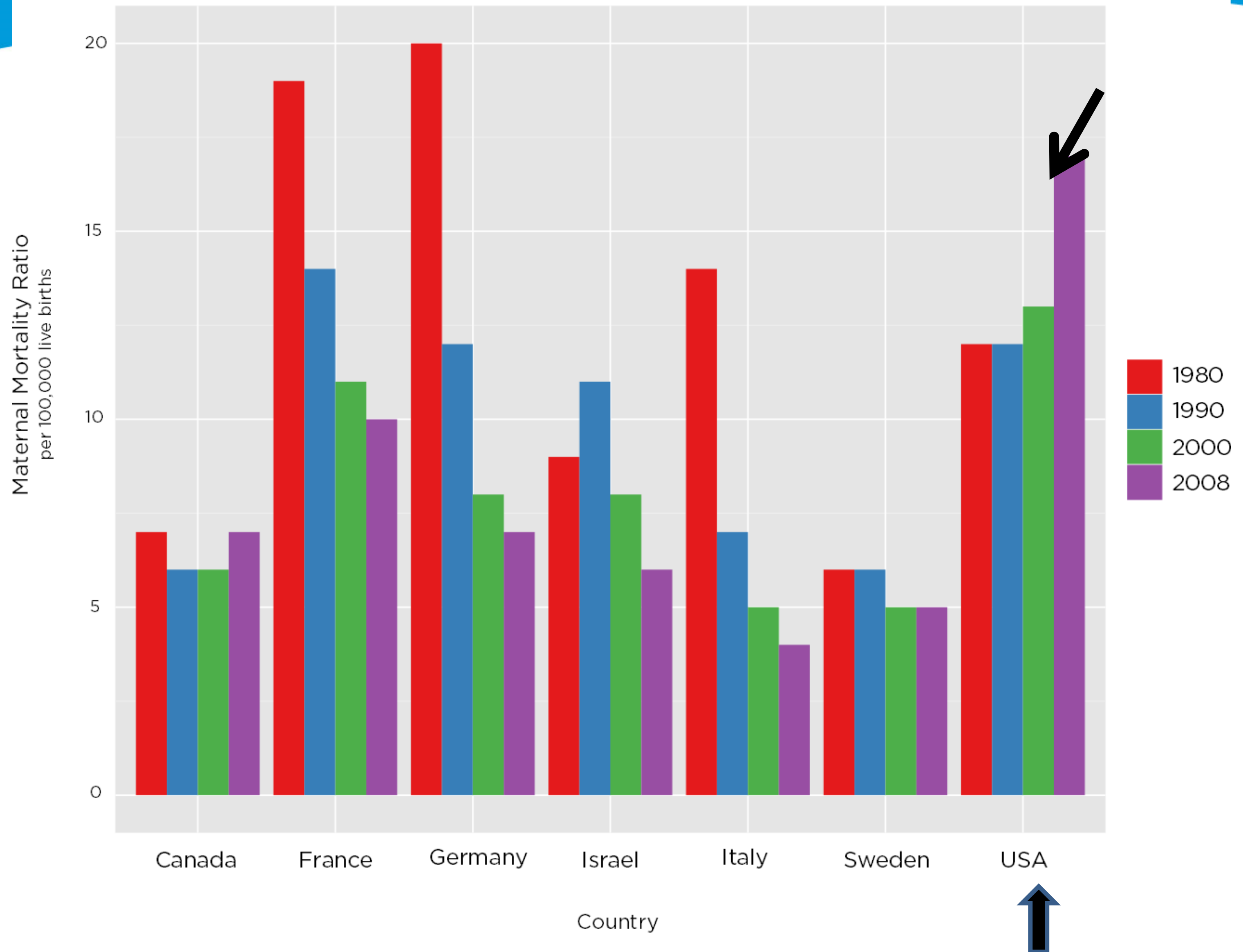


http://www.cdc.gov/reproductivehealth/MaternalInfantHealth/PMSS.html



Hogan, M. C., Foreman, K. J., Naghavi, M., Ahn, S. Y., Wang, M., Makela, S. M., ... Murray, C. J. L. (2010). Maternal mortality for 181 countries, 1980-2008: a systematic analysis of progress towards Millennium Development Goal 5. Lancet, 375(9726), 1609–1623. http://doi.org/10.1016/S0140-6736(10)60518-1

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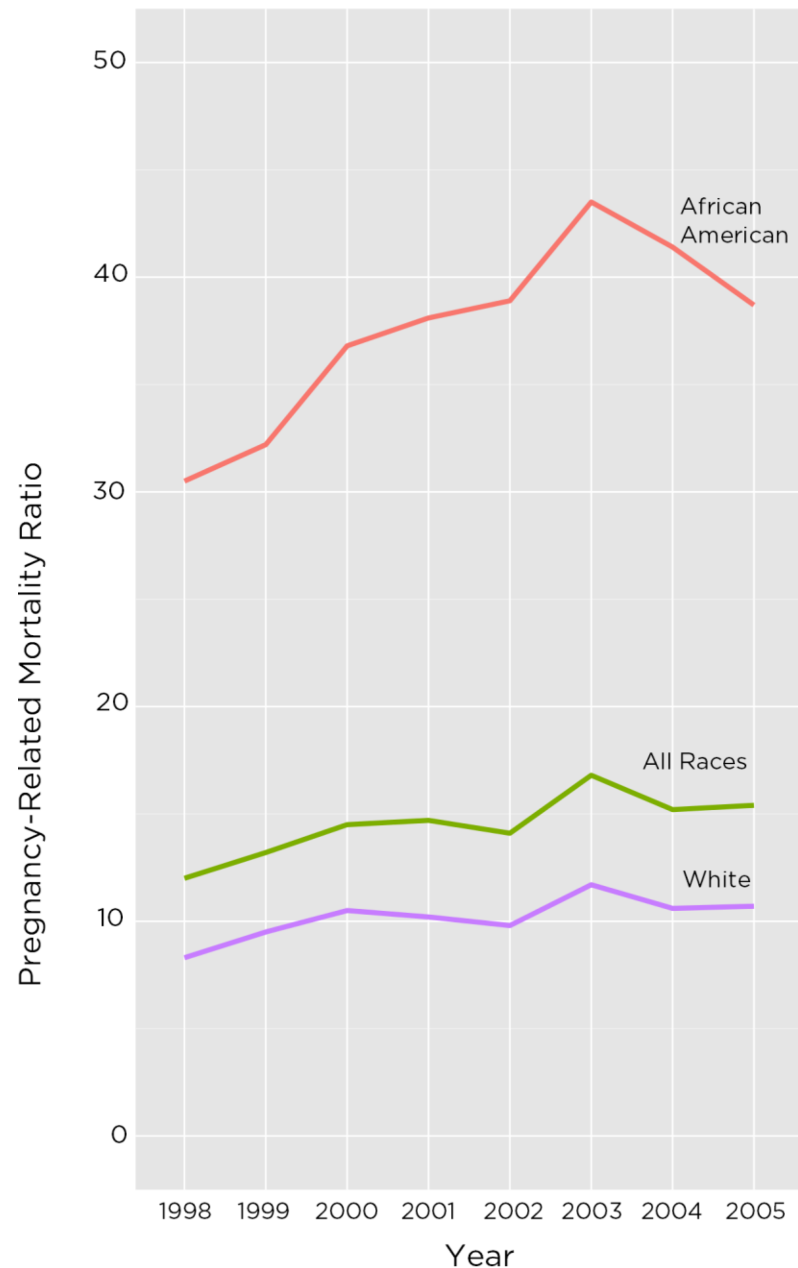
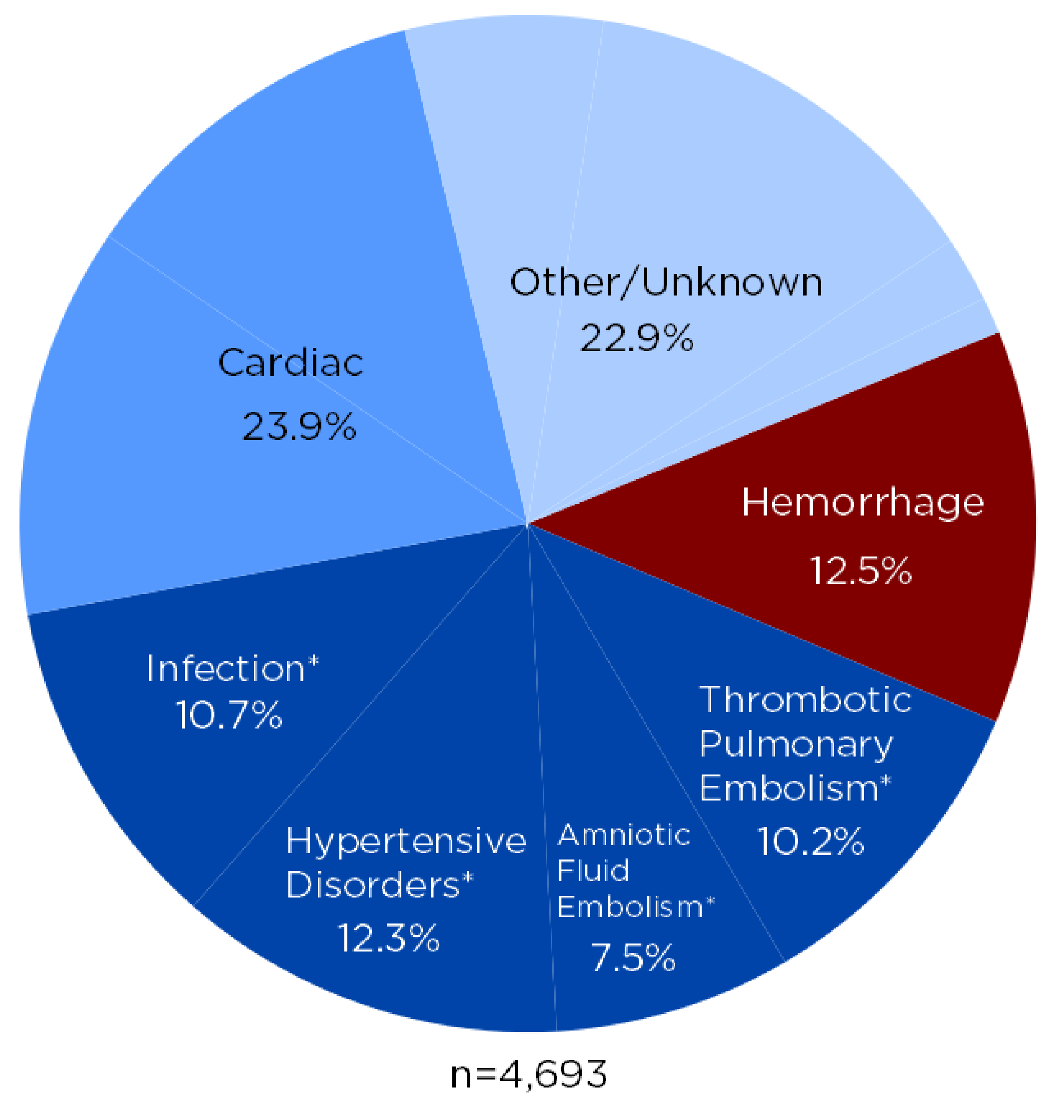
Pregnancy-Related Mortality Ratio by Race



Source: Berg et al. (2010). Pregnancy-Related Mortality In the United States 1998-2005. *Obstetrics & Gynecology, 116.*

Pregnancy-Related Deaths 1998-2005



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

Source: Berg et al. (2010). Pregnancy-Related Mortality In the United States 1998-2005. *Obstetrics & Gynecology, 116.*

Council on Patient Safety in Women's Health Care

www.safehealthcareforeverywoman.org

COUNCIL ON PATIENT SAFETY
IN WOMEN'S HEALTH CARE
safe health care for every woman

Home | About Us | Contact Us | Council Members | Maternal Safety | Get SMM Forms | Safety Action Series

Participate in our Safety Action Series

Contact the Council

We encourage you to contact us to learn more about our mission, purpose and offerings.

Meet the Council Members

The Council on Patient Safety in Women's Health Care's purpose is a unique consortium of organizations across the spectrum of women's health who have come together to promote safe health care for every woman.

We invite you to find out more about the member organizations who make the Council possible. Without their dedication, support and continual input, we would not be able to provide the comprehensive support available on this site. Meet the Council Members by clicking here.

Get the SMM Reporting Forms

Get access to the Severe Maternal Morbidity (SMM) Reporting Forms easily and quickly (registration required).

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	Facility Administrative Review
MS Word (Editable)	MS Word (Editable)
Adobe PDF (Can be completed in-form)	Adobe PDF (Can be completed in-form)

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.

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PATIENT SAFETY BUNDLE

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 (QI) committee

May 2015

AAFP
ACOG
ACNM
AWHONN
SOAP
+12 other professional orgs and other partners

Postpartum Hemorrhage Project

www.pphproject.org

New Jersey
31/52 Hospitals

Washington, DC
2/7 Hospitals

Georgia
25/84 Birthing Hospitals

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

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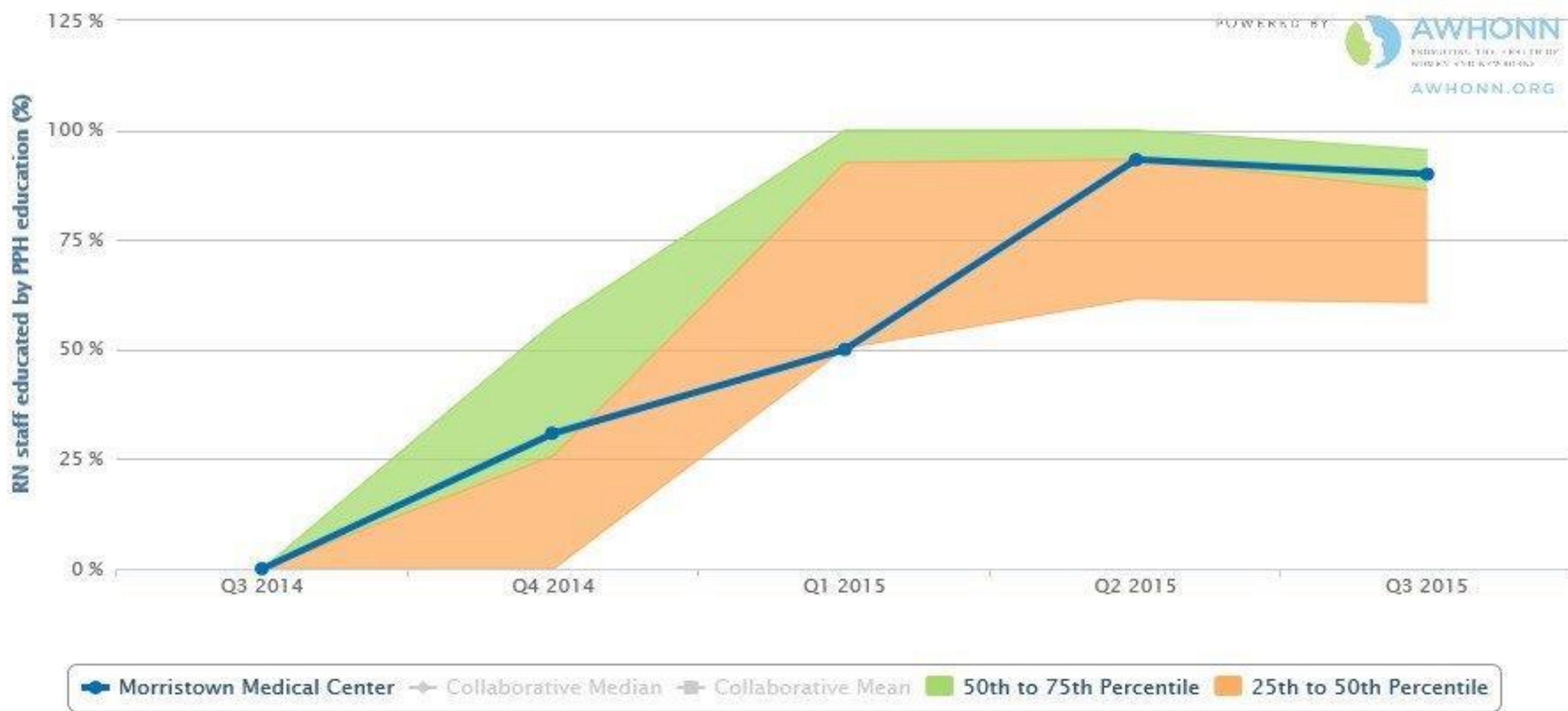
Morristown Medical Center

- 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 On Line Education



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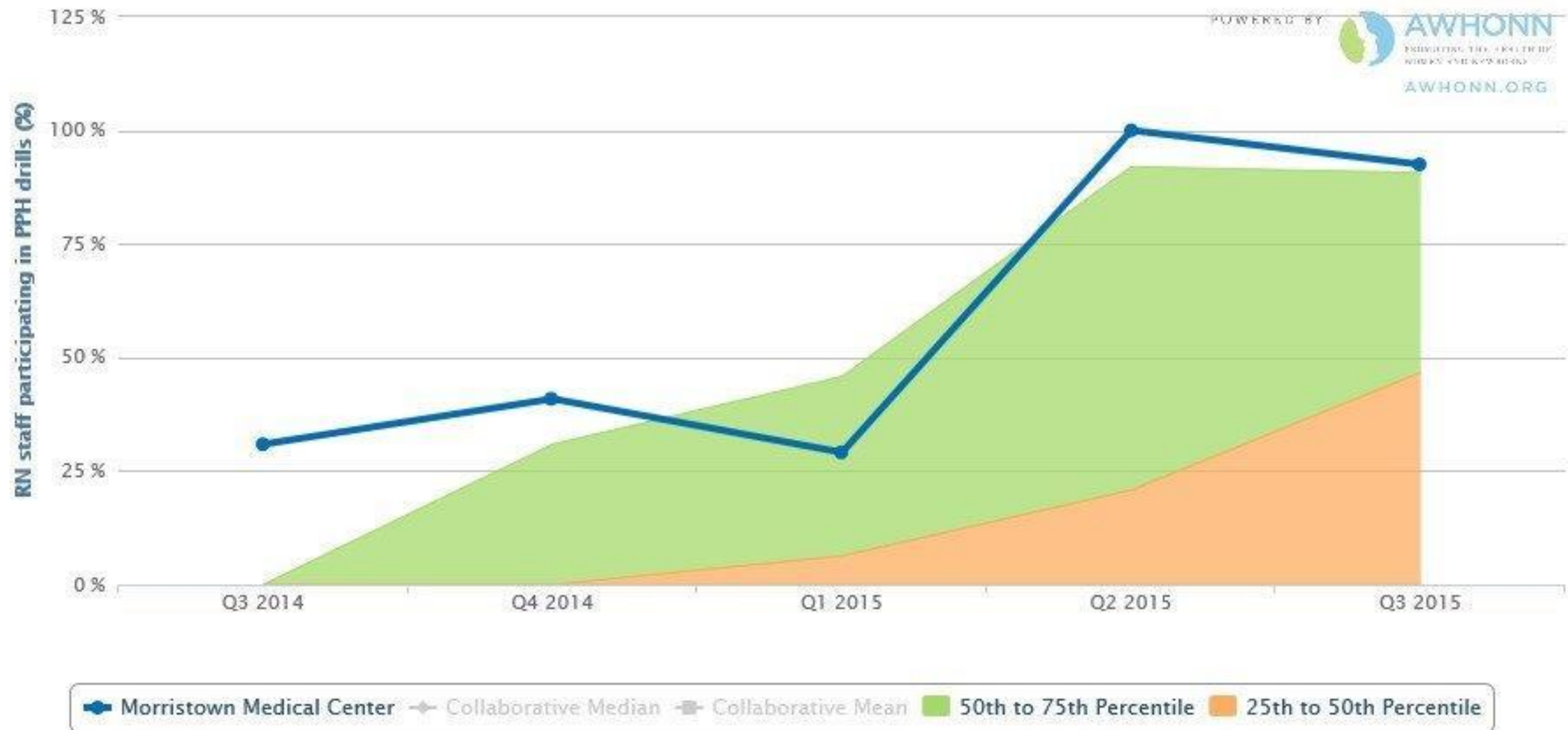
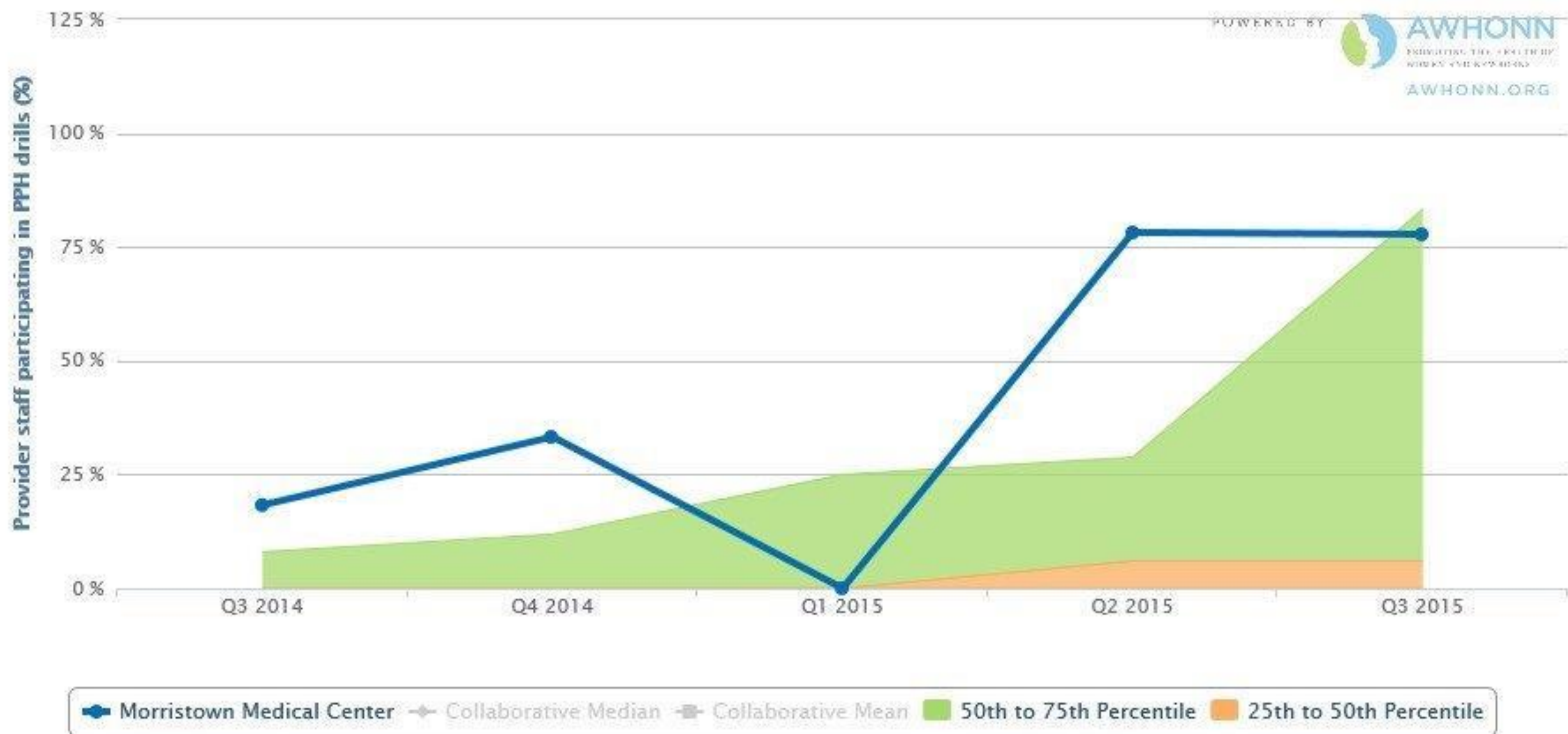
RN Participation in Hemorrhage Drills



Provider Participation in Hemorrhage Drills



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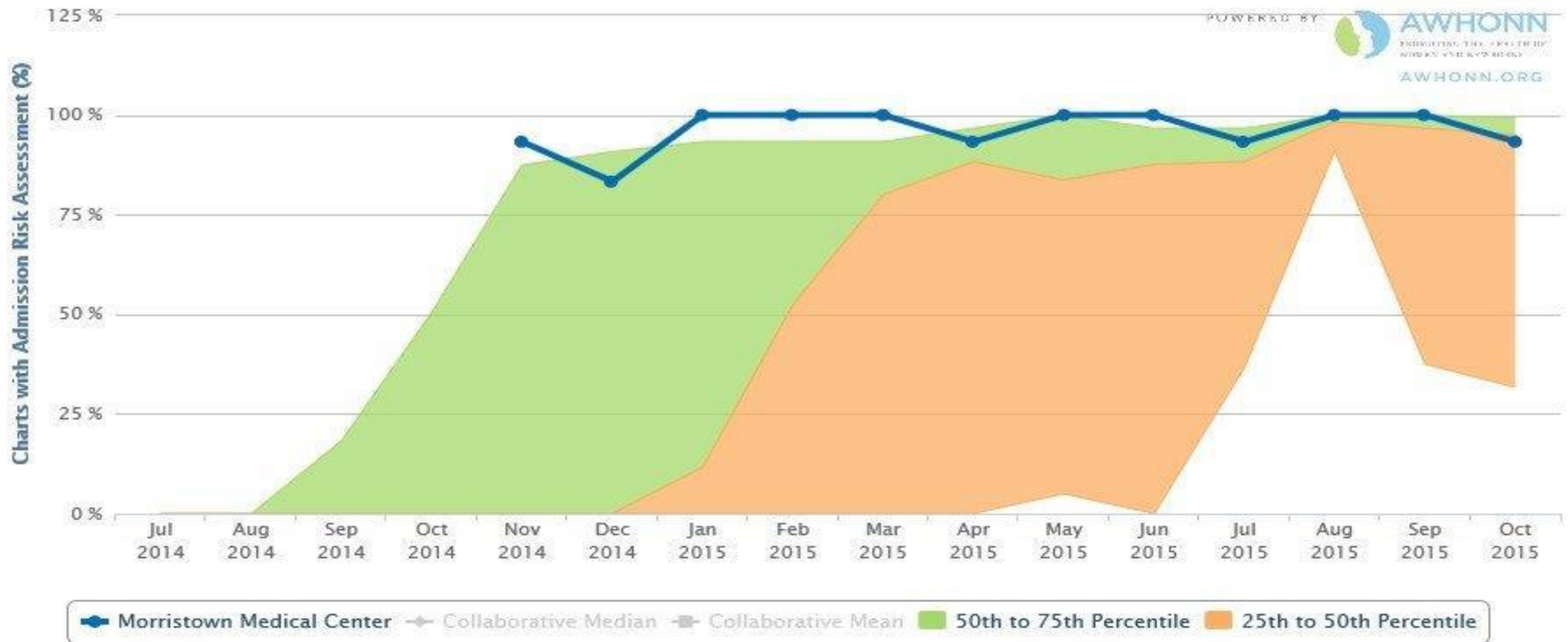
Recognition and Prevention

Admission Hemorrhage Risk Assessment



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Pre-Birth Risk Assessment

Charts with PPH Pre-Birth Risk Assessment (%)

125 %
100 %
75 %
50 %
25 %
0 %

Jul 2014 | Aug 2014 | Sep 2014 | Oct 2014 | Nov 2014 | Dec 2014 | Jan 2015 | Feb 2015 | Mar 2015 | Apr 2015 | May 2015 | Jun 2015 | Jul 2015 | Aug 2015 | Sep 2015 | Oct 2015

Apr 2015
Morristown Medical Center: **80**

Morristown Medical Center — Collaborative Median — Collaborative Mean — 50th to 75th Percentile — 25th to 50th Percentile

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Post Birth Risk Assessment

Charts with PPH Post-Birth Risk Assessment (%)

125 %
100 %
75 %
50 %
25 %
0 %

Jul 2014
Aug 2014
Sep 2014
Oct 2014
Nov 2014
Dec 2014
Jan 2015
Feb 2015
Mar 2015
Apr 2015
May 2015
Jun 2015
Jul 2015
Aug 2015
Sep 2015
Oct 2015

Apr 2015
Morristown Medical Center: 73.3

Morristown Medical Center
Collaborative Median
Collaborative Mean
50th to 75th Percentile
25th to 50th Percentile

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Quantified Blood Loss

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Response - Protocols

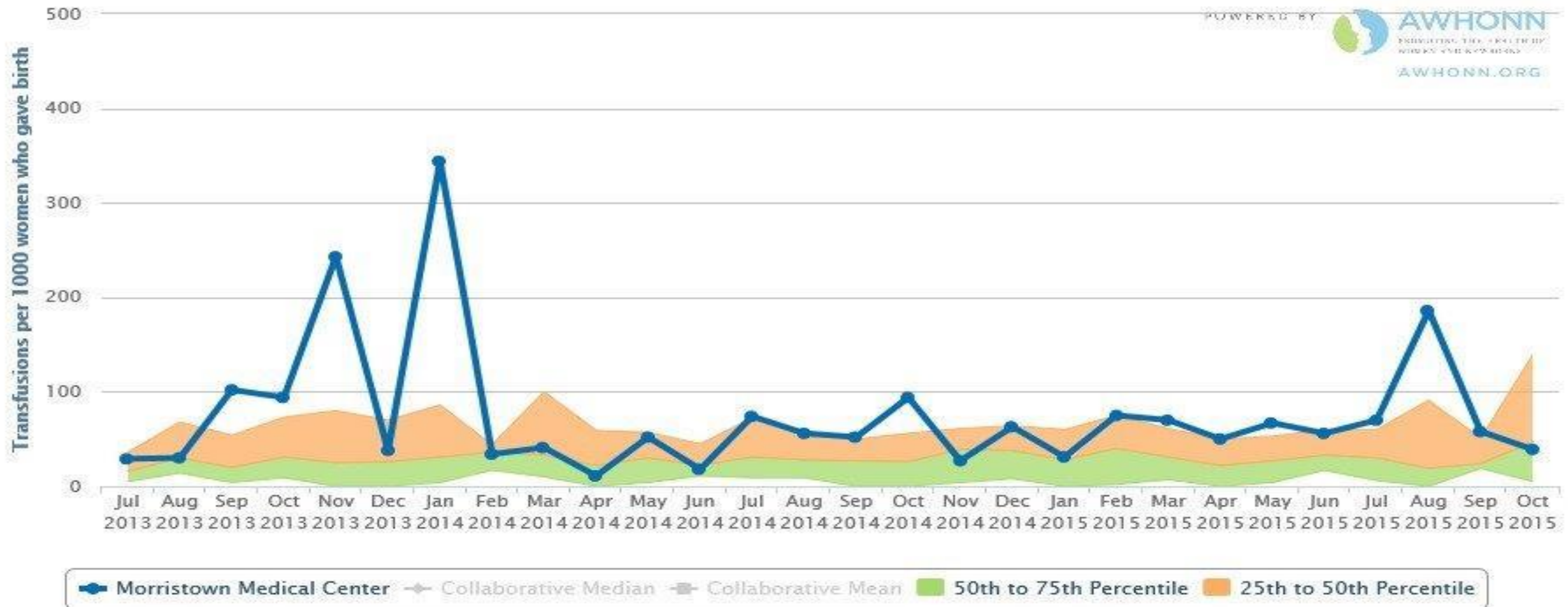
- Postpartum Hemorrhage protocol in place – Reviewed and updated
- Fourth stage of labor policy already in place
- Massive Transfusion protocol in place – Reviewed and updated
- System Improvements
  – Multidisciplinary Obstetric Quality and Safety Committee

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



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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

Postpartum Hemorrhage Project

www.pphproject.org

New Jersey
31/52 Hospitals

Washington, DC
2/7 Hospitals

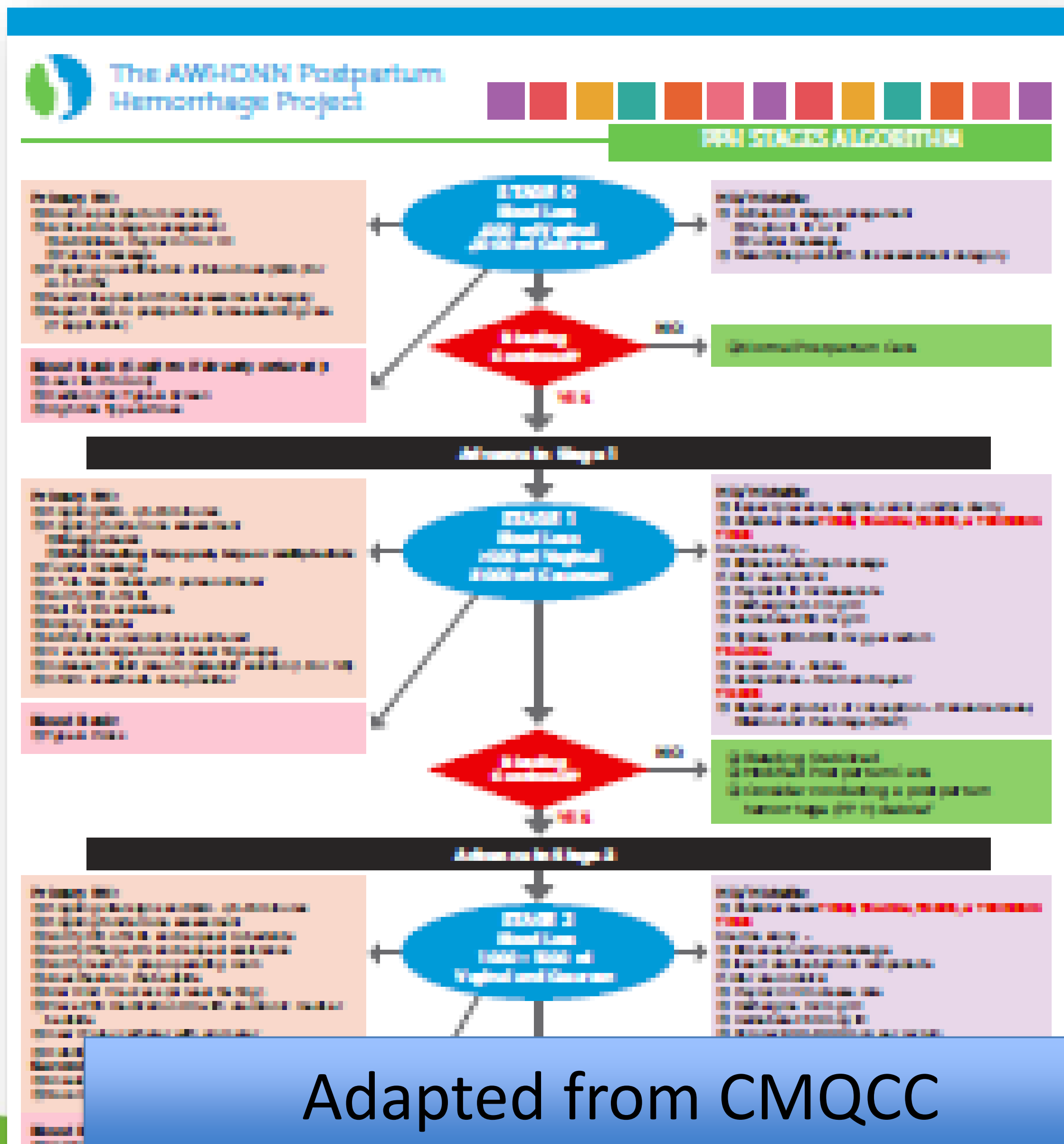
Georgia
25/84 Birthing Hospitals

Three geographic regions were selected based on the following criteria:

- High rates of maternal mortality
  DC (51st), GA (50th), NJ (35th)
- 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

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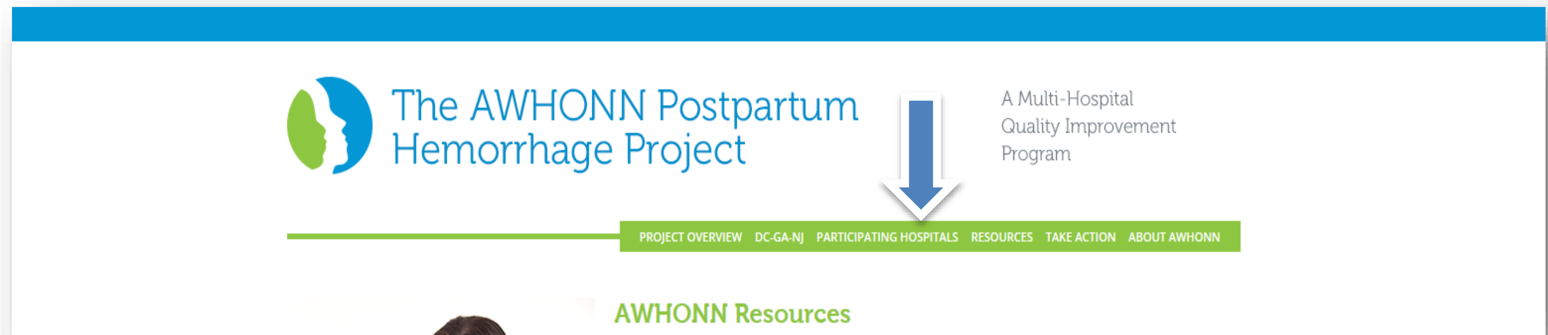
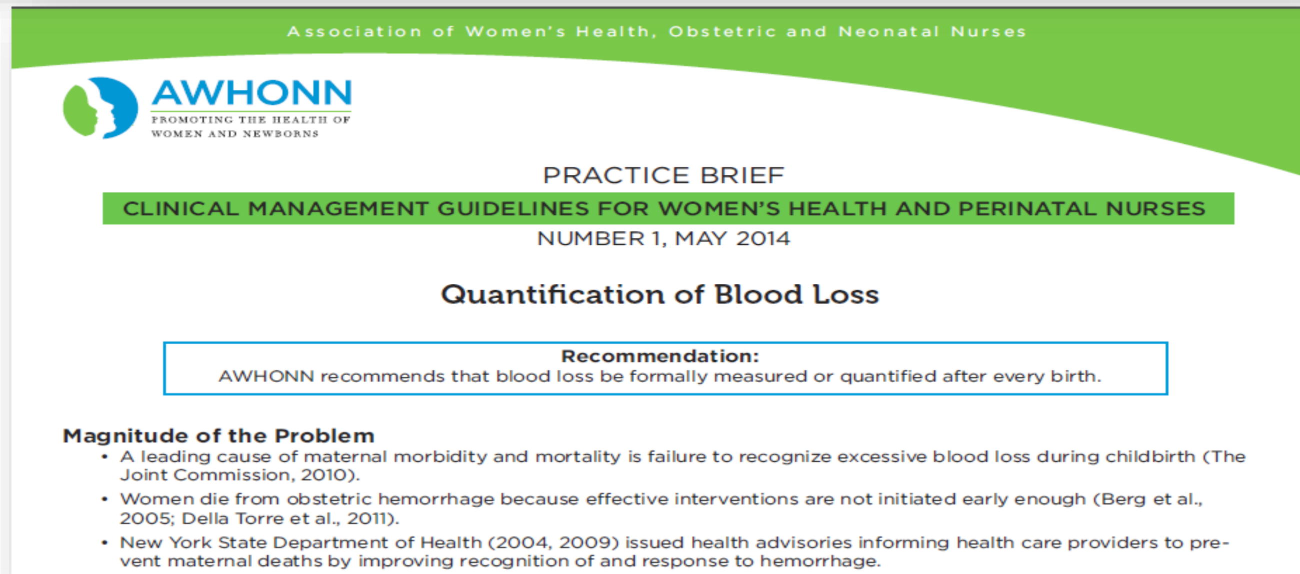
AWHONN's QBL Practice Brief

www.pphproject.org website – Resources tab





Association of Women's Health, Obstetric and Neonatal Nurses

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PRACTICE BRIEF

CLINICAL MANAGEMENT GUIDELINES FOR WOMEN'S HEALTH AND PERINATAL NURSES

NUMBER 1, MAY 2014

Quantification of Blood Loss

Recommendation:
AWHONN recommends that blood loss be formally measured or quantified after every birth.

Magnitude of the Problem

- A leading cause of maternal morbidity and mortality is failure to recognize excessive blood loss during childbirth (The Joint Commission, 2010).
- Women die from obstetric hemorrhage because effective interventions are not initiated early enough (Berg et al., 2005; Della Torre et al., 2011).
- New York State Department of Health (2004, 2009) issued health advisories informing health care providers to prevent maternal deaths by improving recognition of and response to hemorrhage.

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http://www.pphproject.org/resources.asp

AWHONN QBL Video

https://www.youtube.com/watch?v=F_ac-aCbEn0&list=UUPrOhL3Od7ZeFDq27ycS00g

AWHONN PPH Education Modules

Quantification of Blood Loss

The AWHONN PPH education modules will be released nationally
CNE from AWHONN
CME from ACOG

Transfusion Therapy

*On-line
*Self-paced
*Team training
*Certificate of completion

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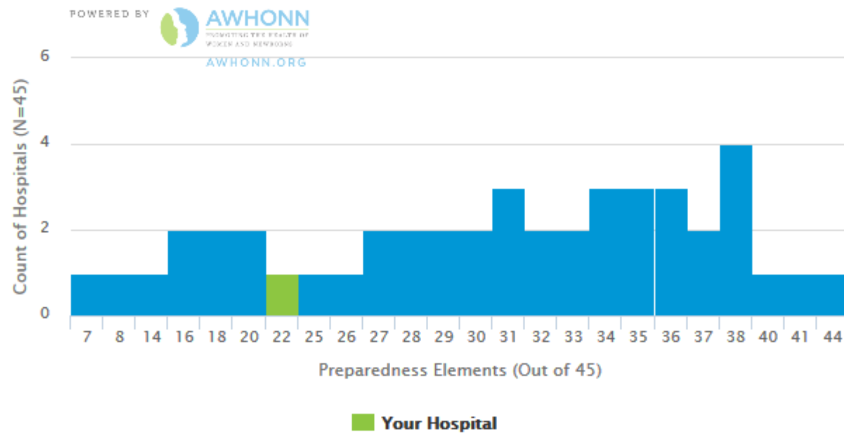
AWHONN Postpartum Hemorrhage Preparedness National Survey

- 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.

AWHONN Postpartum Hemorrhage Preparedness National Survey

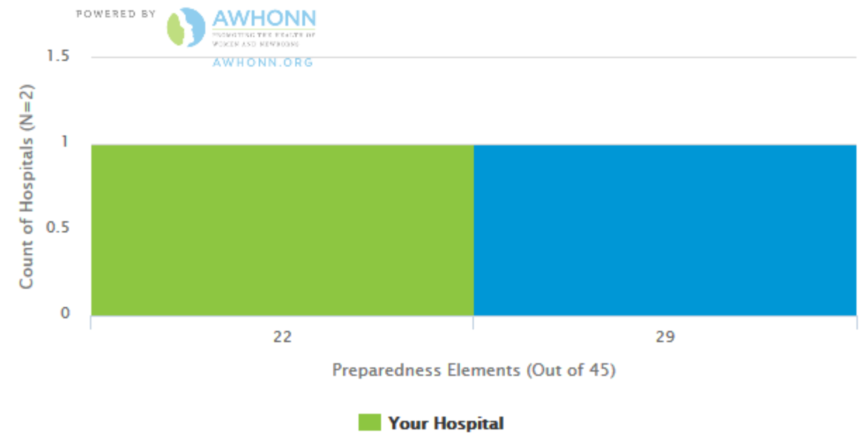
National Comparisons

Overall Number of Preparedness Elements Available



State Comparisons (IN)

Overall Number of Preparedness Elements Available



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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…"

Quality Patient Care in Labor and Delivery:
A Call to Action. (2012) *JOGNN, 41*(1), 151-153.

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

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