Safety Action Series

Connected Regional Projects
Speaker Panel

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VP of Nursing Research, Education, and Practice
Association on Women’s Health, Obstetric and Neonatal Nurses

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Professor & Vice-Chair
Obstetrics and Gynecology
Albert Einstein Medical School/Montefiore Medical Center

**CDR Keisher Highsmith, DrPH**
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Maternal and Child Health Bureau
Health Resources and Services Administration

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Executive Director
ACOG District II (New York State)
Disclosures

- Debra Bingham, DrPH, RN has no real or perceived conflicts of interest to disclose.
- Cynthia Chazotte, MD, FACOG has no real or perceived conflicts of interest to disclose.
- CDR Keisher Highsmith, DrPH has no real or perceived conflicts of interest to disclose.
- Donna Montalto, MPP has no real or perceived conflicts of interest to disclose.
Objectives

➢ A Focused Effort in the District of Columbia, Georgia, and New Jersey
   ▪ A detailed look the work of AWHONN’s Postpartum Hemorrhage Project collaborative efforts in these targeted geographic areas

➢ Lessons Learned in New York
   ▪ Guidance, tips, and best practices for successfully implementing patient safety bundles and evoking change at the local level

➢ National Collaborative Network
   ▪ An overview of the soon-to-be launched Alliance for Innovation on Maternal Health (AIM) focused on providing assistance to drive quality improvement nationwide
Council on Patient Safety in Women’s Health Care

www.safehealthcareforeverywoman.org

Dr. Bingham is the Vice Chair of the Council
National Partnership for Maternal Safety
3 Maternal Safety Bundles

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

Obstetric Hemorrhage
Preeclampsia/ Hypertension
Prevention of VTE in Pregnancy

Note: The bundles represent outlines of highly recommended protocols and materials important to safe care BUT the specific contents and protocols should be individualized to meet local capabilities.

These bundles are being released from the Council on Patient Safety in Women’s Health Care
READINESS
Every unit
- Hemorrhage cart with supplies, checklist, and instruction cards for intrauterine balloons and compression 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
National Partnership for Maternal Safety

The Maternal Early Warning Criteria: A Proposal from the National Partnership for Maternal Safety

Jill M. Mhyre, Robyn D’Oria, Afshan B. Hameed, Justin R. Lappen, Sharon L. Holley, Stephen K. Hunter, Robin L. Jones, Jeffrey C. King, and Mary E. D’Alton

Co-Published in the Green Journal

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National Partnership for Maternal Safety

Current Commentary

Standardized Severe Maternal Morbidity Review
Rationale and Process

Sarah J. Kilpatrick, MD, PhD, Cynthia Berg, MD, MPH, Peter Bernstein, MD, Debra Bingham, DrPH, RN, Ana Delgado, CNM, MSN, William M. Callaghan, MD, MPH, Karen Harris, MD, MPH, Susan Lanni, MD, Jeanne Mahoney, RN, BSN, Elliot Main, MD, Amy Nacht, CNM, MSN, Michael Schellpfeffer, MD, Thomas Westover, MD, and Margaret Harper, MD

Co-Published in JOGNN
It’s 2015 – Where are we?
Millennium Development Goal 5

• Target 5A: Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio


*Note: Number of pregnancy-related deaths per 100,000 live births per year.
Maternal Mortality in the United States

THE SITUATION

Maternal mortality is the death of a woman from complications of pregnancy and childbirth. The leading causes of maternal death in the U.S. include blood clot (embolism), excessive bleeding (obstetric hemorrhage), and severe high blood pressure (preeclampsia).

The approximate number of women who nearly die during pregnancy or childbirth every year in the U.S.:

- >50,000

The maternal mortality rate in the U.S. has nearly doubled since 1990, despite significant progress in reducing rates globally:

- 2X

The U.S.’s global rank in maternal mortality rate – the worst among industrialized nations:

- 47th

THE SOLUTIONS

Merck for Mothers is a 10-year $500 million initiative focused on building a world where no woman dies giving life. We are committed to using our business and scientific expertise to improve maternal health and are already working in more than 20 countries around the world.

- Strengthening Community Initiatives that link high-risk women to care before, during, and after pregnancy
- Implementing Standard Approaches to address obstetric emergencies
- Enhancing Data Collection and Reviews to better understand why maternal deaths are occurring
U.S. Collaboration to Strengthen the Quality of Maternity Care

Ensuring the optimization & management of obstetric complications to reduce the incidence of maternal mortality and morbidity

Project names:
- Safe Motherhood Initiative (ACOG, District II) New York State
- Post-Partum Hemorrhage Project (AWHONN), Georgia, New Jersey Washington, D.C
- California Partnership for Maternal Safety (CMQCC) California

Scale: Approximately one million pregnant women
Timeframe: May 2013 – April 2016

In partnership with Merck for Mothers, ACOG District II, AWHONN and CMQCC are working to address inconsistencies in policies around managing obstetric emergencies, to ensure that health providers can respond quickly and appropriately to warning signs of serious maternal complications with evidence-based guidelines and training. Together, the three organizations aim to deliver high-quality health care no matter where a woman gives birth in the U.S. Beginning in areas with disproportionately high rates of maternal mortality, the project has four key features:

- **Safety Bundles**
  ACOG District II, AWHONN and CMQCC are developing sets of evidence-based practices to prevent and treat the leading killers of pregnant women in the U.S. (obstetric hemorrhage, preeclampsia/eclampsia and embolism).

- **National Advocacy**
  Performance indicators and hospital-based outcome data help inform advocacy efforts to adopt safety bundles nationally -- to improve the quality of care for the four million women who give birth in the U.S. each year.

- **Large Scale Implementation**
  Merck for Mothers' partners are implementing safety bundles in a range of hospitals across five states, from rural community to large urban facilities.

- **Evaluation of Improvements**
  Partners measure improvements in quality of care and maternal health outcomes as a result of the safety bundles.

ACOG District II is working with more than 10,000 providers and 110 delivery units across New York State (quarter of a million births each year) to develop and implement safety bundles for managing obstetric complications for the three leading killers of pregnant women -- obstetric hemorrhage, preeclampsia/eclampsia and embolism.

AWHONN is assessing current obstetric practices in hospitals in Georgia, New Jersey and Washington, D.C. to ultimately improve clinicians' ability to recognize women at the greatest risk of hemorrhage and respond appropriately based on specific indicators, including quantified blood loss.

CMQCC is working with more than 200 labor and delivery hospitals across California (more than half a million births per year) to implement toolkits to guide the management of obstetric hemorrhage and preeclampsia/eclampsia.

For more information visit [www.merckformothers.com](http://www.merckformothers.com) and [www.acog.org](http://www.acog.org).

This program is funded by Merck for Mothers, Merck's 10-year, $500 million initiative focused on improving the health and well-being of mothers during pregnancy and childbirth.
AWHONN Postpartum Hemorrhage (PPH) Project

Debra Bingham, DrPH, RN, FAAN
Vice President of Research, Education, and Practice
Association of Women’s Health, Obstetric and Neonatal Nurses (AWHONN)
Objective

• Describe why AWHONN is working to improve recognition, readiness and response to a postpartum hemorrhage (PPH)

• Discuss AWHONN’s partner efforts to reduce maternal mortality and morbidity

• Describe AWHONN’s multi-hospital postpartum hemorrhage project (www.PPHproject.org)
Guiding Perspective

Goal: Ensure that all women and newborns have equal access to evidence-based, high-quality care

Over 350,000 Registered Nurses care for women and newborns in the United States. (Calculated from HRSA 2008 data)
Countries with the Lowest Maternal Mortality Ratios

Maternal Deaths Per 100,000 Live Births

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Leading Nursing Scholarship
Examples of AWHONN Resources

Minimal to No Implementation Support

Evidence-Based Guidelines

AWHONN WEBINARS

AWHONN Late Preterm Infant Initiative

Staffing Initiatives

© AWHONN 2015
Obstetric hemorrhage is a leading cause of maternal mortality and mortality in the United States (Berg et al., 2010)

Obstetric hemorrhage is a major cause of maternal morbidity
In 2006, obstetric hemorrhage affected 124,708 (2.9%) of all women who gave birth in the United States (Callaghan et al., 2010)

54-93% of hemorrhage-related deaths are preventable
Women die from postpartum hemorrhage because they do not receive early, effective and aggressive lifesaving treatments.

Nursing Leadership is Essential to...
**AWHONN’s Postpartum Hemorrhage Project**
A Multi-State, Multi-Hospital Collaborative Approach
(www.PPHproject.org)

**Selection Criteria:**
- High rates of maternal mortality
  - DC (51st), GA (50th), NJ (35th)
- State-leaders willing to partner with AWHONN
- No competing OB hemorrhage-related initiatives in the state
- Strong AWHONN state leaders

**New Jersey (NJ)**
- 11.3 per 100,000
- Ranks 35th
- 31/52 Hospitals

**Washington, DC**
- 34.9 per 100,000
- Higher than all states
- 2/7 Hospitals

**Georgia (GA)**
- 20.5 per 100,000
- Ranks 50th
- 25/84 Birthing Hospitals

Supported by a grant from Merck for Mothers
# Interdisciplinary Expert Panel

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Locations</th>
<th>Area of Expertise</th>
</tr>
</thead>
</table>
| Brian Bateman, MD, MSc | • Assistant Professor of Anaesthesia  
• Faculty, Department of Anesthesia | • Harvard Medical School  
• Massachusetts General Hospital, Brigham and Women’s Hospital | • Anesthesiology  
• Epidemiology |
| Brenda Chagolla, MSN, RN, CNS | • Manager; University Birthing Suites/Women’s Pavilion/Newborn Nursery | • University of California Davis Medical Center | • Nursing Administration |
| Jed Gorlin, MD | • Medical Director  
• Associate Professor | • Memorial Blood Center  
• University of Minnesota | • Transfusion Medicine |
| David Lagrew, MD | • Medical Director of Physician Informatics  
• Chief Integration and Accountability Officer | • MemorialCare | • Maternal Fetal Medicine  
• Informatics |
| Marla J. Marek, MSN, BSN, RNC, PhD(c) | • Assistant Professor  
• Staff nurse | • California State University Stanislaus | • Nursing Research  
• Nurse Educator |
| Debra Bingham, DrPH, RN | • Vice President of Research, Education and Publications | • AWHONN | • Quality Improvement  
Implementation Science  
• Nursing Research |
| Renée Byfield, MS, FNP, RN, C-EFM | • Nurse Program Development Specialist | • AWHONN | • Perinatal Patient Safety  
• Nursing Education |
| Ben Scheich, MS | • Associate Director, Data Analytics | • AWHONN | • Project Management  
• Biostatistics |
Data Collection Elements

• Baseline Assessment
  – Number of preparedness elements available
  – Safety Attitudes Questionnaire
  – Staffing Data

• Outcome Indicators

• Process Indicators

• Structure Indicators

• Intensity Data to measure leadership engagement

• Post-Implementation Assessment
  – Staffing Data
  – Safety Attitudes Questionnaire
70% of Hospitals GA & NJ
N=95
Example of Data Collection (Admission Risk Assessments)

**Outcome Measures:**
- ICU Admissions & Blood Transfusions

**Structure Measures**
- Develop Policies and Procedures
- Education, Drills, Debriefs

**Process Measures**
- 3 Risk Assessments (Admission, Pre-Birth, Post-Birth)
- Quantification of Blood Loss
PPH Project Tools
National Recommendations for Quantifying Blood Loss (QBL)

• AWHONN
  – All births

• California Maternal Quality Care Collaborative (CMQCC)
  – All births

• National Partnership for Maternal Safety
  – Formal measurement of cumulative blood loss for every patient
AWHONN’s QBL Practice Brief

www.pphproject.org website – Resources tab

**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).

http://www.pphproject.org/resources.asp
AWHONN Quantification of Blood Loss (QBL) Video

https://www.youtube.com/watch?v=F_ac-aCbEn0&list=UUPrOhL3Od7ZeFDq27ycS00g
Education Modules
To Be Released Nationally – Fall 2015

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

© AWHONN 2015  www.pphproject.org
Benefits of Participating in AWHONN’s PPH Collaborative

• Expert mentoring from an inter-disciplinary national faculty of QI leaders
• Peer mentoring from other leaders
• Education
  – Clinical
  – Building Leadership Capacity
Increase in Blood Transfusion Rates

Stop the Bleeding!

183% increase in the number of women receiving a blood transfusion for delivery hospitalizations

Etiology of Postpartum Hemorrhage

- Uterine Atony: 77.8%
- Retained placenta (including accreta): 9.4%
- Coagulopathy: 5.1%
- Delayed (more than 24 h after delivery): 7.7%

Go The Full 40™ Campaign

- Ads & posters
- 40 Reasons Article
- Zone at Health4Mom.org
- Toolkit
- Champions Group
KEEP CALM AND WAIT FOR LABOR

GoTheFull40.com
“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
Thank you!
Questions?

www.pphproject.org
or
customerservice@awhonn.org
Lessons Learned in New York
ACOG District II

Donna Montalto, MPP
Maternal Mortality in the U.S.

New York State ranks 47th out of 50

Source: NLWC from Center for Disease Control and Prevention, National Center for Health Statistics 1999-2006
Safe Motherhood Initiative (SMI)

Began in 2013 • 3 year grant from Merck for Mothers

Focus population

127 obstetric hospitals in New York State
• 49 Level 1
• 26 Level 2
• 35 Level 3
• 18 RPCs

117 participate in SMI
SMI Bundle Content

Binder

Ringed cards

Posters
Checklists for:
- PPH stages
- Severe HTN in pregnancy
- Eclampsia
- Postpartum preeclampsia (for ED)
- Recommended instruments for obstetric hemorrhage

Care management specific to PPH, HTN, VTE with implementation guides

- Visual aids
- Algorithms
- Risk assessment tables
- Medication dosing tables
- Debriefing forms

Support tools for patients, families, staff
SMI Implementation

Binder contains implementation guidance for each bundle

Implementation Guidance

Risk Assessment

Early opportunities for the recognition & prevention of obstetric hemorrhage exist for every patient. Risk assessment, anticipation, and planning occur during:

- Prenatal care
- Antepartum
- L&D admission
- Intrapartum developing risk

Examples of clinical situations that are known to increase a patient’s risk for hemorrhage include an abnormally adherent placenta, morbid obesity, clinically significant coagulopathies, and other situations such as a patient's social/religious/personal choices in relation to receiving blood products.

Upon admission to Labor and Delivery, a patient’s obstetric hemorrhage risk status should be identified. Some examples of medium and high-risk situations are outlined in these risk assessment tables.

It is important to note that two or more medium risk issues may require that the patient be classified as high risk (e.g. multiple gestation and large myomas).

Having blood available as a type & screen or as a type & crossmatch for each risk category can be determined by the individual institution’s blood bank requirements.

*These risk assessment tables have been made available for use and replication on the obstetric unit.
Empowering People

About this element:
When people are empowered they have the skills and knowledge to perform effectively, they are trusted and expected to make decisions, they take responsibility, intervene as they see fit and take the initiative to do so.

I am asked for suggestions on how to improve patient care and safety.

We are encouraged to report errors, even those that are caught and corrected before affecting the patient.

I feel free to question the decisions or actions of others, regardless of their level of authority.

I am comfortable intervening if I see someone about to do something that might threaten patient safety, regardless of their level of authority.

I have the knowledge to identify when someone is about to do something that might threaten patient safety.

I have the skills to manage an emergency safely until someone else arrives to assist or assume management.

We are encouraged to make decisions with the best interest of the patient in mind.

We take the initiative to solve problems faced in our daily work without waiting to be told.

We are encouraged to make decisions within our own area of expertise.
SMI Implementation

Staged Checklist: STAGE 1 - 4

**Obstetric Hemorrhage: Stage 1**
- Blood loss > 500 mL vaginal OR blood loss > 1000 mL, transient with normal vital signs and lab values
- Recheck VS 12, lab every 1 minute
- Record cumulative blood loss
- Insert Foley catheter
- IV access at least 18 gauge
- Increase intravenous fluid crystalloid I:2:1 ratio without dextran
- Fundal massage
- Consider anti-fibrinolytics or TXA - Tranexamic Acid, Tocolytics
- Blood bank: Type and cross 3 units PRBCs

**Medications**
- Diclofenac (Nonsteroidal): 50-100 mg intramuscularly
- Magnesium Sulfate (Methohexital): 1.2 intravenous bolus (may be repeated every 2-4 hours)
- 15-mg methyl FGR (Oxytocin, Carbetocin): 0.35 milligrams intravenously (may repeat every 15 minutes, maximum 6 doses)
- Mifepristone (Mifepristone): 800-1000 micrograms rectally

**Obstetric Hemorrhage: Stage 2**
- Continuous bleeding SBL > 500 mL or any patient requiring ≥ 3 units RBCs with normal vital signs and lab values
- 2nd iv access at least 18 gauge
- STAT labs, with CT-scans & Hemoglobin
- Warm IV bags
- For uterine tampon - Consider uterine balloon or surgical interventions
- Blood bank: DO NOT wait for labs. Transfuse per clinical signs/symptoms
  - Notify OB-Hematology, bring 2 units PRBCs to bedside. Give 2 units FFP
- Medications: Continue medications from Stage 1
- Consider moving patient to OR (renal exposure, potential CaC)
- Mobilize additional team members as necessary

**Obstetric Hemorrhage: Stage 3**
- Continuous bleeding with SBL > 1500 mL, OR > 2 units PRBCs given OR patient with abnormal vital signs/labs/ultrasonography
- Outline management plan - Serial re-evaluation - Communicate with hemorrhage team
- Replacements: ABC 2-step Plan: ABC or If coagulopathy and electrolyte abnormalities, consider consultation for alternative agents
- Uterine therapy for bleeding (placenta)
- Rule out placental abruption, coagulopathy, DIC, occult bleeding (USG)
- Minimize hemostasis immediately, interventions based on etiology
- Adopt additional measures of poor response

**Obstetric Hemorrhage: Stage 4**
- Cardiovascular collapse: For patients with cardiovascular collapse or evidence of massive hemorrhage
- Profound hypovolemic shock (blood loss not replaced)
- AFE patients or collapse followed by heavy arterial bleeding from uterine relaxation and associated coagulopathy

In these situations, immediate surgical intervention to ensure hemostasis (hysterecomy) is suggested. This should take place with simultaneous aggressive blood and factor replacement and medical interventions regardless of the patient’s coagulation status. Expedited hemostasis is the only step that will maximize survival for these critical patients.
• Hospitals’ process & outcomes measured via monthly data collection
SMI Implementation

- Monthly phone calls
- Quarterly in-person meetings
- eNewsletters
- SMI mobile phone application
SMI Implementation Support

- Clinical FAQ
- Print materials
- Educational videos
- Clinical simulation scenarios & assessment guides
- Merck for Mothers patient education
Data Collection Tip Sheet
SMI Site Visits

Implementation site visits (7) • Grand rounds presentations (9)

*SMI Committee physicians lead discussion

Sample Agenda

Hospital
Address
Date + Time

9:00-9:10 am
Welcome and Introductions:
Brief Overview of the Obstetric Department
Chairman OB Department

9:15-9:45 am
Introduction to the Safe Motherhood Initiative
SMI Team

9:45-11:00 am
Presentation of (1-2) morbidity/mortality cases
Hospital obstetric staff
An open discussion will follow about how the bundles relate to these cases.

11:00-11:45 am
ACOG presentation on the __________ bundle.

11:45 am-12:00 pm
Data Collection

12:00
BREAK for Lunch

12:20-12:40 pm
Satus Global (MORE®)

12:40-1:00 pm
SMI Review Team Discussion and Closing Remarks

*ACOG tour of obstetric unit, if time permits.
Implementation Visit Questionnaire

Instructions: Please complete this form and fax or email (scan) to ACOG District II by December 19th. This information will only be shared with SMI faculty prior to the visit.

Title of Person Completing: Perinatal Safety Nurse

Reason for Request (what are you looking to accomplish with this visit):

Assist with the "Buy-in" for OB providers to participate.

1. What is your hospital's level of care? (circle one) 1 2 3 RPC

2. Number of MDs/DOs (this includes community/private practice physicians) in the Obstetric Unit: 8-20 (Twenty-eight)

3. Number of family medicine physicians: 0

4. Name of the OB Chief/Chair and their length of service in the position:

4a. Is the Chair elected or selected on a rotating basis? Selected on a rotating basis

5. Do you have an in-house physician (hospitalist)? Yes ☐ No ☐ Not for OB ☐

6. Number of nurses on staff in the Obstetric Unit: 91

7. Number of midwives on staff in the Obstetric Unit: 3 from 3 different OB groups

8. Do you have a patient safety officer dedicated to the OB department? Yes ☐ No ☐

9. Do you have a nurse educator specific to the OB department? Yes ☐ No ☐

10. Does your hospital have an American Nurses Credentialing Center (ANCC) Magnet Designation? Yes ☐ No ☐
SAFE MOTHERHOOD INITIATIVE

REDUCING THE RATE OF MATERNAL MORTALITY IN NEW YORK STATE

II. PROCESS

a. Visit Agenda

The day commenced with team members and hospital representatives addressing each site and an overview of the initiative’s background and overall goals. Site visits were conducted to assess the status of maternal mortality in the hospitals. The initiative’s goals were to enhance maternal care and improve maternal outcomes in New York State hospitals.

b. Case Presentations

Each hospital site was presented with a detailed case study that outlined the challenges faced and the steps taken to address maternal mortality. The case studies were designed to provide specific examples and strategies for improvement.

c. SMFI Faculty/Team Members

The SMFI faculty and team members presented findings and recommendations to the sites, highlighting best practices and areas for improvement. The interaction was aimed at fostering a collaborative environment where sites could learn from each other and share successful strategies.

I. INTRODUCTION

a. Overview of the Safe Motherhood Initiative

The American Congress of Obstetricians and Gynecologists (ACOG) Divisions II has collaborated with various hospitals across the state to develop a maternal mortality reduction plan. The initiative’s goals are to reduce maternal mortality and improve maternal outcomes.

b. Purpose of the Implementation Visit

The purpose of the implementation visit is to assess the current status of maternal mortality reduction efforts and provide recommendations for improvement. The visit is designed to identify areas for improvement and to share best practices with other hospitals.

c. SMFI Faculty/Team Members

The SMFI team members provided a comprehensive overview of the Safe Motherhood Initiative and its impact on maternal mortality. They highlighted the importance of collaboration and the role of hospitals in addressing maternal mortality.
III. CONCLUSIONS

At the conclusion of the visit, the SMI team expressed its appreciation for the warm reception and congeniality shown to the team, the resources that were made available, and the forthrightness of all those involved in the site visit process. The SMI faculty presented a general overview of suggested next steps and recommendations to be considered.

a. Future Considerations

should consider the following:

- designation of a patient safety officer/coordinate (who could facilitate coordination of quality improvement efforts or combine the tasks of this role with that of a nurse educator for development). This person may also serve as a link to the Center;

- monthly meetings to review implementation of guidelines an interdisciplinary committee to follow through on implementation should be developed;

- a process for sharing bundle implementation efficiently a physician and nurse to lead each clinical bundle

- connecting with other local hospitals and the regional perinatal center participating in the SMI to learn how they identify and allocate resources to carry-out the bundle care management plans;

- develop an intrapartum risk assessment process for obstetric hemorrhage;

- review and compare current hospital policies and procedures as they relate to the SMI bundles and modify as necessary to reflect the recommended care management outlined in each clinical bundle;

- develop and put into action a Massive Transfusion Protocol specific to the Labor and Delivery Department for obstetric hemorrhage like the one offered through the Safe Motherhood Initiative;

- conduct regular interdisciplinary simulation drills to help enhance a team approach in the event of an emergency including post-event debriefs;

- ensure other units/departments are clear of the essential role that they play in implementing the SMI. For example:
  
  - Pharmacy for VTE; ED for postpartum preeclampsia or other post-discharge condition as they relate to the care management plans;

- actively pursue conversations with hospital administration to support and facilitate the SMI bundle implementation within the obstetric unit

- Communicate the Labor and Delivery culture assessment survey results to hospital administration, and,

- consider a presentation of the VTE bundle during a future OB department meeting.
### Examples of Other Site Visit Materials

**Post Implementation Visit Questionnaire**

- **INSTRUCTIONS:**
  - Please circle the number that most closely corresponds to how you feel about the statement.

- **Sufficient time was allocated for preparation of the implementation visit:** 1
- **Models of communication (email, ground mail, call) by ACOG staff were effective and efficient:** 1
- **The SMI team was professional and helpful:** 1
- **The implementation visit provided us the opportunity to learn more about our department structure:** 1
- **We can apply what we learned from the implementation visit directly to our daily clinical responsibilities:** 1
- **The discussions were useful and answered any questions:** 1
- **The on-site bundle guidance was clear and provided ample information:** 1
- **Overall, the implementation visit was very effective and worthwhile:** 1
- **Would you recommend utilizing the implementation visits to another hospital participating in the Safe Motherhood Initiative?**
  - 1. Yes, 2. No

- **What did you find most valuable about the implementation visit?**

- **Which aspect of the implementation visit do you feel needs improvement and why?**

- **ADDITIONAL COMMENTS:**
  - Please list any additional comments or recommendations below

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**Baseline hospital comparison**

**Medical Center Baseline Hospital Comparison**

<table>
<thead>
<tr>
<th>Question</th>
<th>Your Hospital</th>
<th>Your Level of Care</th>
<th>StateWide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of births?</td>
<td>2403</td>
<td>39595</td>
<td>39618</td>
</tr>
<tr>
<td>Obstetric Hemorrhage</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total number of maternity patients that died from obstetric hemorrhage?</td>
<td>0/1000</td>
<td>1.04/1000</td>
<td>2.46/1000</td>
</tr>
<tr>
<td>Total number of maternity patients who received ≥ 4 units of blood products?</td>
<td>0/1000</td>
<td>0.71/1000</td>
<td>0.78/1000</td>
</tr>
<tr>
<td>Products’ means total for all: PRBCs, FFP, platelets, cryoprecipitate)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total number of maternity patients with an obstetric hemorrhage and a hysterectomy was performed?</td>
<td>0/1000</td>
<td>0.71/1000</td>
<td>0.78/1000</td>
</tr>
<tr>
<td>Do you have an ICU?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If YES</td>
<td>0.83/1000</td>
<td>0.87/1000</td>
<td></td>
</tr>
<tr>
<td>• Total number of maternity patients in the ICU with ≥ 4 units of blood products transfused?</td>
<td>0/1000</td>
<td>0.83/1000</td>
<td>0.87/1000</td>
</tr>
<tr>
<td>• Total number of ICU maternity patients with an obstetric hemorrhage that were transferred to a hospital with a higher level of care?</td>
<td>0/1000</td>
<td>0.83/1000</td>
<td>0.87/1000</td>
</tr>
<tr>
<td>If NO</td>
<td>0/1000</td>
<td>0/1000</td>
<td></td>
</tr>
<tr>
<td>• Total number of maternity patients with an obstetric hemorrhage who were transferred to a hospital with a higher level of care?</td>
<td>0/1000</td>
<td>0/1000</td>
<td></td>
</tr>
<tr>
<td>Severe Hypertension in Pregnancy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total number of maternity patients who had a hypertension diagnosis?</td>
<td>0/1000</td>
<td>38.21/1000</td>
<td>32.11/1000</td>
</tr>
<tr>
<td>Total number of maternity patients who had a preeclampsia diagnosis?</td>
<td>38.7/1000</td>
<td>25/1000</td>
<td>24.02/1000</td>
</tr>
<tr>
<td>Total number of maternity patients that died from hypertension?</td>
<td>0/1000</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total number of maternity patients who had a seizure(s)?</td>
<td>0/1000</td>
<td>0.33/1000</td>
<td>0.41/1000</td>
</tr>
<tr>
<td>Total number of maternity patients who had a stroke?</td>
<td>0/1000</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Spotlight Hospitals

Samaritan Medical Center
Watertown, NY

Samaritan Medical Center in Watertown, NY is a 294-bed not-for-profit community medical center, offering a full spectrum of inpatient and outpatient healthcare services. The obstetric department delivers and cares for approximately 1,700 babies each year.

Samaritan Medical Center’s SMI team clearly illustrates the effectiveness of teamwork in a maternal care setting. The project “leads” are Dr. Alvin Maloney, Chairman of the Department of Obstetrics and Gynecology, Gayle Tech, RN, MSN, Nurse Manager, and Jessica Goodrich, RN, BSN, Assistant Nurse Manager. Additionally, one ob-gyn, midwife and/or nurse have been designated as leads for each of the SMI management plans (also known as maternal safety bundles) for obstetric hemorrhage, venous thrombembolism, and severe hypertension in pregnancy.

OBSTETRIC HEMORRHAGE: Dr. John Barrett, Joan Hill, CNM, Sheela Marie, RN, MSN
VENOUS THROMBOEMBOLISM: Dr. Ciera Rakestraw, Susan Shavit, BSN
SEVERE HYPERTENSION IN PREGNANCY: Dr. Christopher Rumsey, Robin Moore, RN, BSN

Samaritan Medical Center’s Quality Manager, Lauren Stevens, RN, MPA, assists in the guidance of data collection though it is each bundle nurse’s responsibility to mine the data on a monthly basis. This approach increases accountability to the project and improves the unit level communication.

This hospital’s overall approach to the SMI has proven to be one of efficiency, consistency and trust - and is being recognized by other SMI hospitals as a maternity model.
The Team

Dena Goffman  Adiel Fleischer  Alex Friedman  Donna Montalto
Burton Rochelson  Lynn Simpson  Joanne Stone
Michelle DiVito  Cande Ananth  Ron Wapner

Cynthia Chazotte & Mary D’Alton
The Council on Patient Safety in Women’s Health Care
Safety Action Series

Keisher Highsmith, Dr.P.H.
Director, Special Initiatives and Program Planning & Evaluation
Division of Healthy Start and Perinatal Services
Maternal and Child Health Bureau
Health Resources and Services Administration

February 18, 2015
Maternal Health Initiative

A public-private partnership to reduce maternal mortality and morbidity and improve maternal health in the U.S.

- Centers for Disease Control & Prevention (CDC)
- Centers for Medicare and Medicaid Services (CMS)
- Health Resources and Services Administration (HRSA)
- National Institutes of Health (NIH)
- Office of Minority Health (OMH)
- Office on Women’s Health (OWH)
- American College of Obstetricians and Gynecologists (ACOG)
- Association of Maternal and Child Health Programs (AMCHP)
- Association of Women’s Health, Obstetric and Neonatal Nurses (AWHONN)
- March of Dimes
- Society for Maternal-Fetal Medicine (SMFM)

An many others…
Framing the Discussion

Public Health Core Functions and 10 Essential Services

Source: CDC www.cdc.gov/nphpsp/essentialservices.html
The Public Health System
What is a Public Health System?

Source: CDC www.cdc.gov/nphpsp/essentialservices.html
Maternal Health Initiative

- Strategic goals:
  - Improve women’s health before, during, and after pregnancy
  - Improve the quality and safety of maternity care
  - Improve systems of maternity care including clinical and public health systems
  - Improve public awareness and education
  - Improve research and surveillance
Alliance for Innovation on Maternal Health: Improving Maternal Health & Safety

• Cooperative Agreement with ACOG

• Aim: Save women from maternal deaths and severe complications during pregnancy, labor and delivery in the U.S.

• Strategies
  • Reduce low-risk cesarean deliveries
  • Integrate patient safety bundles in maternity care in birthing hospitals across the U.S.
  • Promote pre-/interconception health and healthcare
State Selection Criteria

• High MMR

• Data Capacity

• Leadership support and engagement

• An active (at least yearly) multidisciplinary Maternal Mortality review process or solid plan to begin the reviews.

• State wide maternal quality improvement such as a perinatal quality collaborative with a demonstrated maternal focus and involving provider organizations, hospitals, and public health.
State Teams

• State Title V MCH Director
• State Epidemiologist (work closely with vital records)
• State hospital association
• Perinatal collaborative, the medical society or other state perinatal group
• Leadership from ACOG, ACNM, AWHONN
• Other – reps from Medicaid, Healthy Start, major insurers
How does this align with other efforts?

NATIONAL PERSPECTIVE
State Title V Block Grant
Maternal/Women’s Health

National Outcomes Measures

• Maternal mortality ratio
• Severe maternal morbidity

National Performance Measures

• Well woman care
  • Percent of women with a past year preventive visit
• Low risk cesarean deliveries
  • Percent of cesarean deliveries among low-risk first births
Healthy Start

Strategic Goals:

• Improving women’s health before, during, and beyond pregnancy;
• Promoting quality and prevention;
• Strengthening resilience;
• Achieving collective impact; and
• Improving accountability.
Infant Mortality CoIIN

6 strategy teams

1. Perinatal Regionalization
2. Pre/Early Term Birth (EED/17-P)
3. Pre/Interconception Care
4. Social Determinants of Health
5. Safe Sleep (SIDS/SUID)
6. Smoking Cessation
Other Federal MH Efforts

- Maternal and Infant Health Initiative (CMS);
- Perinatal Safety Program (AHRQ)
- State Epi Maternal Morbidity Training Course (CDC)
- Federal Maternal Health Workgroup
Commentary

Putting the “M” Back in the Maternal and Child Health Bureau: Reducing Maternal Mortality and Morbidity

Michael C. Lu · Keisher Highsmith · David de la Cruz · Hani K. Atrash
THANK YOU!

Keisher Highsmith, DrPH
khighsmith@hrsa.gov
http://mchb.hrsa.gov/maternalhealth/
Q&A Session
Press *1 to ask a question

You will enter the question queue
Your line will be unmuted by the operator for your turn

A recording of this presentation will be made available on our website:
www.safehealthcareforeverywoman.org
Next Safety Action Series

Data Collection and Measurement Issues

Monday, March 16 | 11:00 a.m. Eastern

Elliott Main, MD, FACOG
Medical Director
California Maternal Quality Care Collaborative

William Sappenfield, MD, MPH
Co-Director
Florida Perinatal Quality Collaborative

Click Here to Register