IHI Better Maternal Outcomes

Strategies for reducing pregnancy-related morbidity and mortality in the postpartum period

Welcome
WebEx Quick Reference

• Please use chat to “All Participants” for discussion & questions

• For technology issues only, please chat to “Host”
Microphone Feature

To mute your line, please press the microphone icon.
Press it again to unmute.

Muted

Able to speak
Where are you today?
Please type your **name** and the **organization** you represent in the chat box and send to “All Participants”

Example: Mara Lee, Midwest Health
What does respectful post-partum care look like to you?
Support national efforts to implement reliable evidence-based care for women and newborns around the time of birth, leading to a reduction in maternal mortality in the United States (US) in 2021 compared to 2016.

Facilitate locally driven, co-designed, rapid improvements in 2-5 communities targeting the interface of health care delivery, the experience of birthers, and community support systems. The goal of these projects is to test and scale up maternal care supports and to create a learning network to test and learn across participating communities aimed at improving equity, dignity, and safety while reducing racial inequities in maternal outcomes.
Today’s Agenda

• Welcome & Introductions

• The First 42 Days: Strategies for reducing pregnancy-related morbidity and mortality in the postpartum period

• Related Resources

• Follow-Up & Staying Connected
Goals

• Summarize key strategies for reducing pregnancy-related morbidity and mortality in the postpartum period,

• Demonstrate changes or improvements that have resulted in better outcomes for all women,

• Establish examples of systems that empower women as partners in their care, and,

• Surface and share resources available to clinicians, women, and their families related to supporting women in the postpartum period.
Today’s Facilitators

LaShae Wattie, RNC, C-EFM, BSN, MED
Clinical Nurse Specialist
Women and Newborns, Wellstar Health System

Debra Bingham, DrPH, RN, FAAN
Founder and Executive Director
Institute for Perinatal Quality Improvement

Anne Santa-Donato, MSN, RNC
Director, Special Programs and Projects
AWHONN

Jill Duncan, RN, MS, MPH
Executive Director, IHI
*Note: Number of pregnancy-related deaths per 100,000 live births per year.

https://www.cdc.gov/reproductivehealth/maternalinfanthealth/pmss.htm
Timing of Pregnancy-Related Deaths (2011-2013)

- 30.5% died before giving birth
- 16.8% died on the day they gave birth
- 18.2% died 1-6 days after giving birth
- 21.3% died 7-41 days post-birth
- 13.2% died on or after 42 days

Opportunities for Action

- Approximately 52% of pregnancy-related deaths occur in the postpartum period
- 98% of women give birth in hospitals
- All women who give birth in hospitals have an RN who provides discharge education

Shalon Irving, BA in Sociology, 2 masters degrees dual-subject PhD, fully insured Lieutenant Commander Commissioned Corps, U.S. Public Health Service

36 years old
Fully insured
Died 3 weeks after giving birth
Despite seeking and obtaining care during this 3 week period

According to the over 200 stories of maternal morbidity collected and reported by Nina Martin @ProPublica & Renee Montagne @NPR, African American and Black women expressed the feeling of being "devalued and disrespected by medical providers."

Led the Development of AWHONN’s Empowering Women to Obtain Needed Care Pilot Project

Goals:

• Assessed the current state of postpartum discharge education about potential postpartum complications
• Developed an intervention program
• Implemented the program in 4 pilot hospitals
Six Healthcare Strategies

- Standardize postpartum discharge education
- Enhance the timing of postpartum care services
- Improve the quality of the postpartum care visit
- Enhance social and mental health support
- Reduce postoperative complications by decreasing rates of cesarean births

Baseline Assessment
Focus Groups Results Published

Discharge Education on Maternal Morbidity and Mortality Provided by Nurses to Women in the Postpartum Period

Patricia D. Suplee, Lisa Kleppel, and Debra Bingham

Description of the 4 Hospital Pilot Project & Tools

Opportunities for Action Identified

• 46 percent of the nurses surveyed were not aware that maternal mortality rates have increased in the last decade. In fact, 19% thought maternal mortality rates have decreased.

• 12% of the RNs who responded to our survey reported the correct percentage of maternal deaths that occurred in the postpartum period.

• 2/3 of the nurses reported spending 10 minutes or less teaching women about potential complications prior to discharge.

FREE Recorded Webinar about Postpartum Education & links to other resources: www.perinatalQI.org

Presented by:
Debra Bingham, DRPH, RN, FAAN
Executive Director, Institute for Perinatal Quality Improvement
Associate Professor, University of Maryland School of Nursing
AWHONN

• AWHONN’s Role in Reducing Maternal Morbidity and Mortality
• AWHONN Programs and Resources:
  • Postpartum Hemorrhage Project
  • POST-BIRTH Warning Signs Program
  • Obstetric Patient Safety Program
• Alliance for Innovation on Maternal Healthcare (AIM) Program
HRSA AIM Program

- Multidisciplinary team of Nurses, Midwives, Nurse Practitioners, Physicians, Health Equity Experts, QI Professional organizations, Public Health organizations, Parent Advocacy groups, Health Care Systems
- [https://safehealthcareforeverywoman.org/aim-program/](https://safehealthcareforeverywoman.org/aim-program/)
Empowering Women: Description of the 4 Hospital Pilot Project & Tools

AWHONN POST-BIRTH Warning Signs Program Goals

• To raise awareness and educate clinicians about key postpartum complications and warning signs
• To empower women to know the signs and get care quickly using a standardized parent education process
• To ensure that all healthcare providers are involved in education of women and families
  • Nurses
  • Doctors
  • Community health workers

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Program Components

• Online Education Course
• “Save Your Life” Handout, Magnet Template, Magnets
  • English, Spanish, Arabic, Mandarin (Simple) Chinese
• POST-BIRTH Warning Signs Discharge Education Checklist
• POST-BIRTH Warning Signs Toolkit
Key messages for all postpartum women:

- **Recognize** the signs and symptoms of childbirth complications that can occur after hospital discharge

- **Respond** by calling 911, going to the nearest hospital, or calling a healthcare provider, depending on the situation

- **Remember** to tell all healthcare providers (including emergency personnel) the date of childbirth, because symptoms could be related to postpartum complications


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POST-BIRTH WARNING SIGNS: Call 911

- Pain in the chest
- Obstructed breathing or shortness of breath
- Seizures
- Thoughts of hurting yourself or your baby (or someone else)

POST-BIRTH WARNING SIGNS: Call your healthcare provider and if no response go to ER

• **B**leeding, soaking through one pad per hour, or blood clots the size of an egg or bigger, or an

• **I**ncision that is not healing,

• **R**ed or swollen leg that is painful or warm to touch,

• **T**emperature of 100.4 degrees Fahrenheit, or higher

**H**eadache that does not get better, even after taking medicine, or bad headache with vision changes.

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<td>What is Pulmonary Embolism?</td>
<td>Pulmonary embolism is a blood clot that has traveled to your lung.</td>
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| Signs of Pulmonary Embolism      | • Shortness of breath at rest (e.g., tachypneic shallow, rapid respirations)  
                                 | • Chest pain that worsens when coughing                               
                                 | • Change in level of consciousness                                    |
| Obtaining Immediate Care         | Call 911 or go to nearest emergency room **RIGHT AWAY**.             |
You Can Save a Life
Our Journey Through Empowering Women: A Mother Baby Discharge Instruction Project

Lashea Wattie M.Ed., MSN, RNC-OB, C-EFM, Georgia Awhonn PPH/Empowering Women Project Lead

Wellstar Health System Clinical Nurse Specialist

every baby deserves a grand entrance.
National Partnership for Maternal Safety Goals

1. To reduce maternal morbidity and mortality in the US by 50%
2. To reduce racial and ethnic maternal health disparities
Standardization

- PATIENT SAFETY
- RISK REDUCTION
- SAFE CLINICAL OUTCOMES

Processes

- ORDER SETS
- PROTOCOLS
- EDUCATION, PATIENT TEACHING
Maternal Safety Bundles

- Postpartum Care Basic for Maternal Safety
- Hypertension Safety Bundle
- VTE Safety Bundle
- Cardiovascular Tool Kit (CMQCC)
- AWHONN PPH Project/Pilot Community
- AWHONN Empowering Women Pilot Study
- Safe Sleep Campaign
COMMITTEE OPINION

Number 620 • February 2015
(Replaces Committee Opinion Number 514, December 2011)

Committee on Obstetric Practice

This document reflects emerging clinical and scientific advances as of the date issued and is subject to change. The information should not be construed as dictating an exclusive course of treatment or as being inclusive of all possible methods of care.

Emergent Therapy for Acute-Onset, Severe Hypertension During Pregnancy and the Postpartum Period

ABSTRACT: Acute-onset, severe systolic hypertension; severe diastolic hypertension; or both can occur in pregnant women or women in the postpartum period. Introducing standardized, evidence-based clinical guidelines for the management of patients with preeclampsia and eclampsia has been demonstrated to reduce the incidence of adverse maternal outcomes. Individuals and institutions should have mechanisms in place to initiate the prompt administration of medication when a patient presents with a hypertensive emergency. Once the hypertensive emergency is treated, a complete and detailed evaluation of maternal and fetal well-being is needed with consideration of, among many issues, the need for subsequent pharmacotherapy and the appropriate timing of delivery.

COUNCIL ON PATIENT SAFETY
IN WOMEN’S HEALTH CARE

READINESS

Every Unit
- Standards for early warning signs, diagnostic criteria, monitoring and treatment of severe preeclampsia/eclampsia (include order sets and algorithms)
- Unit education on protocols, unit-based drills (with post-drill debriefs)
- Process for timely triage and evaluation of pregnant and postpartum women with hypertension including ED and outpatient areas
- Rapid access to medications used for severe hypertension/eclampsia
- Medications should be stocked and immediately available on L&D and in other areas where patients may be treated. Include brief guide for administration and dosage.
- System plan for escalation, obtaining appropriate consultation, and maternal transport, as needed

RECOGNITION & PREVENTION

Every Patient
- Standard protocol for measurement and assessment of BP and urine protein for all pregnant and postpartum women
- Standard response to maternal early warning signs including listening to and investigating patient symptoms and assessment of labs (e.g. CBC with platelets, AST and ALT)
- Facility-wide standards for educating prenatal and postpartum women on signs and symptoms of hypertension and preeclampsia

PATIENT SAFETY BUNDLE

Maternal Safety Bundle for Severe Hypertension in Pregnancy

Safe Motherhood Initiative

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Management of Postpartum Hypertension and Preeclampsia

- Women with gestational hypertension, preeclampsia, or superimposed preeclampsia is diagnosed, **outpatient surveillance be performed for at least 72 hours postpartum and again 7-10 days after delivery** or earlier in women with symptoms.

- For all women in the postpartum period, it is suggested that **discharge instructions include information about signs and symptoms of preeclampsia** as well as prompt reporting of this information to their healthcare providers.

- For women with persistent postpartum hypertension (**BP 150 mmHg systolic or higher or 100 mmHg diastolic or higher**) on at least 2 occasions that are 4-6hrs apart, antihypertensive is suggested.
Leading cause of indirect pregnancy related mortality in the United States. Approximately 10 to 25% of pregnancy related deaths in the US are associated with cardiac disease (Arafeh, 2014: AWHONN Perinatal Nursing 4th Edition). Age, sedentary lifestyle, obesity and tobacco use play a contributory role in many of these deaths.

Next Steps...Taking Action

CARDIAC DISORDERS

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Cardiovascular Plan of Care

- Developed task force to discuss specific patient population
- Brainstormed about possible collaboration with Cardiology, identifying a lead champion
- Develop a plan of care
- Communicate plan, Physician Champion to all health care providers

- i.e.; Mother Baby nurses, OB physicians, high risk physician (maternal fetal medicine), leadership team support and most important Charge Nurses!!

Recommendations for Cardiac Consult:
- Order for cardiac consult outpatient if has any of the following:
  - Preeclampsia <34/0/7 weeks
  - Preeclampsia with severe features
  - Recurrent preeclampsia with more than one pregnancy
  - Eclampsia
  - History of cardiac disease
- Nurse to have patient call for appointment from the room to Gentry’s office in the KOP: 156-9964

Recommendations per ACOG for Hypertensive Patients:
- Early follow-up uncontrolled Bp’s postpartum (i.e. > 150 or 100 on two different occasions 4-6 hours apart)
- Antihypertensive therapy is suggested
- Preeclamptic patient’s recommendation for discharge
- Discharge education on signs of eclampsia
- Antihypertensive therapy for uncontrolled BP’s

All patients should receive Save your Life Forms as well as Heart Healthy Forms in WHSS folder

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Postpartum (Mother Baby) Education Initiative

AWHONN EMPOWERING WOMEN PROJECT

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Save Your Life: Get Immediate Care

• Handout for **ALL** women to reinforce teaching
• Organized by call to action and specific warning signs of obstetric hemorrhage, severe hypertension, and venous thromboembolism
POST-BIRTH WARNING SIGNS:
POSTPARTUM DISCHARGE EDUCATION CHECKLIST

This checklist is a teaching guide for nurses to use when educating all women about the essential warning signs that can result in maternal morbidity and/or mortality.

Instructions:
- Instruct ALL women about all of the following potential complications. All teaching should be documented on this form or in your facility’s electronic medical record.
- Focus on risk factors for a specific complication first, then review all warning signs.
- Emphasize that women do not have to experience ALL of the signs in each category for them to seek care.
- Encourage the woman’s significant other or her designated family members to be included in education whenever possible.

The information included on this checklist is organized according to complications that can result in severe maternal morbidity or maternal mortality. Essential teaching points should be included in all postpartum discharge teaching.

The patient handout, “Save Your Life,” is designed to reinforce this teaching. This handout is organized according to AWHONN’s acronym, POST-BERTH, to help everyone remember the key warning signs and when to call 911 or a health provider. A portion of this handout is below for reference.

**Call 911 if you have:**
- Pain in chest
- Obstructed breathing or shortness of breath
- Seizures
- Thoughts of hurting yourself or your baby

**Call your healthcare provider if you have:**
- Bleeding, soaking through one pad/hour, or blood clots, the size of an egg or bigger
- Incision that is not healing
- Red or swollen leg that is painful or warm to touch
- Temperature of 100.4°F or higher
- Headache that does not get better, even after taking medicine, or bad headache with vision changes

Below is a suggested conversation-starter:

“Although most women who give birth recover without problems, any woman can have complications after the birth of a baby. Learning to recognize these POST-BIRTH warning signs and knowing what to do can save your life. I would like to go over these POST-BIRTH warning signs with you now, so you will know what to look for and when to call 911 or when to call your healthcare provider.

Please share this with family and friends and post the “Save Your Life” handout in a place where you can get to it easily (like your refrigerator).”

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Maternal Mortality Postpartum Discharge Education Checklist

• Checklist of talking points for nurses
• Use with ALL postpartum women
• Document, sign, and place in each medical record after completed
### Education Checklist/EMR Education

#### POST-BIRTH Warning Signs: Postpartum Discharge Education Checklist

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<tr>
<td></td>
<td>- Chest pain that worsens with coughing</td>
</tr>
<tr>
<td></td>
<td>- Change in level of consciousness</td>
</tr>
<tr>
<td><strong>Obtaining Informed Care</strong></td>
<td>Call 911 or go to nearest emergency room RIGHT AWAY</td>
</tr>
<tr>
<td><strong>RN initials</strong></td>
<td>Date</td>
</tr>
</tbody>
</table>

#### Cardio (Heart) Disease | Essential Teaching for Women |

| **What is Cardiac Disease?** | Cardiac disease is when your heart is not working as well as it should and can include a number of disorders that may have different signs and symptoms. |
| **Signs of Potential Cardio Emergencies** | - Shortness of breath or difficulty breathing |
| | - Heart palpitations (feeling that your heart is racing) |
| | - Chest pain or pressure |
| **Obtaining Informed Care** | Call 911 or go to nearest emergency room RIGHT AWAY |
| **RN initials** | Date | Family/support person present? YES/NO |

#### Hypertensive Disorders of Pregnancy | Essential Teaching for Women |

| **What is Severe Hypertension?** | Hypertension is when your blood pressure is much higher than it should be. |
| **Signs of Severe Hypertension** | - Severe amount of proteinuria that does not respond to over-the-counter pain medicine, rest, or hydration |
| **What is Preeclampsia/Eclampsia?** | Preeclampsia is a complication of pregnancy that includes high blood pressure and signs of damage to other organ systems. Eclampsia is the convulsive phase of preeclampsia, characterized by seizures. |
| **Signs of Preeclampsia** | - Severe amount of proteinuria that does not respond to pain medicine, rest, or hydration |
| | - Changes in vision, seeing spots, or feeling tired |
| | - Swelling of face, hands, and/or legs more than what you would expect |
| | - Change in level of consciousness |
| **Obtaining Informed Care** | Call 911 for stroke |
| **RN initials** | Date | Family/support person present? YES/NO |

#### Obstetric Hemorrhage | Essential Teaching for Women |

| **What is Obstetric Hemorrhage?** | Obstetric hemorrhage is when you have an excess amount of bleeding after you have delivered your baby. |
| **Signs of Obstetric Hemorrhage** | - Bleeding through more than 1 sanitary pad/liner |
| | - Passing 1 or more clots the size of an egg or bigger |
| | - Obstruction or delayed restoration of height and bleeding from dark with clots |
| **Obtaining Informed Care** | Call healthcare provider immediately for signs of hemorrhage. |
| **RN initials** | Date | Family/support person present? YES/NO |

#### Venous Thromboembolism | Essential Teaching for Women |

| **What is Venous Thromboembolism?** | Venous thromboembolism is when a blood clot usually in your leg (or calf) |
| **Signs of Venous Thromboembolism** | - Leg pain or tenderness |
| | - Swelling of one leg more than the other |
| **Obtaining Informed Care** | Call healthcare provider immediately for signs of venous thromboembolism. |
| **RN initials** | Date | Family/support person present? YES/NO |

#### Infection | Essential Teaching for Women |

| **What is Infection?** | An infection is an invasion of bacteria or viruses that enter and spread through your body, making you ill. |
| **Signs of Infection** | - Temp is >100°F (38°C) |
| | - Self-limiting bleed or discharge from the vagina |
| | - Increase in redness or discharge from cystitis or C-section site or open wound not healing |
| **Obtaining Informed Care** | Call healthcare provider immediately for signs. |
| **RN initials** | Date | Family/support person present? YES/NO |

#### Postpartum Depressions | Essential Teaching for Women |

| **What is Postpartum Depression?</p> | Postpartum depression is a type of depression that occurs after childbirth. PPD can occur as early as one week up to one year after giving birth. |
| **Signs of PPD** | - Thinking about hurting yourself or your baby |
| | - Feeling out of control, unable to care for self or baby |
| | - Feeling depressed or sad most of the day every day |
| | - Having trouble sleeping or sleeping too much |
| | - Having trouble bonding with your baby |
| **Obtaining Informed Care** | Call 911 or go to nearest emergency room if you feel that you might harm yourself or your baby. |
| **RN initials** | Date | Family/support person present? YES/NO |

#### Follow-Up Appointment | Essential Teaching for Women |

| **Discussion points** | Discuss importance of follow-up visit with doctor, nurse practitioner or midwife in 4–6 weeks (or sooner if health status warrants it) |
| | Provide current phone number for appointment |
| | Emphasize importance to notify all healthcare providers of delivery date up to one year after |
| | Confirm date for postpartum appointment prior to discharge |
| **RN initials** | Date | Family/support person present? YES/NO |

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Lifesaving Information in EPIC (EMR)

Pulmonary Embolism is a blood clot that has traveled to your lung:
- Signs of Pulmonary Embolism:
  - Sudden onset of shortness of breath
  - Changes in color, character of cough
- Change in level of consciousness
- Severe chest pain that does not go away after pain medication
- Persistent cough
- Call 911 or go to nearest emergency room RIGHT AWAY for any of the above signs.

Hypertension is when your blood pressure is higher than it should be:
- Signs of Hypertension:
  - Severe headache that is not relieved by medication
  - Changes in vision, weakness, dizziness
  - Seepage or blood in the upper right abdomen area
- Swelling of face, hands, and/or legs more than what you describe as “normal” or feel swelling
- Call 911 if nausea or changes in level of consciousness
- If no response from provider or symptoms worsen, call 911.

Venous thrombophlebitis is when you develop a blood clot usually in your leg (call 911):
- Signs of VTE:
  - Sharp, tender pain, tenderness to touch, burning, or swelling particularly in the calf area
  - Swelling of one leg more than the other
- Call healthcare provider immediately for above signs
- If no response from provider or symptoms worsen, call 911.

An infection is an invasion of bacteria or viruses that enter your body and spread:
- Signs of Infection:
  - Temperature above 100.4°F
  - Bad-smelling blood or drainage from vagina
  - Increase in fever, swelling, pain or drainage from episiotomy, C-section site, perineal or open wound not healing
  - Burning or difficulty urinating or feeling that you are not completely emptying your bladder
- Regular, non-bloody stools, or diarrhea at mention any redness, hot spot or lump on the breast
- Call healthcare provider immediately for above signs
- If no response from healthcare provider or symptoms worsen, call 911.

Postpartum Depression is a type of depression that occurs after childbirth. You may feel a strong feeling of sadness 3-5 weeks after birth:
- Signs of postpartum depression:
  - Feeling of hurting yourself or your baby
  - Not being able to care for well or baby
  - Feeling depressed or sad most of the day every day
  - Having trouble sleeping or sleeping with your baby
- Call 911 or go to emergency room for urge to harm self or baby.

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Lessons Learned …

- Communication of new initiatives in every avenue available to your staff (i.e.; huddles, flyers, staff meeting, shared governance, social media)
- Celebrate your WINS!!!
Celebrate Your WINS!!!

Empower and Motivate your team!!

"JILL Saved Abagail's Life!!"

(https://www.youtube.com/watch?v=srDxXgE_t4M)

we believe every baby deserves a grand entrance.
Discussion & Questions
Resources

• Free online resources:
  – AWHONN SAVE YOUR LIFE (pdf)
  – Institute for Perinatal Quality Improvement
    https://www.perinatalqi.org/page/PPDischargeEdu
  – #POSTBIRTH Saves an RN's Life (video)
    https://www.perinatalqi.org/page/PostBirthStoriesRose
  – AWHONN webinars and library are free to AWHONN members
Resources

• Available for a fee:
  – AWHONN POST-BIRTH Warning Signs Education Program https://www.awhonn.org/page/POSTBIRTH
  – AWHONN Maternal Mortality Resources: Includes free and fee resource lists at https://www.awhonn.org/page/MaternalMortality
References:

AWHONN POST BIRTH Waming Signs: Reducing Postpartum Morbidity and Mortality


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Staying Connected

• All slides, materials, and call recordings will be shared via the IHI email distribution list and posted to the IHI website (www.ihi.org/maternalhealth) within 24 hours after each call.

• If you’d like to be added to the IHI maternal health emails or have additional questions about this programming, please contact us at maternalhealth@ihi.org.
Engaging Women with Lived Experience in our Shared Improvement Journey

August 21 from 12:00 to 1:00 PM ET

Please join us for this free one-hour virtual program
The Better Maternal Outcome Rapid Improvement Network is a free initiative aimed at connecting hospitals and providers from across the country who are committed to improving health outcomes by delivering safe, equitable, respectful care of women and their babies.

The goal of the Network is to equip participants with the knowledge and skills needed to reliably implement promising practices and improve care delivery for all women and newborns.
Targeting delivery centers & safety net providers with <1000 deliveries/year
Thank you for joining us

IHI Better Maternal Outcomes Programming