Toward Improving the Outcome of Pregnancy III

Scott D. Berns, MD, MPH
Senior Vice President & Deputy Medical Director
March of Dimes
Clinical Professor of Pediatrics
Warren Alpert Medical School of Brown University
May 23, 2012

Objectives

1. Discuss evidence-based interventions in TIOP III that have been demonstrated to significantly improve perinatal outcomes
2. Identify TIOP III recommendations that each participant can apply immediately in her/his care environment
Your Clinical Focus…
(select all that apply)

1. Women’s health, including preconception and interconception
2. Prenatal care
3. Intrapartum, including labor and delivery
4. NICU care
5. Well-baby neonatal
6. Postpartum care
7. Other

Your Profession…
(select all that apply)

1. Academics/Research
2. Community Pediatrics
3. Nurse
4. Neonatology
5. Other Pediatric Sub-Specialty
6. Hospital-Based Practice
7. Student/Resident/Fellow
8. Other

Your Practice Setting…
(select all that apply)

1. Public Hospital
2. Private Hospital
3. Public Clinic
4. Other
5. Public Health Department
6. Other

Summary of TOIP I and TOIP II and TOIP III

<table>
<thead>
<tr>
<th>TOIP I</th>
<th>TOIP II</th>
<th>TOIP III</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Women’s health, including preconception and interconception</td>
<td>2. Prenatal care</td>
<td>3. Intrapartum, including labor and delivery</td>
</tr>
<tr>
<td>7. Other</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Financial support provided in part by:

William Oh, MD, FAAP, Chair
Warren Alpert Medical School of Brown University

Scott D. Berns, MD, MPH, FAAP
March of Dimes Foundation

Ann Scott Blouin, RN, PHD
American Academy of Pediatrics

March of Dimes Foundation

Association of Women’s Health, Obstetric, and Neonatal Nurses (AWHONN)

Margaret O’Kane
National Committee for Quality Assurance

Anne Santa-Donato, RNC, MSN
March of Dimes Foundation

Kathleen Rice Simpson, PhD, RNC, FAAN

St. John’s Mercy Medical Center

Ann R. Stark, MD
BayCare College of Medicine

John S. Wachtel, MD, FACOG
Stanford University

School of Medicine
What is your institution’s commitment to QI in 2011? (select one answer)
1) We have a specific QI activity in the NICU right now
2) We do not have a specific QI activity underway, but we have completed one in the past year
3) We do not have a specific QI activity underway, but we are planning one for this year
4) We do not have a specific QI activity underway, and we are not planning one for this year

With which organizations does your practice setting partner on QI? (select all that apply)
1. Institute for Healthcare Improvement
2. The Joint Commission
3. March of Dimes
4. National Initiative for Children’s Healthcare Quality
5. Vermont Oxford Network
6. NDNQI
7. CHCA
8. Other
9. Hospital only - no other partner

TIOP III: Purpose
- Action oriented monograph that highlights proven principles, methodologies, evidence-based practices and selected quality improvement programs that significantly improve perinatal outcomes
- Illustrates strategies and interventions that incorporate robust process and systems change
- A call to action, with the goal to reach a more efficient, more accountable system of perinatal care

TIOP III: Table of Contents
Chapter 1: History of the Quality Improvement Movement
Chapter 2: Evolution of Quality Improvement in Perinatal Care
Chapter 3: Epidemiologic Trends in Perinatal Care
Chapter 4: The Role of Patients and Families in Improving Perinatal Care
Chapter 5: Quality Improvement Opportunities in Preconception and Intercconception Care
Chapter 6: Quality Improvement Opportunities in Prenatal Care
Chapter 7: Quality Improvement Opportunities in Intrapartum Care
Chapter 8: Applying Quality Improvement Principles in Caring for the High Risk Infant
Chapter 9: Quality Improvement Opportunities in Postpartum Care
Chapter 10: Quality Improvement Opportunities to Promote Equity in Perinatal Health Outcomes
Chapter 11: Systems Change Across the Continuum of Care
Chapter 12: Policy Dimensions of Systems Change in Perinatal Care
Chapter 13: Opportunities for Action and Summary of Recommendations

Opportunities for Action
- Assuring the uptake of quality improvement and safety initiatives
- Creating equity in perinatal care
- Empowering women and families
- Standardizing the regionalization of perinatal services
- Strengthening the vital statistics system
Promising practices in preconception and interconception care

Clinical Initiatives
- LA (Los Angeles) Best Babies Network
- Magnolia Project
- Interconception Care for At-Risk Women
- Grady Memorial Hospital Interpregnancy Care Project (ICP)
- WOW (WIC Offers Wellness) and KEEP (Keep Energized and Empowered for Pregnancy)

Which of these recommendations are you most likely to act upon after this conference? (select one answer)

1. Participate in developing preconception/interconception quality improvement and performance measures.
2. Conduct research to better understand women’s wellness, including preconception and interconception care.
3. Assure routine assessment of women’s reproductive life plan, health promotion needs and identification of risks.
4. Collaborate on strategies to streamline dissemination of research and promising projects.

Quality Improvement Opportunities to Promote Equity in Perinatal Health Outcomes

![Quality Improvement Opportunities to Promote Equity in Perinatal Health Outcomes](image-url)
Chapter 10: Quality Improvement Opportunities to Promote Equity in Perinatal Health Outcomes

Successful perinatal models to achieve health equity:
• Northern Manhattan Perinatal Partnership
• Parkland Memorial Hospital
• Group Prenatal Care: Centering Pregnancy®
• Perinatal Home Visitation Programs

Which of these recommendations are you most likely to act upon after this conference? (select one answer)

1. Promote preconception care as a critical part of reproductive planning
2. Help raise awareness that African-American women have increased risk of adverse pregnancy outcomes
3. Implement comprehensive risk assessment and screening practices
4. Implement specific evidence-based clinical practices
5. Improve medical record portability

Applying Quality Improvement Principles in Caring for the High-Risk Infant

- Measurement
- Reducing Variation in Process and Outcomes
- Key Practical Concepts in Perinatal QI
  - Timely feedback
  - Transparency
  - Evidence-based decision making
  - Reliability

Applying Quality Improvement Principles in Caring for the High-Risk Infant

- Patient Safety in the NICU
  - Reduction of Health Care-associated infections
  - Handoffs and Improved Communication
  - Simulation

- Individualized/Developmentally Appropriate Care

Table 1. Selected Evidence-Based Quality Improvement Initiatives for High-Risk Infants

<table>
<thead>
<tr>
<th>Outcome/Process</th>
<th>Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>NICU infections</td>
<td>Decreased 65%</td>
</tr>
<tr>
<td>Neonatal sepsis infections</td>
<td>Decreased 17%</td>
</tr>
<tr>
<td>Congenital heart defects</td>
<td>Decreased 21%</td>
</tr>
<tr>
<td>NICU neonatal infections</td>
<td>Decreased 29%</td>
</tr>
<tr>
<td>Catheter-associated bloodstream infections</td>
<td>Decreased 25%</td>
</tr>
<tr>
<td>Neonatal sepsis</td>
<td>Decreased 66%</td>
</tr>
<tr>
<td>Neonatal respiratory distress syndrome</td>
<td>Increased 17%</td>
</tr>
<tr>
<td>Neonatal hypoglycemia</td>
<td>No change</td>
</tr>
<tr>
<td>Receipt of a patient at age 2 hours</td>
<td>Decreased 62%</td>
</tr>
<tr>
<td>Neonatal mortality</td>
<td>Decreased 47%</td>
</tr>
<tr>
<td>NICU admission temperature</td>
<td>Increased 0.5°C</td>
</tr>
<tr>
<td>Improving growth of VLBW infants?</td>
<td>Variable depending on weight</td>
</tr>
</tbody>
</table>

* NICU: neonatal intensive care unit; VLBW: very low birth weight.
Which of these recommendations are you most likely to act upon after this conference? (select one answer)

1. Include support for outcomes measurement and one quality improvement initiative in our NICU budget
2. Develop actionable, evidence-based safety initiatives: reducing nosocomial infections, improving handoffs and communication
3. Include simulation and/or multidisciplinary staff education in quality improvement initiatives
4. Assure transparency of selected performance measures and results in my NICU

Quality Improvement Opportunities in Postpartum Care

- Immediate and Sustained Postpartum Breastfeeding
- Family-Centered Maternity Care
- Smoking Cessation in the Postpartum Period
- Postpartum Depression Screening
- Postpartum Post-Traumatic Stress Disorder

Which of these recommendations are you most likely to act upon after this conference? (select one answer)

1. Focus on the need for immediate and sustained breastfeeding
2. Implement routine postpartum family-centered maternity care
3. Implement standardized smoking cessation programs; offer to all new mothers
4. Administer routine screening and management for postpartum depression
5. Implement routine assessment and screening for post-traumatic stress disorder (PTSD)

Systems Change Across the Continuum of Perinatal Care

- Creating a continuum of care for neonates
  - The benefits of regionalization
- Systems change to improve perinatal safety
  - The Ascension Health Experience
- The role of teamwork in systems change
  - The Premier, Inc., Perinatal Safety Initiative
- Building on success
  - Designing core performance measures for perinatal care
Which of these recommendations are you most likely to act upon after this conference? (select one answer)

1. Urge nationally consistent guidelines for regionalization with state compliance
2. Study effective strategies for enhancing communication across hospitals and systems
3. Broadly implement care bundles to improve safety and outcomes
4. Support transparency of performance measures with data on hospital and provider outcomes

The Role of Patients and Families in Improving Perinatal Care

Key components of patient- and family-centered care:
- Respect
- Collaboration
- Information sharing
- Diversity
- Support
- Empowerment
- Active participation
- Individualized
Chapter 4: The Role of Patients & Families Improving Perinatal Care

- Family history
- Centering Pregnancy®
- NICU Family Support®
- Palliative and End-of-Life care
- Women and families as partners in perinatal quality improvement efforts

"... ask the nurse or doctor; ‘Did you remember to wash your hands?’…"
From the Duke RAIN Family Letter

Which of these recommendations are you most likely to act upon after this conference? (select all that apply)

1. Embrace patient- and family-centered care across the spectrum of perinatal care.
2. Encourage patients and families to learn about their family history so they can better partner with providers to predict and manage risks.
3. Work with national organizations, (e.g. AWHONN) to include patients & families on action committees.
4. Include families in perinatal quality improvement initiatives in my hospital.

March of Dimes TIOP III Action Agenda

- Assuring that quality improvement and safety programs are put in place that can improve the health of moms and babies, such as:
  - “Elimination of Non-medically Indicated (Elective) Deliveries Before 39 weeks Gestational Age” Toolkit/Program
  - Healthy Babies are Worth the Wait®
- Giving more women of childbearing age access to the best, most accurate information about pregnancy and baby health
- Fostering the development and adoption of additional quality measures for moms and babies
- Making key information about the quality of care provided in newborn intensive care units easily and publicly available
- Advocating for reauthorization of the PREEMIE Act

What do you think the March of Dimes highest priority Action Agenda item should be? (select one answer)

1. QI and Safety: < 39 Weeks Toolkit and HBWW
2. Provide more women access to educational materials and information
3. Foster adoption of additional quality measures for moms and babies
4. Make information about NICU care quality easily and publicly available
5. Advocate for reauthorization of the PREEMIE Act

March of Dimes Call to Action
“We all have a role to play”

Request for copies
North America: globalprograms@marchofdimes.com
Rest of the world: pmnch@who.int

www.marchofdimes.com/tiop

Thank You!

Contact Information
Scott D. Berns, MD, MPH
March of Dimes
Senior Vice President, Chapter Programs
sberns@marchofdimes.com