Reducing Non-Medically Indicated Deliveries <39 Weeks Gestation: Florida Initiatives

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State Consumer Health Information and Policy Advisory Council
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Partnering to Improve Health Care Quality for Mothers and Babies

- Origin of Florida Efforts
- March of Dimes Big 5 Efforts
- OB HEN Hospital Expansion with FHA and MOD
- Provider and Consumer Education Campaigns
- COIN Initiative
  - State Monitoring
  - Hospital Survey
March of Dimes Big 5 Idea

What are the unique opportunities for the Big 5 States to accomplish something significant ...
Big 5 Quality Improvement Initiative

- Develop a Common Vision
- Webinars to educate and share best practices
- Formal Leadership Circle of all 5 states—Team of Teams
- Evolved from vision to action
What are State Perinatal Quality Collaboratives?

- Voluntary
- Population-Based
- Data-Driven
- Value-Added
- Quality Improvement
- Collaborative Organizations
CPQCC Toolkits

1. Antenatal Corticosteroid Therapy (2009)
2. Improving Initial Lung Function: Early CPAP, Surfactant and Other Means (2011)
4. Nutritional Support of the Very Low Birth Weight Infant
5. Early Onset Group B Streptococcus Prevention
6. Severe Hyperbilirubinemia Prevention (Revision Coming)
7. Perinatal HIV Prevention
8. Delivery Room Management of the VLBW Infant (2011)
9. Neonatal Hospital Acquired Infection Prevention
10. Care and Management of the Late Preterm Infant (Revision Coming)
Partners

- March of Dimes
- Florida Obstetric and Gynecologic Society
- American Congress of Obstetricians and Gynecologists, District XII
- Florida Society of Neonatalists
- Florida Chapter of American Academy of Pediatrics
- Florida Hospital Association
- Florida Section of the Assoc. of Women’s Health, Obstetrics and Neonatal Nurses
- Florida Council of Nurse Midwives
- Florida Department of Health
- Agency for Health Care Administration
- University of South Florida
- University of Florida
- Florida Association of Healthy Start Coalitions
Elimination of Non-Medically Indicated (Elective) Deliveries Prior to 39 Weeks
Terminology

First day of LMP

Week # 0 20\(^{0/7}\) 34\(^{0/7}\) 37\(^{0/7}\) 39\(^{0/7}\) 41\(^{6/7}\)

Preterm Late Preterm Early Term Post term

Modified from Drawing courtesy of William Engle, MD, Indiana University
Raju TNK. Pediatrics, 2006;118 1207.
U.S. Cesarean Section and Labor Induction Rates Among Singleton Live Births by Week of Gestation, 1992 and 2002

Source: NCHS, Final Natality Data, Prepared by March of Dimes Perinatal Data Center, April 2006.
Adverse Neonatal Outcomes According to Completed Week of Gestation at Delivery: **Absolute Risk**

Adapted from Tita AT, et al. NEJM 2009;360:111
Timing of Fetal Brain Development

- Cortex volume increases by 50% between 34 and 40 weeks gestation. (Adams Chapman, 2008)
- Brain volume increases at a rate of 15 mL/week between 29 and 41 weeks gestation.
- A 5-fold increase in myelinated white matter occurs between 35-41 wks gestation.
- Frontal lobes are the last to develop; therefore, the most vulnerable. (Huttenloher, 1984; Yakavlev, Lecours, 1967; Schade, 1961; Volpe, 2001)
“Non-Medical” Indications Often Given for Inductions

- Maternal intolerance to late pregnancy
  - Excess edema, backache, indigestion, insomnia
- Prior labor complication
- Prior shoulder dystocia
- Suspected fetal macrosomia
- History of rapid labor/ lives far away
- Possible lower risk for mom or baby
  - Lower stillbirth rate, less macrosomia, less preeclampsia
What Motivates Some Obstetricians to Perform Elective Inductions

- Physician Convenience
  - Guarantee attendance at birth
  - Avoid scheduling conflicts
  - Reduce being awakened at night

...What’s the harm?
- Amnesia due to rare occurrence
- The NICU can handles it

And ...
Examples of Successful Programs to Reduce Non-medically Indicated (Elective) Deliveries Before 39 Weeks of Gestation

- Magee-Womens Hospital (Pittsburgh)
- Intermountain Healthcare (Utah)
- Hospital Corporation of America (HCA)
Elimination of Non-Medically Indicated (Elective) Deliveries Prior to 39 Weeks
Rapid Cycle Learning

MAP-IT

- Mobilize
- Assess
- Plan
- Implement
- Track

Scheduling Form—Key Data Elements

<table>
<thead>
<tr>
<th>Monitoring Scheduled Inductions and Cesarean Deliveries among Singletons</th>
</tr>
</thead>
<tbody>
<tr>
<td>OB Provider: _______ Gravida: _______ Parity: _______</td>
</tr>
<tr>
<td>Type of Delivery Planned: □ Induction □ C/S Desired Date: _______</td>
</tr>
</tbody>
</table>

**DATING**
- Gestational Age at Desired Date of Induction or C/S: _______
- EDC: □ US <20 weeks □ Doppler FHT+ for 30 weeks □ +hCG for 36 weeks
- EDC Based on: □ Other dating criteria: _______
- Fetal Lung Maturity test result: _______

**INDICATION**

**Obstetric and Medical Conditions**
- □ Abruption
- □ Previa
- □ Pre-eclampsia
- □ Gestational HTN
- □ GDM with Insulin
- □ PROM
- □ Fetal Demise (current)
- □ Fetal Demise (prior)
- □ Oligohydramnios
- □ Polyhydramnios
- □ IUGR
- □ Non-reassuring fetal status
- □ Isomunization
- □ Fetal malformation

**Scheduled Induction or C/S**
- □ ≥41+0 weeks
- □ Scheduled C/S
  - □ Prior cesarean section
  - □ Breech presentation
  - □ Other malpresentation
  - □ Patient choice
  - □ Other: _______

**Elective Induction**
- □ Patient choice/social
- □ Macrosomia
- □ Distance
- □ Other: _______

**Labor**
- Was labor or SROM present? ©
  - □ Yes, Labor
  - □ Yes, SROM
  - □ Yes, Labor & SROM
  - □ No
- Labor is defined as regular uterine contractions with cervical change.

**Outcome After Delivery**
- Scheduled Delivery was: □ Induced □ Not induced
- Scheduled Delivery was: □ Spontaneous Vaginal □ Operative Vaginal □ Cesarean Section
- Delivery Date: _______
- Did the infant go to the special or intermediate care nursery or NICU? □ Yes □ No
- Was this delivery an intrauterine fetal demise / fetal death? □ Yes □ No

**Key Data Elements**
- Type of Planned Delivery
- Gestational Age
- Gestational Age Dating
- Delivery Indication
- Other Reason
- Labor on Admission
- Outcomes?
Florida Big 5: Reduction of NMI Deliveries <39 Weeks Gestation by Delivery Type (Six Pilot Hospitals Provisional - 2011)
% of NMI Single Live Births <39 Wks Among Term Births for Florida Hospitals by Quintile

Data Source: Florida Live Birth Certificate Data
Percent of NMI Single Live Births <39 Wks Among Term Births for Florida Hospitals by Quintile

Data Source: Florida Live Birth Certificate Data
Eliminating Early Elective Deliveries in Florida

FHA Hospital Engagement Network
Florida Perinatal Quality Collaborative
University of South Florida
HRET/AHA

• The HRET/AHA team includes
  – 33 state hospital associations
  – Subject matter and quality improvement organizations such as the Cynosure Health and IHI
  – Other partners providing planning, clinical and improvement expertise

• Nearly 2,000 hospitals are involved in the HRET national Hospital Engagement Network (HEN)

• 76 Florida hospitals are participating in the HRET FHA HEN
1. Adverse drug events
2. Catheter associated urinary tract infections
3. Catheter associated bloodstream infections
4. Injury from falls and immobility
5. **Obstetrical adverse events**
6. Pressure ulcers
7. Preventable readmissions
8. Surgical site infections
9. Venous thromboembolism
10. Ventilator associated pneumonia
Percent of NMI Single Live Births <39 Wks Among Term Births for Florida Hospitals by Quintile

Data Source: Florida Live Birth Certificate Data
Percent of NMI Single Live Births <39 Wks Among Term Births for FL HEN Hospitals, 2011

Data Source: Florida Live Birth Certificate Data
Hospital Fact Sheet

Hospital A, 2006 — 2011

Non-Medically Indicated (NMI) Deliveries Prior to 39 Weeks

Non-medically indicated (NMI) deliveries are labor induced or cesarean deliveries performed without a maternal or fetal medical condition requiring pregnancy intervention under routine conditions. NMI deliveries prior to 39 weeks increase the risk of admissions to neonatal intensive care units, prolonged hospitalizations and increased costs, respiratory mortality and support, and other neonatal and infant morbidities.1

March of Dimes Big 5 Prematurity Collaborative

The March of Dimes Big 5 State Prematurity Collaborative partnered with Florida, Texas, Illinois, New York, and California teams to implement in pilot hospitals a new toolkit aimed at eliminating NMI deliveries prior to 39 weeks’ gestational age.2 The toolkit outlines the best practices on NMI deliveries and provides support and evidence-based materials for implementing a quality improvement project incorporating policies and tools used successfully at multiple hospitals in the United States. Six hospitals in Florida were chosen to participate as pilot hospitals. When looking at individually collected clinical data, all six hospitals effectively implemented practices and policies that substantially reduced their percentage of NMI deliveries prior to 39 weeks.

Measuring NMI Deliveries Prior to 39 Weeks

Birth certificate data are used to calculate a surrogate measure in order to assess and monitor NMI deliveries prior to 39 weeks completed weeks of gestation. Gestational age is defined using the clinical estimate of gestational age from the birth certificate.

NMI deliveries prior to 39 weeks are classified by birth certificate reporting using The Joint Commission’s (TJC) list of Conditions Possibly Justifying Elective Delivery prior to 39 Weeks Gestation.3 The measure is restricted to live births to women presumed to be at risk for a NMI term delivery prior to 39 weeks. Therefore, live births occurring prior to 37 weeks gestation and live births with mothers or infants having medical conditions present prior to pregnancy or prior to labor and delivery are not included as these births were also not at risk for a NMI delivery.

Percent of NMISingleton Live Births Prior to 39 Weeks Gestation for Hospital A Compared with the Six Big 5 Pilot Hospitals and the Average Florida Hospitals by Quarter

![Graph showing the percentage of premature live births for Hospital A, Six Big 5 Pilot Hospitals, and average Florida Hospitals by quarter from 2006 to 2011.](image)
Provider, Payer, and Policymaker Education on Non-Medically Indicated Deliveries Before 39 Weeks Gestation

Florida Perinatal Quality Collaborative
University of South Florida

march of dimes®
florida chapter
Project Purpose

- Improve knowledge about the risks of NMI deliveries <39 weeks
- Raise awareness of the importance of the last weeks of pregnancy
- Change attitudes and practices
- Collaborate with consumer education project
Project Activities

- Presentations to Medical Professionals
  - Grand Rounds presentations for HEN hospitals
  - No cost presentations by Speakers Bureau physicians (contact Linda Detman at ldetman@health.usf.edu if interested)

- Distributing education materials through Healthy Start Coalitions, social media, and conferences
  - Over 600 provider education packets distributed to Healthy Start Coalition liaisons in consumer campaign regions
  - Exhibits at FOGS and FLAWHONN meetings
  - E-bulletin literature update to FOGS, FLAWHONN, FL CNM, and consumer campaign website

- Working with Florida Keys AHEC to produce web-based education module

- Developing executive briefings for health plan payers and policymakers
Why the Last Weeks of Pregnancy Count: Consumer Campaign

Florida Chapter March of Dimes and Florida Association of Healthy Start Coalitions
When are babies full-term?

- Goldenberg FL

- Not sure

- <37

- 37-38

- 39+

- 2.6
When is it safe to deliver?

- <37: Goldenberg 51.7, FL 45.7
- 37-38: Goldenberg 40.7, FL 31.6
- 39+: Goldenberg 7.6, FL 17.1
- Not sure: FL 5.6

Note: The chart shows the percentage of responses for different gestation periods.
Priority Healthy Start Coalitions

- Healthy Start Coalition of Miami-Dade
- Broward Healthy Start Coalition
- Children’s Services Council of Palm Beach County
- Healthy Start Coalition of Southwest Florida
- Healthy Start Coalition of Hillsborough County
- Healthy Start Coalition of Sarasota County
- Healthy Start Coalition of Santa Rosa County
- Healthy Start of Orange County (NEW!)

Responsibilities:
- Participate in and help coordinate “Prematurity Awareness Day” activities
- Aid in the collection of pre- and post-test survey data in priority counties
- Aid in planning, organization, and logistics of focus groups in priority counties
Healthy Babies are Worth the Wait®

Really important things happen to a baby in the last few weeks of pregnancy. Babies need at least 39 weeks in the womb to fully grow and develop. Here’s what at least 39 weeks can do:

**brain:**
In the last 6 weeks of pregnancy, the size of a baby’s brain almost doubles. This helps with things like balance, learning and behavior as he gets older.

**mouth:**
A baby has time to learn to suck and swallow so he can eat after he’s born.

**liver:**
The liver and other organs grow and develop.

**eyes and ears:**
Babies born at 39 weeks or later are less likely to have vision and hearing problems than babies born early.

**lungs:**
Babies born at 39 weeks or later are less likely to have breathing problems than babies born early.

More and more births are being scheduled a little early for non-medical reasons. This can cause problems for both mom and baby. If your pregnancy is healthy, it’s best to stay pregnant until labor begins on its own.

For more information about a baby’s growth and development, go to: marchofdimes.com/39weeks

New Campaign Materials 2012

don’t rush your baby’s birth day

Your baby needs at least 39 weeks to grow and develop before she is born. If your pregnancy is healthy, wait for labor to begin on its own.

marchofdimes.com/39weeks
Collaborative Improvement & Innovation Network to Reduce Infant Mortality
Infant Mortality Rate Among US States, 2006-2008

U.S. IMR: 6.68 per 1,000
4.94 in MA, UT -- 11.97 in DC

IMR per 1,000
- 4.94 - 5.98
- 5.99 - 6.57
- 6.58 - 7.05
- 7.06 - 7.88
- 7.88 - 11.97

Data Source: US National Center for Health Statistics
COIN: History

Collaborative Improvement & Innovation Network to Reduce Infant Mortality

• Born out of January 2012 Infant Mortality Summit in New Orleans, LA for Regions IV and VI.

• Designed to meet stated needs related to:
  – Common evidence-based strategies to reduce infant mortality;
  – Shared, collaborative learning and action across states.

• Started March 2012 to support the adoption of collaborative learning and quality improvement principles and practices to reduce infant mortality and improve birth outcomes.

• Developed in partnership with ASTHO, AMCHP, March of Dimes, CityMatCH, CMS, and CDC.
What is a CoIN?

A CoIN, or Collaborative Innovation Network, has been described as a cyber-team of self-motivated people with a collective vision, enabled by the Web to collaborate in achieving a common goal by sharing ideas, information, and work.\(^1\)

- **Key Elements of a CoIN are:**
  - Being a “cyberteam”—most work will be distance-based
  - Innovation comes through rapid and on-going communication across all levels.

- Describes **how** individuals will work/learn collaboratively to develop, implement, and evaluate strategies to reduce infant mortality.

COIN: Strategies

Five strategies focused on common state-identified priorities:

1. Reducing elective deliveries <39 weeks (ED);
2. Expanding interconception care in Medicaid (IC);
3. Reducing SIDS/SUID (SS);
4. Increasing smoking cessation among pregnant women (SC);
5. Enhancing perinatal regionalization (RS).
Elective Delivery Strategies / Objectives

- Voluntary Policy Implementation, aided by HEN’s
  - Engage hospitals/physicians and assist them in modifying clinical practice.

- Perinatal Quality Collaboratives
  - Create a quality improvement collaborative among providers to foster implementation of evidence-based practices.

- Medicaid Payor Policies
  - Change Medicaid billing codes to incentivize elimination of early, non-medically indicated deliveries.

- Data Improvement
  - Identify common data indicators and sources for monitoring and reporting to allow for state to state comparisons and measurement of progress.
Health Monitoring: Percent of Elective Deliveries <39 Weeks Gestation

Data Source: State Birth Certificate Data
**Health Problem Analysis: Hospital Survey of Elective Delivery Policies and Practices**

<table>
<thead>
<tr>
<th>Hospital Survey on Non-Medically Indicated Early Term Delivery Activities</th>
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<tbody>
<tr>
<td><em>This survey was developed by the Florida Perinatal Quality Collaborative with support from the March of Dimes Big 5 States and the HRSA COIN States. [11/13/2012]</em></td>
</tr>
<tr>
<td>We would appreciate you completing the following survey about your hospital’s efforts to reduce non-medically indicated early term deliveries. The __________________ are partnering together in order to support hospital and providers in their efforts. The intent of the survey is to better understand our state’s current hospital efforts with improvement efforts. Participation in this survey is voluntary. Responses, where possible, should represent the combined opinions of both hospital obstetrical and nursing leadership. Please contact __________________ at the __________________ if you have any questions or concerns.</td>
</tr>
</tbody>
</table>

Hospital Name: ____________________________________________ 
Hospital Address: ________________________________________ 
Name of person completing this survey: ________________________ 
Title of person completing survey: ____________________________ 
Occupation of person completing survey: ______________________ 
Email: ____________________________________________________ 
Phone: ____________________________________________________ 

Which of the following type of individuals were included in completing the survey? 
- Hospital Administrator 
- Obstetrical Leadership 
- OB Nurse Manager or Leadership 
- Quality Improvement Staff 
- Clerical Staff 
- Other 

Does your hospital have a formal written policy specifically focused on non-medically indicated deliveries before 39 weeks gestation? (Please check one) 
- Yes, for induced deliveries 
- Yes, for cesarean deliveries 
- Yes, for both induced and cesarean deliveries 
- No → Please go to Question 7
Questions?

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