

# Elimination of Elective Deliveries at Prior to 39 Weeks Gestation

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## **Reducing Elective Deliveries Prior to 39 Weeks Gestation**

The last few weeks of pregnancy are critical to a baby's health because important organs, including the brain and lungs, are not completely developed until the end of pregnancy. A baby's birth should not be scheduled before 39 weeks of pregnancy, unless medically necessary. The Leapfrog Group, a coalition of public and private healthcare purchasers, reports that hospital rates of early elective deliveries range from less than 5% to more than 40%. The 773 hospitals from around the country that voluntarily provided Leapfrog with information on this measure reported over 57,000 early elective deliveries by cesarean section or induction during the reporting period. The variation in hospital rates has long been talked about in the health care community, but Leapfrog's release of 2010 data is the first real evidence that the practice of scheduling newborn deliveries before 39 weeks without a medical reason is common and varied among hospitals even in the same state or community.<sup>iiiiii</sup>

Elimination of early elective deliveries requires effort on behalf of physicians, nurses and hospital leaders. Successful implementation of a 39 week induction program can only come from a commitment to providing care that is patient-centered and safe.

## **Suggested AIM Statements**

Before the implementation work starts, the team must have a goal at which to aim. An AIM statement for Early Elective Delivery reduction efforts could include one of the following:

- Decrease the elective delivery rate at less than 39 weeks gestation to less than 3% of all deliveries by December 31, 2013.
- Decrease the early elective delivery rate by 50% within 12 months and achieve a rate of less than 3% of all deliveries by December 31, 2013.

## **Reduce DEMAND for Elective Deliveries at Prior to 39 Weeks Gestation**

Reducing the demand comes from education to both clinicians and patients. An awareness of the risks involved curtails the requests for convenience, or early elective, deliveries. National guidelines, media attention and successful regions that have eliminated elective deliveries prior to 39 weeks gestation are all helpful increasing the organizational will to reduce demand.

## **Secondary Driver: Awareness of risks of early elective deliveries by physicians, nurses and patients**

Patients and practitioners must understand the risks when delivering at less than 39 weeks without medical indications. Generally, resistance to change around <39 week deliveries is due to perception of little or no harm to the baby or increased risk to the mother. Provide a summary of evidence from literature to clinicians who are resistant to change, and provide

data and feedback on your hospital outcomes in general and specifically on the clinician's practices<sup>iv</sup>.

Note – nothing stated about how to inform patients of risk. Add statement here.

### **Change Ideas: Provide education to physicians and nursing staff**

- Provide clinicians with data about their patients' complications (maternal and neonatal). Emphasize avoiding elective deliveries at less than 39 weeks.
- Use a physician champion to communicate the reasons for and importance of the initiative to medical staff
- Use a nursing champion to communicate the reasons for and importance of the initiative to the nursing staff

### **Change Ideas: Provide education to patients**

- Provide patients with educational materials that define “full term” and emphasize the importance of eliminating elective deliveries at prior to that time
- Use hospital marketing to educate patients about the 39 week initiative
- Work with local media on the 39 week initiative
- Connect with the March of Dimes program in your region on the 39 week initiative
- **Develop patient education materials and provide to your physician's offices for their waiting rooms and for distribution during prenatal classes**

### **Hardwiring the reduction in demand for elective deliveries at prior to 39 weeks as part of the improvement plan:**

Assist the physician champion by arming him/her with the most up to date research from obstetrical quality resources. Have the physician champion discuss the research and current recommendations at Medical Staff meetings and in newsletters. Do a retrospective review of hospital data findings from elective deliveries at prior to 39 weeks gestation to give the Medical Staff baseline data from which to work. Utilize the physician champion to address concerns by the Medical Staff, and to distribute current research and data. A physician champion does not need to be a physician who holds a “title”, such as Department Chair or Department Director. A good physician champion is:

- ✓ Respected as a Physician by his/her peers
- ✓ Good at communicating with other physicians and hospital staff
- ✓ Willing to stand up *when needed* (has courage, but not a bully)
- ✓ One who possesses good social skills and relationships within the hospital

## **Reduce AVAILABILITY of Elective Deliveries at Prior to 39 Weeks Gestation**

Reducing the availability comes from a physician-driven, nurse-administered, hospital leadership-supported policy for elective inductions and the process for scheduling. Implementing the elective induction bundle and a policy that includes a “hard stop”, if supported by physician and hospital leadership will lead to successful reduction in convenience deliveries.

### **Secondary Driver: An enforceable hospital policy and procedure**

Formalizing the elimination of elective deliveries at prior to 39 weeks gestation requires policies and procedures that govern care and are based on evidence based protocol examples.<sup>v</sup> A policy that specifically defines acceptable instances of early elective delivery eliminates guesswork for clinicians and hospital staff, and sets clear guidelines for care delivery. Support from Medical Staff and Hospital leadership is necessary to assist front-line nursing staff to be the “gate-keepers” for policies. It is imperative that staff members know that hospital leadership is in support of the policy. An elective delivery policy is primarily physician driven and requires buy-in from the Medical Staff to be successful.

### **Change Ideas: Include physicians in the development of the policy and procedure**

- Utilize a physician champion to communicate with and engage the Medical Staff in the improvement project
- Establish “ownership” of the policy by the Medical Staff in the policy

### **Change Ideas: Use an established, evidence based policy/protocol**

- Include the Elective Induction Labor Bundle<sup>vi</sup> elements in the policy:
  1. Gestational Age 39 weeks or greater required to induce the patient  
Organization should specify method of dating pregnancies
  2. Reassuring Fetal Status prior to induction  
Organization should specify a required amount of time for fetal monitoring prior to induction
  3. Pelvic Exam prior to induction  
Pelvic exam necessary to check for cephalo-pelvic disproportions, assess potential difficulties during delivery
  4. Absence of Hyperstimulation on fetal monitor  
Organization should implement NICHD Standardized Nomenclature<sup>vii</sup> for fetal monitoring documentation in order to eliminate confusion regarding fetal status
- Use a sample policy already developed by a maternal quality care collaborative, The March of Dimes, state Medicaid programs, or perinatal safety programs<sup>viii</sup>

### **Change Ideas: Establish procedures for approving exceptions to the policy**

- Use physician leadership to define “medical necessity” for elective deliveries at prior to 39 weeks using ACOG and national quality criteria<sup>ixx</sup>
- Set clear guidelines and define the chain of command for who can approve an early elective delivery based on medical necessity, such as the Chair of the Department

### **Change Ideas: Establish a defined procedure for scheduling elective deliveries**

- The policy should clearly define the process for scheduling elective deliveries that includes the required information in order to schedule
- This information should include gestational age and indication for induction/cesarean section
- The procedure should also clearly define the chain of command if an induction/cesarean section does not meet criteria
- Create standardized forms for scheduling that includes all of the required information (See Appendix A)

### **Change Ideas: Include a “Hard Stop”, or instruction for halting the scheduling process when an attempt is made to schedule an induction that does not meet criteria**

- Include specific detail about the chain of command to be notified when a “Hard Stop” is implemented
- Include specific detail about the responsibilities and expectations for team members when a “Hard Stop” is implemented, and guidance to resolve the issue

### **Hardwiring the reduction in availability for elective deliveries at prior to 39 weeks as part of the improvement plan:**

Measure compliance with the elective delivery policy by collecting data on deliveries at prior to 39 weeks gestation. Complete an in-depth review of any “fallouts” to determine the cause(s). Continue to discuss the scheduling process with staff during staff meetings, and use the feedback from team members to further refine and improve the scheduling process. Listen to physicians who provide feedback about potential delays in scheduling due to the new policy, and use that feedback to also refine and improve the process. Continue to report outcomes data on all elective deliveries to the Medical Staff. Support from Medical Staff and Hospital leadership is necessary to assist front-line nursing staff to be the “gate-keepers” for policies. It is imperative that staff members know that hospital leadership is in support of the policy.

### **Suggested Process Measures:**

- Measure the use and completion of a standardized tool for scheduling elective deliveries

- Review all “fallouts” (early elective deliveries without medical indications) with medical staff and nursing staff
- Measure compliance with all elements of the labor induction bundle

### **Potential Barriers:**

Recognize that for many physicians this will be a change in their practice. Decisions about timing of deliveries have always been at the discretion of the physician, not a function directed by policy. Include lead physicians in the improvement team. Select these leads to work as champions to dialogue with physician colleges and achieve accelerated implementation. Order sets and protocols may be seen by some physicians as “cookbook” medicine. It is actually “best recipe” medicine that uses what is known in the literature to provide the best opportunity for each patient based on their individual needs to receive the care that will reduce their risk for harm.

Use administrative leadership sponsorship to help remove or mitigate barriers

If physicians perceive a significant, unjustifiable loss of clinical autonomy, they may discuss moving to a nearby hospital for future elective deliveries. This may create a business and social challenge for the administration. Getting nearby hospitals to also implement the policy removes this barrier. Also, creating community awareness of the 39 week initiative makes it harder to “practice as usual” in a different location.

Including bedside nurses, physicians, and hospital leadership in the improvement team to develop protocols, work flows, conduct peer to peer education has been shown to be effective in successfully implementing best practices. It is important to start with the one early adopter physician who can help lead and then recruit early adopter champions.

A management executive sponsor, recognizing the value to the patients and the value to the organization of preventing harm, can help brainstorm solutions to what may appear to be added work, or provide resources to mitigate that additional work. An executive sponsor can also help to see the “big picture” on how this may impact organizational wide, and champion through requests for workflow change or supplies. Executive sponsors can help educate, lead, and provide solutions to staffing barriers.

A senior or opinion leader physician is crucial to accomplish the goal of organization-wide adoption of best practices order sets.

This is not just a change in practice but may also be a change in culture:

This may very well require a change in culture, particularly physician culture. The physicians will be asked to trade their traditional way of individualizing pregnancy management for each patient for a more standardized and safe approach. This may appear to be a loss of control for the physician. Order sets and practice bundles can be worrisome to physicians who are not used to them. This will be a change in how they work. Physicians

learn from peers. Most physicians will follow their peers before they will follow “expert advice.”

This is also an example of an innovation that will require small test of changes and planned spread driven by success. The ideal end result is the development of team based care where each member of the team contributes to better and safer patient care. The new/updated scheduling process may be different, with more requirements than before its implementation. It is important to publicize the scheduling process well in advance; train schedulers and nursing staff to facilitate its implementation; streamline the process making it easy for physicians and their office staff to schedule patients.

## **Tips on How to Use the Model for Improvement to:**

### **Reduce the Demand for Elective Deliveries at Less Than 39 Weeks**

- ✓ Review the current hospital baseline data with one physician to start. **[OneMD? What does that mean? I think the data should be by MD; identify trends]**
- ✓ Borrow from other organizations that have successfully implemented a 39 week delivery program.
- ✓ Utilize the national and statewide resources already working on this topic to obtain educational materials and other resources.
- ✓ Connect the physician champion with a national or statewide perinatal safety collaborative for support and resources.

### **Reduce the Availability of Elective Deliveries at Less Than 39 Weeks**

- ✓ Put together a small team that includes physicians, nurses and hospital leadership. Review sample policies and forms.
- ✓ Ask one or two of the physicians on the committee to review the sample policies for help with adoption at your facility.
- ✓ Voluntary participation through the method of “asking for help improving, not approving” will often generate momentum and rapid improvement of the process.
- ✓ Forcing order sets on physicians before there is a critical mass of adopters generally is not effective and often sets the improvement effort back.
- ✓ Design a small pilot on the unit where the lead physicians and nurses are comfortable with testing the sample policy to determine any issues with implementation prior to piloting the policy and protocol on a larger scale. Remember that a small pilot test can be just that – small. Start with one patient, one physician, and one nurse.
- ✓ Don’t wait for approval from all departments. The results of multiple small tests of change will ultimately guide successful implementation.



## Key Resources:

The March of Dimes, *Towards Improving the Outcome of Pregnancy III*, December 2010, [http://www.marchofdimes.com/TIOPIII\\_FinalManuscript.pdf](http://www.marchofdimes.com/TIOPIII_FinalManuscript.pdf)

- [Comprehensive guide to current research and recommendations for safe perinatal care](#)

The Institute for Healthcare Improvement on Perinatal Care Improvement, <http://www.ihl.org/IHI/Topics/PerinatalCare/>

- [Complete listing of bundle elements for the Elective Induction and Labor Augmentation bundles](#)

The March of Dimes/CMQCC 39 Weeks Toolkit [http://www.cmqcc.org/\\_39\\_week\\_toolkit](http://www.cmqcc.org/_39_week_toolkit)

- Includes sample policies, scheduling forms, implementation tips, education guide, data abstraction guide, and numerous tools to aid in implementation

Wagner, Meirowitz, Shah, et al. *Comprehensive Perinatal Safety Initiative to Reduce Adverse Obstetric Events*; *Journal for Healthcare Quality*, Volume 34, Issue 1, pages 6–15, January / February 2012

Cherouny PH, Federico FA, Haraden C, Leavitt Gullo S, Resar R. *Idealized Design of Perinatal Care*.

IHI Innovation Series white paper. Cambridge, Massachusetts: Institute for Healthcare Improvement; 2005.

# Appendix I: Sample Scheduling Form

## BEST MEDICAL CENTER SAMPLE SCHEDULING FORM FOR INDUCTIONS AND CESAREAN SECTIONS Call (XXX) XXX-XXXX or Fax (XXX) XXX-XXXX

Name \_\_\_\_\_ Phone \_\_\_\_\_  
 OB Provider \_\_\_\_\_ G/P \_\_\_\_\_  
 Type of Delivery Planned:  Induction;  C/S Desired Date/Time: \_\_\_\_\_

### DATING

EDC: \_\_\_\_\_ Gestational Age at Date of Induction or C/S: \_\_\_\_\_ (week+day)

EDC Based on:  US 10-20 weeks;  Doppler FHT+ for 30 weeks;  +hCG for 36 weeks

Other dating criteria: \_\_\_\_\_ (details)

*By ACOG Guidelines, women should be 39 wks or greater before initiating an elective (no indication) delivery. ACOG also states that a mature fetal lung test in the absence of clinical indication is not considered an indication for delivery.*

Fetal Lung Maturity test result: \_\_\_\_\_ Date: \_\_\_\_\_

### INDICATION

#### Obstetric and Medical Conditions (OK if <39 weeks)

(need to deliver <39 weeks dependent on severity of condition)

- |  |   |
|--|---|
| <input type="checkbox"/> Abruptio                    | <input type="checkbox"/> Heart disease  |
| <input type="checkbox"/> Previa                      | <input type="checkbox"/> Liver disease (e.g. cholestasis of preg.)                |
| <input type="checkbox"/> Preeclampsia                | <input type="checkbox"/> Chronic HTN  |
| <input type="checkbox"/> Gestational HTN             | <input type="checkbox"/> Diabetes (Type I or II)                                  |
| <input type="checkbox"/> GDM with Insulin            | <input type="checkbox"/> Renal disease  |
| <input type="checkbox"/> ≥41+0 weeks                 | <input type="checkbox"/> Coag/Thrombophilia                                       |
| <input type="checkbox"/> PROM                        | <input type="checkbox"/> Pulmonary disease  |
| <input type="checkbox"/> Fetal Demise (current)      | <input type="checkbox"/> HIV infection  |
| <input type="checkbox"/> Fetal Demise (prior)        | <input type="checkbox"/> Other: _____   |
| <input type="checkbox"/> Oligohydramnios             | Perinatology consult obtained and agrees with plan:<br>_____<br>(consultant name) |
| <input type="checkbox"/> Polyhydramnios              |   |
| <input type="checkbox"/> IUGR                        |   |
| <input type="checkbox"/> Non-reassuring fetal status |   |
| <input type="checkbox"/> Isoimmunization             |   |
| <input type="checkbox"/> Fetal malformation          |   |
| <input type="checkbox"/> Twin with complication      |   |

#### Scheduled C/S (≥39 wks)

- Prior C/S
- Prior classical C/S
- Prior myomectomy (may be earlier with fetal lung maturity test)
- Breech presentation
- Other malpresentation
- Patient choice
- Other: \_\_\_\_\_
- Twin w/o complication (ok ≥38 wks)

#### Elective Induction (≥39wks)

- Patient choice/social
- Macrosomia
- Distance
- Other: \_\_\_\_\_

Description/Details: \_\_\_\_\_

### CERVICAL EXAM (for inductions)

Date of Exam: \_\_\_\_\_ (within 7 days of date of induction)

**Bishop Score:** circle each element of the exam below and add:

**Total Score:** \_\_\_\_\_

| Score | Dilation | Effacement | Station | Consistency | Position    |
|-------|----------|------------|---------|-------------|-------------|
| 0     | Closed   | 0-30%      | -3      | Firm        | Posterior   |
| 1     | 1-2      | 40-50%     | -2      | Medium      | Midposition |
| 2     | 3-4      | 60-70%     | -1, 0   | Soft        | Anterior    |
| 3     | 5-6      | 80%        | +1, +2  | -----       | -----       |

This section is used only by those hospitals using cervical exam criteria for scheduling inductions.

### SCHEDULING OFFICE USE

Procedure NOT Scheduled:

Scheduled?  by: \_\_\_\_\_ Confirmed Date/Time: \_\_\_\_\_

Referred to Dept Chair?  PrenatalRecordpresentinLD:  Yes

## Endnotes:

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<sup>i</sup> Improving Perinatal Safety: The Elimination of Elective Deliveries Before 39 Weeks. Health Research & Educational Trust. Chicago: February 2012. Accessed at [www.hpoe.org](http://www.hpoe.org)

<sup>ii</sup> The Leapfrog Group. Early Elective Deliveries (Between 37 and 39 Complete Weeks of Gestation). Released March 28, 2011. Accessible at <http://www.leapfroggroup.org>

<sup>iii</sup> Partnership for Patients: Centers for Medicare and Medicaid Services. Addressing Obstetrical Harm through the Pay-for-Performance Network. February 8, 2012.

<sup>iv</sup> Tita, et al. Timing of Elective Repeat Cesarean at term and Neonatal Outcomes. N Engl J Med 2009; 360:111-120

<sup>v</sup> Institute for Healthcare Improvement (IHI) Elective Induction and Augmentation Bundles Update January 2009;  
[http://www.ih.org/knowledge/Knowledge%20Center%20Assets/Changes%20-%20ElectiveInductionandAugmentationBundles\\_bef6ac1c-01f5-4ab7-9ef6-90468f111b47/IHIElectiveInductionandAugmentationBundlesJan09.pdf](http://www.ih.org/knowledge/Knowledge%20Center%20Assets/Changes%20-%20ElectiveInductionandAugmentationBundles_bef6ac1c-01f5-4ab7-9ef6-90468f111b47/IHIElectiveInductionandAugmentationBundlesJan09.pdf)

<sup>vi</sup> Institute for Healthcare Improvement (IHI) Elective Induction and Augmentation Bundles Update January 2009;  
[http://www.ih.org/knowledge/Knowledge%20Center%20Assets/Changes%20-%20ElectiveInductionandAugmentationBundles\\_bef6ac1c-01f5-4ab7-9ef6-90468f111b47/IHIElectiveInductionandAugmentationBundlesJan09.pdf](http://www.ih.org/knowledge/Knowledge%20Center%20Assets/Changes%20-%20ElectiveInductionandAugmentationBundles_bef6ac1c-01f5-4ab7-9ef6-90468f111b47/IHIElectiveInductionandAugmentationBundlesJan09.pdf)

<sup>vii</sup> A Review of NICHD Standardized Nomenclature for Cardiotocography: The Importance of Speaking a Common Language When Describing Electronic Fetal Monitoring  
Barrett Robinson  
Rev Obstet Gynecol. 2008 Spring; 1(2): 56-60

<sup>viii</sup> Main E, Oshiro B, Chagolla B, Bingham D, Dang-Kilduff L, and Kowalewski L. Elimination of Non-medically Indicated (Elective) Deliveries Before 39 Weeks Gestational Age. (California Maternal Quality Care Collaborative Toolkit to Transform Maternity Care) Developed under contract #08-85012 with the California Department of Public Health; Maternal, Child and Adolescent Health Division; First edition published by March of Dimes, July 2010.

<sup>ix</sup> ACOG. Clinical management guidelines for obstetricians-gynecologists: Induction of labor. American College of Obstetricians and Gynecologists Practice Bulletin Number 107 August, 2009.

<sup>x</sup> TJC. Specifications Manual for Joint Commission National Quality Core Measures (20101a); Perinatal Care Core Measure Set. 2009 [cited November 21, 2009]; Available from: <http://www.jointcommission.org/PerformanceMeasurement/PerformanceMeasurement/Perinatal+Care+Core+Measure+Set.html>