



Indiana Perinatal Quality Improvement Collaborative: Guidelines to Reduce Early Elective Delivery

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Guidelines to Reduce Early Elective Deliveries

Overview

The Quality Improvement Committee of the Indiana Perinatal Quality Improvement Collaborative (IPQIC) was charged to develop guidelines that would support efforts in Indiana to reduce the number of non-medically indicated early term deliveries (37 07 through 38 6/7 weeks of gestation) to a rate of 3% or less. The following documents reflect the efforts of the dedicated medical professionals, state health officials and public insurance representatives that contributed to the final guidelines.

Why?

Research shows that early term elective deliveries without medical or obstetrical indication is linked to neonatal morbidities with no benefit to the mother or infant. Neonatal morbidities include increased adverse outcomes and death, NICU admissions, adverse respiratory outcome, transient tachypnea of the newborn, newborn sepsis, treated hypoglycemia, CPR or ventilation and extended length of stay.

The American Congress of Obstetricians and Gynecologists (ACOG) publications, (1979, 1999, 2009), the Indiana Hospital Association, The Joint Commission, the Center for Medicare & Medicaid Services (CMS), the March of Dimes, the Indiana Perinatal Network, the Indiana State Department of Health (ISDH), and the Indiana Office of Medicaid Policy and Planning (OMPP) have advised against non-medically indicated elective early term deliveries.

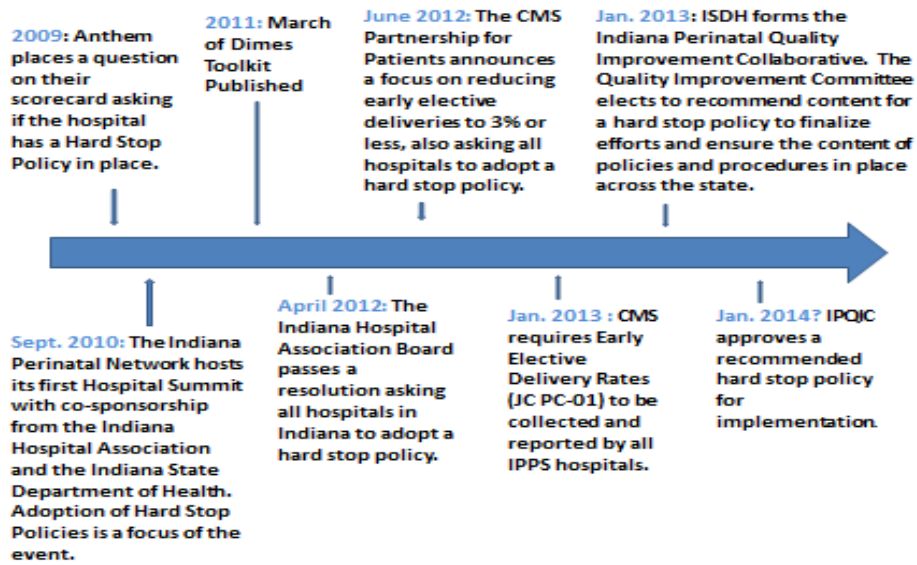
Quality improvement initiatives are known to be effective in reducing early term elective deliveries and successful initiatives are data-driven, involve multidisciplinary teams, and reference specific guidelines. The IPQIC guidelines for early term elective deliveries should be adopted by medical staff in Indiana hospitals. The guidelines include indications such as those identified by both ACOG and The Joint Commission.

Best practice is a hard stop policy enforced by strong medical staff leadership for all early term elective deliveries which does not allow medical staff to schedule an early term elective delivery without meeting criteria or receiving approval from medical staff leadership. Hospitals that have implemented a hard stop policy have virtually eliminated early term elective deliveries.

Indiana History

The following is a timeline of activities impacting early elective delivery (EED) rates in Indiana:

Guidelines to Reduce Early Elective Deliveries



As of Nov. 20, 2013, 93% (86 of 93) of delivering hospitals in Indiana report that they have adopted hard stop policies. (See Figure 1) Seven hospitals have not elected to implement a hard stop policy with varied results. Two of those seven hospitals report an early elective delivery rates less than 3%.

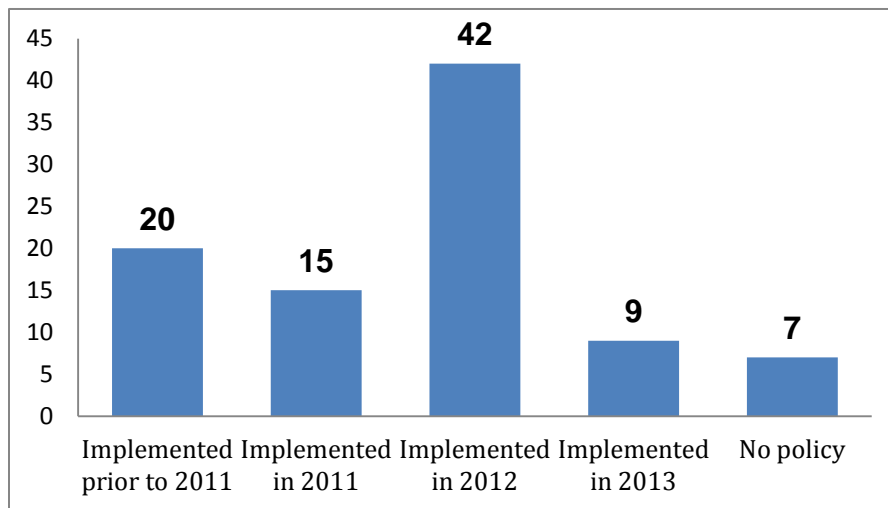


Figure 1: Adoption of Hard Stop Policies in Indiana

The advantages of a uniform policy are to assist hospitals whose policies and procedures are weaker and are currently allowing early elective deliveries. Several Indiana hospitals reporting adoption of hard stop policies also report current rates of early elective delivery over 10% in 2013.

Guidelines to Reduce Early Elective Deliveries

In Dec. 2013, CMS released the first national data on JC PC-01, early elective delivery rates to hospital compare. This public release included data for all inpatient prospective payment system hospitals.

Committee Participants

The following individuals were involved in the development of the documents:

Name	Agency	Role
Michele Bierman, MSN, BSN, RNC-OB	Union Hospital	Labor Room Manager
Carol Briley	Family and Social Services Administration	Office of Medicaid Policy and Planning
Kathy Detweiler, RN	Dupont Hospital	Birthplace Team Specialist
Joan Duwve, MD	IN State Department of Health	Chief Medical Officer
John Ellis, MD	MHS Indiana	Pediatrician
Brennan Fitzpatrick, MD	The Women's Hospital	Director, High Risk Obstetric Services
Lori Grimm, RN	Deaconess Hospital	Manager, Quality and Patient Safety
Larry Humbert, MSW	Indiana Perinatal Network	Executive Director
Deb Kirkpatrick, MD	IU School of Medicine	Obstetrician-Gynecologist
Joseph Landwehr, MD	IU Health Ball Memorial	Perinatologist
Pam Lowe, MSN, RN	IU Health North Hospital	Director, Women's Services
Minjoo Morlan, MSW	IN March of Dimes	Associate Director, Program Services
Donna Neufelder, RN	St. Mary's Medical Center	Executive Director, Quality Management
Risheet Patel, MD	IN Academy of Family Physicians	President
Sue Ann Pflum, RN	Wellpoint	Clinical Program Manager
Frank Schubert, MD	IU Women's Healthcare	Maternal Fetal Medicine
Laura Sparks, RN	Clark Memorial Hospital	Director, Maternal Health
Daniel Sunkel, MD	Women's Clinic	Obstetrician-Gynecologist
Kathy Wallace, RHIA (Committee Chair)	Indiana Hospital Association	Director, Performance Improvement
Erin Walsh	Family and Social Services Administration	Office of Medicaid Policy and Planning

POLICY GUIDELINES

Indiana Perinatal Quality Improvement Committee

SUBJECT: GUIDELINES FOR EARLY DELIVERIES	PAGE: 1 of 5
DISTRIBUTION: OBSTETRICS	DATE:

I. **PURPOSE:**

To establish guidelines to allow for safe delivery of obstetric care and prevent iatrogenic early elective and preterm birth. **The following guidelines are intended only as a general resource for hospitals and are not intended to reflect or establish a standard of care or to replace individual clinician judgments and medical decision making for specific healthcare organization and patient situations.**

II. **POLICY STATEMENT:**

- A. Early induction of labor or cesarean section should occur when there is medical benefit to mother or child for delivery at that point in time compared with continuation of pregnancy.
- B. Non-medically indicated cesarean section or induction of labor prior to full term (39 0/7 weeks of gestation) requires approval of the Obstetrics and Gynecology Medical Director or Department chair.
- C. Elective deliveries that are performed early term (37 0/7 through 38 6/7 weeks of gestation) without an approved medical indication will be reviewed by the department in the quality review process. Cases that are unjustified based upon documentation will be forwarded for Peer Review.
- D. Elective deliveries are discouraged after 39 weeks if a medical indication to induce is not present.

III. **DEFINITIONS:**

- A. **Elective Cesarean Section:** Refers to a primary or repeat Cesarean Section (CS) that is performed on a pregnant woman per request of the physician on behalf of the patient.
- B. **Elective Induction:** An elective induction is defined as a pharmacological or mechanical initiation of labor in a woman who has no known medical conditions or complications.

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IV. REQUIREMENTS:

- A. Patients who are electively delivered early term (37 0/7 through 38 6/7 weeks of gestation) should meet one of the following medical indications:

Category I		
Approved medical indications for early term (37 0/7 through 38 6/7 weeks of gestation) delivery		
Maternal Indications	Fetal Indications	Obstetric Indications
Antiphospholipid Syndrome (649.3)	ABO Isoimmunization (656.21)	Abruptio Placenta (641.20)
Chronic Hypertension (642.2)	Chorioamnionitis (658.40)	Antepartum Hemorrhage/Bleeding(641.8)
Chronic Pulmonary Disease	Fetal Abnormality(655.81)	Chronic Hypertension with super imposed preeclampsia (642.7)
Coagulopathy Defect (641.30)	Fetal Chromosomal Anomaly (655.11)	Gestational Hypertension (642.30)
Coagulopathy Disorders (649.3)	Fetal CNS anomaly (655.01)	Maternal /Fetal Hemorrhage (656.0)
Congenital Heart Defect (658.41) Heart Disease (648.61)	Fetal Damage due to Disease (655.41)	Mild Preeclampsia (642.4) Severe Preeclampsia/HELLP (642.5) / Eclampsia (642.6)
Current Cancer	Fetal Damage due to Drugs (655.51)	Multiple gestation (651.5) Multiple gestation with loss (651.6)
Diabetes Mellitus (648.01)	Fetal Damage due to Radiation (655.61)	Oligohydramnios (658.01)
Epilepsy/ Seizure Disorder (649.4)	Fetal Damage due to Virus (655.31)	Placenta Previa (641.01)
Gastroenteric Diseases/ Disorders	Fetal Demise-Singleton (656.41)	Placental Previa Hemorrhage (641.11)
Hematological disorder	Fetal Distress (656.3)	Premature Rupture of Membranes (658.10)
HIV (042) Asymptomatic HIV infection status (V08)	Intrauterine Growth Restriction(656.51)	Prolonged Rupture of Membranes (658.21)
Hypertension Non-Specified (642.9)	Non-Reassuring fetal antepartum testing (659.73)	Polyhydramnios (657.00)
Liver Disease(646.71)	RH Isoimmunization (656.11)	Quadruplets (651.2) Quadruplets with loss (651.5)
Previous Stillborn (V23.5)		Triplets (651.1) Triplets with fetal loss (651.41)
Prior Classical Cesarean Delivery (654.81)		Twins (651.01) Twins with fetal loss (651.3)
Prior Myomectomy Entering Endometrial Cavity		Uncontrolled Gestational Diabetes (648.80)
Renal Disease (646.21)		Unstable lie (652.01) Multiple gestation with malpresentation (652.61)
		Vasa Previa (663.51)

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- B. Patients who are electively delivered at full term (39 0/7 weeks of gestation through 40 6/7 weeks of gestation), should meet one of the following medical indications:

Category II		
Approved medical indications for full term delivery.		
Fetal Malpresentation/Unstable Lie	History of Herpes Simplex Virus or Active Infection	

- C. The following are non-medical indications for delivery and should only be used at full term (39 0/7 weeks of gestation through 40 6/7 weeks of gestation).

Category III		
Non-medical indications for delivery.		
Maternal Request	Favorable Cervix	History of Rapid Labor
Distance From Hospital	Psychosocial Factors	Repeat Cesarean Delivery

V. RECOMMENDED CRITERIA FOR INITIATING ELECTIVE INDUCTION

- A. Prior to elective delivery, full term (39 0/7 weeks of gestation through 40 6/7 weeks of gestation) gestational age will be confirmed and documented by one of the following:
1. Based on Assisted reproductive technologies dating
 2. It has been 36 weeks since a positive serum or urine human chorionic gonadotropin pregnancy test result.
 3. Fetal heart tones have been documented as present for 30 weeks by Doppler ultrasonography.
 4. Ultrasound measurement at less than 20 weeks of gestation supports full term (39 0/7 weeks of gestation through 40 6/7 weeks of gestation).
 5. If LMP is known, an ultrasound obtained before 13 weeks and 6 days with a crown rump length corresponding to a gestational age within 5 days confirms the established due date based on menstrual dates. Conversely, the estimated due date should be based on the ultrasound if the difference between menstrual and ultrasound dates is greater than 6 days. For ultrasounds between 16 and 22 weeks, composite gestational age based on biometry should be within 10 days to confirm LMP dating, and the estimated due date should be changed only if calculated gestational age difference is 11 days or greater. If the LMP is unknown, dating should be based on ultrasound, preferably in the first trimester. The first ultrasound is the most accurate, and the pregnancy should not be re-dated based on subsequent ultrasounds.
- B. A mature fetal lung maturity test result before full term (39 0/7 weeks of gestation through 40 6/7 weeks of gestation), in the absence of appropriate clinical circumstances, is not an indication for early elective delivery.

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- C. Prior to elective induction, a Bishop score should be calculated.
 - 1. A high bishop score (defined as greater than 5 for multiparous patients or greater than or equal to 8 for nulliparous patients) indicates a similar likelihood of vaginal birth whether labor is spontaneous or induced. A bishop score less than 6 is associated with a higher rate of failed induction of labor, particularly in nulliparous women.
 - 2. The increased risk of cesarean delivery secondary to labor induction is almost entirely confined to nulliparous women with an unfavorable cervix. For nulliparous women with a Bishop score of less than 6, the cesarean section rate approaches 50%.

VI. SCHEDULING PROCEDURE:

The delivering physician will utilize the scheduling form to request delivery scheduling.

A. Provider Responsibility:

- 1. The delivering physician or designee will contact the OB Department to schedule the induction or cesarean section. The following will be provided:
 - a. Indication for the procedure.
 - b. Gestational age on the day of the scheduled procedure.
- 2. Complete the scheduling form, consent for induction of labor form and appropriate order sheet.
- 3. Fax the scheduling form, consent for induction of labor form, updated prenatal records and copy of first ultrasound report to the OB Department.

B. Nursing Responsibility:

- 1. The Charge Nurse will review the information provided and compare it with the approved, predetermined list of medical and obstetrical indications for induction of labor and / or cesarean delivery on the "Delivery Analysis and Scheduling" form.
 - a. Category I Indications - Approved medical indications for delivery at less than 39 weeks gestation or greater.
 - b. Category II Indications - Approved medical indication for delivery at 39 weeks gestation.
 - c. Category III Indications - Non-medical indication for delivery.
- 2. The Charge Nurse or designee will review the department calendar for scheduled inductions and cesarean sections daily.
 - a. Scheduling priority will be given to the patients with a Category 1 medical indication for delivery.
 - b. Elective non-medically indicated induction and /or cesarean section will be scheduled on a first come, first serve basis.
- 3. Any request that does not meet category criteria as defined above will be referred to the OB Department Nurse Manager or designee for review at that time. The OB Department Nurse Manager or designee will initiate the chain of command.

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C. Special Considerations:

During times of high acuity or high census, patient prioritization will be determined by utilizing the following guidelines:

1. Priority will be given to patients in active labor.
2. Scheduled deliveries will be prioritized according to their indication for delivery.
3. Medically indicated deliveries will take priority over elective non-medically indicated inductions and / or cesarean sections.
4. Elective non-medically indicated inductions and / or cesarean sections may be delayed or rescheduled.
 - a. Delays will be communicated to the patient by the Charge Nurse or designee.
 - b. Decision to reschedule will be communicated to the patient by the delivering physician on call. The patient will be rescheduled for delivery prior to departure.

ATTACHMENTS:

- Delivery Analysis and Scheduling Form
- Patient Consent Form for Induction of Labor

REFERENCES:

American College of Obstetricians and Gynecologists, Society of Maternal-Fetal Medicine. (2013). Definition of Term Pregnancy (Committee Opinion No. 579). Washington, DC: Author

American College of Obstetricians and Gynecologists. (2009). Induction of Labor (Practice Bulletin No. 107). Washington, DC: Author

American College of Obstetricians and Gynecologists. (2008). Fetal Lung Maturity (Practice Bulletin No. 97). Washington, DC: Author

American Academy of Pediatrics & American College of Obstetricians and Gynecologists. (2012). Guidelines for Perinatal Care (7th Ed, pp 180-181,193.). Elk Grove, IL; Washington, DC: Authors

Northern New England Perinatal Quality Improvement Network. (2011). Guidelines for Medically Indicated Induction of Labor.

Simpson, K.R., (2009) Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN) Cervical Ripening and Induction and Augmentation of Labor, 3rd Edition. Washington, DC.

Spong, C. (2013). Defining "Term" Pregnancy Recommendations from the Defining "Term" Pregnancy Workgroup. *JAMA* published online May 3, 2013. Retrieved from <http://jama.jamanetwork.com>.

DELIVERY ANALYSIS AND SCHEDULING FORM

(Patient Sticker)

Delivery Analysis and Scheduling Form

Patient Name: _____ DOB: _____ G ___ P ___ EDC: _____

Requested Date of Procedure: _____ Gestational Age on Date of Procedure: _____

Desired Method of Delivery: Induction of Labor Cesarean

(Circle all indications that apply below)

Category I		
Approved medical indications for early term (37 0/7 through 38 6/7 weeks of gestation) delivery		
Maternal Indications	Fetal Indications	Obstetric Indications
Antiphospholipid Syndrome (649.3)	ABO Isoimmunization (656.21)	Abruption Placenta (641.20)
Chronic Hypertension (642.2)	Chorioamnionitis (658.40)	Antepartum Hemorrhage/Bleeding(641.8)
Chronic Pulmonary Disease	Fetal Abnormality(655.81)	Chronic Hypertension with super imposed preeclampsia (642.7)
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Current Cancer	Fetal Damage due to Drugs (655.51)	Multiple gestation (651.5) Multiple gestation with loss (651.6)
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HIV (042) Asymptomatic HIV infection status (V08)	Intrauterine Growth Restriction(656.51)	Prolonged Rupture of Membranes (658.21)
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Prior Myomectomy Entering Endometrial Cavity		Uncontrolled Gestational Diabetes (648.80)
Renal Disease (646.21)		Unstable lie (652.01) Multiple gestation with malpresentation (652.61)
		Vasa Previa (663.51)
Category II		
Approved medical indications for full term delivery (39 0/7 weeks of gestation through 40 6/7 weeks of gestation)		
Fetal Malpresentation/ Unstable Lie	History of Herpes Simplex Virus or Active Infection	
Category III		
Non-medical indications for delivery.		
Maternal Request	Favorable Cervix	History of Rapid Labor
Distance From Hospital	Psychosocial Factors (Specify Below)	Repeat Cesarean Delivery

Clinical/Other Indications/Supporting Data: _____

******Include first ultrasound report and Updated H&P which includes documentation of indication for delivery**

(Patient Sticker)

Delivery Analysis and Scheduling Form, page 2

Fetal maturity confirmation was confirmed by the following method:

- Based on assisted reproductive technologies dating
- Ultrasound measurement at less than 20 weeks of gestation supports full term (39 0/7 weeks of gestation through 40 6/7 weeks of gestation)
- Fetal heart tones have been documented as present for 30 weeks by Doppler ultrasonography.
- It has been 36 weeks since a positive serum or urine human chorionic gonadotropin pregnancy test result.

Bishop Score: Circle factors that are present at start of induction.

Non-applicable (Scheduled C-section, medically indicated delivery)

Factor	0	1	2	3
Dilation (cm)	Closed	1 - 2	3 - 4	Greater Than or Equal to 5
Effacement (%)	0 - 30%	40 - 50%	60 - 70%	Greater Than or Equal to 80%
Station	-3	-2	-1 / 0	+1 / +2
Consistency	Firm	Medium	Soft	-----
Cervical Position	Posterior	Mid-Position	Anterior	-----

Bishop Score Total: _____

1. A high bishop score (defined as greater than 5 for multiparous patients or greater than or equal to 8 for nulliparous patients) indicates a similar likelihood of vaginal birth whether labor is spontaneous or induced.
2. A bishop score less than 6 is associated with a higher rate of failed induction of labor, particularly in nulliparous women. The increased risk of cesarean delivery secondary to labor induction is almost entirely confined to nulliparous women with an unfavorable cervix. For nulliparous women with a Bishop score of less than 6, the cesarean section rate approaches 50%.

Other Factors: Yes/No Adequate Pelvis _____ EFW < 4500 grams _____ EFW > 4500 grams

Patient Education: Patient reviewed risk and benefits Patient signed Consent for Induction of Labor Form

Physician Signature

Time

Date

CONSENT FOR INDUCTION OF LABOR

Insert Hospital Name
CONSENT FOR INDUCTION OF LABOR

If you are considering an elective induction of labor, please read the information provided. The risks associated with an elective induction may outweigh the possible benefits, especially if this is a first time labor. You should also discuss this with your physician.

YOUR LABOR INDUCTION

Labor induction is usually done with a medication called Oxytocin or Pitocin. With your practitioner's order, our staff will start the medication at a standard dose and increase it over time to achieve labor progress. While you are getting the medication we will closely monitor the baby's heart rate and your contractions. The length of labor depends on how dilated or "ripe" your cervix is at the start of the induction. In general the more dilated you are, the quicker your labor will progress. Also, if this not your first birth, labor may progress faster.

If your cervix is already fairly dilated, your practitioner may start your induction by breaking the bag of water. We may schedule a cervical ripening the day before your induction, if your cervix is closed and not shortening. This procedure may soften your cervix and cause it to begin to dilate. Ripening your cervix may make the Oxytocin more effective when it is begun. Additionally, ripening your cervix may trigger the onset of your labor.

WHY ARE LABOR INDUCTIONS PERFORMED?

Labor inductions are performed for many reasons. Clearly, some reasons are more urgent than others. Here are just a few examples:

- A woman is past her due date.
- A woman is experiencing medical problems that place her or her baby at risk, such as high blood pressure, diabetes, rupture of the bag of water, etc.
- The baby or babies may be small or the amniotic fluid too low.

WHAT ARE THE POTENTIAL RISKS AND BENEFITS OF LABOR INDUCTION?

It is always important to consider the potential benefits and risks of any procedure. The risks include, but are not limited to the following:

- A greater risk of cesarean birth delivery, especially with an "unripe" cervix.
- Longer labors
- Higher chance of a vacuum or forceps delivery.
- Side effects associated with medications or unintended adverse reactions. For example, it is possible to cause contractions that are too frequent and may affect the baby's heart rate. This is why careful monitoring of your baby's heart rate is necessary during labor induction.

If you are considering an elective induction, the risks may outweigh the possible benefits, especially if this is a first time labor.

CONSENT FOR INDUCTIONS OF LABOR

Indications for Induction: _____

I have read the above information and I have had the chance to ask my practitioner questions. All of my questions have been answered to my satisfaction. I wish to proceed with the induction.

Patient Signature

Date

Provider Signature

Date