



# Provider Toolkit



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"People  
helping people  
help  
themselves"

MITCHELL E. DANIELS, JR., GOVERNOR  
STATE OF INDIANA

*Office of Medicaid Policy and Planning*  
MS 07, 402 W. WASHINGTON STREET, ROOM W382  
INDIANAPOLIS, IN 46204-2739

February 21, 2012

Dear Obstetrical Provider:

We are pleased to invite you to participate in a new state-wide quality initiative called "40 Weeks of Pregnancy, Every Week Counts". This initiative was created to address the concerning 41% increase in late preterm births in Indiana, due to elective inductions and cesarean sections over the past 16 years.<sup>1</sup> "40 Weeks of Pregnancy" is supported and endorsed by:

- The Indiana Chapter of the American College of Obstetrics and Gynecology
- The Indiana Chapter of the Association of Family Physicians
- The Indiana Chapter of the American Academy of Pediatrics
- The Indiana University School of Medicine
- The Indiana Hospital Association
- The Indiana Perinatal Network
- The March of Dimes, Indiana Chapter
- The Indiana State Department of Health
- The Office of Medicaid Policy and Planning
- The Indiana Medicaid Hoosier Healthwise health plans (Anthem, MDwise, and Managed Health Services)

The goal of the quality initiative is to reduce the number of elective inductions and cesarean deliveries prior to 39 weeks of gestation. Elective deliveries prior to 39 weeks of gestation are associated with increased admission to the NICU and ventilator use. A retrospective analysis of 179,701 births showed that the incidence of severe respiratory distress syndrome was 22.5-fold higher for infants born at 37 weeks gestation and 7.5-fold higher for infants born at 38 weeks of gestation compared to with those born at 39 to 41 weeks of gestation.<sup>2</sup>

<sup>1</sup> Indiana State Department of Health, Maternal and Child Health Services Trends in Preterm Birth, Cesarean Delivery, and Induction of Labor in Indiana: Statistics from Live birth Data 1990-2006: Table 6.

<sup>2</sup> Madar J, Richmond S, Hey E. Surfactant-deficient respiratory distress after elective delivery at 'term.' Acta Paediatr 1999;88: 1244-8.

The Joint Commission has added early elective deliveries to its Core Measure set for maternity care, and the Leapfrog Group has adopted this measure as its primary measure of quality for maternity care. Many Indiana hospitals and their medical staffs have responded to these national initiatives by adopting policies that assure that early inductions and caesarean deliveries meet ACOG guidelines for medical necessity.

As a physician with privileges at Indiana hospitals, we know you are well aware of the national concern and of the local efforts to reduce the trend. We also know that as a physician on the front line, you are often put in the difficult position of communicating these risks to your patients. A recent survey by UnitedHealthcare of first-time mothers found more than half the respondents believe it is safe to deliver their baby before 37 weeks' gestation even if not required because of a medical complication.<sup>3</sup>

In recognition of the critical role that physicians providing obstetric services play in communicating the risks of early induction or caesarean section, the Indiana Medicaid Hoosier Healthwise health plans have developed a 40 Weeks of Pregnancy toolkit for their participating providers. The toolkit includes both clinical resources including an early induction bibliography and compelling patient education resources for physicians to use in discussions with their patients. The Hoosier Healthwise Plans will also be providing their contracted providers with information on specific obstetric care management and health education services offered to their providers and members.


We hope that you will accept our invitation to participate in "40 Weeks of Pregnancy". Your participation would include:

- Displaying the "Healthy Babies Are Worth the Wait" educational poster in your office waiting and/or exam rooms, and
- Sharing and discussing patient education materials with your patients.

The Hoosier Healthwise health plan representatives will be making personal visits to physician offices in the next few weeks to hand deliver the "40 Weeks of Pregnancy" toolkits and to discuss any additional needs that offices might have for improving birth outcomes.

We believe that by working together to impact patient understanding of healthy pregnancy, we can improve birth outcomes in our communities and our state. Thank you in advance for your participation and support of improved birth outcomes for Indiana's babies.

Sincerely,



Patricia Casanova  
Director of Medicaid

<sup>3</sup> Goldenberg, RL, McClure EM, Bhattacharya A, Groat TD, Stahl PJ. Women's Perceptions Regarding the Safety of Births at Various Gestational Ages. *Obstet Gynecol* 2009;114:1254-8.

# Provider Resources

Research article. Bryan Oshiro, Erick Henry, Janie Wilson, et al. (April 2009). Decreasing Elective Deliveries Before 39 Weeks of Gestation in an Integrated Health Care System. <i>Obstetrics &amp; Gynecology</i> , 13(4), 804-811. ....	6
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Obstetrics & Gynecology:

April 2009 – Volume 113 – Issue 4 – pp 804–811

doi: 10.1097/AOG.0b013e31819b5c8c

Original Research

## **Decreasing Elective Deliveries Before 39 Weeks of Gestation in an Integrated Health Care System**

**Oshiro, Bryan T. MD<sup>1,3</sup>; Henry, Erick MPH<sup>1</sup>; Wilson, Janie RN<sup>1</sup>; Branch, D Ware MD<sup>1,2</sup>; Varner, Michael W. MD<sup>1,2</sup>; for the Women and Newborn Clinical Integration Program**

### **Abstract**

**OBJECTIVE:** The American College of Obstetricians and Gynecologists has recommended that elective deliveries not be performed before 39 weeks of gestation, to minimize prematurity-related neonatal complications. Because a worrisome number of elective deliveries were occurring before 39 weeks of gestation in our system, we developed and implemented a program to decrease the number of these early term elective deliveries. Secondary objectives were to monitor relevant clinical outcomes.

**METHODS:** The electronic medical records of an integrated health care system involving nine labor and delivery units in Utah were queried to establish the incidence of patients admitted for elective induction of labor or planned elective cesarean delivery. These facilities have open staff models with obstetricians, family practitioners, and certified nurse midwives. Guidelines were developed and implemented to discourage early term elective deliveries. The prevalence of early term elective deliveries was tracked and reported back regularly to the obstetric leadership and obstetric departments at each facility.

**RESULTS:** The baseline prevalence of early term elective deliveries was 28% of all elective deliveries before the initiation of the program. Within 6 months of initiating the program, the incidence of near-term elective deliveries decreased to less than 10% and after 6 years continues to be less than 3%. A reduced length of stay in labor and delivery occurred with the introduction of the program, and there were no adverse effects on secondary clinical outcomes.

**CONCLUSION:** With institutional commitment, it is possible to substantially reduce and sustain a decline in the incidence of elective deliveries before 39 weeks of gestation.

**LEVEL OF EVIDENCE:** III

### **Link to full article**

[http://journals.lww.com/greenjournal/Fulltext/2009/04000/Decreasing\\_Elective\\_Deliveries\\_Before\\_39\\_Weeks\\_of.8.aspx#](http://journals.lww.com/greenjournal/Fulltext/2009/04000/Decreasing_Elective_Deliveries_Before_39_Weeks_of.8.aspx#)

## A Quality Improvement Toolkit

# Elimination of Non-medically Indicated (Elective) Deliveries Before 39 Weeks Gestational Age



Funding for the development of this toolkit was provided by:

Federal Title V block grant funding from the California Department of Public Health; Maternal, Child and Adolescent Health Division was used by the California Maternal Quality Care Collaborative to develop the toolkit; and March of Dimes.

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# Women's Perceptions Regarding the Safety of Births at Various Gestational Ages

*Robert L. Goldenberg, MD, Elizabeth M. McClure, MEd, Anand Bhattacharya, MHS,  
Tina D. Groat, MD, MBA, and Pamela J. Stahl*

VOL. 114, NO. 6, DECEMBER 2009

OBSTETRICS & GYNECOLOGY

Obstet Gynecol 2009;114:1254

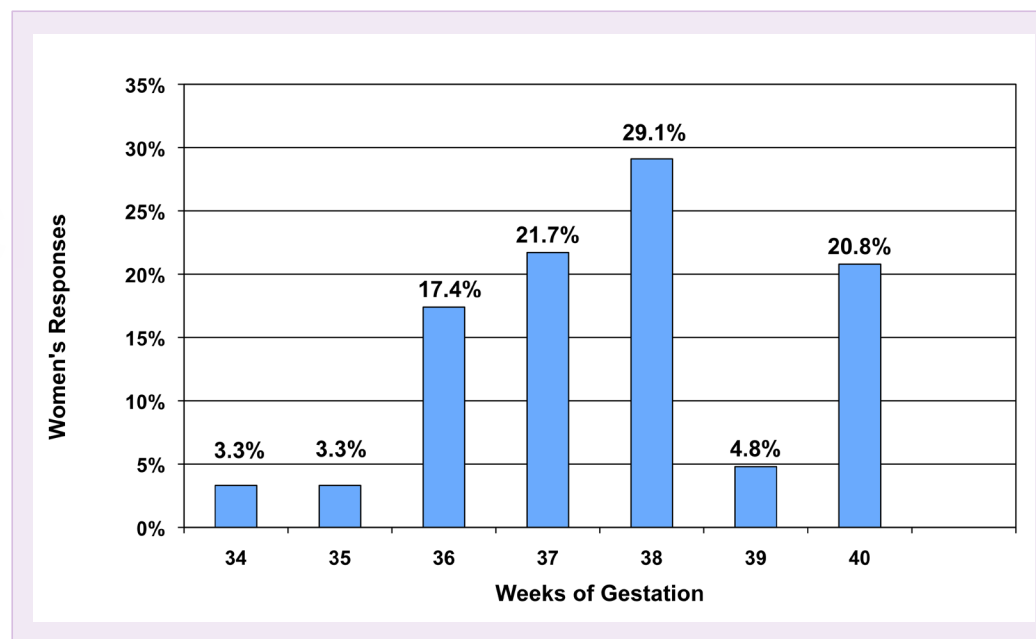
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This study by Goldenberg et al. addresses the potential impact of the patient on initiating the elective delivery process due to a lack of understanding of the risks of an early delivery. A national sample of 650 insured women was commissioned by a large health care insurance company. The purpose of the study was to understand women's beliefs related to the meaning of full term and the safety of delivery at various gestational ages. The study was anonymous and voluntary and included women who had given birth within the last 18 months; were first time mothers of singleton infants; currently had health insurance coverage either through their employer or spouse's employer; had completed at least some high school education; and delivered their child at a hospital or medical facility. Those who had diabetes, hypertension/preeclampsia, or obesity or had any other medical condition that would put them at high risk for a cesarean delivery were excluded from the study. The online survey was conducted August 16–19, 2008, while the telephone portion of the survey was conducted August 18–29, 2008. 58% were white, 93% were married or partnered, and 77% had a yearly family income of at least \$50,000. Nearly 50% were employed full-time and nearly 69% held a college degree.

## The Gestational Age that Women Considered a Baby to be Full Term



Obstet Gynecol 2009;114:1254

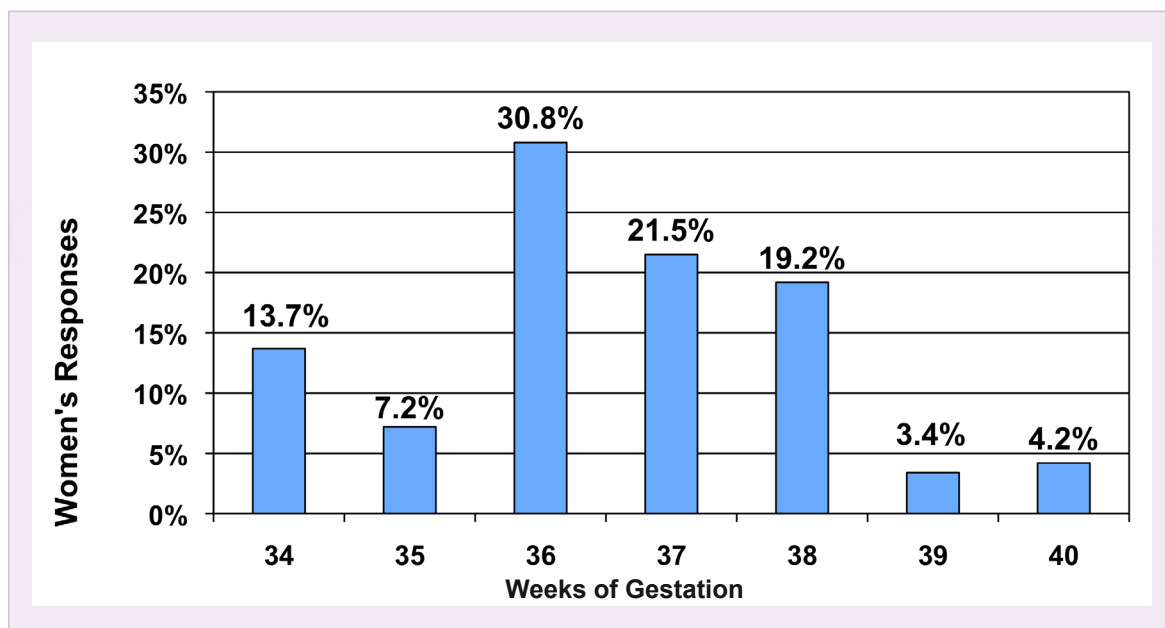
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When participants were asked “At what gestational age do you believe the baby is considered full term?” nearly 25% chose 34–36 weeks. Another 50% chose 37–38 weeks and only 25% chose 39–40 weeks.

## The Gestational Age that Women Considered it Safe to Deliver



Obstet Gynecol 2009;114:1254

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When women were asked “What is the earliest point in the pregnancy that it is safe to deliver the baby, should there be no other medical complications requiring early delivery?” more than half of the mothers chose 34–36 weeks. Only 7.6% chose 39–40 weeks.

## Timing of Fetal Brain Development

- Cortex volume increases by 50% between 34 and 40 weeks gestation. (Adams Chapman, 2008)
- Brain volume increases at 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).



# Bibliography for Elective Delivery Prior to 39 Weeks

*Compiled by the IU National Center of Excellence In Women's Health Best Practices Committee.*

*Additional resources available online at <http://obgyn.medicine.iu.edu/centers/national-center-of-excellence-in-women-s-health/toolkits/elective-induction-toolkit/>*

## **Evidence that “early term” delivery is associated with neonatal adverse effects**

1. Engle WA, Kominiarek MA. Late preterm infants, early term infants and timing of elective deliveries. *Clinical Perinatology* 2008; 35:325–41. Vi.
2. Reddy UM, Ko CW, Willinger M. “Early” Term births (37–38 weeks) are associated with increased mortality. *American Journal of Obstetrics & Gynecology* 2006; 195:S202
3. Zhang X, Kramer MS. Variations in mortality and morbidity by gestational age among infants born at term. *Journal of Pediatrics* 2009; 154:358–62, 362.el.
4. Hansen AK, Wisborg K, Uldbjerg N, Henriksen TB. Elective caesarean section and respiratory morbidity in the term and near-term neonate. *Acta Obstetrics & Gynecology Scand* 2007; 86:389–94.
5. Tita AT, Landon MB, Spong CY, Lai Y, Leveno KJ, Varner MW. Timing of elective repeat cesarean delivery at term and neonatal outcomes. *New England Journal of Medicine* 2009; 360:111–20.
6. Wilmsink FA, Hukkelhoven CW, Lunshof S, Mol BW, van der Post JA, Papatsonis DN. Neonatal outcomes following elective cesarean section beyond 37 weeks of gestation: a 7-year retrospective analysis of a national registry. *American Journal of Obstetrics & Gynecology* 2010; 202:250.el–8.

## **ACOG bulletins/committee opinions**

1. Cesarean delivery on maternal request. ACOG Committee Opinion No. 394
2. Induction of labor. ACOG Practice Bulletin No. 107

## **General articles**

1. Sigmore C. No time for complacency. *Obstetrics & Gynecology* 2010; 116:4–6.
2. Fleischman AR, Oinuma M, Clark SL. Rethinking the definition of “term pregnancy” *Obstetrics & Gynecology* 2010; 111:136–138.

## **March of Dimes Less Than 39 Weeks Toolkit**


The March of Dimes, in collaboration with the California Maternal Quality Care Collaborative and the California Department of Health, Maternal Child and Adolescent Health Division, created a quality improvement toolkit.

“Elimination of Non-medically Indicated (Elective) Deliveries Before 39 Weeks Gestational Age” was developed to support hospitals and contains a step-by-step guide to assist hospital leaders with implementing policies and a guide for measuring quality improvement over time. The appendix includes educational tools for clinicians and staff and sample forms and hospital case studies. Download or purchase a copy at [www.prematurityprevention.org](http://www.prematurityprevention.org).

# Patient Resources

Provider Office Poster ( <i>English &amp; Spanish</i> ) .....	14–15
What You Should Know About a Scheduled Delivery FAQs ( <i>For use when counseling patients</i> ) .....	16–17



To learn more about brain development, scan this code. 



Babies aren't fully developed until at least 39 weeks in the womb. Important development of their brains, lungs and eyes occurs in the last few weeks of pregnancy. If your pregnancy is healthy, wait for labor to begin on its own.

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[marchofdimes.com/39weeks](https://marchofdimes.com/39weeks)  

Escanee este código para aprender más sobre el desarrollo del cerebro de un bebé.



Los bebés no están desarrollados por completo hasta no haber cumplido al menos 39 semanas en el vientre. El desarrollo importante del cerebro, los pulmones y los ojos ocurre en las últimas semanas del embarazo. Si su embarazo es sano, espere que el parto comience por sí solo.

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[nacersano.org/39semanas](http://nacersano.org/39semanas)  

# What You Should Know About A Scheduled Delivery

## Frequently Asked Questions

### What is a scheduled delivery?

A scheduled delivery is when you and your healthcare provider pick the day to deliver, either by Cesarean delivery or by giving you medications to start your labor – a process called induction. Scheduled deliveries occur before you go into natural labor.

*Convenience may not be what's best for your baby*



### Why are deliveries scheduled?

Most of the time a scheduled delivery is due to a medical reason involving either the mother or the baby. Recently, more scheduled deliveries are occurring without a medical reason.

### Why do women choose a scheduled delivery?

A scheduled delivery may appeal to both a woman and the healthcare provider because it helps them plan their schedules. Many women have backaches, swollen feet, are very tired and just want to have the baby.

### Are there medical risks to my baby?

Babies born between 36 – 38 weeks are more likely to:

- Be admitted to the intensive care unit, not go home at the same time as their mothers and need IV and other needle sticks
- Have trouble breathing and be connected to a ventilator
- Have trouble keeping their body temperature at a healthy level and spend time in an incubator

### Are there medical risks for me?

If labor is induced before your body is ready to deliver, there is an increased chance of having a Cesarean delivery.

### What is a full term pregnancy?

In reality, a full term pregnancy is a range of time and only 4.5% of women go into labor on their actual due date.\* Most women deliver up to a week before or after their due date.

#### 37 Weeks

Baby will continue to grow about ½ ounce per day.\*\*



#### 38 Weeks

Baby's lungs will continue to mature.\*\*



#### 39 Weeks

Baby's brain development is rapid.\*\*



#### 40-42 Weeks

Your body continues to make antibodies to protect baby after birth.\*\*

Sources: \*[www.familyresource.com](http://www.familyresource.com) \*\*[www.whattoexpect.com](http://www.whattoexpect.com)

### *What do health care providers recommend?*

- If there is no medical reason for you to be delivered before your due date, it's best for you and your baby to wait for natural labor.
- The American College of Obstetricians and Gynecologists recommends that scheduled deliveries without a medical reason should not occur before 39 weeks of pregnancy.
- If you must schedule your delivery, talk with your health care provider and make sure you are at least 39 weeks into your pregnancy.
- If you are planning a vaginal delivery, make sure your cervix is beginning to open and ready for delivery.



*Your  
body knows  
best!*

*The closer  
your baby is born to  
his or her due date -  
the healthier he or  
she is!*

A baby's brain at 35 weeks weighs only two-thirds of what it will weigh at 39 to 40 weeks.\*



35 weeks



39 to 40 weeks



Indiana State  
Department of Health

Division  
of Maternal  
and Child  
Health



IN WOMEN'S HEALTH



Source: \*March of Dimes; © Bonnie Hofkin, 2007