A GUIDE FOR EMPLOYERS

Using Comparative Effectiveness Research

JUNE 2011

National Business Group on Health

Choosing to Have Labor Induced: Safety and Harm

This guide provides actions suggested by the National Business Group on Health for employers who want to use comparative effectiveness research (CER) in their health plan and program design. It is based on research funded by the federal Agency for Healthcare Research and Quality (AHRQ) on elective labor induction at term (39, 40 or 41 weeks). For more information about elective labor induction, such as additional findings and data, see the "Resources" section at the back of this guide.

Impact on Employers

For employers, maternity care and nursery costs are typically among the top three expenses, depending on the industry. For employers with "younger" workforces, their highest health care spending may be for deliveries and newborn care. Therefore, it is important for employers to address maternity issues such as elective induction of labor.

Elective induction of labor is a woman's decision near her due date--when contractions have not yet occurred and in the absence of any medical problems--to begin the process of giving birth. The decision is often made in consultation with a health professional.

Labor induction rates more than doubled between 1990 and 2005 to an all-time high of 22 percent.[1] Current guidelines do not recommend elective induction prior to 39 weeks of gestation. Elective induction of labor at term (39, 40 or 41 weeks gestation) may increase the risk of Caesarean delivery.

Among those undergoing induction, women with their first pregnancy have a higher rate of Caesarean delivery than women with prior vaginal births. Caesarean deliveries, also known as C-sections, are on the rise, with a 46% increase between 1997 and 2007.[2] The C-section rate in the United States reached 32.9% in 2009, the country's highest rate ever.[2, 3] C-sections, which require longer hospital stays and are more expensive than vaginal deliveries, are among the fifteen most expensive procedure-related hospitalization costs. Since a C-section involves surgery, there is a longer recovery time, 3.6 days in the hospital on average compared to 2.2 days for a vaginal delivery.[4] Charges for a C-section delivery may be 30% to 50% higher than those for a vaginal delivery.[5-7] A review of more than 45,000 births found that C-sections were substantially more expensive than vaginal deliveries ($10,958 vs. $7,737). [8,5]

The findings from a 2010 study of 773 hospitals revealed significant variation in rates of early elective Caesarean section and elective induction, with some hospitals having 10 times the rate of others.[9]

Agency for Healthcare Research & Quality

Comparative Effectiveness Research Findings

In 2008, the AHRQ Effective Healthcare Program funded a review of research literature which examined evidence on the effectiveness and safety of labor induction at term (39, 40 or 41 weeks). The following findings are based on the review, entitled *Maternal and Neonatal Outcomes of Elective Induction of Labor: A Systematic Review and Cost-Effectiveness Analysis* (2008). The findings are the basis for the consumer (December 2009) and clinician (November 2009) guides.

Main research findings:

- There is a trend toward increasing rates of C-sections among women undergoing induction of labor at term. C-section rates vary by clinical practice.
- Among women undergoing induction, those in their first pregnancies have a higher rate of C-section delivery than those with prior vaginal births.
- Increased maternal body mass index (BMI) is a predictor of C-section delivery among women who have induction, on the basis of several studies.
- Cervical status has an important effect on C-section rates with induction: the more cervical dilation/readiness for labor, the lower the likelihood of C-section birth.

Still Unknown

There is insufficient evidence to determine whether elective induction of labor does the following:

- Leads to higher or lower rates of C-section delivery than expectant management (waiting for spontaneous labor in a term pregnancy);
- Affects the rates of fetal intolerance of labor or breastfeeding; and
- Creates differences in length of labor, postpartum hemorrhage or maternal infection for women who are induced, as compared with those who, instead, choose expectant management.

What is Elective Induction of Labor?

Elective induction of labor is a woman's decision near her due date to begin the process of giving birth when contractions have not yet occurred and in the absence of any medical problems. The decision is often made in consultation with a health professional. As a result of the use of medicine or other inducing methods, the uterus starts to contract and the cervix opens up allowing the infant to be born. Some common reasons for wanting elective induction at term include a woman's physical discomfort, scheduling issues due to her or her doctor's other responsibilities, and a concern that she might go into labor rapidly in a setting away from the hospital.

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Strategies for Employers

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Employers can inform their female employees about the safety concerns of elective labor induction. They also can use plan design and provider selection to encourage evidence-based care and engage employees in making decisions about giving birth which are in the best interests of mother, child and employer.

Employee Education and Supports

Help employees learn about the safety concerns of elective labor induction and engage women in their health care decision-making for preconception, prenatal and postpartum care.

- Provide women with educational materials and decision aids.
- Educate pregnant women and women who are planning to become pregnant about the importance of managing a healthy weight.
- Offer incentives for women to participate in prenatal education programs that include information on indications and risks for labor induction.
- Present easy access to disease management and wellness programs, specifically weight management, smoking cessation and chronic diseases.
- Supply employees with the AHRQ consumer and clinician guides on elective labor induction. Disseminate AHRQ guides at on-site clinics and also online. Encourage employees to take the guides with them to doctor appointments.
- Provide prenatal and postpartum care guidelines developed by the American Congress of Obstetricians and Gynecologists, and encourage women to ask their physicians and caregivers to follow the guidelines.

The following are some questions a patient may want to ask her doctor.

- I'm thinking about elective induction. Do you do elective inductions?
- When would you schedule an induction?
- What methods do you use to get labor started?
- If my induction is going slowly and my baby is okay, can I take a break or come back another day to have my baby?
- Are there things we can do to get my body to go into labor on its own?

Plan Design

To encourage healthy pregnancies, lower cost-sharing or provide incentives for women, do the following:

- Participate in prenatal education programs, making certain that these programs deal with this issue; and
- Access benefits for tobacco cessation and alcohol/drug screening, counseling and treatment so that women can cease using these substances before becoming pregnant, or as soon as possible once pregnancy is known.

Network Management

Select best-in-class providers and ensure network adequacy.

- Employers can work with health plans or consultants to research facilities and/or providers that offer superior maternity treatment. Data about the quality of maternity care facilities is available at the state level in many states.
- Heath plans or employers can contract with these facilities directly to ensure in-network inclusion.

Monitor labor induction rates using diagnosis and procedure codes.

- Monitor labor induction rates.
- Monitor neonatal intensive care unit transfers and admissions to detect higher than average use.
- Identify outliers and regional or hospital variation; list relevant diagnosis and procedure codes; and summarize health plan and data warehouse options.
- Require Current Procedural Terminology (CPT) Codes and International Classification of Diseases (ICD-10) Codes to indicate elective labor inductions and C-sections.

2011 CPT Codes:

59200 Insertion of cervical dilator
59514 Caesarean delivery only
59612 Vaginal delivery only, after previous Caesarean delivery
59620 Caesarean delivery only, following attempted vaginal delivery after previous Caesarean delivery

2011 ICD-10 Procedure Codes:

<u>061 Failed induction of labor</u>
061.0 Failed medical induction of labor
Failed induction (of labor) by: oxytocin, prostaglandins
061.1 Failed instrumental induction of labor
Failed induction (of labor): mechanical, surgical
061.8 Other failed induction of labor
061.9 Failed induction of labor, unspecified

<u>082 Single delivery by Caesarean section</u>
082.0 Delivery by elective Caesarean section
082.1 Delivery by emergency Caesarean section

EMPLOYER CASE EXAMPLES:

Outstanding Maternity Programs & Practices

- In January 2011, Aetna, CIGNA, UnitedHealthcare and WellPoint began collaborating with Leapfrog, Childbirth Connection and March of Dimes on an awareness campaign focusing on preterm birth, elective delivery and C-section. The three key messages include: the last weeks of pregnancy are important; there are risks for mothers and babies if births are scheduled before 39 weeks for nonmedical reasons; and expectant mothers should investigate the rates of elective deliveries for hospitals in their community.[9]

- Intermountain Health Care in Utah has saved millions of dollars in medical costs by performing fewer Caesarean sections and reducing labor induction. In 1999, approximately 28% of all inductions at Intermountain's hospitals occurred before 39 weeks. Today, that percentage is less than 2%. Its C-section rate is now 21%, compared to a national average of 32%, due to new guidelines and educating patients. The result was a $50 million savings for Intermountain.[10]

- An analysis of cost data revealed that AOL was spending heavily on health care, productivity loss and turnover related to unhealthy babies. In response, AOL's Human Resources team—in partnership with Inova HealthSource—substantially revised existing services to include a higher level of personal interaction, additional classes and content areas, expanded counseling services, and greater counselor availability. The product - AOL's WellBaby Program - addresses a number of healthy pregnancy and preconception behaviors. It measures data points annually to assess progress in key areas such as the number of women enrolled in the program, number of prenatal visits, number of Caesarean deliveries, number of preterm births and number of days in the NICU, among others. In one year alone, AOL saved an estimated $782,584 in NICU costs.[11]

- Walmart's Life with Baby program pairs expecting and adoptive parents with a registered nurse throughout the pregnancy and the child's first year - at no cost to the employees. It encompasses education, decision tools, pregnancy books and other resources to enhance understanding about healthy pregnancy and delivery decisions. When considering vendors and health plans for pregnancy management, Walmart selects programs that sufficiently emphasize avoiding unnecessary C-sections and elective inductions.

Conclusion

Labor induction rates are rising. Among women undergoing induction, women with their first pregnancies have a higher rate of C-section delivery than women with prior vaginal births. C-sections, which require longer hospital stays and are more expensive than vaginal deliveries, are among the fifteen most expensive procedure-related hospitalization costs. Since a C-section involves surgery, there is also a longer recovery time. Employers can inform employees about the safety of elective labor induction and engage women in their health care decision-making for preconception, prenatal and postpartum care. Furthermore, employers working with their health vendors can support best-in-class providers and ensure network adequacy.

Resources

For Employers

Clinician Guide: ***Elective Induction of Labor: Safety and Harms***
Agency for Healthcare Research and Quality, November 2009

HCUPnet
Agency for Healthcare Research and Quality
AHRQ offers a free online query system based on data from the Healthcare Cost and Utilization Project (HCUP). It provides access to health statistics and information on hospital inpatient and emergency department utilization.
http://hcupnet.ahrq.gov

Healthy Babies, Healthy Business
March of Dimes
http://www.marchofdimes.com/hbhb/index.asp

For Employees

Consumer Guide: ***Thinking About Having Your Labor Induced? A Guide for Pregnant Women***
Agency for Healthcare Research and Quality, December 2009

Questions are the Answer
Agency for Healthcare Research and Quality
This is an easy-to-use consumer website that helps patients take an active role in their health care by asking questions so that they understand their condition and options.
http://www.ahrq.gov/questionsaretheanswer/

March of Dimes
http://www.marchofdimes.com

For Free Print Copies of the Consumer and Clinician Guides

AHRQ Publications Clearinghouse – 800.358.9295

Elective Induction of Labor: Safety and Harms: Clinician Guide, AHRQ Pub. No. 10-EHC004-3

Thinking About Having Your Labor Induced? A Guide for Pregnant Women, AHRQ Pub. No. 10-EHC004-A

REFERENCES

[1] Agency for Healthcare Research and Quality (AHRQ). Clinician Guide. *Elective Induction of Labor: Safety and Harms*; 2009.

[2] Elixhauser A, Andrews RM. Profile of inpatient operating room procedures in US hospitals in 2007. *Arch Surg.* 2010;145(12):1201-1208.

[3] Hamilton BE, Martin JA, Ventura SJ. Births: Preliminary data for 2007. National Vital Statistics Reports. In: Statistics NCfH, ed. Vol 57; 2009.

[4] National Committee for Quality Assurance (NCQA). *The state of health care quality: Industry trends and analysis*. Washington, D.C. 2007.

[5] Agency for Healthcare Research and Quality (AHRQ). Healthcare Costs and Utilization Project. Rockville, MD: U.S. Agency for Healthcare Research and Quality (AHRQ); 2005. DRGs 370–3.

[6] Allen VM, O'Connell CM, Baskett TF Cumulative economic implications of initial method of delivery. *Obstetrics & Gynecology*. 2006;108(3):549-555.

[7] Thomson Healthcare. *The healthcare costs of having a baby*. Santa Barbara, CA. 2007.

[8] Allen VM, O'Connell CM, Farrell SA et al. Economic implications of method of delivery. *American Journal of Obstetrics and Gynecology*. 2005;193(1):192-197.

[9] The Leapfrog Group. Press release. Newborn deliveries are scheduled too early, according to hospital watchdog group. 2011.

[10] Vaughn A. Intermountain says fewer c-section deliveries would save billions. http://www.fox13now.com/news/local/kstu-ihc-less-c-sections,0,3982985.story, March 11, 2011.

[11] Bosworth HB, Oddone EZ, Weinberger M. *Patient treatment adherence: Concepts, interventions, and measurement.* Mahwah, NJ: Lawrence Erlbaum Associates, Inc.; 2006.

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All materials are in the public domain. Additional copies of this *Guide* are available at www.businessgrouphealth.org or by contacting healthservices@businessgrouphealth.org for more information.

About the National Business Group on Health

The Business Group is the only non-profit organization devoted exclusively to representing large employers' perspectives on national health issues and providing solutions to its members' most important health care and health benefits challenges. The Business Group fosters the development of a safe health care delivery system and treatments based on scientific evidence. Members share strategies for controlling costs, improving patient safety and quality of care, increasing productivity and supporting healthy lifestyles.

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