Preterm Birth and Elective Labor Induction Prior to 39 Weeks

The number of preterm births and induction of labor preterm continue to rise, even though increasing evidence shows that babies born preterm or late preterm are less healthy and incur higher costs than infants born at full term.\(^1\)\(^3\) Approximately 900 late preterm births occur every day in the U.S., equivalent to one in every three births.\(^1\)\(^2\) Preterm birth costs total $26 billion annually or $51,500 for every infant born prematurely.\(^4\) Nearly half of these costs, or almost $13 billion, fall to employers and other private insurers.\(^4\)\(^5\)

Premature birth is defined as an infant born at less than 37 weeks gestation. Preterm births in the United States rose by more than 20% between 1990 and 2006, most of which occurred during the period known as “late preterm,” or 34 to 36 weeks (See Table 1).

Table 1: Percentage of Preterm Births\(^1\)

<table>
<thead>
<tr>
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<th>1990</th>
<th>2006</th>
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<tbody>
<tr>
<td>Induced Labor</td>
<td>7.5%</td>
<td>17.3%</td>
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<tr>
<td>Delivered through C-section</td>
<td>23.5%</td>
<td>34.3%</td>
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Although it is difficult to determine conclusively, studies suggest that the increased use of elective induction of labor—which is not recommended under any circumstances—combined with Caesarean section (C-section) between 34 and 36 weeks, have contributed to the increase of late preterm births.\(^6\)\(^7\) Induced labor preterm births increased from 7.5% to 17.3% between 1990 and 2006; and late preterm births delivered through C-section rose from 23.5% to 34.3% during the same time period.\(^1\)

The American College of Obstetricians and Gynecologists (ACOG) recommends that elective deliveries not occur before 39 weeks of gestation. The ACOG Practice Bulletin on Induction of Labor further states that doctors should warn women having their first babies that their risk of having a C-section doubles if labor is induced.\(^8\)
**Why Preterm Birth and Labor Induction Matters**

**Late Preterm Infants Have Poorer Health Status**
- Late preterm babies are more likely than full-term babies to suffer complications at birth (e.g., respiratory distress), to require intensive and prolonged hospitalization, to die within the first year of life, and to suffer brain injury that can result in long-term neurodevelopmental problems.²
- Those born with a diagnosis of prematurity or low birthweight average 13.6 to 24.2 days in the neonatal intensive care unit (NICU), whereas the average length of a hospital stay for a healthy baby is 2.3 days.⁹
- Late preterm infants have higher rates of hospital readmission (15.2% versus 7.9%) during the neonatal period than do full-term infants.³, ¹⁰
- Preterm and early-term birth may increase the risk of a child developing attention deficit hyperactivity disorder (ADHD) by degree of immaturity.¹¹

**Preterm Births and Inductions Result in Higher Costs for Employers**
- Mothers of preterm babies spend 10.2 days more on short-term disability during the first six months after delivery than mothers of full-term babies, costing employers an average of $1,513 in lost productivity per premature baby.¹²
- The average hospital cost of preterm infants is $26,054 versus $2,061 for infants born at full-term.³
- Total first-year costs after the initial hospitalization were, on average, three times higher for late preterm infants ($12,247) than for full-term infants ($4,069).³
- Induction of labor is consistently more costly than spontaneous labor.¹³
- Higher rates of C-section delivery are found with elective induction of labor, and C-sections are substantially more expensive than vaginal deliveries ($10,958 vs. $7,737).¹⁴

**What Employers Can Do**
Fortunately, with employer policies, education and preventive measures in place, many preterm births, C-sections and elective labor inductions prior to 39 weeks can be avoided. Employers can take action to ensure that their employees and beneficiaries are as healthy as possible before, during and after pregnancy.

**Provide female employees with educational materials and decision-aids to inform them about the safety concerns around elective labor induction and engage them in their health care decision-making for preconception, prenatal and postpartum care.** Employers should ensure that employees understand that elective delivery should not occur before 39 weeks of gestation and provide information about the possible health risks associated with having a baby in the late preterm period. Information can be incorporated into existing prenatal education programs, wellness initiatives, and the content of the company Intranet site. Women can also ask their physicians and caregivers to follow the recommendations and guidelines of authoritative medical organizations such as the American College of Obstetricians and Gynecologists (ACOG) and the March of Dimes.

**Lower cost-sharing or provide incentives for women who participate in prenatal education programs and benefits.** For example, employers can offer lower cost-sharing or incentives for pregnant women who access benefits for tobacco cessation and alcohol/drug screening, counseling and treatment so that women can cease using these substances, have healthier pregnancies and deliver healthier babies.
Select best-in-class providers. Employers can work with health plans or consultants to find and include facilities and/or providers that offer superior maternity treatment. Some hospitals and physicians have begun to require signed consent forms from couples seeking to deliver their babies prior to 39 weeks’ gestation; they find that people generally rethink the decision after learning about the risks. Health plans or employers can contract with these facilities directly to ensure in-network inclusion.

Data about the quality of maternity care facilities is available at the state level in many states:
- The Agency for Healthcare Research and Quality maintains the National Quality Measures Clearinghouse (NQMC), a public resource for evidence-based quality measures and measure sets.
- The Leapfrog Group collects and reports data from hundreds of participating hospitals on quality measures, including elective delivery prior to 39 completed weeks gestation, appropriate blood clot prevention measures in women having Caesarean section delivery, screening newborns for jaundice and infants under 1500g delivered at appropriate hospital.
- The International Cesarean Awareness Network database provides information about Vaginal Birth After Cesarean (VBAC) policies in U.S. hospitals.

Monitor labor induction rates using diagnosis and procedure codes. In-network hospitals can conduct reviews to ensure that all C-sections and inductions meet established professional guidelines. Employers can require health plans and data warehouses to list Current Procedural Terminology (CPT) Codes and International Classification of Diseases (ICD)-10 Codes to indicate elective labor inductions and C-sections. In addition, monitoring neonatal intensive care unit transfers and admissions for higher than average use can help identify outliers and regional or hospital variation.

Resources


References

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Written by:
Penney Berryman, M.P.H.
Wendy Slavit, M.P.H.

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National Business Group on Health
20 F Street NW, Suite 200 • Washington, DC 20001
Phone (202) 558-3000 • Fax (202) 628-9244 • www.businessgrouphealth.org
Helen Darling, President, National Business Group on Health

National Committee on Child and Maternal Health
Joseph Hagan Jr, M.D., American Academy of Pediatrics; Wayne Burton, M.D., American Express; Martín Sepúlveda, M.D., IBM Corporation, Daniel Conti, Ph.D., JPMorgan Chase; Sharon Adamo, Maternal and Child Health Bureau, Isadora Hare, Maternal and Child Health Bureau, David Heppel, M.D., Maternal and Child Health Bureau