





MATERNITY CARE

DATA BY HOSPITAL ON NATIONALLY STANDARDIZED METRICS



FIGURE 1

HOSPITALS FAIL TO COMPLY WITH NATIONAL MATERNITY CARE STANDARDS

Leapfrog compared each hospital's performance to evidence-based standards set by its Maternity Care Expert Panel.

The percentage of hospitals that did **NOT** fully meet Leapfrog's standards:

EARLY ELECTIVE DELIVERY:



16%

C-SECTIONS:



EPISIOTOMY:



HIGH-RISK DELIVERY:



78%

Giving birth marks one of life's most important milestones for many women and families. For privately-insured women ages 19-44¹, maternity care accounts for the majority of all hospitalizations. Despite the significance of this area of care, there is substantial evidence that U.S. hospitals overuse medical interventions, exposing mothers and babies to unnecessary health risks from C-sections, episiotomies, and early elective deliveries.

Private and public purchasers of health care have long pushed for public reporting of these important measures, and where that has occurred experts observe important quality improvements. Public reporting of individual hospitals' results can empower women to choose a hospital based on quality. However, not all hospitals participate in these transparency initiatives. And even for those that do, most are not meeting national performance targets for key maternity care metrics (Figure 1).

HOSPITALS OVERUSE MEDICAL INTERVENTIONS FOR LOW-RISK MOTHERS DELIVERING FULL-TERM BABIES

An episiotomy is an incision made in the perineum to widen the birth canal during childbirth. Because episiotomies have been linked to worse perineal tears, loss of bladder or bowel control, and pelvic floor defects², medical guidelines recommend episiotomy in only a small proportion of cases³. Leapfrog's target for all hospitals is 5%, meaning that no more 5% of women should be having an episiotomy for a vaginal delivery, except for a narrow set of medical necessities such as shoulder dystocia (i.e., where a baby's shoulder gets stuck during delivery). For the majority of reporting hospitals (68%), the episiotomy rate was above the target.



Similarly, at the majority of reporting hospitals (60%) the C-section rate was also above the target. Although different states and studies often use different measures to assess C-section rates, Leapfrog utilizes one standardized, endorsed measure for all hospitals nationwide (nulliparous term singleton vertex, or NTSV, C-section) to enable hospital comparisons across the country. This measure examines the percentage of first-time mothers giving birth to a single baby (i.e., no twins or other multiples) at term (at least 37 weeks gestation), in the head-down position. With this standardized measure and Leapfrog's transparency, this is the first and only time that national reporting of C-section rates is available by hospital.

Leapfrog's target for this measure is a rate of 23.9% or below. Leapfrog's Maternity Care Expert Panel set this target rate based on the goals of Healthy People 2020⁴, a federal program that sets evidence-based benchmarks for improving the health of Americans. C-sections carry serious risks of infection and blood clots, and many women experience longer recoveries and difficulty with future pregnancies. C-sections can also cause problems for babies, like breathing difficulties that need treatment in a newborn intensive care unit (NICU). In the long-term, research shows that C-sections can cause chronic pelvic pain in some women, and babies born by C-section are at increased risk of developing chronic childhood diseases like asthma and diabetes⁵.

Compared to episiotomies and C-sections, Leapfrog's data shows that early elective deliveries are less frequently performed, meaning that hospitals are doing a better job of keeping mothers and babies safe from unnecessary risks. On average, more than four out of five hospitals have met Leapfrog's target of 5% or less for early elective deliveries, meaning that at most hospitals no more than 5% of mothers delivering newborns are being scheduled for a C-section or induction prior to 39 completed weeks of gestation without medical necessity. The current nationwide average rate of 2.8% represents tremendous progress compared to the average rate of 17% when Leapfrog first reported this measure in 2010. Leapfrog's public reporting sparked policymakers and hospitals to take steps

to reduce early elective deliveries, and many other organizations have since collaborated to achieve results in this area. Because of these efforts, fewer infants face increased risk of complications that come with early elective delivery, including respiratory distress, pneumonia, or even, in rare cases, death6.

APPROPRIATE EXPERIENCE WITH HIGH-RISK **DELIVERIES IS LACKING**

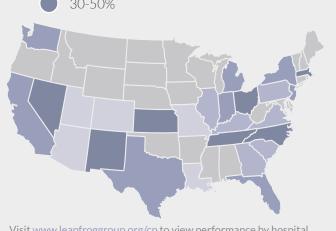
A hospital's level of experience can decrease the risk of infant mortality or complications, especially important for high-risk deliveries, or those in which the baby has a very low birth weight (less than 1500 grams or 3 pounds, 4.91 ounces). These babies are more likely to survive if their hospital has an experienced neonatal intensive-care unit (NICU) on-site⁷.

FIGURE 2

NO STATE HAD MORE THAN 50% OF HOSPITALS MEETING LEAPFROG'S STANDARDS FOR HIGH-RISK DELIVERY

THE PERCENTAGE OF HOSPITALS MEETING LEAPFROG'S STANDARD

- Less than five hospitals reporting in 2015
- 0-9%
- 10-19%
- 20-29%
- 30-50%



Visit www.leapfroggroup.org/cp to view performance by hospital.



Yet, 78% of reporting hospitals performing high-risk deliveries did not meet Leapfrog's standards. Leapfrog recommends that hospitals deliver at least 50 very-low birth weight babies per year and ensure that at least 80% of mothers receive antenatal steroids prior to delivery OR maintain a lower-than-average morbidity/mortality rate for very-low birth weight babies and ensure that at least 80% of mothers receive antenatal steroids prior to delivery.

A MOTHER'S STATE OF RESIDENCE AND CHOICE OF HOSPITAL AFFECT THE CARE SHE AND HER BABY RECEIVE

While performance over time has greatly improved on early elective deliveries and episiotomies, hospitals' overall rate of NTSV C-sections and experience in delivering very low birth-weight babies is far from meeting Leapfrog's standard.

A closer look at hospitals' performance on the NTSV C-section and high-risk deliveries metrics reveal significant variation between certain states across the country. For high-risk deliveries, the percentage of hospitals meeting Leapfrog's standard varied from 0% in Utah and Missouri to 50% in Ohio and Nevada (Figure 2). That means that mothers living in Utah and Missouri do not have any hospital in their state that can provide the recommended care for their low birth-weight infant.

A mother's state of residence partially determines the care that she and her baby receive, yet most mothers across the country can ensure they receive the best available care by using these publicly reported results to choose the hospital for their child's birth. This choice can have a large impact on the care received, because hospital maternity care quality varies significantly even within communities. For example, in the metropolitan area near one major East Coast city, the C-section rate ranged from 10% to 54% (Figure 3).

MORE TRANSPARENCY AND QUALITY IMPROVEMENT ARE NEEDED

Nationwide, only 1% of reporting hospitals fully met the standard for all four of Leapfrog's maternity care metrics. All hospitals should be striving towards improving the quality of maternity care for mothers and babies, even those that are fully meeting standards.

FIGURE 3

HOSPITAL C-SECTION RATES VARY WITHIN CITIES

A woman's chances of having a C-section can increase dramatically depending on the hospital she chooses. Hospitals with the highest C-section rates perform this procedure up to five times as often as hospitals with the lowest rates.



Note: Excludes hospitals reporting rates that were greater than 55%.

Moreover, some hospitals declined to report their data at all. Without Leapfrog's independent, evidence-based survey, there would be limited national data by hospital on maternity care measures and other critical information on hospital safety and quality. An increase in the number of hospitals reporting to the Leapfrog Hospital Survey can help enable patients to make more informed decisions when seeking maternity care, and can help providers to benchmark their own progress in achieving appropriate standards of care.



METHODS

The Leapfrog Group annually invites all adult general acute care and free-standing pediatric hospitals in the United States to voluntarily report on topics such as high-risk procedures, maternity care, hospital-acquired infections, medication safety, nursing safety, and never events through its annual hospital survey. In 2015, a record 1,750 hospitals submitted a survey, representing 46% of hospitals nationwide. This report uses final hospital data from the 2015 Leapfrog Hospital Survey (data submitted through December 31, 2015).

The Leapfrog Hospital Survey includes measures that are endorsed by the National Quality Forum (NQF) and/or aligned with those of other significant data-collection entities, including the Centers for Medicare

& Medicaid Services (CMS) and The Joint Commission. Leapfrog partners with the Armstrong Institute for Patient Safety and Quality at Johns Hopkins Medicine to review survey measures and standards, and updates them annually to reflect the latest science. Additionally, panels of volunteer experts meet regularly to review the survey measures and recommend performance standards for each subject area covered in the Leapfrog Hospital Survey. The full list of survey measures included in the 2015 survey is available here.

- 1. 2014 Health Care Cost and Utilization Report, Health Care Cost Institute, October 2015
- 2. Outcomes of Routine Episiotomy: A Systematic Review. JAMA, May 2005
- 3. Practice Bulletin No. 71: Episiotomy, American College of Obstetrics and Gynecology, April 2006
- 4. 2020 Topics & Objectives: Maternal, Infant, and Child Health, Office of Disease Prevention and Health Promotion, January 2016
- 5. Committee Opinion No. 559: Cesarean delivery on maternal request, American College of Obstetrics and Gynecology, April 2013 and Reaffirmed 2015
- 6. Committee Opinion No. 561: Non-medically indicated early-term deliveries, American College of Obstetrics and Gynecology, April 2013 and Reaffirmed 2015
- 7. The effects of patient volume and level of care at the hospital of birth on neonatal mortality, JAMA, October 1996

About The Leapfrog Group: Founded in 2000 by large employers and other purchasers, <u>The Leapfrog Group</u> is a national nonprofit organization driving a movement for giant leaps forward in the quality and safety of American health care. The flagship <u>Leapfrog Hospital Survey</u> collects and transparently reports hospital performance, empowering purchasers to find the highest-value care and giving consumers the lifesaving information they need to make informed decisions. <u>Hospital Safety Score</u>, <u>Leapfrog's other main initiative</u>, assigns letter grades to hospitals based on their record of patient safety, helping consumers protect themselves and their families from errors, injuries, accidents, and infections.

About Castlight Health: Our mission is to empower people to make the best choices for their health and to help companies make the most of their health benefits. We offer a health benefits platform that engages employees to make better healthcare decisions and guide them to the right program, care, and provider. The platform also enables benefit leaders to communicate and measure their programs while driving employee engagement with targeted, relevant communications. Castlight has partnered with more than 190 customers, spanning millions of lives, to improve healthcare outcomes, lower costs, and increase benefits satisfaction.

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