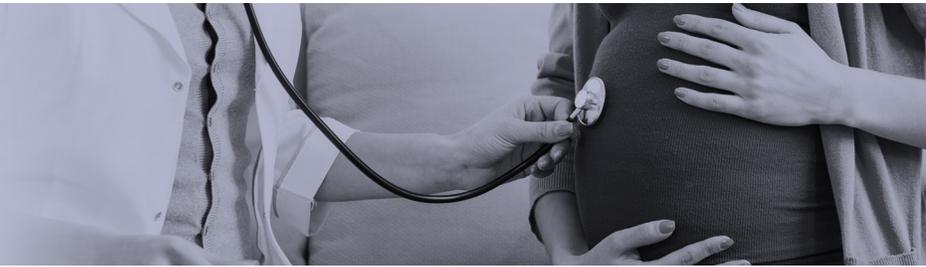




MATERNITY CARE

DATA BY HOSPITAL ON NATIONALLY STANDARDIZED METRICS



Among privately insured women ages 19-44¹, childbirth accounts for the majority of all U.S. hospitalizations. As a result, the quality of maternity care mothers receive is critically important to employers, who are responsible for much of the cost of childbirth for women under employer-sponsored health plans, and who want to ensure the health and well-being of their employees and dependents.

This report examines U.S. hospital performance in three key areas of maternity care measured on the 2016 Leapfrog Hospital Survey: NTSV (Nulliparous, Term, Singleton, Vertex) C-sections, early elective deliveries, and episiotomies.

REPORT HIGHLIGHTS

- Rates of early elective deliveries have reached a remarkable low, a win for mothers and babies
- While rates of C-sections and episiotomies are at their lowest since Leapfrog began reporting these metrics, significant progress is still needed to reach Leapfrog’s target rates
- Eastern and southern states have higher rates of C-Sections than western states
- There is little variance in quality between teaching and non-teaching hospitals, or urban and rural hospitals
- More transparency and quality improvement are still needed

FIGURE 1

MATERNITY CARE HOSPITAL QUALITY STANDARDS MEASURED IN THIS REPORT

	WHAT IS IT	ASSOCIATED COMPLICATIONS	LEAPFROG'S TARGET RATE
 <p>NTSV C-SECTION</p>	C-Section delivery for a first-time mother of a single baby at term (at least 37 weeks gestation) in the head-down position	<p>Mothers: Increased risk of infection and blood clots, longer recoveries, difficulty with future pregnancies, and chronic pelvic pain</p> <p>Babies: Breathing difficulties, increased risk of developing chronic childhood diseases (e.g. asthma, diabetes)</p>	23.9% or lower
 <p>EARLY ELECTIVE DELIVERY</p>	Scheduled C-Sections or medical inductions performed prior to 39 completed weeks gestation without medical necessity	<p>Babies: Risk of respiratory diseases, pneumonia, or even, in rare cases, death</p>	5.0% or lower
 <p>EPISIOTOMY</p>	An incision made in the perineum to widen the birth canal during childbirth	<p>Mothers: Linked to worse perineal tears, loss of bladder or bowel control, and pelvic floor defects</p>	5.0% or lower

RATE OF MEDICAL INTERVENTIONS FOR LOW-RISK DELIVERIES CONTINUES TO FALL

Hospitals across the country have been making steady progress in meeting national maternity care standards. The rate of early elective deliveries reached an all-time low in 2016, falling to 1.9% from 17% when Leapfrog first began reporting this metric in 2010. Early elective deliveries are those performed by induction or Cesarean section prior to 39 completed weeks with no medical indication, and carry risks affecting both mothers and babies. Leapfrog recommends they be performed in no more than 5% of all low-risk deliveries (Figure 1). As noted below, transparency in public reporting and subsequent collaboration amongst stakeholders was the spark that ignited this rapid reduction and success story. While episiotomies also dropped in 2016, to 9.6% from 13.0% in 2012,

this average rate is still significantly higher than Leapfrog’s target of 5.0%. Evidence has shown that episiotomies are only recommended in a narrow set of cases due to the associated risk of complications for women². Hospitals should continue striving for the reduction of these often unnecessary interventions.

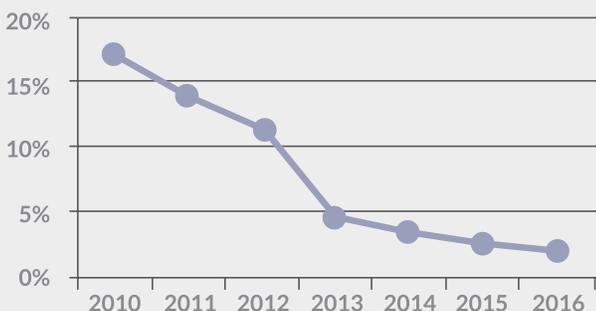
THE STATE A MOTHER LIVES IN AFFECTS HOW LIKELY SHE IS TO HAVE A C-SECTION

Nationwide, the average rate of NTSV C-sections was 25.8%, representing only minimal improvement from the rate of 26.4% in 2015 when Leapfrog first began reporting this data. A closer look at hospitals’ performance on the NTSV C-section measure reveals significant variation across the country. A map of average C-section rates by state shows a general pattern of higher rates across eastern and southern states compared with western states. Rates varied from as low as 17.1% in New Mexico to 32.1% in Louisiana (Figure 3).

FIGURE 2

RATES OF EARLY ELECTIVE DELIVERIES AND EPISIOTOMIES HAVE BEEN STEADILY DECLINING

RATE OF EARLY ELECTIVE DELIVERIES (2010-2016)



RATE OF EPISIOTOMIES (2012-2016)

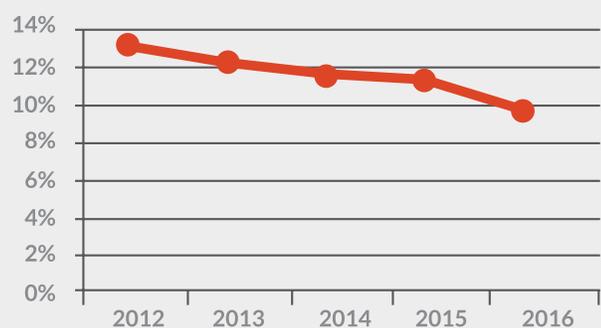


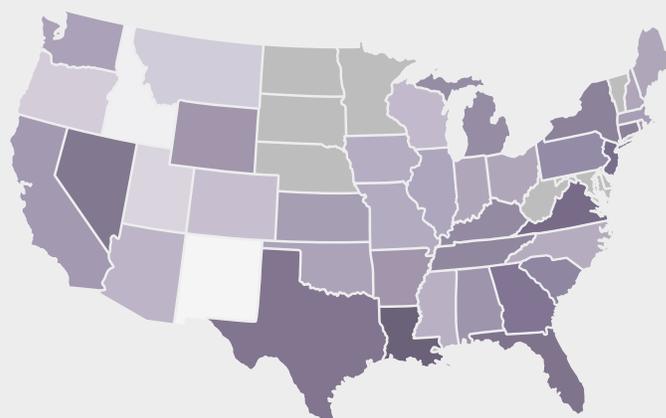
FIGURE 3

AVERAGE RATE OF NTSV C-SECTIONS BY STATE

AVG. C-SECTION RATE



LESS THAN FIVE HOSPITALS REPORTING IN 2016



Leapfrog’s target for NTSV C-sections is 23.9% or below, aligned with the goals of Healthy People 2020³.

Despite the wide variance in C-Section rates across states, most mothers with a low-risk pregnancy can reduce their odds of receiving an unnecessary C-section by using Leapfrog’s publicly reported results to choose the hospital for their child’s birth. Leapfrog Hospital Survey data shows that hospital maternity care quality varies significantly even within the same city.

“ This year’s Leapfrog data underscores that many of the conventional assumptions for how to pick a ‘good’ hospital do not bear out. ”

~ Dr. Neel Shah, MD
ASSOCIATE PROFESSOR
HARVARD MEDICAL SCHOOL

LITTLE VARIANCE BETWEEN TEACHING VS. NON-TEACHING HOSPITALS, URBAN VS. RURAL HOSPITALS

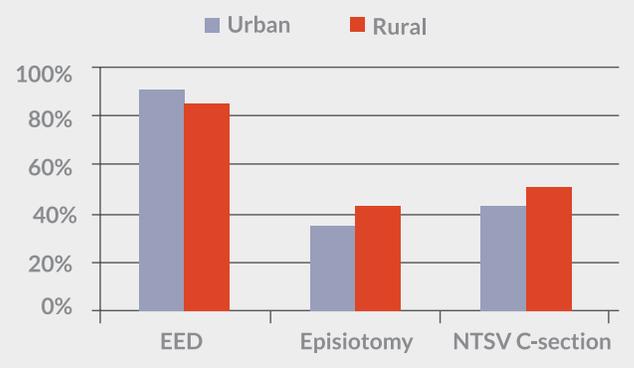
Data from the 2016 Leapfrog Hospital Survey shows that some of the most common assumptions of what makes a “good” hospital for maternity care appears to have little evidence to back it. Teaching hospitals, for example, are often assumed by the public to deliver higher quality care than non-teaching hospitals, yet this year’s survey results show maternity care performance for these different types of hospitals to be nearly identical. Rural hospitals reported nearly the same rates of early elective deliveries, episiotomies, and C-sections as urban hospitals. In fact, a greater percentage of rural hospitals fully met Leapfrog’s standards for episiotomies and C-sections than their urban counterparts (Figure 4). A similar lack of variance for these quality measures was also seen when comparing teaching hospitals to non-teaching hospitals.

According to Dr. Neel Shah, MD, Associate Professor at Harvard Medical School, “this year’s Leapfrog data underscores that many of the conventional assumptions for how to pick a ‘good’

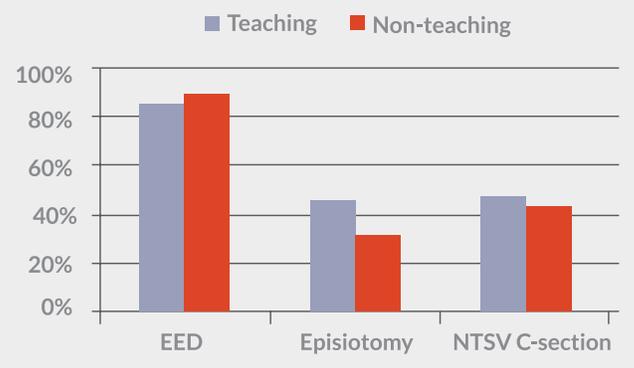
hospital do not bear out--rates among teaching hospitals that may care for “sicker” patients are similar to those at non-teaching hospitals. Rates at urban hospitals are similar to those at rural hospitals. There is a tremendous opportunity to better understand what is happening at hospitals that have high rates of these procedures and learn from those that are able to keep rates low for appropriate women.”

FIGURE 4
URBAN VS. RURAL HOSPITALS AND TEACHING VS. NON-TEACHING HOSPITALS HAD SIMILAR RATES OF FULLY MEETING LEAPFROG’S MATERNITY CARE STANDARDS

PERCENT OF HOSPITALS FULLY MEETING LEAPFROG’S STANDARDS



PERCENT OF HOSPITALS FULLY MEETING LEAPFROG’S STANDARDS



MORE TRANSPARENCY AND QUALITY IMPROVEMENT ARE STILL NEEDED

Despite the continuing improvements made in quality across these key maternity care measures,

the majority of reporting hospitals still fall short of meeting Leapfrog's targets for C-sections and episiotomies. Only 45% of hospitals are currently meeting the target for episiotomies, and only 37% are meeting the target for C-sections. Yet 89% of reporting hospitals now fully meet Leapfrog's standard for early elective deliveries, representing tremendous progress from 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. Continued public reporting of C-section and episiotomy rates can lead to similar success across other areas of maternity care, improving health for mothers and babies.

Unfortunately, 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 enable patients to make more informed decisions when seeking maternity care, and can help bring more advocacy to improving these performance measures nationwide. Research has shown that once hospitals formally target key quality measures, those measures tend to improve as a result of better documentation and processes. Women and families across the country deserve no less.

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 2016, 1,859 hospitals submitted a survey, representing 49% of hospitals nationwide. This report uses final hospital data from the 2016 Leapfrog Hospital Survey (data submitted through December 31, 2016).

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 2016 survey is available at www.leapfroggroup.org/survey.

1. 2014 Health Care Cost and Utilization Report, Health Care Cost Institute, October 2015
2. ICEA Position Paper: Episiotomy. http://icea.org/wp-content/uploads/2016/01/Episiotomy_PP.pdf
3. 2020 Topics & Objectives: Maternal, Infant, and Child Health, Office of Disease Prevention and Health Promotion, January 2016

About The Leapfrog Group: Founded in 2000 by large employers and other purchasers, [The Leapfrog Group](http://www.leapfroggroup.org) is a national nonprofit organization driving a movement for giant leaps forward in the quality and safety of American health care. The flagship [Leapfrog Hospital Survey](http://www.leapfroggroup.org/survey) 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. The [Leapfrog Hospital Safety Grade](http://www.leapfroggroup.org/safety), Leapfrog's other main initiative, 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 enterprise customers, spanning millions of lives, to improve healthcare outcomes, lower costs, and increase benefits satisfaction. For more information, visit www.castlighthealth.com and connect with us on [Twitter](https://twitter.com/castlighthealth) and [LinkedIn](https://www.linkedin.com/company/castlighthealth) and [Facebook](https://www.facebook.com/castlighthealth).