

# Results of the 2014 Leapfrog Hospital Survey: Maternity Care

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Developed for The Leapfrog Group by Castlight Health®



## Table of contents

<b>Introduction .....</b>	<b>3</b>
<b>Maternity care .....</b>	<b>4</b>
Continued progress in 2014 .....	5
Early elective deliveries.....	6
Continued decline in early elective deliveries .....	6
State-by-state success and continued geographic variation .....	8
Many hospitals still lag behind.....	10
Episiotomy .....	11
Improvement in episiotomy rates—but lots of room for further gains.....	12
High-risk deliveries.....	14
Not enough improvement in hospital performance on Leapfrog’s standard for high-risk deliveries .....	15
<b>Conclusion and calls-to-action .....</b>	<b>17</b>

## 2014 Leapfrog Hospital Survey results

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Every year, The Leapfrog Group and its membership of employers and other organizations that purchase health insurance coverage for dependents and their families, as well as business coalitions on health, ask every adult general acute care and free-standing pediatric hospital in the U.S. to voluntarily complete the Leapfrog Hospital Survey. Leapfrog uses the survey data to publicly report on issues that matter to healthcare purchasers and consumers, including high-risk surgeries, maternity care, hospital-acquired infections, and more. Measures included on the Leapfrog Hospital Survey are endorsed by the National Quality Forum and/or aligned with those of other significant data collection entities, including the Center for Medicare Services (CMS) and the Joint Commission. Leapfrog partners with Armstrong Institute for Patient Safety and Quality at Johns Hopkins Medicine to review the survey measures and standards, and updates them annually to reflect the latest science. Additionally, panels of experts volunteer to meet regularly to review the survey measures and recommend performance standards for each subject area covered on the Leapfrog Hospital Survey.

**This is the first in a series of reports Castlight Health is preparing on the results of the 2014 Leapfrog Hospital Survey.**

## Maternity care

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Maternity care happens at one of life's most important moments—not only for a woman giving birth, but also for the newborn and the entire family. Given the significance to the health and well-being of employees and their families, the quality of maternity care is critically important to employers, who collectively pay for more than one-third of all deliveries in the U.S. through employer-sponsored health insurance plans. The Leapfrog Group, a national employer-driven nonprofit watchdog organization, surveys hospitals on their progress in meeting maternity care standards. The results of these surveys can be used by healthcare consumers and purchasers to compare hospitals and make the best choice for maternity care.



## Continued progress in 2014

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The Leapfrog Group's 2014 survey results show continued improvements in the quality of maternity care offered by U.S. hospitals, but there's plenty of room for further progress. Highlights of the 2014 survey on maternity care include:

- ***Across the country, the rate of early elective deliveries continues to fall:*** For the fifth year in a row, the average rate of early elective deliveries has decreased, and for the second year, the national average hit the target rate of less than 5%.
- ***However, some hospitals still perform early elective deliveries at a high rate:*** While nearly 78% of reporting hospitals achieved the Leapfrog standard for early elective deliveries, much variation exists—nearly 9% report a rate twice as high as Leapfrog's standard.
- ***More hospitals are meeting Leapfrog's standard for episiotomy:*** In 2014, 648 hospitals performed episiotomies 12% or less of the time to meet Leapfrog's 2014 standard, compared with 468 hospitals in 2012.
- ***However, significant variation in episiotomy rates still exists:*** As with early elective deliveries, there's an unhealthy amount of variation in the episiotomy data—less than 3% of hospitals report an episiotomy rate of 1% or lower, while 15% of hospitals still report rates of 20% or higher.
- ***There is additional work to be done on high-risk deliveries:*** High-risk newborns, such as those delivered before 32 weeks gestation or with birth weights below three-and-a-half pounds, should be delivered in hospitals with onsite specialized neonatal intensive care units (NICUs) prepared to provide the best care. In 2014, the number of high-risk deliveries happening in hospitals with adequate NICUs remained at slightly less than one in four, making a mother's choice of hospital a key decision in a high-risk pregnancy. In 2014, there was only a slight increase in hospitals meeting these criteria (24% in 2013 to 24.4% in 2014).

Maternity care remains an area in which many hospitals are making steady progress, but some hospitals still have quite a lot of work to do. This report will examine the progress made against Leapfrog standards, as well as improvements needed in each of these three key areas of maternity care: early elective deliveries, episiotomy, and high-risk deliveries.

### *Appropriate care guidelines*

Choosing to deliver a fetus before 39 completed weeks when there is no medical reason to do so can pose serious risks to both the mother and the baby. Episiotomies have also been shown to be problematic for new mothers, and should generally be restricted. Leapfrog tracks both of these metrics and rates hospitals on the appropriate use of these procedures. Consumers should carefully consider these metrics when deciding on a hospital for delivery.

## Early elective deliveries

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**Leapfrog’s standard for early elective deliveries:** A hospital’s rate of scheduled cesarean sections and elective inductions before 39 weeks is less than or equal to 5%.

## Continued decline in early elective deliveries

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There’s a great deal of confusion as to what “full term” actually means. New definitions, published in the journal *Obstetrics & Gynecology* (2013) and endorsed by the American College of Obstetricians and Gynecologists and the Society for Maternal-Fetal Medicine, have narrowed the definition of full term to be 39 weeks to 40 weeks and 6 days (essentially spanning two full weeks). Data strongly demonstrates that early elective deliveries—scheduled cesarean sections or medical inductions performed prior to 39 weeks of gestation without medical necessity—carry risks to both babies and mothers. Early elective deliveries can result in neonatal intensive care unit (NICU) admissions, longer stays and higher costs to both patients and payers.<sup>123</sup>

For more than 30 years, the American College of Obstetrics and Gynecology (ACOG) has advised its membership of maternity care physicians not to perform early elective deliveries, and highly influential organizations such as the March of Dimes and national health plans have campaigned to stop these deliveries. Leapfrog’s public data, first presented in 2010, helped sparked efforts from a variety of organizations, policymakers, and hospitals to end early elective deliveries. In 2014, the average national rate of early elective delivery was 3.4%, compared with 4.6% in 2013 and 17% in 2010, and the percentage of hospitals meeting the Leapfrog standard continues to increase.

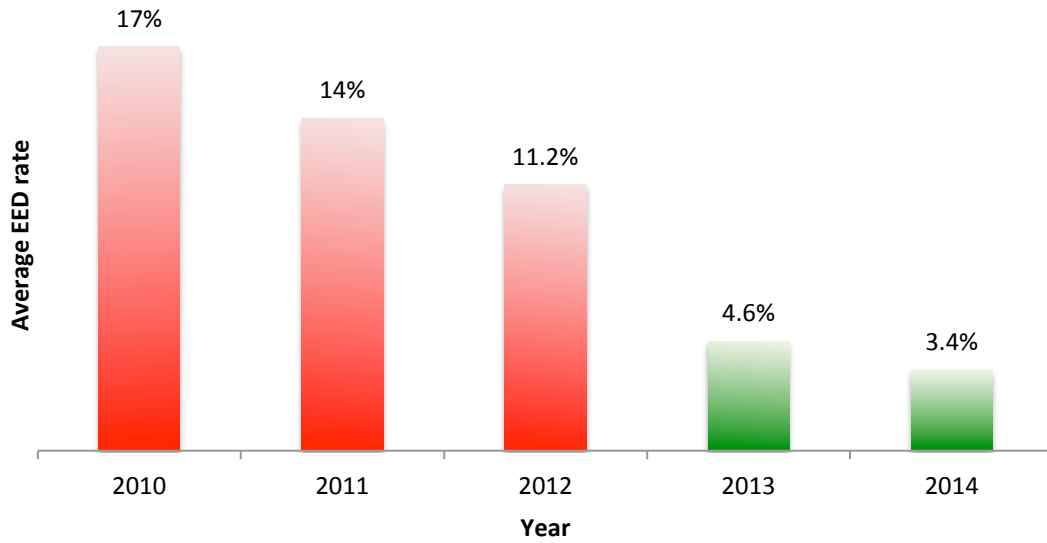
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<sup>1</sup> King VJ, Pilliod RP, Little A. Medicaid-Evidence-Based Decisions Project (MED) Rapid review: elective inductions of labor. September 17, 2010.

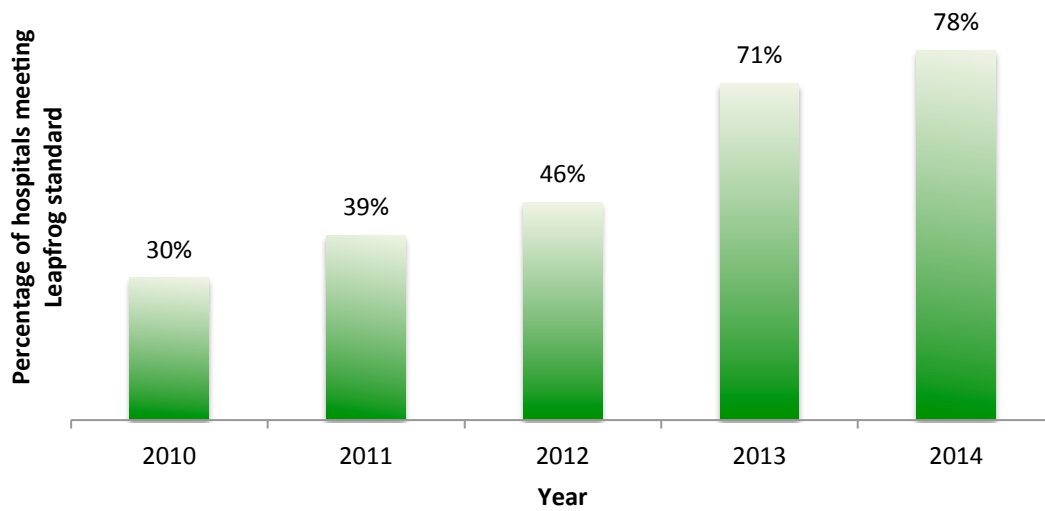
<sup>2</sup> Clark, SL, Miller DD, Belfort MA, Dildy GA, Frye DK, Meyers JA. Neonatal and maternal outcomes associated with elective term delivery. *Am J Obstet Gynecol*, 156, February 2009, e1- e4.

<sup>3</sup> Clark SL, Frye DR, Meyers JA, Belfort MA, Dildy GA, Kofford S, Englebright J, Perlin JA. Reduction in elective delivery at <39 weeks of gestation: comparative effectiveness of 3 approaches to change and the impact on neonatal intensive care admission and stillbirth. *Am J Obstet Gynecol*, 2010, 203:449, e1-6.

### Average rate of early elective deliveries



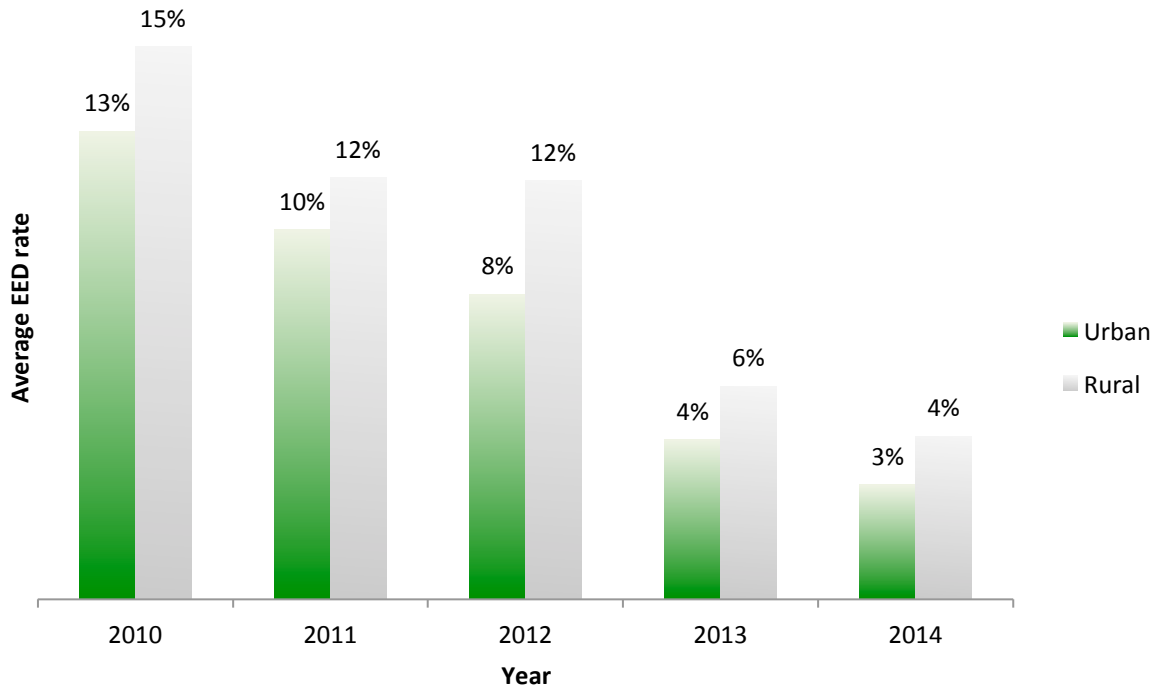
### Percentage of hospitals achieving $\leq 5\%$ early elective deliveries over time



## State-by-state success and continued geographic variation

Groups such as the [Dartmouth Atlas](#) have long noted regional practice variations in care delivery, and the length of pregnancies is no exception. While many states such as California, Colorado, and Illinois have seen strong progress in lowering the rate of early elective deliveries, others show year-to-year fluctuations or consistently perform at rates above the Leapfrog standard.

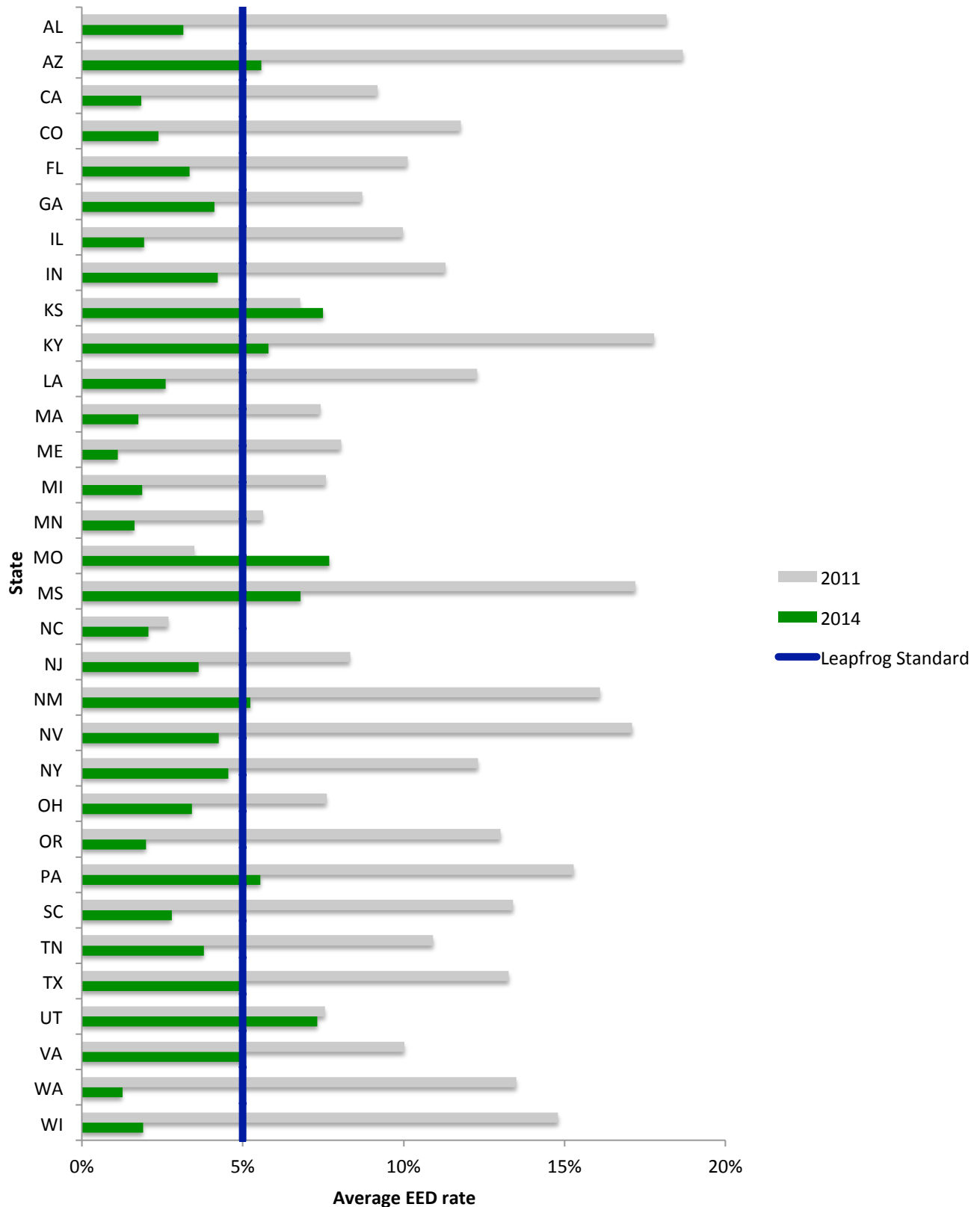
**Average rate of early elective deliveries, by area**





## Average rate of early elective deliveries, by state

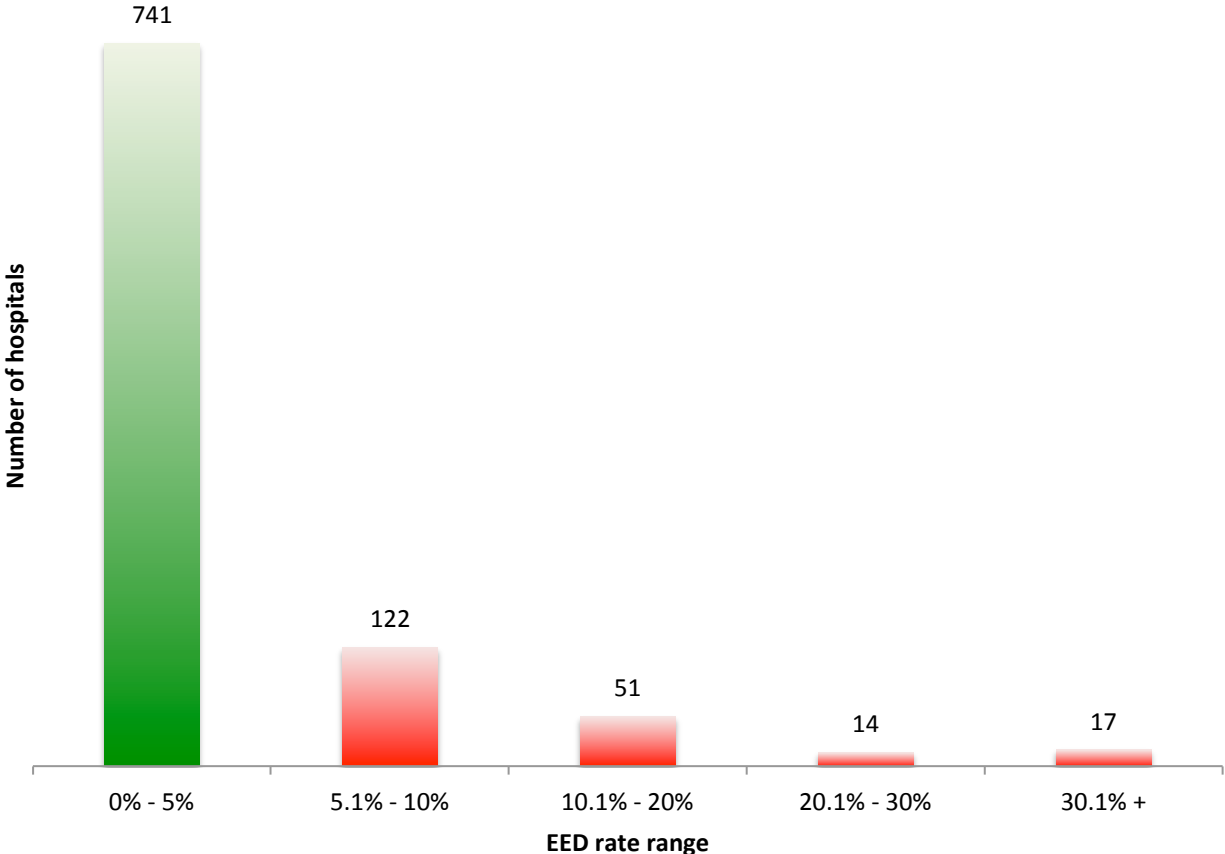
*Excludes states with an average of fewer than five hospitals reporting in 2011 and 2014*



## Many hospitals still lag behind

While an impressive 78% of hospitals had an early elective delivery rate of 5% or less, a large amount of variance still exists among reporting hospitals. 82 hospitals reported an early elective delivery rate of more than 10%, with 17 of those hospitals reporting an early elective delivery rate of greater than or equal to 30%.

Rate of early elective deliveries, 2014



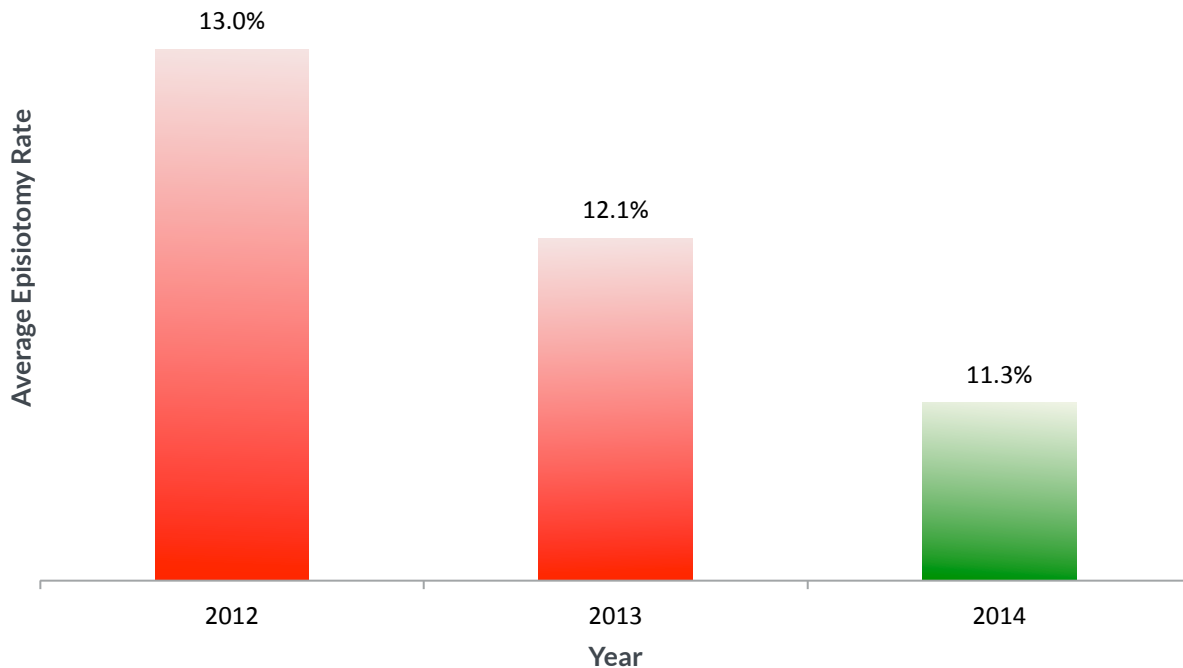
## Episiotomy

An episiotomy is an incision made in the perineum (the birth canal) during childbirth. Although episiotomies were once routine in childbirth, medical guidelines today recommend an episiotomy only in a narrow set of cases.<sup>4</sup>

Episiotomies have been clearly linked with worse perineal tears, loss of bladder or bowel control, and pelvic floor defects.<sup>5</sup> These complications slow the mother's recovery and increase delivery costs. Due to these concerns, ACOG has called for the "restricted use of episiotomy," which has been firmly linked to lower rates of perineal injury.

**Leapfrog's standard for episiotomy:** A hospital's rate of episiotomy is less than or equal to 12%.

### Average rate of episiotomies



<sup>4</sup> ACOG- Practice Bulletin-"Episiotomy" No.71 2006.

<sup>5</sup> Hartmann K, Viswanathan M, Palmieri R, et al. Outcomes of Routine Episiotomy: A Systematic Review. *JAMA*, 2005, 293(17), 2141-2.

## Improvement in episiotomy rates—but lots of room for further gains

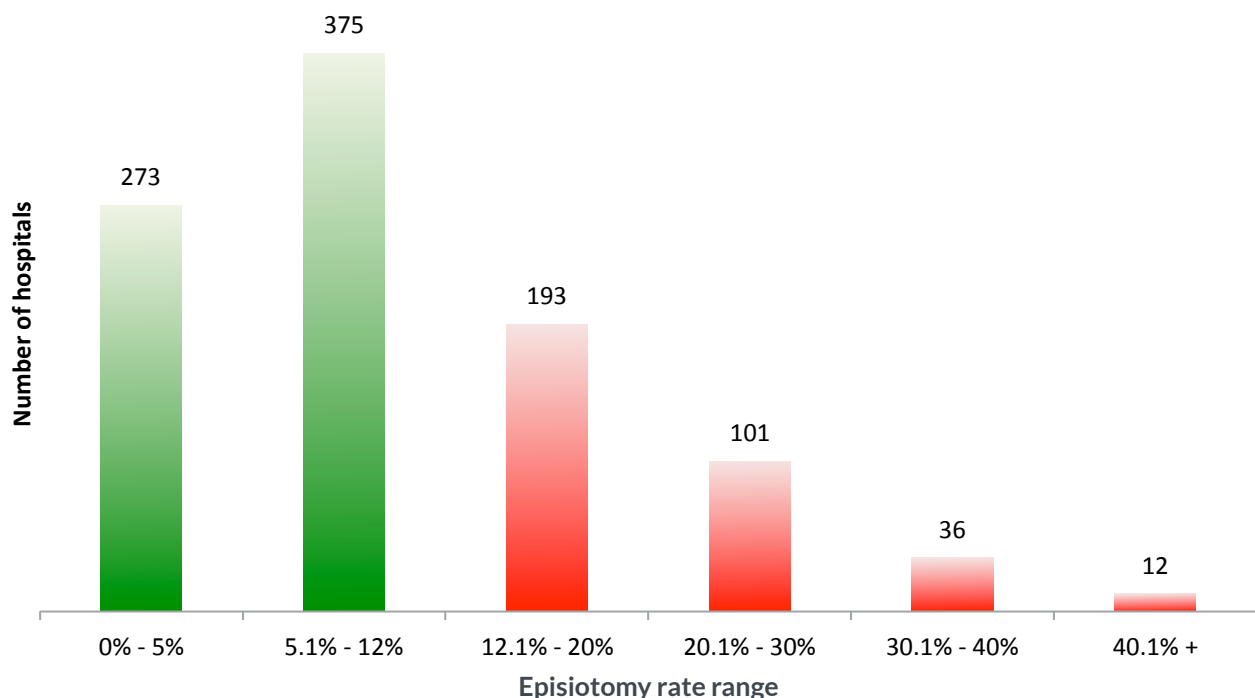
Leapfrog has tracked episiotomy use by hospitals since 2012. In 2014, 990 hospitals reported on the standard, and 648 (65%) achieved a rate of 12% or better, compared with 468 out of 833 (56%) in 2012. For the first time, the national average hit the target rate of less than 12%.

Individual rates of episiotomy vary dramatically, with 25 hospitals reporting an episiotomy rate of 1% or less and 12 hospitals reporting an episiotomy rate of 40% or higher. Thus, while there's been modest improvement nationally, 35% of birthing hospitals still permit too many episiotomies, putting hundreds of thousands of women at unnecessary risk.

Based on current research and literature, Leapfrog's Maternity Care Expert Panel recommended further lowering of the target episiotomy rate by changing the standard to 5% in 2015. Only 27% of hospitals would meet this new target rate today.

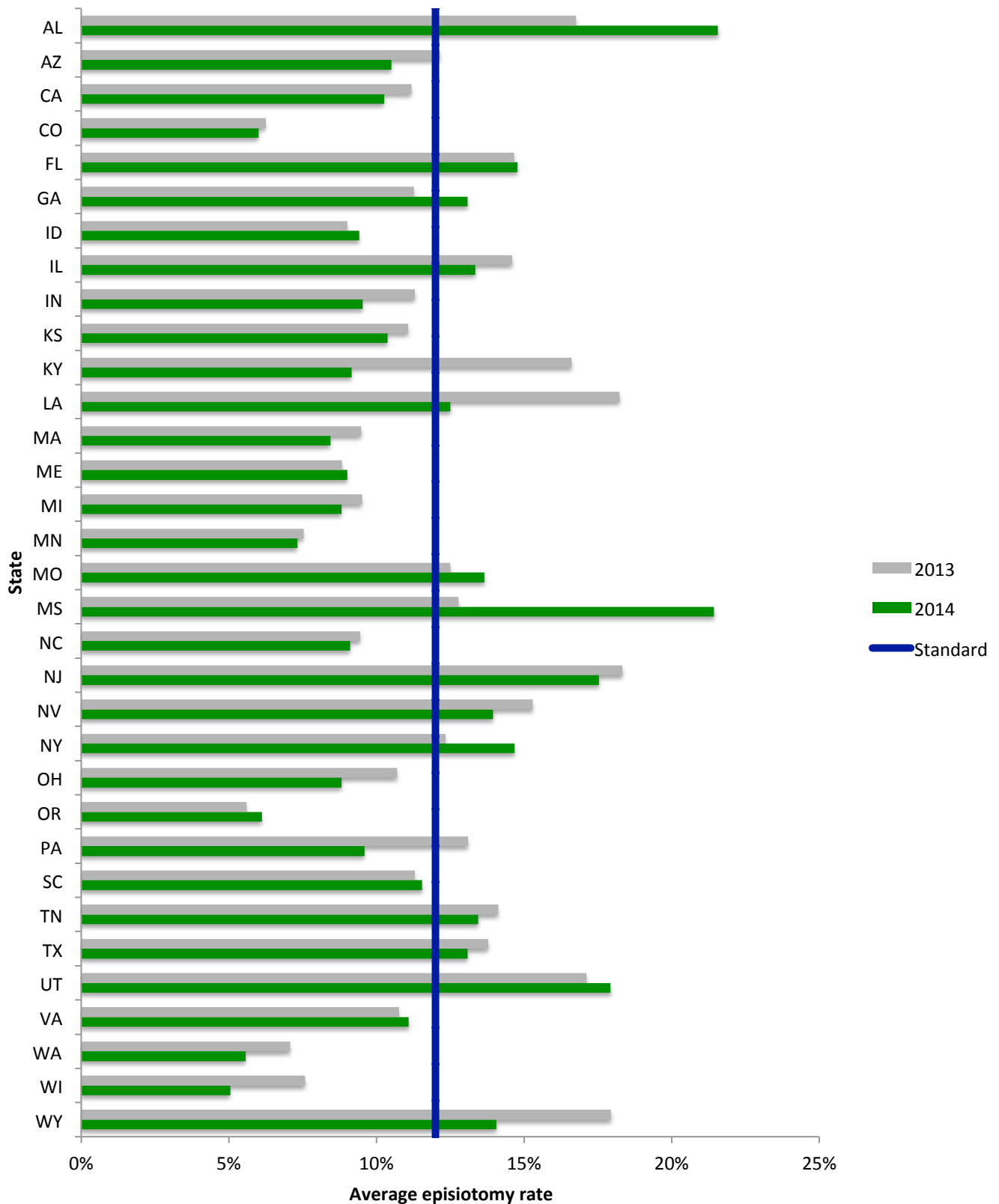
While the state-by-state variation is not as significant as with early elective deliveries, there is still plenty of room for improvement in specific locations.

**Rate of episiotomy use, 2014**



## Average rate of episiotomies, by state

*Excludes states with an average of fewer than five hospitals reporting in 2013 and 2014*



## High-risk deliveries

### Experience

*In medicine, like much in life, practice makes perfect. Finding a hospital where staff has ample experience caring for very vulnerable newborns is key to receiving the best care. Many expectant mothers have medical conditions that put them at risk for delivering a baby prematurely. If this happens, infants may need specialized care.*

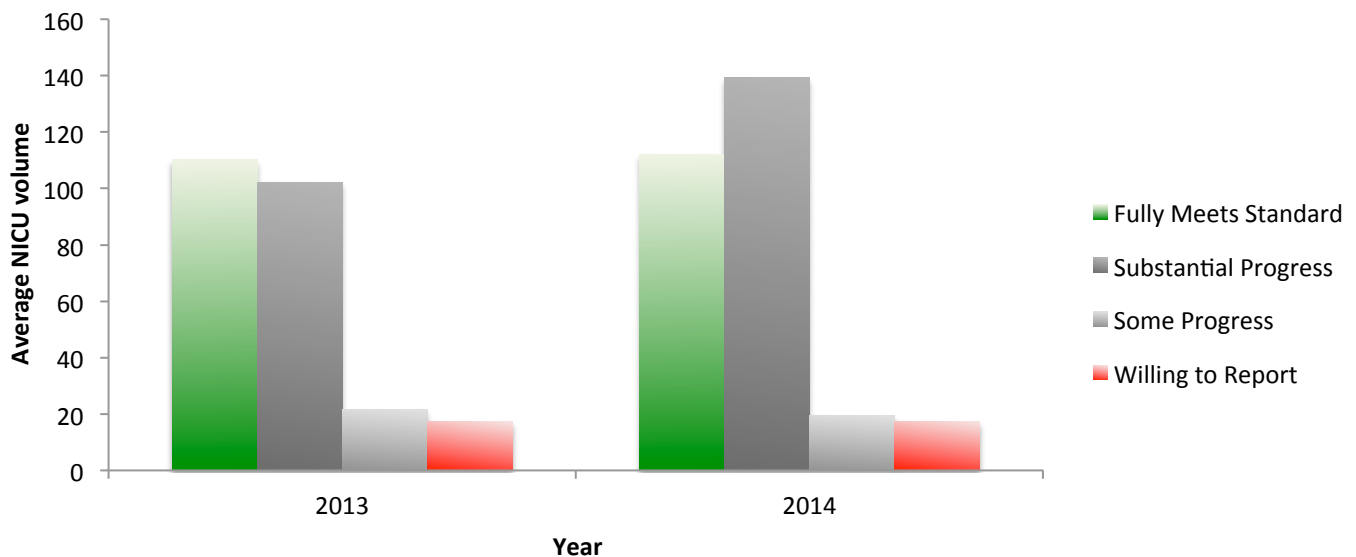


When infants are born weighing less than 1500 grams (3 pounds, 4.91 ounces), they must be cared for in a NICU with proven capacity to care for them. Research suggests that these very-vulnerable babies are more likely to survive and thrive if they are born in a hospital that has an experienced NICU available on-site.<sup>6</sup> In cases of potentially high-risk deliveries, mothers should choose a hospital with a NICU with proven capacity. Patients who are unsure whether they may have a high-risk delivery should speak with their provider.

**Leapfrog's standard for high-risk deliveries:** A hospital that...

- Delivers at least 50 very-low birth weight babies per year and ensures that at least 80% of mothers receive antenatal steroids prior to delivery
- OR**
- Maintains a lower-than-average morbidity/mortality rate for very-low birth weight babies and ensures that at least 80% of mothers receive antenatal steroids prior to delivery.

### Average NICU volume by high-risk delivery quality rating

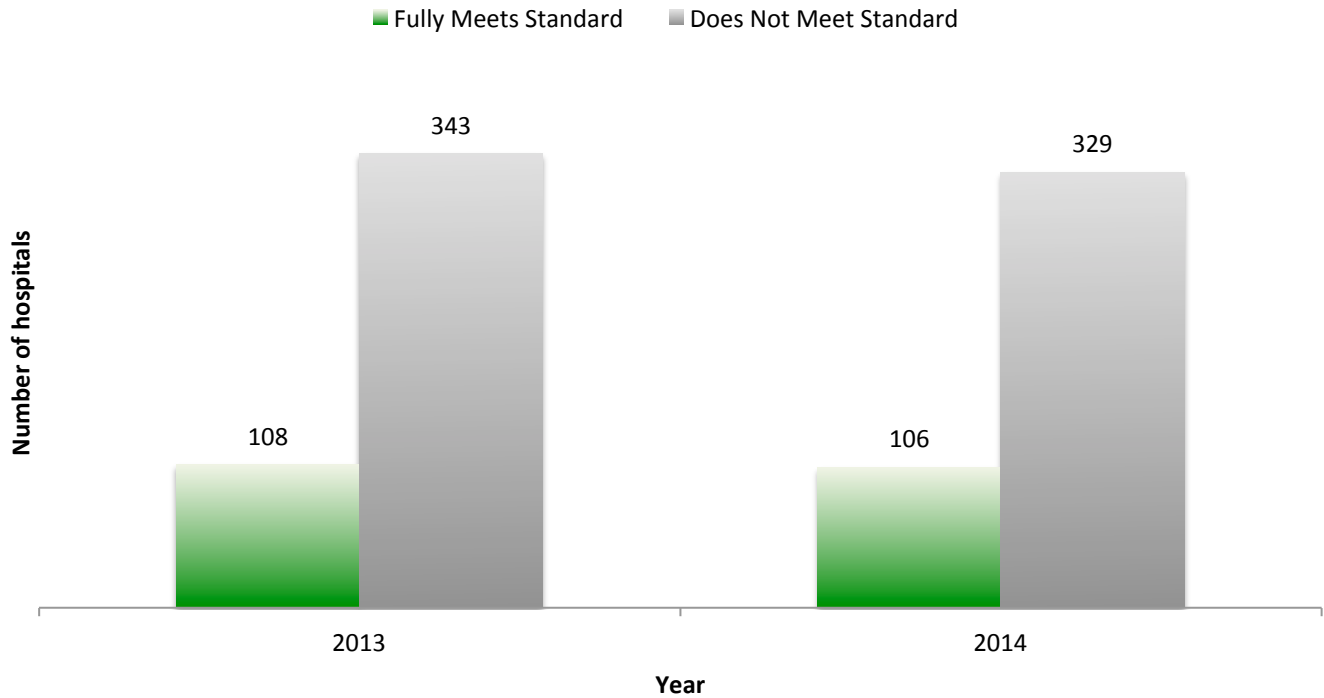


<sup>6</sup> Phibbs CS, Bronstein JM, Buxton E, Phibbs RH. The effects of patient volume and level of care at the hospital of birth on neonatal mortality. *JAMA*. 1996; 276:1054-9.

## Not enough improvement in hospital performance on Leapfrog's standard for high-risk deliveries

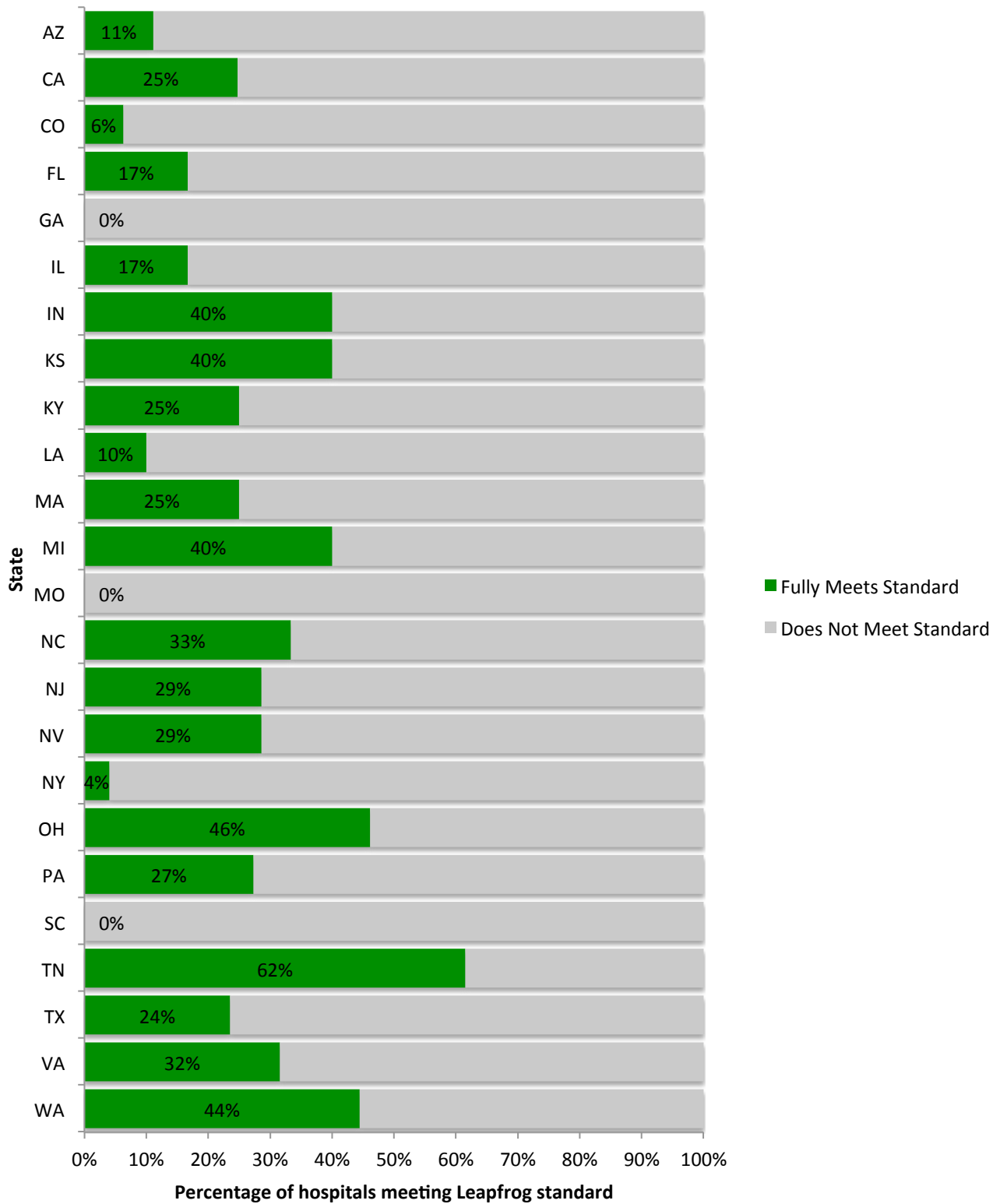
Unfortunately, too many high-risk babies are being delivered in hospitals with sub-optimal conditions to care for them. In 2014, only 106 out of 435 hospitals that deliver high-risk babies (24.4%) have fully met this standard. This represents only a slight improvement in the percentage of those meeting the standard from 2013, when 108 out of 451 such hospitals (24.0%) met this metric.

### Number of hospitals meeting Leapfrog's standard for high-risk deliveries



## Percentage of hospitals meeting Leapfrog's standard for high-risk deliveries, by state

*Excludes states with fewer than five hospitals reporting in 2014*





## Conclusion and calls-to-action

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Maternity care plays a critical role in the lives of many women and families, and expectant parents deserve to know how hospitals in their community compare in delivering high-quality care. Leapfrog would like to provide special recognition to the many hospitals that now meet or exceed the standards for high-risk delivery quality, early elective delivery, episiotomies, and overall maternity processes of care.

- **Hospitals** that have not yet met Leapfrog’s standards are encouraged to continue working toward the goals—learning from others that have achieved these high standards of care.
- **Employers** are invited to continue to support the work of Leapfrog, urge hospitals to report to the Leapfrog Hospital Survey, and encourage their employees to choose hospitals that provide the highest levels of maternity care.
- **Women and families** needing maternity care services are encouraged to consult the Leapfrog Hospital Survey results before choosing a hospital to deliver their baby.

Having a baby is a special time for families, and choosing the right hospital for the baby’s birth is one of the most important decisions they can make. The right hospital will give both mom and her baby the best possible start to their life together.

To learn more about why maternity care matters, go to the [Leapfrog maternity fact sheet](#).



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## About The Leapfrog Group:

National nonprofit watchdog The Leapfrog Group was founded in 2000 by employers and other purchasers of health benefits to collect data from U.S. hospitals and publicly report their performance by facility. Leapfrog has been the nation's premier advocate of transparency to galvanize giant leaps forward in quality and safety of care. Leapfrog's data by hospital from the [Leapfrog Hospital Survey](#) and [Hospital Safety Score](#) allow purchasers of healthcare to structure contracts and purchasing toward the highest performing hospitals, while providing consumers with potentially lifesaving information on hospital quality. The biannual Hospital Safety Score, which assigns letter grades to hospitals based on how safe they are for patients, empowers consumers to search for a local 'A' hospital for their life-long healthcare needs.

## About Castlight Health:

Castlight Health, Inc. (NYSE:CSLT) is the leader in Enterprise Healthcare Management. We believe great healthcare builds great business and U.S. enterprises can gain control over the \$620 billion spent annually on healthcare, transforming a crippling cost into a strategic business advantage. Recognized as [a top 2014 software platform](#) by the HR Technology Conference & Exposition, Castlight's Enterprise Healthcare Cloud enables employers to understand and manage all their healthcare investments while helping employees make the best possible healthcare decisions. Castlight is a great place to work, honored with a [Glassdoor Employees' Choice award](#) and recognized by Rock Health for Diversity in Leadership. For more information visit [www.castlighthealth.com](http://www.castlighthealth.com). Follow us on [Twitter](#) and [LinkedIn](#) and Like us on [Facebook](#).

