CHART
Center for Health Analytics, Research & Transformation at NJHA

BULLETIN

Delivering Results: New Jersey Makes Strides in Reducing Cesarean Section Rates

Disparities in outcomes for maternity and infant health have received heightened attention in 2019, as health advocates, policymakers and others have raised awareness and issued calls for improvement in several areas, including Cesarean-section (C-section) rates. NJHA's Center for Health Analytics, Research & Transformation (CHART) selected this topic for further exploration and determined that New Jersey's hospitals have made significant strides in this area, driving an 11.4 percent reduction in all C-section rates between 2011 and 2018, and a reduction of nearly 30 percent for Nulliparous, Term Singleton, Vertex (NTSV) C-section births during that same time. However, analysis shows that progress has not been uniform across all demographic populations, requiring continued monitoring and attention from health leaders.

Background

The New Jersey Hospital Association's (NJHA) Health Research and Educational Trust of New Jersey (HRET) has a longstanding history of leading collaborative efforts to improve care for women and children. One effort, the New Jersey Perinatal Quality Collaborative (NJPQC), is a partnership of the state's birthing hospitals, HRET and the N.J. Department of Health. Since its launch in 2009, the NJPQC has grown to become one of 13 such collaboratives in the nation to be funded by the U.S. Centers for Disease Control and Prevention. Together, the NJPQC partners focus on implementing strategies and best practices to improve the health and well-being of mothers and babies, including strategies from the Alliance for Innovation in Maternal Health (AIM) to reduce birth complications such as maternal hemorrhage and preeclampsia (pregnancy-related high blood pressure.)

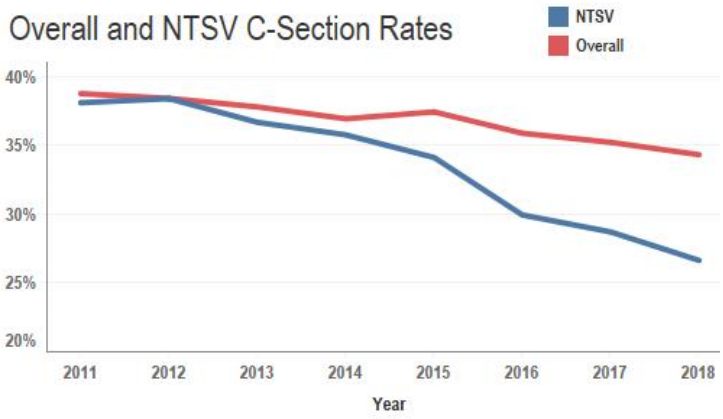
A key priority area for NJHA and HRET is reducing New Jersey's historically high overall C-section rate. In 2012, hospitals statewide adopted policies ending the scheduling of elective deliveries before the 39th week of pregnancy, recognizing that induced pregnancies have a higher chance of resulting in a C-section. By 2018, each of New Jersey's birthing hospitals had reached the national target of a rate of 5 percent or less for early elective deliveries.

In April 2018, N.J. hospitals refocused their efforts on NTSV C-sections, embarking on a series of educational programming, quality improvement activities and shared learning focused on evidence-based practices that encourage vaginal deliveries, particularly in the case of NTSV – that is, first-time, low-risk pregnancies with a single fetus in the proper position. Approximately 90 percent of women who have a primary cesarean delivery are likely to deliver by cesarean again in subsequent pregnancies, which incurs progressively higher morbidity risks. Focus areas in the effort to reduce NTSV C-sections include educating staff about fetal monitoring and labor support skills; establishing criteria for inducing labor; and tracking data on C-sections for use in case reviews and rapid-cycle improvement with delivery teams.

To health! NJHA New Jersey Hospital Association

What the Data Say

Uniform Bill and vital statistics data were reviewed to determine what impact these efforts have had to date. The analysis included claims data from 800,000 hospital births from 2011 through 2018. The trend shows a nearly 11.4 percent reduction in New Jersey's overall C-section rate, from 38.7 percent in 2011 to 34.3 percent in 2018. On a similar trajectory, NTSV C-section rates have been reduced by nearly 30 percent, from 38.07 percent in 2011 to 26.63 percent in 2018.



Data were then stratified further to see if the results were consistent across patient age groups and patient race/ethnicity. This deeper cut into the data revealed that while overall progress has been made, more attention is needed to address disparities for minority populations and older women.

Most patients, regardless of race or ethnicity, experienced a reduction in overall C-section rates. However, the data show that white mothers achieved the highest rate of reduction at 16.4 percent. Black and Asian mothers lagged behind, experiencing more modest reductions of 6.7 percent and 9.5 percent, respectively.

Consistent with the C-section findings, New Jersey made comparable improvements in the NTSV rate, showing a 30 percent reduction. However, while the Black and Asian populations showed improvements, their reductions lagged the statewide average (22.3 percent and 28.1 percent respectively).

While most age groups experienced a reduction in overall C-section rates, mothers age 20-24 experienced a significant reduction of 21.3 percent. Deliveries in the largest birthing age group, ages 30-39, essentially mirrored the statewide drop, effectuating a 12.3 percent reduction. However, mothers age 45+ were outliers. This high-risk age group experienced an increase of 4.7 percent in C-sections and babies were born by C-section approximately two-thirds of the time.

Next Steps

With a goal for the state's 49 birthing hospitals to reach the Healthy People 2020 benchmark of 23.9 for NTSV C-section rates, more work remains. Patient engagement is key. Keeping the voice of the expectant mother at the forefront of care is critical to the success of any effort to improve quality. New Jersey's birthing hospitals and partners are working to engage and empower mothers in their birth plans; to help them understand that there are risks associated with unnecessary C-sections, for both them and their babies. Documented risks for mothers include hemorrhage, infection, uterine rupture, abnormal placentation and cardiac events. For newborns, C-sections have been associated with impaired neonatal respiratory function, neonatal intensive care unit admission, difficulty breastfeeding and certain chronic health conditions.

However, it's also important for expectant mothers to know that C-sections are valid medical procedures when medically indicated. The decision to perform a C-section should be shared by the mother and her care team. New Jersey's birthing hospitals and partners are connecting mothers and their care teams to help them have an open, respected dialogue about benefits and risks associated with any medical procedure.

The perinatal phase, which includes appropriate care for mother and baby, begins before the hospital stay and continues after discharge. Because reduction of C-sections is multi-faceted and quality improvement efforts need to span the entire pregnancy, the state's hospitals and partners are focusing on what happens before and after the birth of the child. Influencing factors such as access to prenatal care; breastfeeding education; optimizing patient and family engagement; informed consent and shared decision-making about labor and birth plans are important factors in shifting the trajectory of outcomes.