



NEWS RELEASE

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Hospital Decreases Cesarean Delivery Rate by 13 Percent Through Quality Improvement Initiative

New Study in February 2017 Issue of The Joint Commission Journal on Quality and Patient Safety

(OAK BROOK, Illinois, January 27, 2017) – Approximately one third of births in the United States are by cesarean delivery. Although most experts believe this rate is too high and results in increased morbidity and mortality for mothers, efforts to decrease the rate have usually failed. A new study published in the February 2017 issue of [The Joint Commission Journal on Quality and Patient Safety](#) describes a long-term, multi-strategy quality improvement initiative that substantially lowered the cesarean delivery rate at Beth Israel Deaconess Medical Center, Boston.

The study focused on nulliparous women with a term, singleton baby in the vertex position. This refers to women delivering their first baby at 37 weeks or beyond with a single baby (no multiple gestations) in the vertex (head down) presentation. Compared to the general obstetric population, women with a nulliparous, term singleton vertex (NTSV) pregnancy have fewer risk factors for cesarean delivery.

For the study, Mary A. Vadnais, MD, MPH, clinical instructor at Harvard Medical School and maternal fetal medicine physician at Harvard Vanguard Medical Associates and Beth Israel Deaconess Medical Center, and co-authors, identified five factors that may influence the NTSV cesarean delivery rate: interpretation and management of fetal heart rate tracings, provider tolerance for labor, induction of labor, provider awareness of the NTSV cesarean delivery rate and environmental stress.

From 2008 through 2015, the authors applied a multi-strategy approach including provider education, provider feedback and implementation of new policies to target the five identified factors. The interventions were largely initiated and implemented by the director of Labor and Delivery who is a board-certified obstetrician, in collaboration with other thought

leaders and with support from multidisciplinary committees which included members from nursing and anesthesiology.

Data on the mode of delivery, maternal outcomes and neonatal outcomes were collected following the interventions. The authors analyzed more than 20,000 NTSV deliveries. Findings showed the NTSV cesarean delivery rate decreased from 34.8 to 21.2 percent and the total cesarean delivery rate decreased from 40 to 29.1 percent.

In the journal, an accompanying editorial by Elliott K. Main, MD, medical director at the California Maternal Quality Care Collaborative and clinical professor at the University of California at San Francisco and Stanford University, emphasizes the need for culture change in maternity units in order to address the rise in cesarean rates. “To have maximal culture change, a quality improvement project will take perseverance, involve multiple interventions and may take external leverage,” Dr. Main notes.

The February 2017 issue provides open access to all articles. Also featured in the issue:

- Data-Driven Implementation of Alarm Reduction Interventions in a Cardiovascular Surgical ICU (open access article)
- Year-End Resident Clinic Handoffs: Narrative Review and Recommendations for Improvement
- Improving Communication with Primary Care Physicians at the Time of Hospital Discharge
- Review of Nonformulary Medication Approvals in an Academic Medical Center

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Note for editors

The article is “Quality Improvement Initiatives Lead to Reduction in Nulliparous Term Singleton Vertex Cesarean Delivery Rate,” by Mary A. Vadnais, MD, MPH; Michele R Hacker, ScD; Neel T. Shah, MD, MPP; JoAnn Jordan, BA; Anna M. Modest, MPH; Molly Siegel, MD; and Toni H. Golen, MD. It appears in *The Joint Commission Quality and Patient Safety*, volume 43, number 2 (February 2017), published by Elsevier.

The Joint Commission Journal on Quality and Patient Safety

[The Joint Commission Journal on Quality and Patient Safety](#) (JQPS), published monthly by Elsevier, is a peer-reviewed journal dedicated to providing health care professionals with innovative thinking, strategies and practices in improving quality and safety in health care. JQPS is the official journal of [The Joint Commission](#) and [Joint Commission Resources, Inc.](#), a nonprofit affiliate of The Joint Commission. Original case studies, program or project reports, reports of new methodologies or the new application of methodologies, research studies, and commentaries on issues and practices are regularly featured.