

Reducing Cesarean Section Rates: A Multifaceted Triumph

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INTRODUCTION

Cesarean deliveries (C-sections) are a vital intervention in modern obstetric care, often lifesaving for mothers and babies. However, the global rise in C-section rates has raised significant concerns about the associated risks, including increased maternal morbidity, longer recovery times, higher healthcare costs, and potential long-term complications for both mothers and infants. Addressing this challenge requires a balanced, evidence-based approach that safeguards maternal and neonatal outcomes while reducing unnecessary surgical interventions. This project was designed to optimize obstetric care by reducing non-medically indicated C-sections, promoting safe vaginal deliveries, and fostering a culture of continuous quality improvement within a multidisciplinary healthcare team.

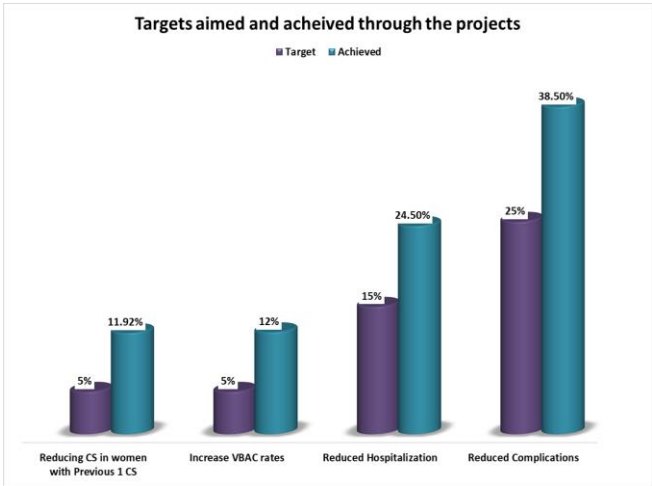
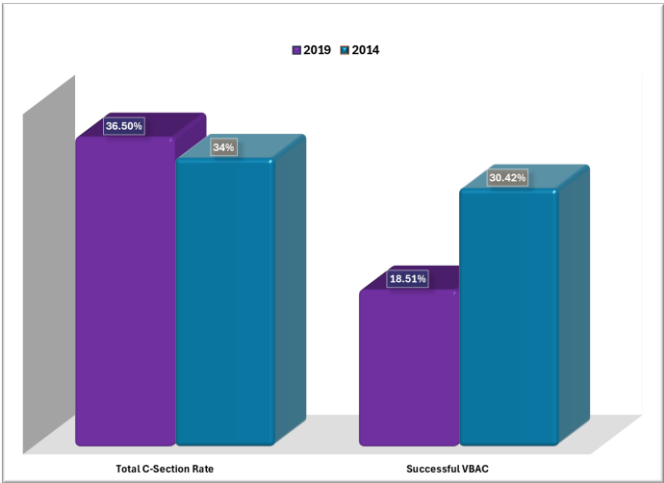
OBJECTIVES

The rising rates of Cesarean deliveries pose significant challenges in maternal and neonatal healthcare, often leading to increased recovery times, healthcare costs, and potential complications. This project aimed to reduce unnecessary C-section rates while ensuring service quality and patient safety.

METHODOLOGY

A multidisciplinary team—comprising obstetricians, midwives, nurses, and quality improvement experts—employed a systematic approach using the Plan-Do-Study-Act (PDSA) cycle to analyze C-section rates, develop evidence-based guidelines for labor and fetal monitoring, and implement clinical and non-clinical interventions. Pregnant women registered in antenatal clinics from 2020 to 2022 constituted the study population, with data compared to pre-implementation rates in 2019. Statistical analysis utilized odds ratios to assess changes in C-section rates and patient outcomes.

RESULTS



RESULTS

- ✓ Implementation of this quality improvement initiative resulted in a significant decrease in overall C-section rates from 36.5% to 34%.
- ✓ Notably, the rate of C-sections among women with prior Cesarean deliveries decreased from 81.49% in 2019 to 69.58% in 2024 (odds ratio: 1.83; 95% CI: 0.947–3.527; $p < 0.05$).
- ✓ Concurrently, the uptake of Vaginal Birth After Cesarean (VBAC) increased from 18.51% to 30.42% (odds ratio: 2.04; 95% CI: 1.04–3.97; $p < 0.05$).
- ✓ There were also significant reductions in surgical complications, surgical site infections, reinterventions, and readmission rates, while close monitoring ensured maternal and neonatal safety.

CONCLUSIONS

- This quality improvement project demonstrates that a multidisciplinary, evidence-based approach can effectively lower C-section rates, enhancing maternal and neonatal outcomes and reducing healthcare costs.
- Continued research and active patient engagement are essential for sustaining these improvements and promoting best practices in obstetric care.

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