

Quality Improvement Project to Reduce Nulliparous Term Singleton Vertex Cesarean Rate: Implementing a Pre-Cesarean Checklist

Victoria Carlucci BSN, RNC-OB, RNC-MNN, C-EFM
Tracy Vitale DNP, RNC-OB, C-EFM, NE-BC and William Lowe, MD

Introduction

NTSV Cesarean Birth Rate

- Healthy People 2020 goal = 23.9%
- Project Site's Rate (2016) = 29.8%

Implement Pre-Cesarean Checklist

- Guide to bridge knowledge gap between nurse and providers
- Establish uniform, evidence-based labor management

Background & Significance

Global Cesarean Section Rates

- Brazil 55.6%, Dominican Republic 56.4%, Egypt 51.8%, Iran 47.9%, Italy 38.1%, and the USA 32.8%

Morbidity and Mortality

- Complication rates higher in cesarean deliveries compared to vaginal deliveries
- Risks to both mother and newborn

Financial Risk

- Cesarean delivery costs \$5,000 to \$10,000 more than vaginal delivery

Intervention for Change

- Project site's NTSV cesarean rate
 6% higher than Healthy People
 2020 goal
- Less NTSV cesarean births = More vaginal births = Better outcomes

Needs Assessment

With the national target of 23.9% for NTSV cesarean rate:

- 16% of NJ Hospitals meet the national target
- 84% of NJ hospitals can improve

Methodology

- 3-month retrospective/prospective chart review

Setting

- Labor and delivery unit of a Level III Regional Perinatal Center in central New Jersey

Study Population

Inclusion Criteria

- Parturient women who are nulliparous, term, singleton, and vertex presentation

Exclusion Criteria

- 17 years old or younger
- Intrauterine fetal demise

Intervention

Implementation of a pre-cesarean checklist into practice from 7/2020
9/2020

Data Analysis

- Descriptive Statistics
 - Age
 - Ethnicity
 - Gestational Age
 - Risk Factors
- SPSS
 - Chi square test
 - No statistical significance

Results

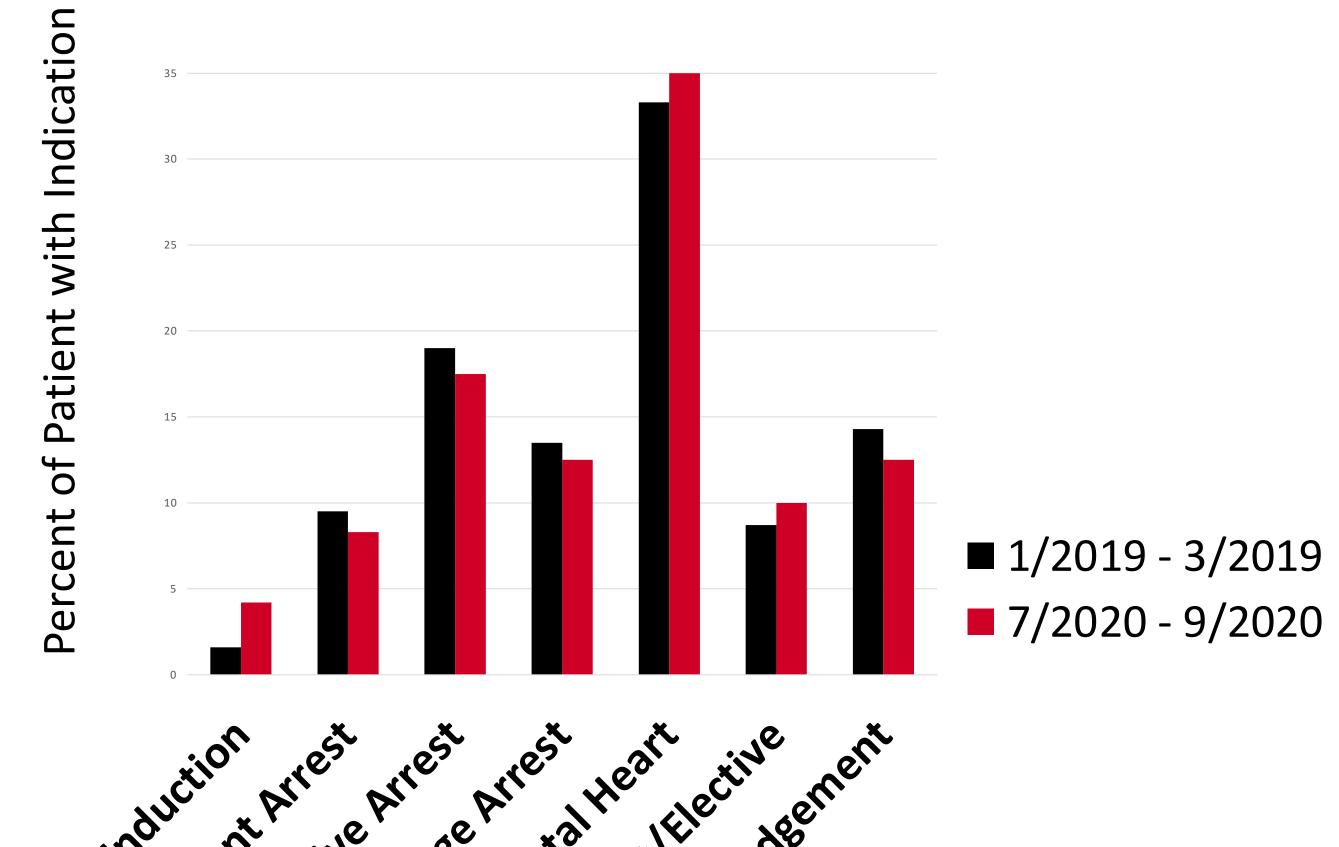
Overall NTSV Cesarean Rate

- 10.8% decrease
- 36.2% → 25.4%

Compliance Rate

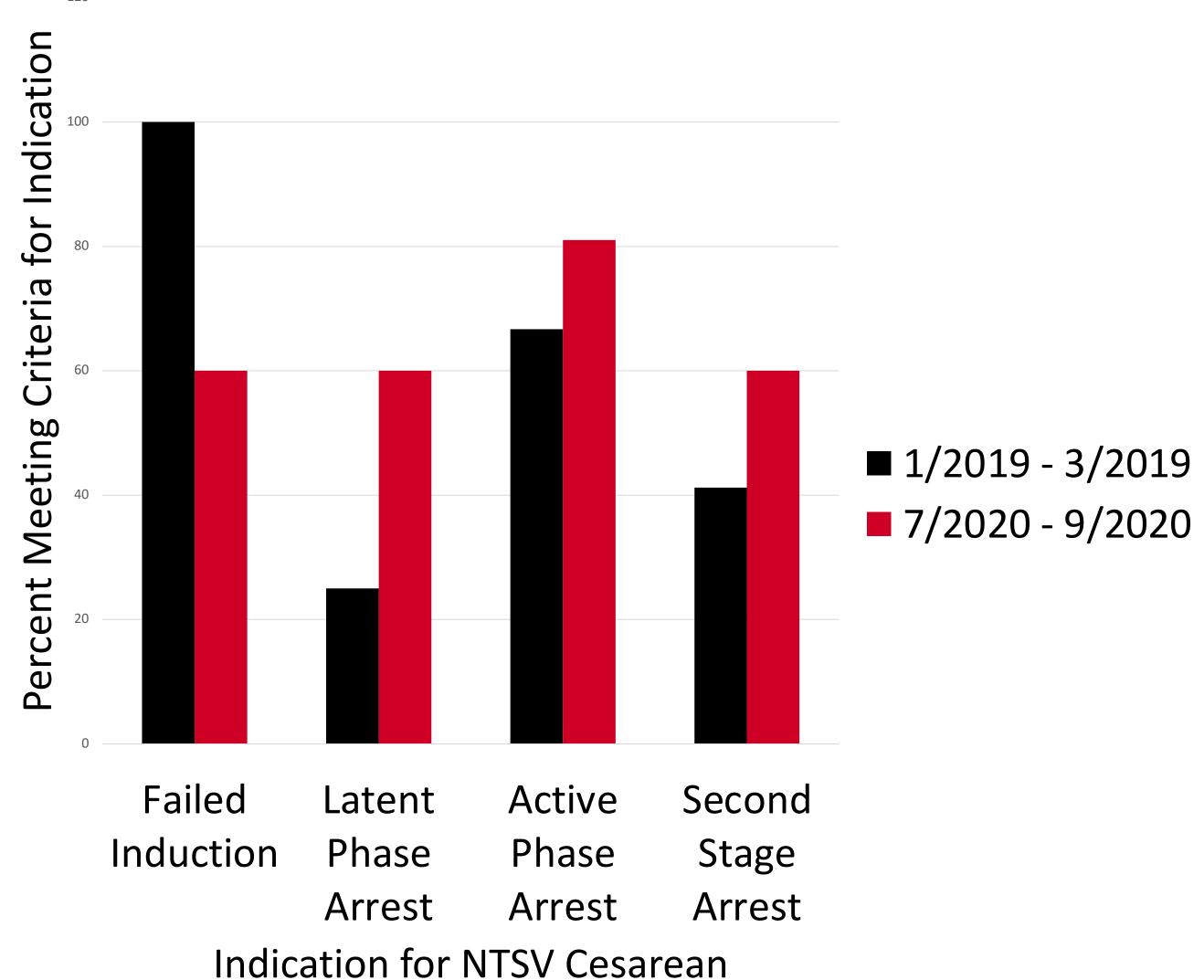
- 40% checklist completion
- 60% collaboration of the checklists completed

Indication for NTSV Cesarean



Active Stable Fetal Lest File Judge Second Stable Fetal Provider Judge Second S

Meets ACOG Recommendations



Conclusions/Implications

Implication for Clinical Practice

- Additional staff education
- Promotion of collaboration
- Future study
 - Larger Sample Size
 - Multiple Interventions
 - Different Methods

Economic Benefit

- Reduced cesarean births = reduced cost

Health Care Quality & Safety

Lower cesarean birth rate = lower complication rate

Health Policy

- Need for policy change at both local and national level

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Contact Information

Victoria Carlucci

vc375@sn.rutgers.edu