Standardizing care of Cesarean section patients using a quality bundle

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**BACKGROUND**

Surgical site infection complicates almost 11% of cesarean deliveries, resulting in maternal morbidity with increased length of stay, readmission and cost. Care of cesarean section patients at Vidant Medical Center is currently not standardized, with variations in preoperative preparation and compliance with identified best practices. A quality care bundle incorporating evidence-based interventions can provide a systematic method to ensure consistent care and reduce risk of surgical site infection across the Vidant health system.

**PROJECT AIM**

Improve standardization of care for cesarean section deliveries by achieving 100% bundle compliance in 50% of cesarean section patients within 6 months.

**PROJECT DESIGN/STRATEGY**

A care bundle of best practice interventions was initially defined to include 4 elements. Education was offered to relevant groups for appropriate implementation of quality care bundle for every patient with elective or urgent cesarean section. Emphasis was placed on technique and documentation to ensure a highly reliable process. Project improvement was measured by audits of bundle element compliance using a random sample of cesarean section patients monthly.

**CHANGES MADE (PDSA CYCLES)**

1. Establish C/S bundle elements based on best practice and obtain approval from obstetric leadership group.
2. C/S room temp of 77\(^\circ\) already current practice
3. Validate competency of RNs on vaginal preparation skill
4. Provided hands-on education with return demonstration of competency
5. Educate labor & delivery staff on C/S bundle, purpose of project, and documentation of elements using unit huddles, signs, and weekly communication.
6. Small cue cards on C/S bundle elements added to computers in OR delivery rooms.

**RESULTS/OUTCOMES**

Overall compliance with quality care bundle improved 63% in sampled patients over 1 year. Most missed opportunities were delivery room temperature and vaginal preparation.

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