Standardizing care of Cesarean section patients using a quality bundle

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BACKGROUND

- Surgical site infection complicates almost 11% of C-sections → increased risk maternal morbidity, readmission, and cost
- Care of C-section patients at VMC not currently standardized – 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

- Defined a quality care bundle with 4 best practice interventions
- Education was offered to relevant groups for appropriate implementation of quality care bundle
- Emphasis placed on technique and documentation to ensure high reliability
- Project improvement measured by audits of bundle compliance using a random sample of C-section patients monthly

RESULTS/OUTCOMES

Overall compliance with quality care bundle improved 75% in sampled patients over 1 year. Most missed opportunities were delivery room temperature and vaginal preparation.

CHANGES MADE (PDSA CYCLES)

1. Established C/S bundle elements based on best practice and obtained approval from obstetric leadership group
   - C/S room temp of 77º already current practice

2. Validated competency of RNs on vaginal preparation skill
   - Provided hands-on education with return demonstration of competency

3. Visual signs & written newsletter communication with labor & delivery staff on C/S bundle, purpose of project, and documentation

4. Small cue cards on C/S bundle elements added to computers in OR delivery rooms

5. New room thermometers placed in OR delivery rooms

6. Added bundle elements to surgery time out posters

LESSONS LEARNED

- Approval of bundle as standard practice by providers was critical
- Slow buy-in by RNs as bundle not written in policy
- Data sharing, feedback, continued education, & addressing barriers key to successful implementation
- Documentation impact on compliance data (temperature)
- Initial bundle with only 4 elements & not all inclusive
- Bundle compliance outcome data would be enhanced with report from electronic health record to audit all C/S patients (pending request)

NEXT STEPS

Incorporation of bundle into written health system policy/ERAS protocol
Adoption of quality care bundle with obstetric teams at system hospitals
Additional interventions to further standardize care

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