NSQIP-Pediatric Participation Aides in Decreasing Post-op SSI’s

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**BACKGROUND**

- 2004, American College of Surgeons (ACS) introduced the National Surgical Quality Improvement Program (NSQIP)
- Pre-op, Intra-op & Post-op data was collected and analyzed on select adult surgeries utilizing set algorithms
- NSQIP became the first nationally validated, outcome-based program to provide risk-adjusted data assisting with improving the quality of care across adult surgical specialties.
- Vidant Medical Center joined the pediatric version, ACS NSQIP-Pediatrics, in October of 2014.

**PROJECT AIM**

A nationally recognized & validated surgical database would provide a vital tool in decreasing patient Postop Occurrences/complications.

**PROJECT DESIGN/STRATEGY**

- A quality team including NSQIP Surgical Clinical Reviewers (SCR) and a pediatric surgical champion (SC) were developed with program initiation
- Peds surgery cases were gathered and abstracted per NSQIP-Pediatric standards
- Database reports and the ACS semi-annual report (SAR) were reviewed by the SCR & SC
- Real time communication occurred as needed for clarification and updates
- Quarterly update emails and bi-annual meetings were established to further enhance communication between SCR & SC
- Opportunities for improvement were identified through reports and SAR and shared with the Children’s Quality Team

**CHANGES MADE (PDSA CYCLES)**

- Standardized Appendicitis Care
- Reviewed further areas for improvement strategies
  - Standardizing Antibiotic Protocol
  - Updating Bathing Protocol
- NSQIP data followed and noted an immediate drop in Appendectomy postoperative occurrence rates
- Also noted a decrease in Overall General Surgery Morbidity Rates
- 2015 NSQIP data identified VMC as a high outlier for Postop Occurrences
- VMC Identified variations in Appendicitis care between surgeons when compared to Best Practice
- Plan to create standardized Appendectomy Protocol
- Reviewed Best Practice for Appendectomy Care
- Created a Standardized Appendectomy Protocol
- Shared a new Standardized Protocol with Pediatric General Surgery care team
- Trialed new Protocol

**RESULTS/OUTCOMES**

- 2015 NSQIP data identified VMC as a high outlier for Postop Occurrences
- VMC Identified variations in Appendicitis care between surgeons when compared to Best Practice
- Plan to create standardized Appendectomy Protocol

**LESSONS LEARNED**

- Nationally validated comparison data identifies areas for improvement assisting in process improvement strategies
- Access to non-risk-adjusted data provides real-time metrics of results post implementation of care changes
- Collaboration between surgery & patient care teams, identifies opportunity for multidisciplinary discussions thus increasing understanding of NSQIP data & engagement with needed changes
- Results can be applied to other areas/disciplines

**NEXT STEPS**

- Continued collaboration between surgery & patient care teams using NSQIP-Pediatric data
- Identify further opportunities through multidisciplinary discussions to improve patient outcomes
- Drill down postop occurrences to identify variances and best practice improvements

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