Targeting a Defect: Improving Preoperative Patient Education for Safer Surgery
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**BACKGROUND**
- Surgical site infections (SSI) are a largely preventable cause of patient harm.
- A colorectal surgery Comprehensive Unit-Based Safety (CUSP) team was developed to address the high SSI rate in this patient population.
- The CUSP team utilized the SSI Investigation and Learning from a Defect tools to help identify where systems and processes failed.
- Poor compliance with preoperative bowel preparation and chlorhexidine washcloths were recognized with the tools.
- We hypothesized that increased compliance with preoperative bowel preparations and chlorhexidine washcloths will lower the SSI rate.

**METHODS**
- Key Contributing Factors Identified:
  - Poor compliance with preoperative bowel preparation and chlorhexidine washcloths were identified with the tools.
  - Tablet Based Curriculum using teach-back method was created:
    - To address lapses in pre-op educational training that required increase in personnel resources which was unattainable.
    - The tablet educates patients about the proper bowel preparation and washcloth procedures, and their importance in preparing patients for safe surgery and reducing SSIs.
    - The components for the bowel preparation and the washcloths are given to the patient at their clinic visit to remove lack of materials as a contributing factor.

**AIMS**
- Identify factors that contribute to SSI.
- Identify and improve compliance rate with preoperative bowel preparations and chlorhexidine washcloths.
- Design and implement tablet-based curriculum to educate patients

**RESULTS**

<table>
<thead>
<tr>
<th>Measure</th>
<th>How Often Do We Harm? Are Patient Outcomes Improving?</th>
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</thead>
<tbody>
<tr>
<td>CUSP Comprehensive Unit Based Safety program</td>
<td>Translating Evidence Into Practice (TRIP)</td>
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<tr>
<td>1. Educate staff on science of safety</td>
<td>1. Summarize the evidence in a checklist</td>
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<td>2. Identify defects</td>
<td>2. Identify local barriers to implementation</td>
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<td>3. Assign volunteers to adapt unit</td>
<td>3. Measure performance</td>
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<tr>
<td>4. Learn from one defect per quarter implementation team tools</td>
<td>4. Ensure all patients get the evidence</td>
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**STRENGTHS**
- Tablet based preop education for colorectal surgery patients can be a useful resource for patients to learn about proper pre-surgical care, such as the proper use of chlorhexidine washcloths and proper bowel preparation techniques.
- Goal was to better educate patients on preop education and chlorhexidine washcloths.
- Data gathered from the PACU documentation identified factors that impact SSI and made it possible to track patient compliance data.
- Tablet education promotes better patient-provider communication.
- We hoped improved pre-op education may reduce SSIs.
- Further research is needed to assess impact of preop education on SSI rates.

**CONCLUSIONS**
- Utilizing readily available tools including CUSP model can allow unit-based teams to substantially improve clinical care.