**Bariatric Surgical Site Infection Reduction**

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**Strategic Alignment:**  
**Quality:** Surgical Site Infections (SSI) in the MUHC Bariatric population are above the national average based on National Healthcare Safety Network (NHSN) average of 1.72% and National Surgical Quality Improvement Program (NSQIP) average of 2.75%.  
**Service:** MUHC is behind industry standards in implementation of Chlorhexidine Gluconate (CHG) products in the perioperative setting.

### Aim Statement
To reduce SSI at MUHC within the Bariatric population (gastric bypass, gastric band and gastric sleeve) by 25% from 2.5% to 1.88% (NHSN) and from 5.85% to 4.4% (NSQIP) through implementation of using CHG protocol in the perioperative setting by September 2014.

### Specific Measures
- Number of Infections
- Number of Patients Educated
- Number of Patients Compliant with Decolonization Protocol
  - Home
  - Day of Surgery
- Follow Up Protocol

### Background
- Identified Surgical Site Infection rates higher than national average among Bariatric population  
  - NHSN rate = 2.5% (average is 1.72%)
  - NSQIP rate = 5.85% (average is 2.75%)

### Pre-Intervention Process
- Visited Bariatric clinic to understand current process  
  - No hygienic or Surgical Site Infection education being given during pre-operative education class

### CHG Protocol
- Evening before Surgery - patient used CHG wipe or soap
- Morning of Surgery - patient gets CHG wipes and betadine nasal swab

### Action Plan
- Developed an action plan to insert an education presentation into current pre-operative education and an in-person survey during follow up visit

### Intervention
- Educated pre-operative and Bariatric Clinic staff on SSI and importance of prevention
- Created and implemented  
  - Patient education sheet and received approval by CED
  - PowerPoint education presentation for patients at bariatric clinic
  - Follow up survey on education and use of products
  - Training feedback survey
  - Established protocol for CHG products (wipes/soap) and nasal swab for bariatric patients

### Pilot Study
- 9 patient education sessions complete
- 7 follow-up survey session complete

### Intervention Process
- First run of protocol not fully adhered to due to miscommunication but was addressed and fixed
- Patients have a lot of questions regarding SSI during the education session
- Changed education and survey based on feedback

### Survey Results
- Patients are using the product before surgery
- Patients follow hygiene instructions
- Patients like the additional education on SSI

### Infections
- 1 patient within scope of project was determined to have an infection out of the 37 in study

### Moving Forward
- Continue to work with Bariatric Clinic to enhance patient education  
  - Presentation and education book
  - Follow up with pre-operative for full implementation of protocol
  - Track the survey data in a database and monitor on a weekly basis
  - Monitor feedback to edit
  - PowerPoint presentation and education, based on patient feedback
- Make SSI education a permanent part of the Bariatric Clinic process

### Graphics / Data

### Pre-Intervention
- **Doctors Office**  
  - Pre-Surgery Class Visit till Surgery Visit  
  - Surgery Visit till 30 Days After

### Post-Intervention
- **Doctors Office**  
  - Pre-Surgery Class Visit till Surgery Visit  
  - Surgery Visit till 30 Days After

### Surgical Site Rates
- Desired: 2.63, 1.72, 5.0, 2.75
- NHSN CY 2012-2013: 2.63
- NSQIP CY 2012-2013: 1.72
- National Comparison: 5.0
- National Comparison: 2.75

### Number of Surgical Site Infections (SSI)
- Present Among Bariatric Population
  - No Hygiene Education: 36
  - Education Implementation: 3

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**No Hygiene Education**

**Education Implementation**