### SSI Knee

**OhioHealth Mansfield** 

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## **Objectives**

- Identify evidence based initiatives utilized in the perioperative setting to decrease surgical site infections (SSI) in total knee patients.
  - SSI rate of knees significantly decreased related to standardization of practices in each of the following phases of surgery.
    - Preoperative
    - Intraoperative
    - Postoperative

#### **OhioHealth Mansfield**

- 326-bed hospital in Richland County
- Comprehensive mix of inpatient and outpatient healthcare services
- Annually:
  - 52,000 emergency patients Level II Trauma Center
  - Admits more than 10,000 patients
  - Performs more than 7,000 surgical procedures
  - Helps 1,000 babies come into the world

#### **OhioHealth Mansfield Orthopedics**

 Joint Commission disease specific certification for total hip & knee



 Healthgrades 5 stars for joint replacement



#### **SSI Knee Occurrences**

| Year | Occurrences | # Cases | %     |
|------|-------------|---------|-------|
| 2014 | 1           | 73      | 0.014 |
| 2015 | 1           | 332     | 0.003 |
| 2016 | 2           | 399     | 0.005 |
| 2017 | 0           | 387     | 0     |

- New physician, Dr. Bernhard joined OhioHealth in 2015
  - Standard of practice changes and lateralization

## **Preoperative Initiatives**

- Total Joint Camp education
  - MRSA Swabbing and treatment
  - Chlorhexidine wash prior to surgery
- Antibiotic prophylaxis within 1 hour of incision
- Oral Tranexamic acid (TXA)

## **Intraoperative Initiatives**



- Decrease traffic
  - No entry or exit once sterile supplies are opened
  - If entry required, rear exit only
- Limited team members
  - Surgeon, Scrub Nurse, Assistant, & Circulating Nurse only
  - Robotics
    - Limiting field service reps
  - Sales Rep only permitted if necessary
    - As requested by surgeon
- Sterile field
  - Appropriate distance for all nonscrub personnel.
  - Long sleeve jackets when opening sterile supplies
  - Meticulous inspection of surgical instrumentation

- Prep
  - 3 ChloraPreps; last one done after draping
- Draping
  - loban
  - Integuseal
- Complete coverage PPE
- Glove changes
  - After draping
  - Before implant
  - Top of every hour if past one hour in length
- Only surgeon touches implant
- ATB prophylaxis
  - Vancomycin powder
- No drains
- Length of time in OR

## **Postoperative Initiatives**

- Aquacel dressing
- Limit certain medical conditions to the unit
- Antibiotic prophylaxis- x 2 doses
- Oral TXA and ASA
- Home Health
  - Cross training nursing and therapist
  - Relationship with Home Health team and physician
- ED physician to physician collaboration
- Nursing competency skill check for dressing changes

#### **Future Initiatives**

- Continuous scorecard monitoring and action planning
- Ultraviolet disinfecting robot

#### Conclusion

Questions and/or comments

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#### A FAITH-BASED, NOT-FOR-PROFIT HEALTHCARE SYSTEM

RIVERSIDE METHODIST HOSPITAL + GRANT MEDICAL CENTER + DOCTORS HOSPITAL

GRADY MEMORIAL HOSPITAL + DUBLIN METHODIST HOSPITAL + HARDIN MEMORIAL HOSPITAL

MARION GENERAL HOSPITAL + REHABILITATION HOSPITAL + O'BLENESS HOSPITAL + MANSFIELD HOSPITAL

SHELBY HOSPITAL + WESTERVILLE MEDICAL CAMPUS + HEALTH AND SURGERY CENTERS

PRIMARY AND SPECIALTY CARE + URGENT CARE + WELLNESS + HOSPICE

HOME CARE + 28,000 PHYSICIANS, ASSOCIATES & VOLUNTEERS