

Case Study: Surgical Site Infections

You are the infection preventionist for a rural, community hospital. Over the past two months, you have noted a significant increase in surgical site infections (SSI). Only around ⅓ of the wounds were cultured and of those, 88% were positive for MRSA. The hospital has three operating rooms, one for orthopedics, another for general surgery, and one for labor/delivery. The majority of recent SSIs have been orthopedic patients. What additional information will you need to complete your investigation?

Recommendations:

Organism/relatedness:

- Previous culture results?
- Swabs used for testing
- Consider environmental cultures
- Genetic testing

Pre-operative:

- Pre-op antibiotics
- Surgical bundle, CHG (chlorhexidine gluconate) bathing
- Same surgeon?
- Common staff?

Perioperative:

- Proper cap/hair containment
- Caregiver traffic in OR
- Cleaning in between cases
- Hardware used

Postoperative:

- Post-op placement in house and post hospitalization
- Terminal cleaning
- Hand hygiene, PPE compliance
- Dressing change technique
- Post-op antibiotics

Other:

- Equipment reprocessing/sterilization
- Assess frequency of flash sterilization/staff competency
- Staff with open wounds providing care
- Met criteria for SSI, and type of SSI
- What changed in the prior months