Establishing a Culture of Safety: USING A 7 S BUNDLE APPROACH FOR THE PREVENTION OFSSI

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Purpose of Project:
To develop a systematic approach to preventing surgical site infections (SSIs) in the pre-operative, intraoperative and postoperative period.

Methodology:
In 2012, a corporate team with the Title Analysis Director, Surgical Director, and Infection Preventionist developed a bundled approach for the reduction of SSIs. The team collected research on prevention measures suggested by national organizations. A seven-step approach was designed and included:

1) Safe operating room
2) Screen for risk factors and MRSA/SSSI
3) Showers with chlorhexidine
4) Skin prep with alcohol based antiseptics
5) Sutures with an antimicrobial
6) Solution to irrigate with chlorhexidine
7) Skin adhesive or antimicrobial dressings to protect incision

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Introduction
Surgical site infections (SSIs) are the most common type of hospital-acquired infections. SSIs are infections caused by microorganisms entering through surgical incisions. They can lead to increased morbidity, mortality and economic burden on the healthcare system.

SSIs are defined as any infection occurring at the surgical site within 30 days of surgery. They are classified as incisional or deep or organ/space. Incisional SSIs occur at the site of surgical incision and may be further classified as superficial or deep.

Prevention
SSIs can be prevented through a combination of evidence-based interventions. These interventions include preoperative skin preparation, surgical site preparation, use of antimicrobial prophylaxis, proper surgical technique, and infection control practices.

Preoperative Skin Preparation
Preoperative skin preparation is an important component of preventing SSIs. It involves the use of antiseptics to reduce skin bacterial counts and prepare the surgical site for surgery.

Antimicrobial Prophylaxis
Antimicrobial prophylaxis is used to reduce the risk of SSIs in patients undergoing surgery. It involves the use of antibiotics before surgery to reduce the number of bacteria at the surgical site.

Surgical Site Preparation
Surgical site preparation involves the use of antiseptics to clean and decontaminate the surgical site. This includes the use of scrubbing techniques and the application of antiseptics to the surgical site.

Infection Control Practices
Infection control practices are measures taken to prevent the spread of infections in healthcare settings. These include hand hygiene, proper use of personal protective equipment, and infection control policies.

Evidence-based interventions can significantly reduce the incidence of SSIs. The use of a bundled approach such as the 7 S Bundle can further enhance the effectiveness of these interventions.

References: