Behind the Mask:

Fundamentals of a Surgical Site Infection (SSI) Prevention Program

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Meet our Subject Matter Experts

Lori Snyder-Sloan MSN, RN, CIC

Lori is a Master's-prepared nurse with additional education and a degree in the education of adults and has 42-years of experience in Infection Prevention and hospital safety. Much of her career has been spent in the acute care setting, but she also has experience in various roles in the long-term care setting. Lori has worked as a front-line Infection Preventionist as well as in leadership within a large hospital system, including the mentoring of many novices in Infection Prevention. Currently she works as a consultant and has a specialty in surveillance of infection and is passionate about facilitating the growth of new leaders into this profession.

Alisha Sheffield BSN, RN CIC

Alisha is an Infection Preventionist and Registered Nurse with 21 years of experience in a variety of healthcare settings including ambulatory, acute care, and surgical areas. Over the past 13 years, she has worked as an Infection Preventionist in outpatient surgery as well as at a large academic medical center. Her recent work has focused on utilizing her IPC expertise to develop infection control tools and resources to assist Infection Preventionists in under-resourced settings.

Lauren Musil BSN, RN

Lauren is an Infection Preventionist with a background as Registered Nurse. She has a wide variety of healthcare experience having worked in neurology, neurosurgery, ambulatory surgery, home health and with the Nebraska Biocontainment unit. As an IP, her primary focus was in critical care, oncology, VAE prevention and as the IP to the Nebraska Biocontainment Unit. Her recent work has been spent in a grant funded role to develop innovative tools to aid IPs in rural and remote settings.

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Disclosure Declaration

- We have no financial disclosures or conflicts related to this presentation.
- This work has been grant funded through the Center for Disease Control and Prevention in support of Project Firstline.
- The views and opinions expressed during this webinar are those of the presenters and do not necessarily reflect those of the University of Nebraska Medical Center, The Nebraska Medical Center or the Centers for Disease Control and Prevention.

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Overall Series Objectives

- Analyze the fundamental components of a robust infection prevention and control (IPC) program.
- Interpret guidelines, regulatory requirements, and best practice literature for a successful application to the infection prevention program.
- Utilize identified strategies to incorporate best practice into Infection Prevention programs.
- Integrate Infection Prevention program data to target prevention and improvement strategies.
- Combine acquired knowledge to enhance collaboration and teamwork within the healthcare system.

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SSI Prevention Program Objectives

- Define Surgical Site Infection and its relevance to an IPC program.
- Define necessary elements of an SSI prevention program.
- Explore roles and reporting structures to sufficiently report SSI data.
- Utilize information presented to identify common gaps and opportunities for SSI prevention.
- Evaluate SSI prevention program to ensure alignment with regulatory requirements.

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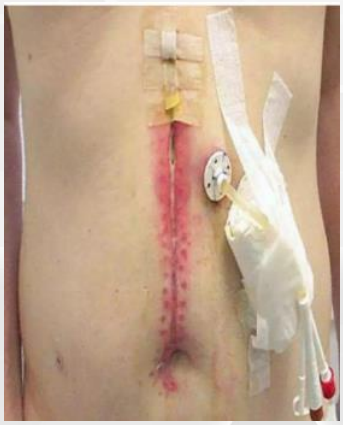
What is a Surgical Site Infection?[1]

Infection that occurs after surgery in the part of the body where the surgery took place

Signs & symptoms include:

- Fever
- Purulent drainage
- Pain/tenderness
- Erythema/heat
- Swelling



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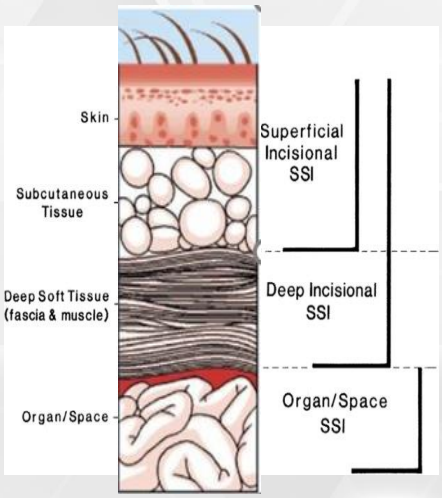
Types of SSIs [1]

Surgical Site Infections can be:

- **Incisional:**
  - Superficial: involve only skin and subcutaneous tissue
  - Deep: involve deep, soft tissues
- **Organ Space:**
  - Involve any part of anatomy other than incisional opening



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Wound Classification

Wound Class: Assessment of the degree of contamination of a surgical wound at the time of the surgical procedure.

Must be assigned by a person involved in the procedure (e.g., surgeon, circulating nurse) based on the wound class schema adopted by the organization

Cannot be used to determine PATOS

- Clean (C)/ Class I
- Clean-Contaminated (CC)/ Class II
- Contaminated (CO)/ Class III
- Dirty/ Infected (D)/ Class IV

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Burden of SSIs in the U.S.[4]

SSIs are one of the most common and costly HAIs

Patients with an SSI have a 2-11x higher risk of death	Most costly HAI with estimated annual cost of $3.3-10 billion	Cumulative 1 million additional inpatient days

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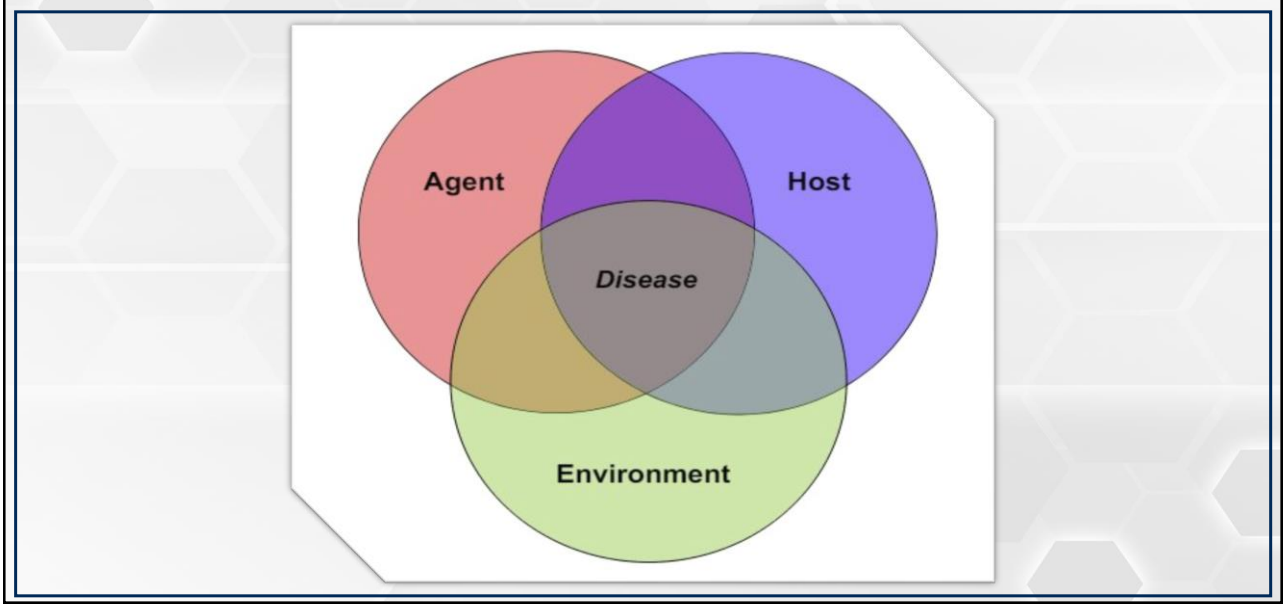
SSIs - A complex interaction [2, 4]



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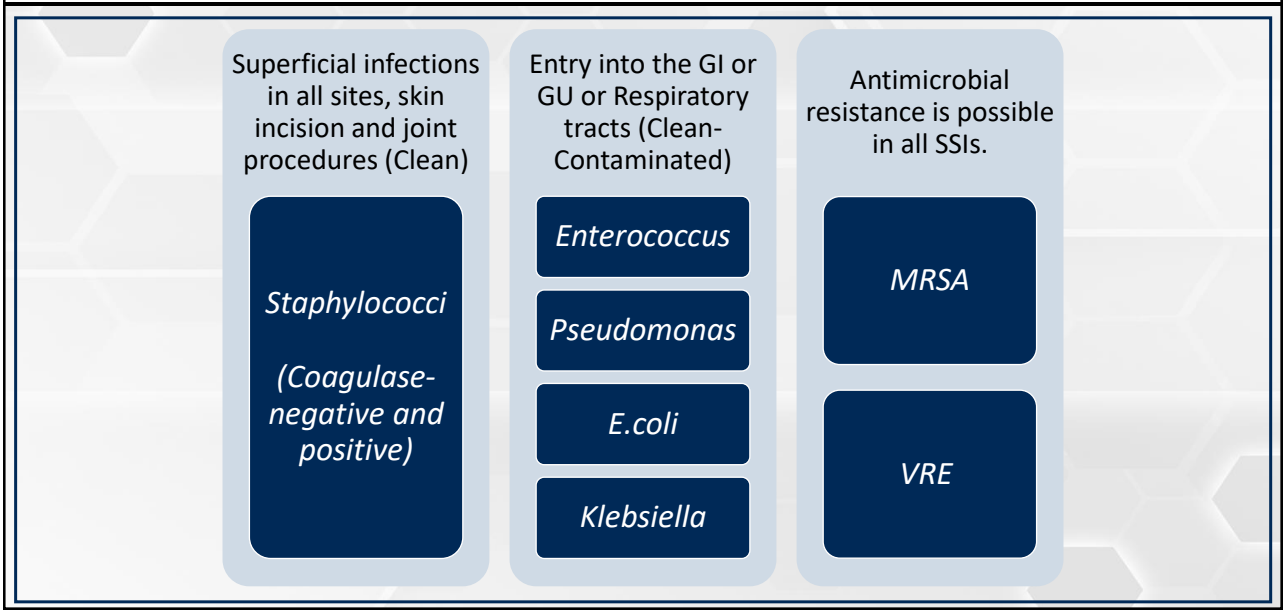
Common SSI Pathogens by Operative Site[11]



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Risk Factors for SSI [8, 11]

Patient	• Modifiable- Nutrition, smoking, obesity, glucose control, MDRO colonization • Non-modifiable- Age, sex, immunosuppression, comorbidities
Surgical Team Practices	• Surgical hand scrub • Antisepsis at the surgical site • Antimicrobial selection
Operative Environment of Care	• Cleaning & Disinfection of instruments & environment • Management of Traffic • PPE • Asepsis • Air-handling
Surgical Technique	• Careful handling of tissues • Duration of the case

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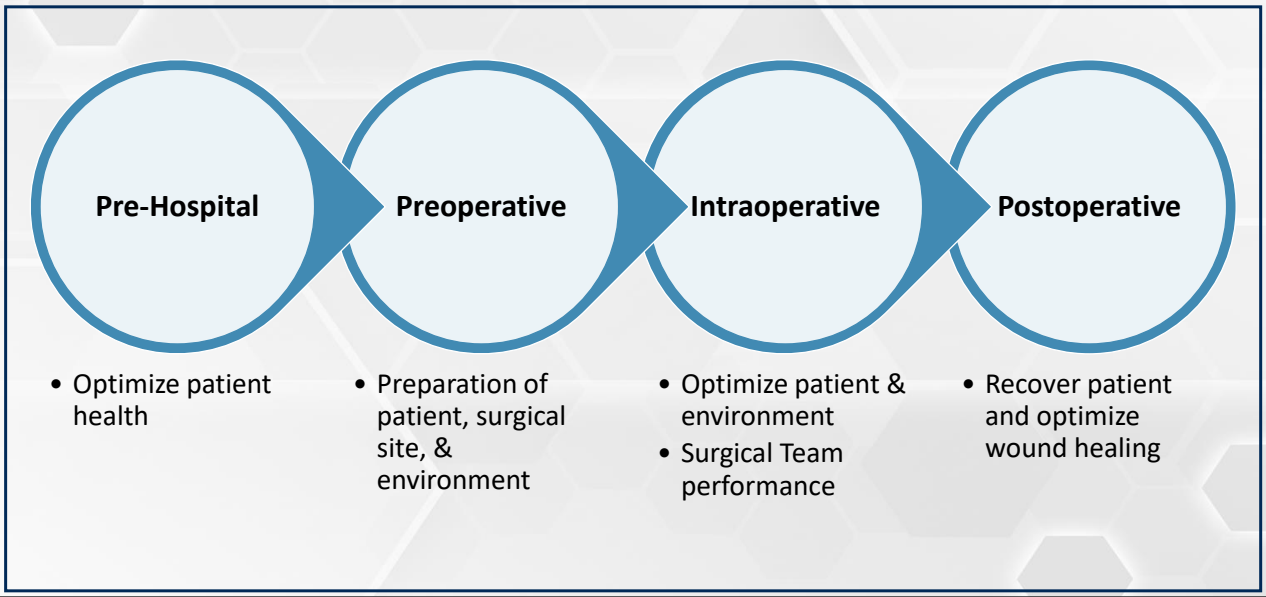
SSI Prevention Strategies[8, 11]



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Strategies for Preventing SSI [3,4]

Modifiable		
Glucose control	Control serum blood-glucose levels for all surgical patients including patients without diabetes.[345]	HIGH
Obesity	Increase dosing of prophylactic antimicrobial agent for morbidly obese patients.[73,346]	HIGH
Smoking cessation	Encourage smoking cessation within 30 days of procedure.[4,347-351]	HIGH
Immunosuppressive medications	Avoid immune-suppressive medications in perioperative period if possible	LOW
Hypoalbuminemia	No formal recommendation. Though a noted risk factor,[352] do not delay surgery for use of total parenteral nutrition.	N/A
S. aureus nasal colonization	Decolonize patients with nasal mupirocin or povidine-iodine prior to surgery	MODERATE
Preparation of patient		
Hair removal	Do not remove unless hair will interfere with the operation[4]; if hair removal is necessary, remove outside of the operating room by clipping. Do not use razors.	HIGH
Preoperative infections	Identify and treat infections remote to the surgical site (eg, urinary tract infection in the presence of prior to elective surgery.[4,353] Do not routinely test or treat for asymptomatic bacteriuria except in urologic procedures.[4,353]	MODERATE
	Administer within 1 hour of incision to maximize tissue concentration.[73] Discontinue antimicrobial agents after incisional closure in the operating room.[9]	
Blood transfusion	Blood transfusions increase the risk of SSI by decreasing macrophage function. Reduce blood loss and need for blood transfusion to greatest extent possible.[355-357]	MODERATE
Surgeon skill/technique	Handle tissue carefully and eradicate dead space.[4]	LOW
Appropriate gloving	All members of the operative team should double glove and change gloves when perforation is noted.[358]	LOW
Asepsis	Adhere to standard principles of operating room asepsis.[4]	LOW
Operative time	No formal recommendation in most recent guidelines; minimize as much as possible without sacrificing surgical technique and aseptic practice.	HIGH
Operating room characteristics		
Ventilation	Follow American Institute of Architects' recommendations for proper air handling in the operating room.[4,359]	LOW
Traffic	Minimize operating room traffic.[4,207,208]	LOW
Environmental surfaces	Use an Environmental Protection Agency (EPA)–approved hospital disinfectant to clean visibly soiled	LOW

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Topics and Relevant Resources [4, 24]

Glucose Control	Antimicrobial Prophylaxis	Decolonization	Previous infections	Gloving	CHG Bathing
Site Prep	Immunosuppression	Hair Removal	Smoking	Obesity	OR Time
Normothermia	Environmental Cleaning	Device Reprocessing	Hair Removal	Ventilation & Air Handling	Surgical Prep
	Sterile Technique	Surgical Drapes	OR Traffic	Hand Hygiene	

Title	Link
SHEA Prevention of SSI 2022 Update	Strategies to prevent surgical site infections in acute-care hospitals:
CDC Guideline for Prevention of SSI	https://jamanetwork.com/journals/jamasurgery/fullarticle/2623725 -
Association of periOperative Registered Nurses (AORN)	https://www.aorn.org/guidelines-resources/guidelines-for-perioperative-practice
APIC Text Surgical Site Infection Chapter	https://text.apic.org/toc/prevention-measures-for-healthcare-associated-infections/surgical-site-infection -
Agency for Healthcare Research & Quality (AHRQ)	https://www.ahrq.gov/hai/tools/surgery/index.html -
Association for the Advancement of Medical Instrumentation (AAMI)	https://www.aami.org

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PRE-
OPERATIVELY
Glucose Control
Obesity
Smoking
CHG Bathing
Hair Removal
Immuno-suppressive therapy
Site Prep
Antimicrobial prophylaxis
Decolonization
Tx Prior Infections
Environmental Cleaning
Gloving & PPE

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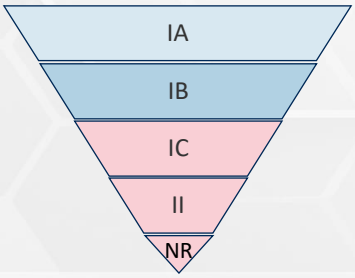
Pre-operative Strategies [4,17,18]

Nasal Decolonization

- Moderate to high depending on the procedure
- Nasal carriage of *S. aureus* is a risk factor for SSI
  - Mupirocin 2% (antibiotic)
  - Ethanol 62% (antiseptic)
  - Povidone-iodine (antiseptic)



Pre-Operative Skin Preparation

- Cleansing with soap or antiseptic agent
  - CHG bathing
- Hair removal
  - Clipping outside the OR
  - Not irritating techniques
  - Not shaving

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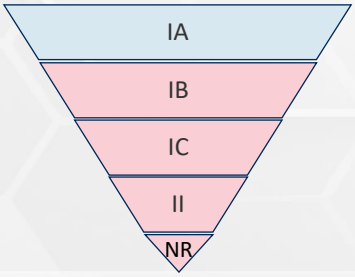
Pre-operative Strategies[24, 25]

Antimicrobial Administration

- Timing
- Selection
- Dosing
- Discontinuation



Opportunity for Antimicrobial Stewardship Program to partner to ensure we are following recommended practices

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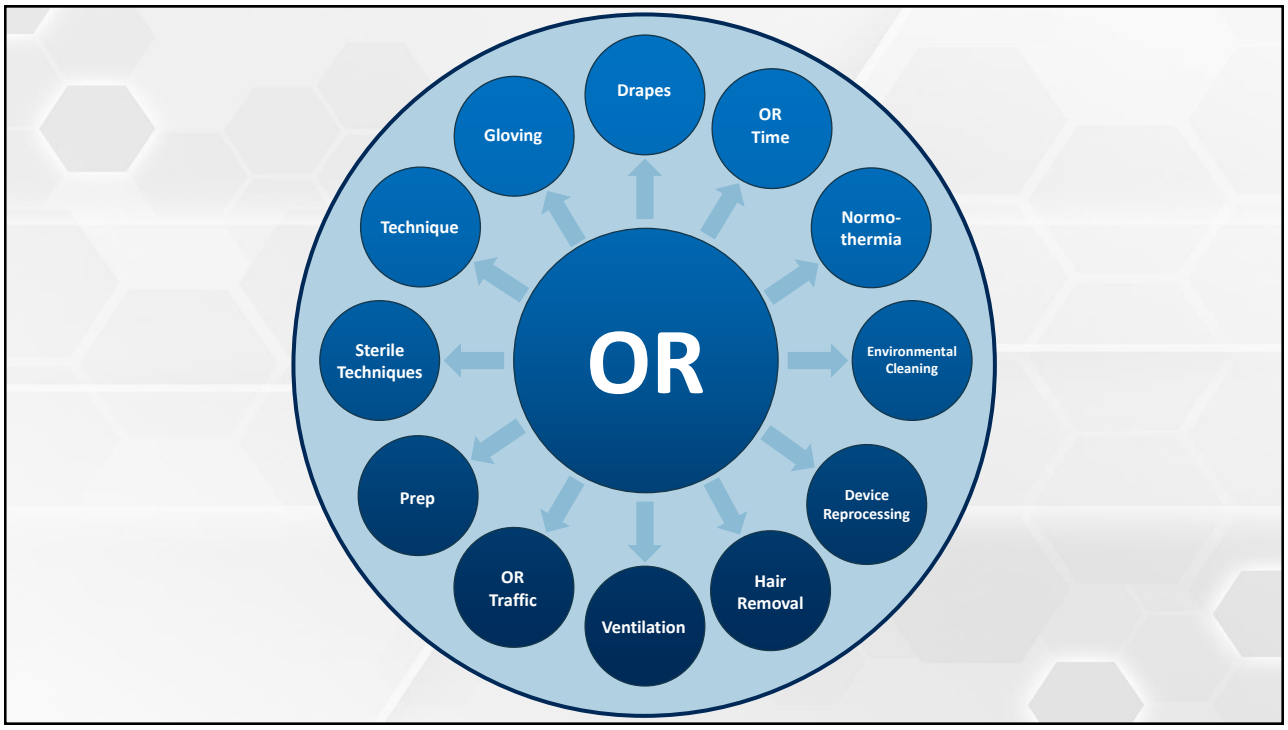
OR
Drapes
OR Time
Normo-thermia
Environmental Cleaning
Device Reprocessing
Hair Removal
Ventilation
OR Traffic
Prep
Sterile Techniques
Technique
Gloving

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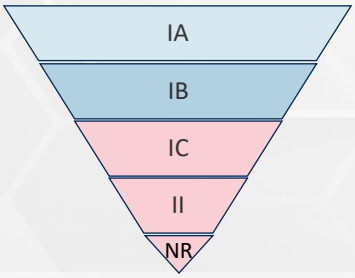
Maximizing the patient's immune function (High) [4]

Glycemic Control

All patients should have controlled glucose levels throughout the perioperative period.

Normothermia

Maintaining the patient's internal body temperature throughout the perioperative period takes teamwork.



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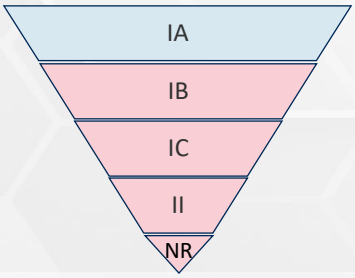
Preparing the Patients Skin [4]

- Alcohol + Antiseptic
- Clipping <u>OUTSIDE</u> OR
- NO hair removal



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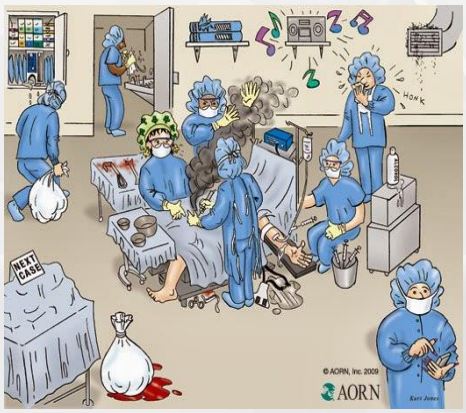
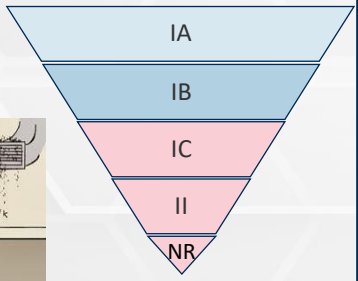
Environment of Care [8, 11]

- Air-Handling/ HVAC
- Traffic Patterns
- Surgical Attire
- Environmental Cleaning
- Waste Management
- Distraction (music)
- Sterile Supply Storage





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Systematic Cleaning OR [13]

- Roles & Responsibilities
- Frequency
- Process
- Tools & Chemicals/Product
- Special Equipment

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Device Reprocessing [14, 16]

Monitoring and tracking

- Instrument trays
- Implants

Quality control checks in the OR

- Wrappers
- Filters
- Holes
- Chemical indicators
- Moistening soiled instruments

Immediate Use Steam Sterilization (IUSS)

- Only as needed
- Never use for implants
- Track utilization

Infection Preventionist's Role in SSI Prevention

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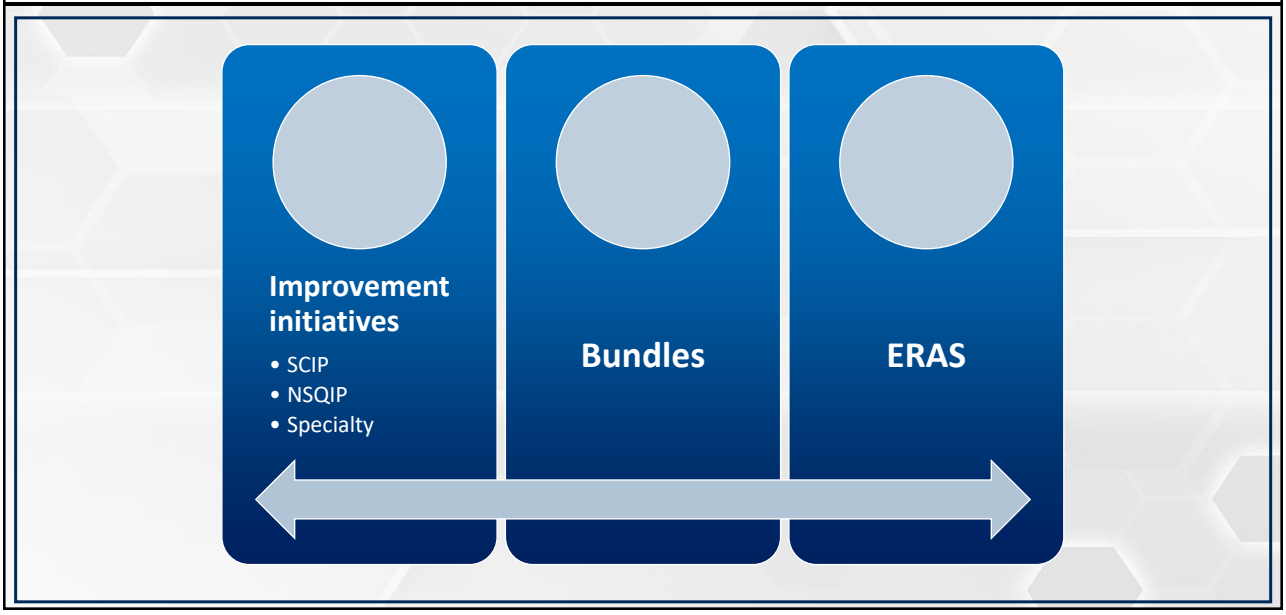
Multi-Disciplinary Hospital Surgical Improvement Team [7, 8]



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SSIs and the Bundle Concept [21, 22]

SSIs are not prevented by a single action or precaution, but by a **combination of evidence-based** approaches.

SSI rate was lower for patients in the bundle group (7%) compared with patients in a standard care group (15.1%)

Patients who received all 6 elements of the perioperative care bundle achieved a 2.0% risk-adjusted SSI rate, compared with 17.5% in patients who received only 1 of the elements.[1]

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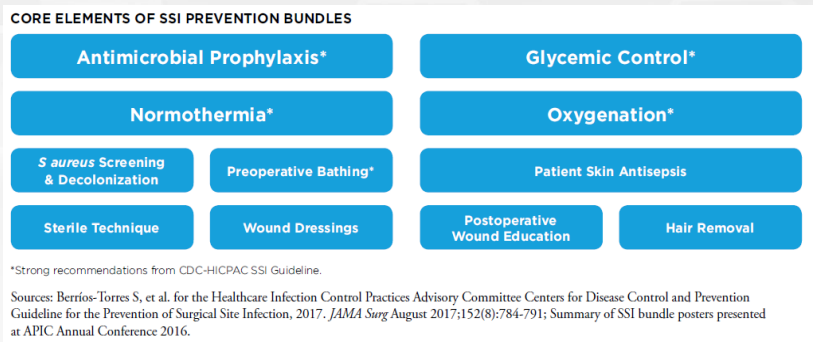
How to Select Bundle Elements

- Utilize the 4 E's
- May be procedure specific
- Utilize High levels of evidence
- Bundle elements may target various phases of the procedure



Sources: Berríos-Torres S, et al. for the Healthcare Infection Control Practices Advisory Committee Centers for Disease Control and Prevention Guideline for the Prevention of Surgical Site Infection, 2017. *JAMA Surg* August 2017;152(8):784-791; Summary of SSI bundle posters presented at APIC Annual Conference 2016.

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Procedure Specific Examples

- **Colorectal**
  - Use of silver dressings
  - Gown/glove change
  - User of new sterile closing instrument/tray
  - Combined oral and mechanical bowel prep for elective procedures
  - Use of wound protectors
- **Abdominal hysterectomy**
  - Vaginal preparation with providone iodine or CHG
  - Use of new sterile closing instrument tray
  - gown and glove change
- **Orthopedic**
  - Use of silver dressings
  - Nasal decolonization
  - Betadine irrigation of the surgical wound prior to closure
  - Traffic restriction and control during procedure
- **Cardiac**
  - Nasal Decolonization

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Enhanced Recovery After Surgery (ERAS)[19, 20, 23]

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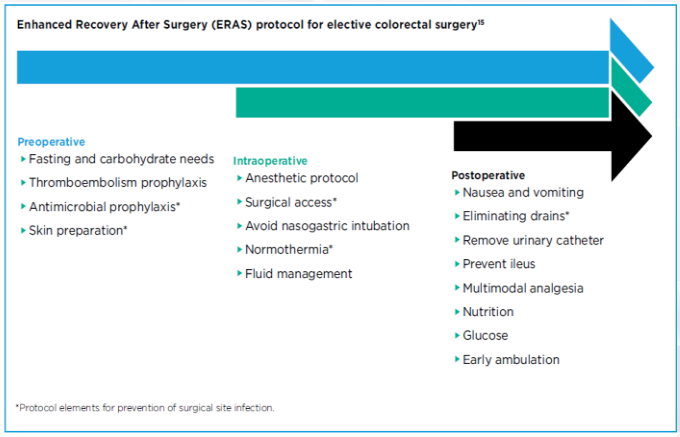
Focus on Enhanced Recovery Program (ERP):

1. Perioperative analgesia
2. Perioperative fluid management
3. Preventing nosocomial infection
4. Measurement and quality



Source: Hohenberger, H. & Delahanty, K. 2015. Patient-centered care – Enhanced recovery after surgery and population health management. AORN Journal. 102(6):578-583.

SSI Surveillance [5, 15]

Select Procedures to include in Surveillance Plan via:

- Risk Assessment
- All vs. High volume procedures
- State Code on required surveillance
- CMS Required reporting
- Risk of procedure/ performance improvement
- Point Prevalence

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Surveillance – Information Services [4, 15]

- ✓ Medical record review
- ✓ Readmissions after surgery
- ✓ Procedure Logs
- ✓ Diagnostic tests/ Imaging
- ✓ Communication from clinics, providers, other hospitals
- ✓ Microbiology reports
- ✓ Electronic surveillance reports
- ✓ Patient post-discharge communication and care
- ✓ ICD-10 coded diagnosis

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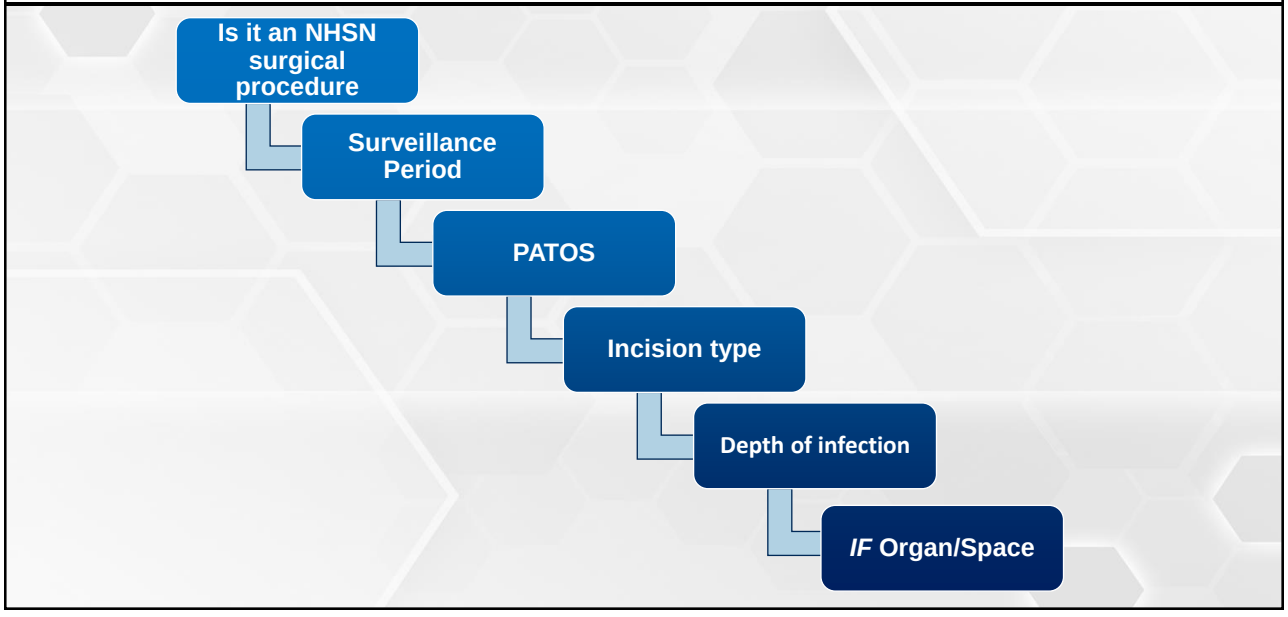
SSI Criteria to Meet[15]



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SSI Criteria to Meet[15]

Is it an NHSN surgical procedure

- Takes place in an Operating Room that meets the Facilities Guidelines Institute's (FGI) or American Institute of Architects' (AIA) criteria for an operating room when it was constructed or renovated.
- Includes an incision made through the skin
- Utilize ICD-10 Codes

…cision, resection, or anastomosis of the large intestine; includes large-to-smal…
…e REC for rectal operations

ICD-10-PCS Codes	Procedure Code Descriptions
0D180KN	Bypass Small Intestine to Sigmoid Colon with Nonautologous Tissue Substitute, Open Approach
0D1607L	Bypass Stomach to Transverse Colon with Autologous Tissue Substitute, Open Approach
0D160JL	Bypass Stomach to Transverse Colon with Synthetic Substitute Open Approach
0D160KL	Bypass Stomach to Transverse Colon with Nonautologous Tissue Substitute, Open Approach
0D160ZL	Bypass Stomach to Transverse Colon, Open Approach
0D1647L	Bypass Stomach to Transverse Colon with Autologous Tissue Substitute, Percutaneous Endoscopic Approach
0D164JL	Bypass Stomach to Transverse Colon with Synthetic Substitute Percutaneous Endoscopic Approach
0D164KL	Bypass Stomach to Transverse Colon with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach
0D164ZL	Bypass Stomach to Transverse Colon, Percutaneous Endoscopic Approach
0D1807H	Bypass Small Intestine to Cecum with Autologous Tissue Substitute, Open Approach
0D1807K	Bypass Small Intestine to Ascending Colon with Autologous Tissue Substitute, Open Approach
0D1807L	Bypass Small Intestine to Transverse Colon with Autologo… Tissue Substitute, Open Approach

SSI Criteria to Meet[15]

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Is it an NHSN surgical procedure

Surveillance Period

90-day Surveillance	
Category	**Operative Procedure**
BRST	Breast surgery
CARD	Cardiac surgery
CBGB	Coronary artery bypass graft with both chest and donor site incisions
CBGC	Coronary artery bypass graft with chest incision only
CRAN	Craniotomy
FUSN	Spinal fusion
FX	Open reduction of fracture
HER	Herniorrhaphy
HPRO	Hip prosthesis
KPRO	Knee prosthesis
PACE	Pacemaker surgery
PVBY	Peripheral vascular bypass surgery
VSHN	Ventricular shunt

30-day Surveillance			
Category	**Operative Procedure**	**Category**	**Operative Procedure**
AAA	Abdominal aortic aneurysm repair	LAM	Laminectomy
AMP	Limb amputation	LTP	Liver transplant
APPY	Appendix surgery	NECK	Neck surgery
AVSD	Shunt for dialysis	NEPH	Kidney surgery
BILI	Bile duct, liver or pancreatic surgery	OVRY	Ovarian surgery
[illegible]	[illegible]	PRST	Prostate surgery
CHOL	Gallbladder surgery	REC	Rectal surgery
[illegible]	[illegible]	SB	Small bowel surgery
CSEC	Cesarean section	SPLE	Spleen surgery
GAST	Gastric surgery	THOR	Thoracic surgery
HTP	Heart transplant	THYR	Thyroid and/or parathyroid surgery
HYST	Abdominal hysterectomy	VHYS	Vaginal hysterectomy
KTP	Kidney transplant	XLAP	Exploratory laparotomy

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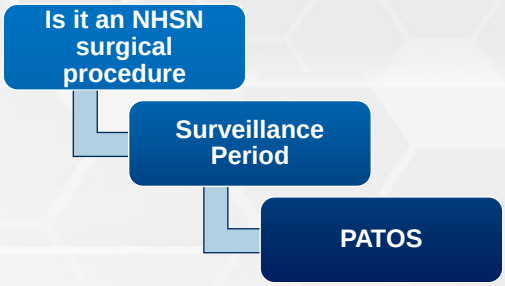
SSI Criteria to Meet[15]



Present **a**t the **T**ime **o**f **Su**rgery (PATOS)

- evidence of infection is <u>seen</u> during the surgical procedure which later develops an SSI.
- noted intraoperatively and documented within the operative note
- does not include pre/post op diagnoses, 'indication for surgery', and other headings

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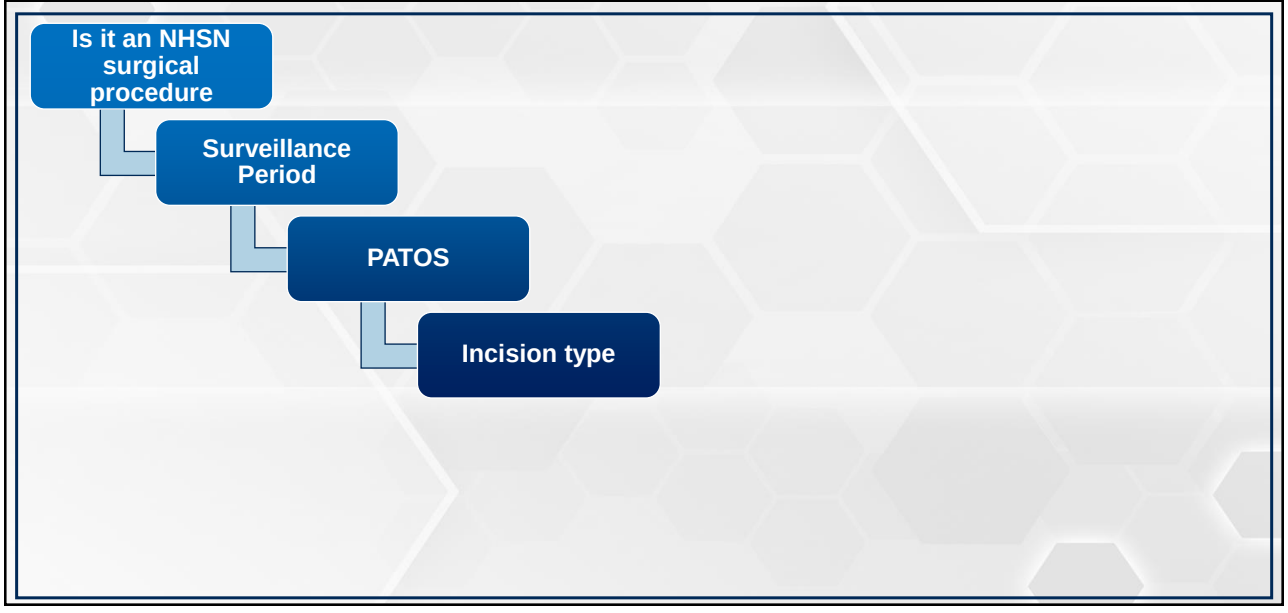
SSI Criteria to Meet[15]



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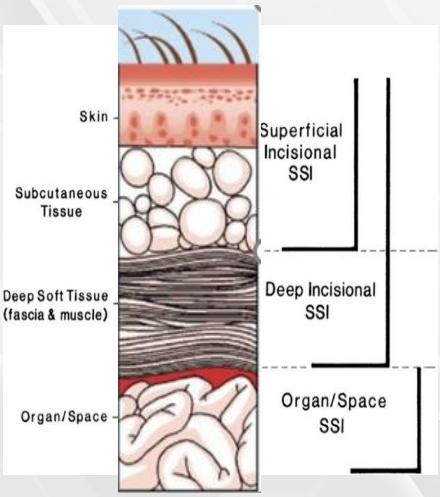
SSI Criteria to Meet[15]

- Is it an NHSN surgical procedure
- Surveillance Period
- PATOS
- Incision type
- Depth of infection



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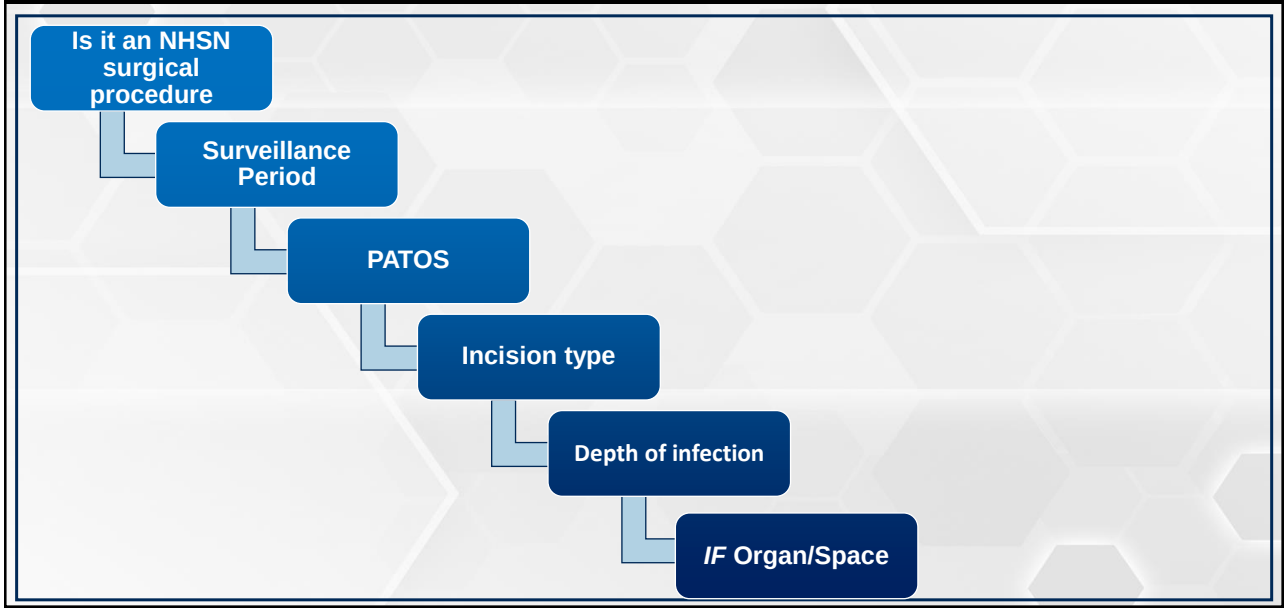
SSI Criteria to Meet[15]



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Organ/Space SSIs[15]

Category	Specific Site	Category	Specific Site
BONE	Osteomyelitis	MED	Mediastinitis
BRST	Breast abscess or mastitis	MEN	Meningitis or ventriculitis
CARD	Myocarditis or pericarditis	ORAL	Oral cavity infection (mouth, tongue, or gums)
DISC	Disc space infection	OREP	Deep pelvic tissue infection or other infection of the male or female reproductive tract
EAR	Ear, mastoid infection	PJI	Periprosthetic joint infection
EMET	Endometritis	SA	Spinal abscess/infection
ENDO	Endocarditis	SINU	Sinusitis
GIT	Gastrointestinal (GI) tract infection	UR	Upper respiratory tract, pharyngitis, laryngitis, epiglottitis
IAB	Intraabdominal infection, not specified elsewhere	USI	Urinary System Infection
IC	Intracranial infection	VASC	Arterial or venous infection
JNT	Joint or bursa infection	VCUF	Vaginal cuff infection
LUNG	Other infection of the lower respiratory tract		

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Supporting Resources

Resource	Link
SSI Events Page	https://www.cdc.gov/nhsn/pdfs/pscmanual/pcsmanual_current.pdf
NHSN Email Address	nhsn@cdc.gov
Patient Safety FAQ	https://www.cdc.gov/nhsn/faqs/faq-index.html
NHSN Educational Roadmap- Procedure-associated Module	https://nhsn.cdc.gov/lectoras/C07%20Intro%20to%20PA%20HTML%202023
APIC Implementation Guide- SSI Prevention & Orthopedic SSI prevention	• https://apic.org/Resource_/TinyMceFileManager/Implementation_Guides/APIC_ImplementationPreventionGuide_Web_FIN03.pdf • https://apic.org/wp-content/uploads/2019/10/APIC-Ortho-Guide.pdf
APIC Education Courses	https://apic.org/education-and-events/epi-education-series/

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Case Study

39-year-old male with diverticulitis is admitted for an elective colon resection

The Initial Surgery:

- Robotic laparoscopy / Low Anterior Resection
- ASA 3
- Wound class II
  (Clean-Contaminated, no evidence of infection at time of surgery)
- Duration 2h 1 min

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Case Study

Readmission:

Returns to the ED on the 10th Post-operative Day.

- **Severe abdominal pain**
- **Fever** of 104.0
- Nausea
- Leukocytosis
- Wound dehiscence.

An Abdominal CT abdomen reveals a retroperitoneal **fluid collection**.

- The patient is admitted
- 50mL of **thick yellow material**
- **Cultures grow** ESBL E.coli.

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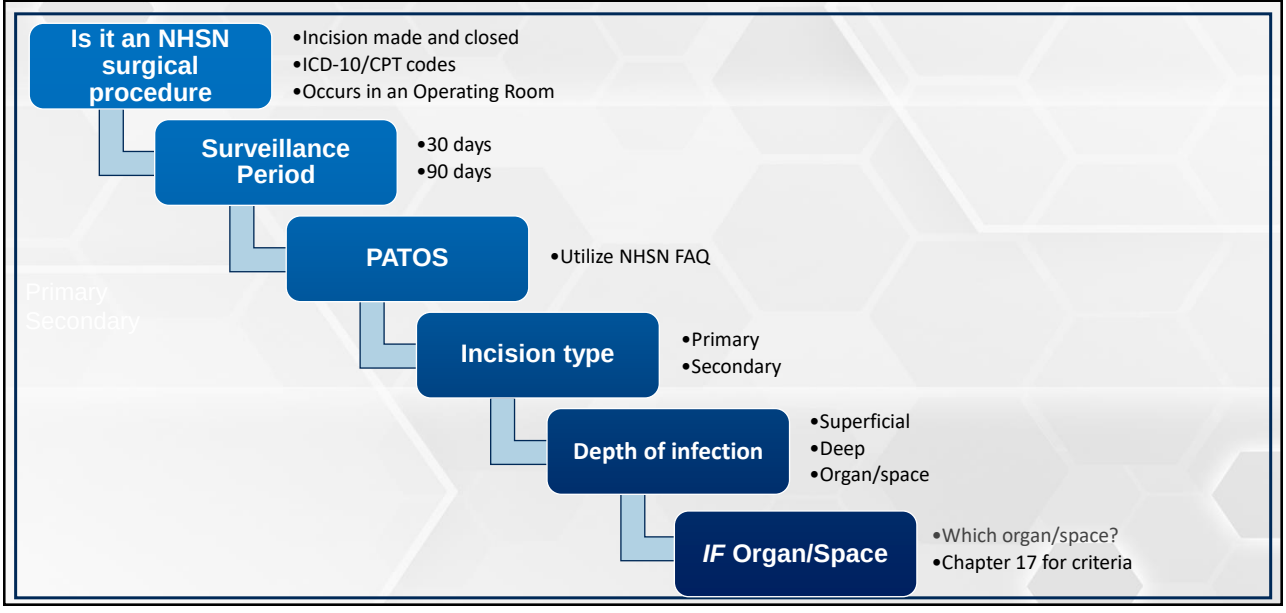
SSI Criteria to Meet[15]



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NHSN Organ Space Criteria + Specific Type of Infection [20, 21]

Organ/Space SSI

Must meet the following criteria:

Date of event occurs within 30 or 90 days following the NHSN operative procedure (where day 1 = the procedure date) according to the list in Table 2

AND

involves any part of the body deeper than the fascial/muscle layers that is opened or manipulated during the operative procedure

AND

patient has at least ***one*** of the following:

a. purulent drainage from a drain placed into the organ/space (for example, closed suction drainage system, open drain, T-tube drain, CT-guided drainage)

b. organism(s) identified from fluid or tissue in the organ/space by a culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment (for example, not Active Surveillance Culture/Testing [ASC/AST])

c. an abscess or other evidence of infection involving the organ/space detected on:

- gross anatomical exam or
- histopathologic exam or
- imaging test evidence definitive or equivocal for infection

AND

meets at least ***one*** criterion for a specific organ/space infection site listed in Table 3. These criteria are found in the Surveillance Definitions for Specific Types of Infections (Chapter 17).

DOE occurs within 30 days

Deeper than fascial/muscle
Opened during operative procedure

Purulent aspirate
ESBL E.coli was cultured from the aspirate
Aspirate seen on CT Scan

IAB w/ criterion for Organ Space

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Finalizing our SSI Case Findings

Bundle Elements	Patient
Antibiotic choice, dose, timing and re-dosing	Cefoxitin 2gm + Flagyl 500mg within 15 minutes of incision; dosed appropriately, but administered 90 minutes before the case. No re-dose or increased dosing needed for the 2 hr surgery.
Glycemic control	Glucose 92 as surgery begins
Normothermia	Yes
Skin Prep / Hair	CHG + Alcohol / Hair was clipped
Bowel prep	Was not completed, or documentation was not provided.

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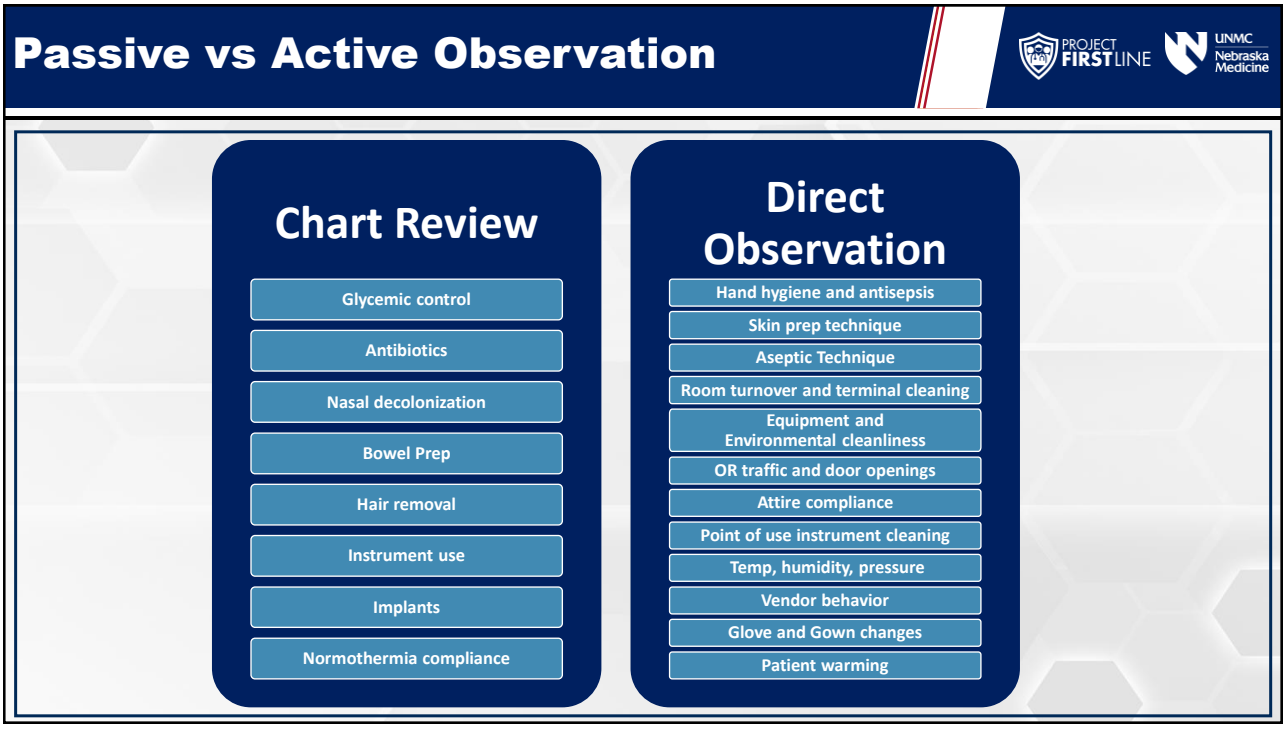
Passive vs Active Observation



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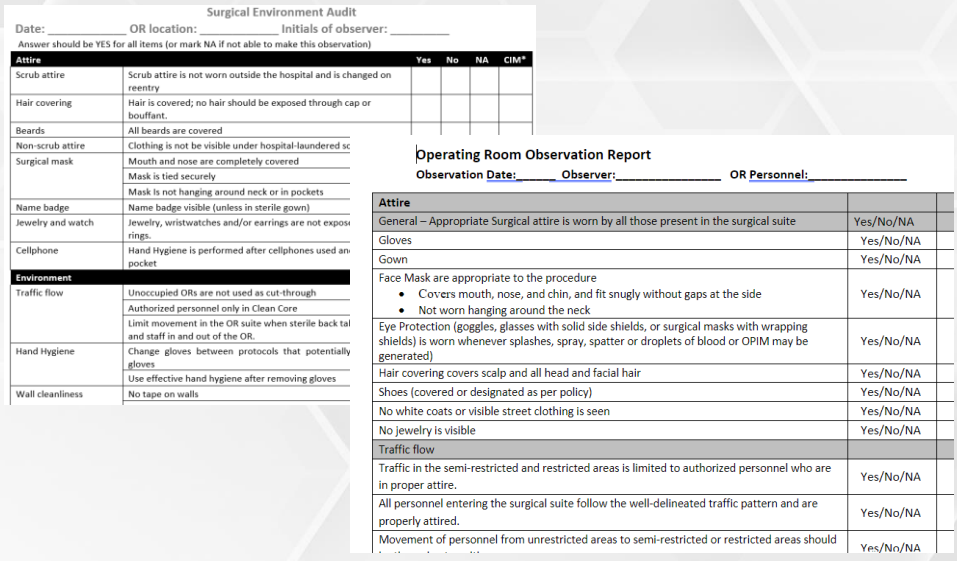
Observing for Compliance



Surgical Environment Audit

Date: _____ OR location: _____ Initials of observer: _____

Answer should be YES for all items (or mark NA if not able to make this observation)

Attire		Yes	No	NA	CIM*
Scrub attire	Scrub attire is not worn outside the hospital and is changed on reentry				
Hair covering	Hair is covered; no hair should be exposed through cap or bouffant.				
Beards	All beards are covered				
Non-scrub attire	Clothing is not be visible under hospital-laundered sc				
Surgical mask	Mouth and nose are completely covered				
	Mask is tied securely				
	Mask Is not hanging around neck or in pockets				
Name badge	Name badge visible (unless in sterile gown)				
Jewelry and watch	Jewelry, wristwatches and/or earrings are not expos				
	rings.				
Cellphone	Hand Hygiene is performed after cellphones used an				
	pocket				
Environment					
Traffic flow	Unoccupied ORs are not used as cut-through				
	Authorized personnel only in Clean Core				
	Limit movement in the OR suite when sterile back tal				
	and staff in and out of the OR.				
Hand Hygiene	Change gloves between protocols that potentially				
	gloves				
	Use effective hand hygiene after removing gloves				
Wall cleanliness	No tape on walls				

Operating Room Observation Report

Observation Date:_____ Observer:_____ OR Personnel:_____

Attire	
General – Appropriate Surgical attire is worn by all those present in the surgical suite	Yes/No/NA
Gloves	Yes/No/NA
Gown	Yes/No/NA
Face Mask are appropriate to the procedure • Covers mouth, nose, and chin, and fit snugly without gaps at the side • Not worn hanging around the neck	Yes/No/NA
Eye Protection (goggles, glasses with solid side shields, or surgical masks with wrapping shields) is worn whenever splashes, spray, spatter or droplets of blood or OPIM may be generated)	Yes/No/NA
Hair covering covers scalp and all head and facial hair	Yes/No/NA
Shoes (covered or designated as per policy)	Yes/No/NA
No white coats or visible street clothing is seen	Yes/No/NA
No jewelry is visible	Yes/No/NA
Traffic flow	
Traffic in the semi-restricted and restricted areas is limited to authorized personnel who are in proper attire.	Yes/No/NA
All personnel entering the surgical suite follow the well-delineated traffic pattern and are properly attired.	Yes/No/NA
Movement of personnel from unrestricted areas to semi-restricted or restricted areas should	Yes/No/NA

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Observing for Compliance

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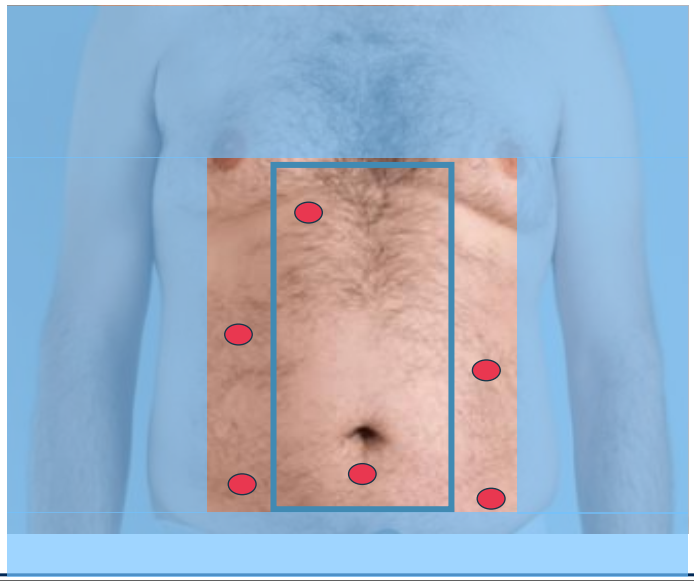
Skin Preparation

Surgical Skin Preparation
- ✓Pre-operative clipping
- ✓Site selection
- ✓Device selection



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Process Issues

- Choice of clipping method
- Timing of clipping
- Training and competency of staff
- Equipment and maintenance
- Skin Assessment
- Communication & Documentation

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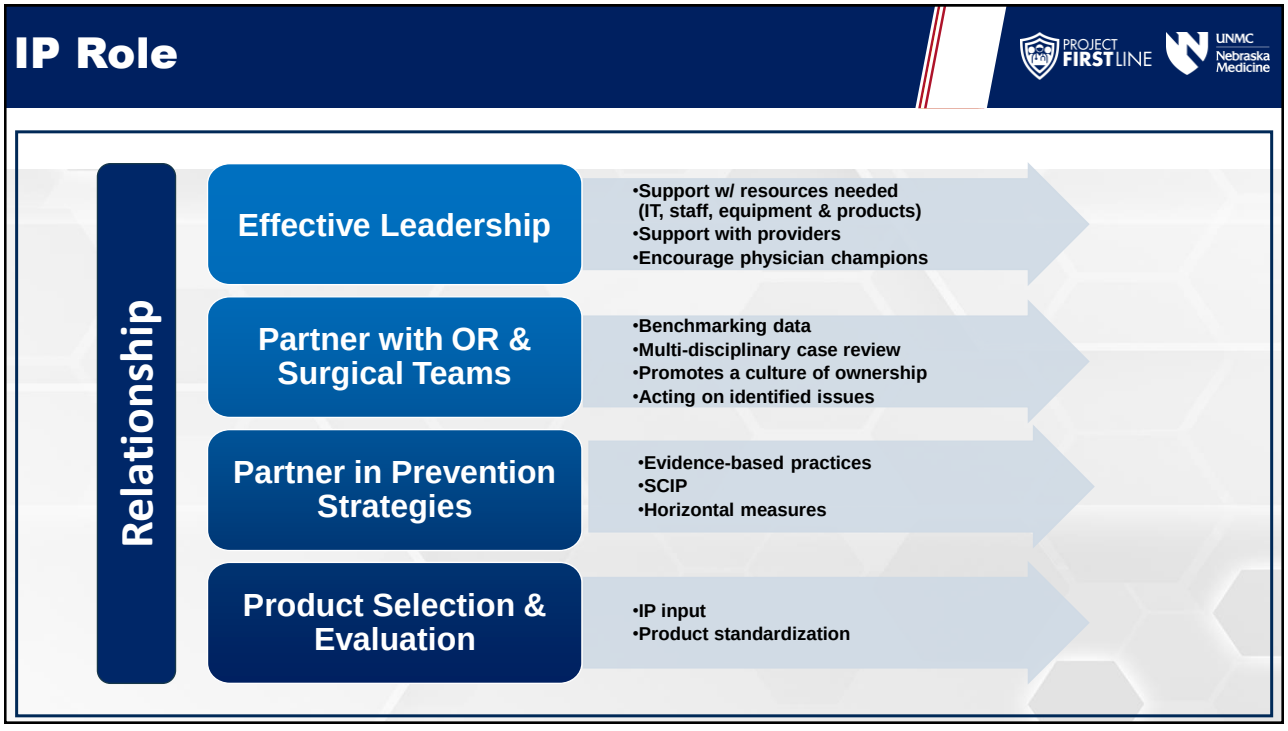
IP Role


Relationship
Effective Leadership
•Support w/ resources needed (IT, staff, equipment & products)
•Support with providers
•Encourage physician champions
Partner with OR & Surgical Teams
•Benchmarking data
•Multi-disciplinary case review
•Promotes a culture of ownership
•Acting on identified issues
Partner in Prevention Strategies
•Evidence-based practices
•SCIP
•Horizontal measures
Product Selection & Evaluation
•IP input
•Product standardization

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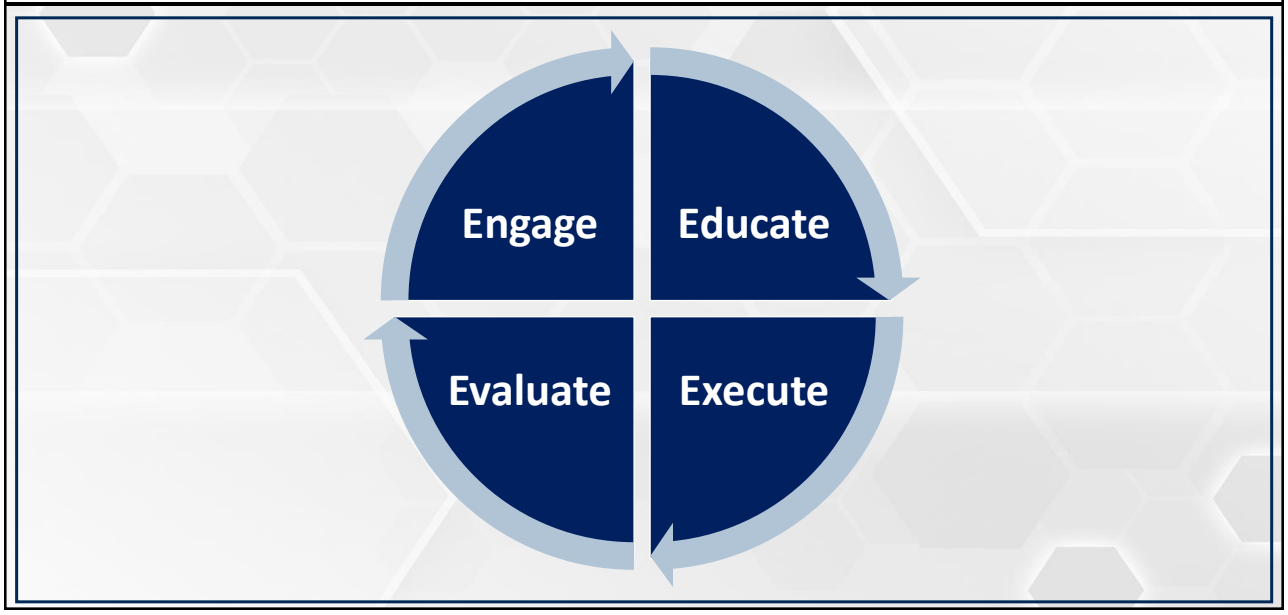
4 E's for Process Improvement



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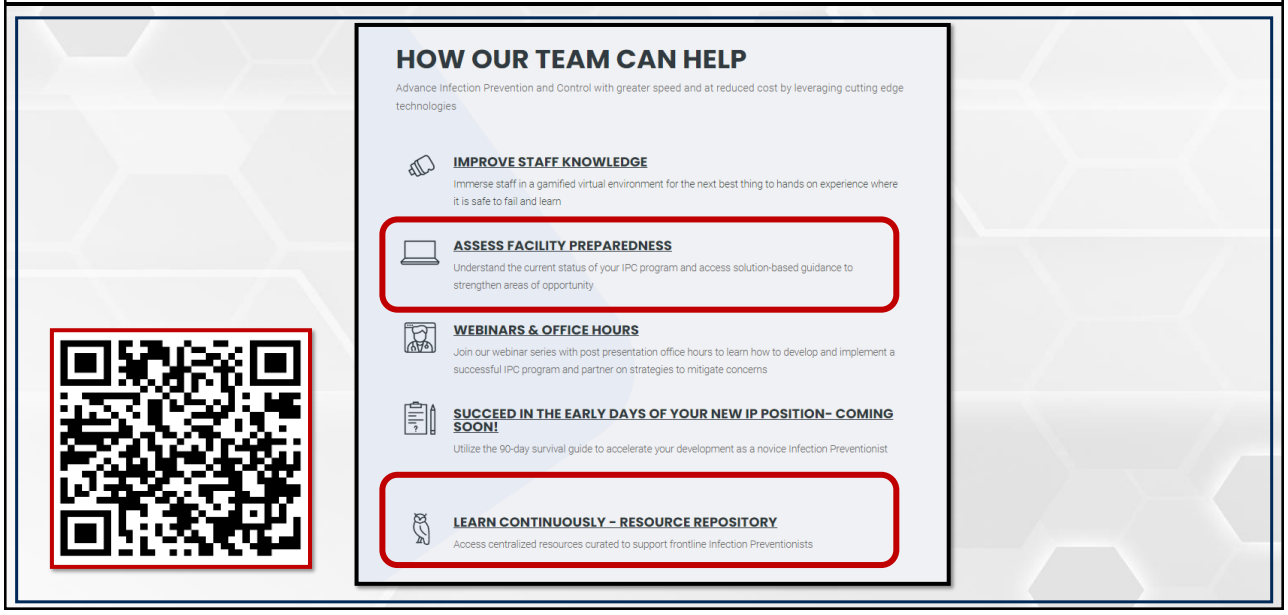
Innovate IPC website



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PROJECT FIRSTLINE

UNMC Nebraska Medicine

Join us next month for Fundamentals of IPC Rounding

August 15th, 2024

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Questions

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