



LET'S REDUCE SSI

TOGETHER

SSI's Impact on Hospitals

Take Action on Your Hospital's SSI Prevention Bundle

Successful Colorectal SSI Prevention Bundles

STOP SURGICAL
SITE **INFECTION**

Visit www.stopsurgicalsiteinfection.com
for more information

SSI'S IMPACT ON HOSPITALS

SSI has added
\$3 TO \$10
BILLION
to the cost
of healthcare¹



SSI patients require
an additional cost of
\$27,631
per infection²



SSI patients spend
an additional



days
in the hospital⁴

Over **8,000** deaths were associated

with over **290,000** cases of SSI in one year⁵

SSI patients are **60%** more likely to spend time in ICU³



SSI patients are
5X
MORE LIKELY
to be readmitted to the hospital³



SSI patients have a
2 TO 11
TIMES
higher risk of
DEATH
than patients without an
SSI⁴

2% TO 5%
of patients undergoing inpatient surgery
surgery will develop an SSI⁴





TAKE ACTION ON YOUR HOSPITAL'S SSI PREVENTION BUNDLE

Mobilizing Your SSI Prevention Team

Your hospital's success in SSI prevention may be largely dependent on the recruitment and involvement of a dedicated SSI team. Members of your SSI team should be qualified and committed to spearheading your hospital's SSI program. These team members should be responsible for communicating and implementing all SSI prevention practices and driving participation and compliance across all ranks and disciplines.

Attributes to consider as you mobilize your team:

- Multidisciplinary representation
- Executive leadership participation
- Passion for SSI prevention
- Commitment to actively participate
- Strong communication skills

Assessing Your Baseline

By conducting an assessment of your hospital's current SSI prevention practices, you will be better poised to address your hospital's performance goals. Accurate baseline knowledge will support the development of an effective SSI prevention bundle that includes customized and evidence-based measures to target your hospital's greatest needs.

Questions to consider:

- What are your current SSI rates?
- What are your current bundle measures?
- How do you track and monitor your outcomes?
- How invested is your team and hospital in implementing change?

Investing in Education

Providing your physicians, staff and patients with meaningful education based on your hospital's needs will help cultivate the adoption of clinically proven methods and influence positive change. Increasing awareness of best practices and empowering your staff with actionable knowledge will support and enhance your SSI prevention efforts.

Opportunities to provide for further education:

- National symposiums and congresses focused on SSI prevention best practices
- In-hospital workshops
- SSI awareness competency training
- Patient education classes
- Physician- and patient-engaging mobile applications

Implementing and Monitoring

After you have established your SSI prevention bundle and educated appropriate audiences on the importance and benefits of each measure, it is necessary to monitor and report your challenges and successes. Consistent surveillance will allow your SSI team to be aware of ongoing opportunities for education and improvement.

Strategies to consider for surveillance:

- Regular meetings with the SSI team
- Action plans for fallouts
- Dashboards to evaluate major trends

Through active surveillance, your SSI team will be better equipped to continue to improve your hospital's SSI prevention practices and demonstrate improvement through measurable data.



SUCCESSFUL COLORECTAL SSI PREVENTION BUNDLES

Cedars-Sinai Medical Center⁶

Los Angeles, California

Multidisciplinary team

Executives, hospital managers, colorectal surgeons, anesthesiologists, nurses, and other support staff

Evidence-based measures

Preoperative

- CHG Shower
- Bowel Prep with Choice of Antibiotics (optional)

Intraoperative

- Antibiotics
- Antibiotic Redosing
- CHG Skin Prep
- Wound Protector
- Observe Hand Hygiene
- Skin Closure Protocol

Postoperative

Wound Dressing/Care

Results

Pre-Bundle

SSI Rate: 15.5%

Post-Bundle

SSI Rate: 5.5%

Duke University Hospital⁷

Durham, North Carolina

Multidisciplinary team

Surgeons, anesthesiologists, clinic nurses, operating room staff, unit nurses, house staff, and hospital mid-level providers

Evidence-based measures

Preoperative

Patient Education
Mechanical Bowel Preparation with Oral Antibiotics
Chlorhexidine Shower
Antibiotic Prophylaxis
Skin Prep

Intraoperative

Patient Education
Fascial Wound Protector
Gown and glove change
Limited OR Traffic
Temperature Control
Glycemic Control
Sterile Dressing
Dedicated Wound Closure Tray

Postoperative

Patient Education
Timely Dressing Removal
Daily Chlorhexidine Washings
Temperature Control
Glycemic Control

Results

Pre-Bundle

Superficial SSI Rate: 19.3%

Post-Bundle

Superficial SSI Rate: 5.7%

Emory University Hospital[®]

Atlanta, Georgia

Multidisciplinary team

Surgeons, quality administration, anesthesia, nurses, statisticians, coders, and other support staff

Evidence-based measures

Preoperative

Set OR Temperature

Pre-incision

Administer Antibiotic

Prep Skin

Perform Universal Prep

Double Glove

Initiate Intraoperative Warming

Prepare Closing Pan

Intraoperative

Use Alexis[®] Wound Protector

Perform Irrigation

Postoperative

Remove Instruments

Retrieve Closing Pan

Re-Glove

Re-Towel Surgical Wound

Pass Off New Suction and Bovie

Close Fascia

Close Skin

Apply Sterile Dressing

Results

Pre-Bundle

SSI Rate: 18.79%

Post-Bundle

SSI Rate: 8.17%

1. Scott RD. The direct medical costs of healthcare-associated infections in U.S. hospitals and the benefits of prevention. http://www.cdc.gov/ncidod/dhqp/pdf/Scott_CostPaper.pdf. Published March 2009. Accessed November 30, 2015.
2. Harris R. Analysis of surgical site infection rates and cost benefits associated with plain gauze dressings compared to gauze dressings impregnated with Polyhexamethylene Biguanide (PHMB). *Am J Infect Control*. 2008; 36(5):E31-E32.
3. Kirkland KB, Briggs JP, Trivette SL, Wilkinson WE, Sexton DJ. The impact of surgical-site infections in the 1990s: Attributable mortality, excess length of hospitalization, and extra costs. *Infect Control Hosp Epidemiol*. 1999; 20(11):725-730.
4. Anderson DJ, Podgorny K, Berríos-Torres SI, et al. Strategies to prevent surgical site infections in acute care hospitals: 2014 update. *Infect Control Hosp Epidemiol*. 2014;35(6):605-627.
5. Klevens RM, Edwards JR, Richards CL Jr, et al. Estimating health care-associated infections and deaths in U.S. hospitals, 2002. *Public Health Rep*. 2007;122(2):160-166.
6. Murthy R. Implementing a bundle to reduce colorectal surgical site infection. Talk presented at: Reducing SSI: Take action with evidence; May 2, 2014; Baltimore, MD.
7. Keenan JE, Speicher PJ, Thacker JKM, Walter M, Kuchibhatla M, Mantyh CR. The preventive surgical site infection bundle in colorectal surgery: An effective approach to surgical site infection reduction and health care cost savings. *JAMA Surg*. 2014;149(10):1045-1052.
8. Sharma J. Implementation of a NSQIP based wound infection prevention process (WIPP) reduces surgical site infections. Talk presented at: Reducing SSI: A roadmap to successful implementation; June 28, 2015; Nashville, TN.

STOP SURGICAL SITE INFECTION

Visit www.stopsurgicalsiteinfection.com
for more information

© 2018 Applied Medical Resources Corporation. All rights reserved. Applied Medical, the Applied Medical logo design and marks designated with a * are trademarks of Applied Medical Resources Corporation, registered in one or more of the following countries: Australia, Canada, Japan, South Korea, the United States, and/or the European Union. 1251EXT0518

