HRET HIIN Surgical Site Infection (SSI)

WANTED!

Guidance to Prevent Surgical Site Infections in the Era of “Unresolved Issues”

June 29, 2017
WELCOME AND INTRODUCTIONS

Elizabeth Ross, MPH, Program Manager | HRET
## Agenda for Today

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Details</th>
<th>Presenter/Presenter Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:00-11:05 a.m.</td>
<td>Welcome and Introductions</td>
<td>Thank you for joining us on the HRET HIIN Surgical Site Infection Virtual Event. The purpose of today’s event is to review a resourceful tool that offers an evidence-based perspective on additional recommendations to prevent surgical site infections.</td>
<td></td>
</tr>
</tbody>
</table>
|                    |                                                                        |                                                                                                                               | Elizabeth Ross, MPH  
Program Manager, HRET                                                        |
| 11:05-11:10 a.m.   | HIIN SSI Data Resources and Update                                     | An overview from HRET on how HIIN hospitals are performing to reduce SSI.                                                                                                                               | Paul Cholod  
Data Analyst, HRET                          |
| 11:10-11:45 a.m.   | Wisconsin Division of Public Health Supplemental Guidance for the Prevention of Surgical Site Infections *(Interactive Session)* | An insightful explanation of what the Wisconsin Division of Public Health developed as a supplemental guide to the Centers for Disease Control and Prevention’s recommendations on preventing surgical site infections. Ms. Borlaug will also share practical applications that hospitals can use to implement outlined recommendations. | Gwen Borlaug, MPH, CIC  
Director, Healthcare-Associated Infections Prevention Program, Wisconsin Division of Public Health |
| 11:45-11:55 a.m.   | Your Turn: Open Lines                                                 | 1. Have you heard of or used the Wisconsin Division of Public Health’s Supplemental Guidance?  
2. What resources or tools do you or your organization currently reference to prevent SSI?  
3. What are specific challenges you are experiencing to prevent SSI among your patients?  
4. What was the process you or your organization went through to reduce SSI among patients in your organization? | Barb Debaun, MSN, RN, CIC  
Improvement Advisor, Cynosure  
Steve Tremain, MD, FACPE  
Improvement Advisor, Cynosure |
| 11:55-12:00 p.m.   | Bring it Home                                                          | Available SSI Resources  
Upcoming HRET HIIN events                                                                                                                  | Elizabeth Ross, MPH  
Program Manager, HRET                                                      |
HIIN SSI DATA UPDATE
Paul Cholod, MS, Data Analyst | HRET
### SSI Rates

**HRET HIIN June 2017 Monthly Report**  
Appendix A3. Evaluation Measure Results

**Progress to Date**

Data submitted to HRET as of 6/1/2017

**Figure 10a: Surgical Site Infection Rates**

*To date, there is no current reporting mandate for total hip replacements and total knee replacements.*

*Hospitals are reporting issues with NHSN, in particular, under-reported case volumes, particularly in the hip and knee surgery procedure categories.*

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>2016-10</th>
<th>2016-11</th>
<th>2016-12</th>
<th>2017-01</th>
<th>2017-02</th>
<th>2017-03</th>
<th>2017-04</th>
<th>2017-05</th>
<th>2017-06</th>
<th>Relative reduction, baseline to Oct '16 - May '17</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSI rate, colon surgeries</td>
<td>5.2%</td>
<td>4.1%</td>
<td>4.5%</td>
<td>4.6%</td>
<td>4.3%</td>
<td>4.3%</td>
<td>3.7%</td>
<td>3.0%</td>
<td>-16.79%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of hospitals reporting</td>
<td>86%</td>
<td>82%</td>
<td>82%</td>
<td>82%</td>
<td>76%</td>
<td>75%</td>
<td>65%</td>
<td>52%</td>
<td>--</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>SSI rate, abd hyst</td>
<td>1.3%</td>
<td>1.0%</td>
<td>1.5%</td>
<td>1.8%</td>
<td>1.8%</td>
<td>1.1%</td>
<td>1.1%</td>
<td>1.0%</td>
<td>--</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>% of hospitals reporting</td>
<td>81%</td>
<td>77%</td>
<td>77%</td>
<td>76%</td>
<td>78%</td>
<td>70%</td>
<td>61%</td>
<td>20%</td>
<td>--</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>SSI rate, knee surgeries</td>
<td>0.7%</td>
<td>0.6%</td>
<td>0.5%</td>
<td>0.7%</td>
<td>0.5%</td>
<td>0.4%</td>
<td>0.5%</td>
<td>0.2%</td>
<td>-36.58%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of hospitals reporting</td>
<td>72%</td>
<td>66%</td>
<td>65%</td>
<td>65%</td>
<td>63%</td>
<td>62%</td>
<td>56%</td>
<td>41%</td>
<td>--</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>SSI rate, hip surgeries</td>
<td>1.3%</td>
<td>1.0%</td>
<td>1.1%</td>
<td>0.8%</td>
<td>1.1%</td>
<td>1.0%</td>
<td>0.8%</td>
<td>0.5%</td>
<td>-16.45%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of hospitals reporting</td>
<td>71%</td>
<td>65%</td>
<td>64%</td>
<td>64%</td>
<td>64%</td>
<td>62%</td>
<td>56%</td>
<td>40%</td>
<td>--</td>
<td>--</td>
<td></td>
</tr>
</tbody>
</table>

Data submission represents percentage of hospitals expected to report data for the measure. Relative reduction represents preliminary results for the first six months of reporting.

Results for months where data submission is below 50% should be interpreted with caution.

Results are for hospitals reporting both baseline AND monitoring data.
SSI Standardized Infection Ratios

HRET HIIN June 2017 Monthly Report
Appendix A3. Evaluation Measure Results

Progress to Date
Data submitted to HRET as of: 6/1/2017

Figure 10b: Standardized Infection Ratios - SSI

The Standardized Infection Ratio (SIR) is available only for those hospitals reporting to NHSN. The SIR shown here are based on the 2015 baseline, released Jan 2017.

Results based on SIRs should be interpreted cautiously. SIRs may not be available for smaller hospitals. For smaller hospitals with low catheter utilization and infrequent infection events, assessing improvement is challenging.

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>2016-10</th>
<th>2016-11</th>
<th>2016-12</th>
<th>2017-01</th>
<th>2017-02</th>
<th>2017-03</th>
<th>2017-04</th>
<th>2017-05</th>
<th>2017-06</th>
<th>Relative reduction, baseline to Oct '16 - Mar '17 (+)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSI SIR, colon surgeries</td>
<td>0.93</td>
<td>0.71</td>
<td>0.71</td>
<td>0.93</td>
<td>0.87</td>
<td>0.77</td>
<td>0.65</td>
<td></td>
<td></td>
<td></td>
<td>-17.03%</td>
</tr>
<tr>
<td>% of hospitals reporting</td>
<td>76%</td>
<td>73%</td>
<td>72%</td>
<td>72%</td>
<td>67%</td>
<td>64%</td>
<td>55%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SSI SIR, abd hyst</td>
<td>0.92</td>
<td>0.68</td>
<td>0.57</td>
<td>0.76</td>
<td>0.76</td>
<td>0.79</td>
<td>0.73</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of hospitals reporting</td>
<td>76%</td>
<td>73%</td>
<td>72%</td>
<td>72%</td>
<td>66%</td>
<td>63%</td>
<td>54%</td>
<td></td>
<td></td>
<td></td>
<td>-25.99%</td>
</tr>
<tr>
<td>SSI SIR, knee surgeries</td>
<td>0.33</td>
<td>0.23</td>
<td>0.12</td>
<td>0.21</td>
<td>0.21</td>
<td>0.12</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>% of hospitals reporting</td>
<td>47%</td>
<td>41%</td>
<td>40%</td>
<td>40%</td>
<td>36%</td>
<td>33%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-47.55%</td>
</tr>
<tr>
<td>SSI SIR, hip surgeries</td>
<td>0.54</td>
<td>0.35</td>
<td>0.44</td>
<td>0.34</td>
<td>0.39</td>
<td>0.44</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-30.50%</td>
</tr>
<tr>
<td>% of hospitals reporting</td>
<td>46%</td>
<td>40%</td>
<td>39%</td>
<td>40%</td>
<td>35%</td>
<td>32%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Data submission represents percentage of hospitals expected to report data for the measure. (+) Relative reduction represents preliminary results for the first six months of reporting. For knee surgeries and hip surgeries, 6-month data submission falls below the 50% reporting threshold, therefore relative reduction is based on 4Q 2016.

Results for months where data submission is below 50% should be interpreted with caution.

Results are for hospitals reporting both baseline AND monitoring data.

PROGRESS TO DATE - 15
SSI GUIDANCE: SETTING THE TABLE

Barbara DeBaun, RN, MSN, CIC
Steve Tremain, MD, FACPE
Improvement Advisors
Cynosure Health
A PRACTICAL GUIDANCE FOR THE PREVENTION OF SSI

Gwen Borlaug, MPH, CIC
Director, Health-care Associated Infections Prevention Program
Wisconsin Division of Public Health
Wisconsin Division of Public Health Supplemental Guidance for the Prevention of Surgical Site Infections: An Evidence-Based Perspective

2017

P-01715 (Rev. 3/2017)
Focus on SSI: what are we missing?

Lessons learned
<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category IA</td>
<td>A strong recommendation supported by high- to moderate-quality evidence suggesting net clinical benefits or harms.</td>
</tr>
<tr>
<td>Category IB</td>
<td>A strong recommendation supported by low-quality evidence suggesting net clinical benefits or harms, or an accepted practice, supported by low- to very low-quality evidence.</td>
</tr>
<tr>
<td>Category IC</td>
<td>A strong recommendation required by state or federal regulation.</td>
</tr>
<tr>
<td>Category II</td>
<td>A weak recommendation supported by any quality evidence suggesting a tradeoff between clinical benefits and harms.</td>
</tr>
<tr>
<td>No recommendation/unresolved issue</td>
<td>An unresolved issue for which there is either low- to very low-quality evidence with uncertain tradeoffs between benefits and harms or no published evidence on outcomes deemed critical to weighing the risks and benefits of a given intervention.</td>
</tr>
</tbody>
</table>
Interventions for All Procedures

- Antimicrobial prophylaxis (AMP)
- Glycemic control
- Normothermia
- Oxygenation
- Antiseptic prophylaxis
Additional Interventions

• Prosthetic joint
  – Staphyloccocal screening and decolonization
  – blood transfusion
  – systemic immunosuppressive therapy, intra-articular corticosteroid injection, anticoagulation, orthopedic space suits, and biofilms

• Colorectal
  – Mechanical bowel preparation with antibiotics
Wisconsin DPH SSI Prevention

- Site visits by subject matter expert/state surgical care improvement champion
- Data validation
- Current journal library
  https://www.dhs.wisconsin.gov/hai/ssi-prevention.htm
- Patient education
- Radio campaign
- Annual summits
- SSI prevention practices survey
- State SSI guidance document
Polling Question

In my facility, we:

a. Give every surgical patient the same dose of prophylactic antibiotics
b. Adjust prophylactic antibiotics based on patient’s BMI or weight
c. Not sure
Polling Question

At my facility, we:

a. Re-dose prophylactic antibiotics based on the drug half-life and duration of surgery
b. Do not re-dose
c. Not sure
Polling Question

At my facility we:

a. Provide pre-operative antibiotics and mechanical bowel preparation prior to colo-rectal surgery

b. No, we don’t

c. Not sure
### Antimicrobial Prophylaxis

<table>
<thead>
<tr>
<th>HICPAC SSI Prevention Guidelines</th>
<th>WDPH SSI Prevention Guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. No recommendation can be made regarding the safety and effectiveness of weight-based dosing of parenteral prophylactic agents to prevent surgical site infection (No recommendation/unresolved issue)</td>
<td>3. Follow the 2013 American Society of Health-System Pharmacists (ASHP) guidelines for antimicrobial prophylaxis in surgery. Administer prophylactic antibiotic agents based on the patient’s Body Mass Index (BMI) or the patient’s weight in kilograms. For example, patients with a BMI &lt; 30 (or &lt; 120 kg) should receive 2 grams of a beta-lactam agent; patients with a BMI ≥ 30 (or ≥ 120 kg) should receive 3 grams.</td>
</tr>
<tr>
<td>4. No recommendation can be made regarding the safety and effectiveness of intraoperative re-dosing of parenteral prophylactic antimicrobial agents for the prevention of SSI (No recommendation/unresolved issue).</td>
<td>4. Base re-dosing of antibiotic agents on the drug half-life and duration of surgery.</td>
</tr>
</tbody>
</table>

American Hospital Association
# Antimicrobial Prophylaxis

<table>
<thead>
<tr>
<th>HICPAC SSI Prevention Guidelines</th>
<th>WDPH SSI Prevention Guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. This issue not addressed.</td>
<td>6. Include preoperative oral antibiotics in combination with mechanical bowel preparations (OA-MBP) as a safe and effective adjunctive strategy for reducing the risk of infection following colorectal surgery. Current peer-reviewed evidence indicates that OA-MBP should be part of a comprehensive colorectal surgical care bundle. (^{10-14})</td>
</tr>
</tbody>
</table>
Polling Question

In my facility, we:

a. Avoid increased risk of hypoglycemic events associated with tight glycemic control
b. Not on our radar
c. Not sure
Polling Question

In my facility, we:

a. Aim to maintain a hemoglobin A1C of <6.7 for all surgical patients
b. Only focus on patients with known diabetes
c. Not on our radar
d. Not sure
## Glycemic Control

<table>
<thead>
<tr>
<th>HICPAC SSI Prevention Guidelines</th>
<th>WDPH SSI Prevention Guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Implement perioperative glycemic control and blood glucose target levels of &lt;200 mg/dl in diabetic and non-diabetic surgical patients (Category 1A).</td>
<td>1. Maintain a mean perioperative blood glucose level &lt;200 mg/dl in diabetic and non-diabetic surgical patients.(^\text{15,16})</td>
</tr>
<tr>
<td>2. No recommendation can be made regarding the safety and effectiveness of lower or narrower blood glucose target levels and SSI (No recommendation/unresolved issue).</td>
<td>2. Avoid increased risk of hypoglycemic events and increased mortality associated with tight glycemic control (81 to 108 mg/dl).(^\text{17,18})</td>
</tr>
<tr>
<td>3. No recommendation can be made regarding hemoglobin A1C target levels and risk of SSI in diabetic and non-diabetic patients (No recommendation/unresolved issue).</td>
<td>3. Maintain hemoglobin A1C level &lt;6.7. This has been shown to minimize postoperative infectious complications in surgical patients.(^\text{19,20})</td>
</tr>
</tbody>
</table>
Polling Question

In my facility, we:

a. Keep our surgical patients warm before, during, and after surgery
b. Are not focused on keeping patients warm
c. Not sure
## Normothermia

<table>
<thead>
<tr>
<th>HICPAC SSI Prevention Guidelines</th>
<th>WDPH SSI Prevention Guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Maintain perioperative normothermia (Category 1A).</td>
<td>1. No difference in guidance recommendation.</td>
</tr>
<tr>
<td>2. No recommendation can be made regarding the safety or effectiveness of strategies to achieve and maintain normothermia, the lower limit of normothermia, or the optimal timing and duration of normothermia (No recommendation/unresolved issue).</td>
<td>2. Consider use of forced-air warming (FAW) to reduce incidence of SSIs.</td>
</tr>
</tbody>
</table>

Based on 67 trials (45 of which were randomized controlled trials) with 5,438 participants, a Cochrane Collaboration found that FAW reduced incidence of SSIs and complications among patients undergoing abdominal surgery.\(^{21}\) It was also beneficial in preventing major cardiovascular complications in patients with substantial cardiovascular disease.\(^{21}\) It has been suggested that use of FAW in laminar air flow operating rooms during orthopedic procedures may pose a risk for intraoperative wound contamination, however, there are no definitive clinical studies suggesting that FAW increases the risk of postoperative surgical site infections.\(^{22,23}\) Normothermia should be maintained in the preoperative, intraoperative and in the postoperative environment.\(^ {24}\)
Polling Question

In my facility, we

a. Provide high oxygen supplementation to patients under-going colon surgery
b. Do not provide high oxygen supplementation to surgical patients
c. Not sure
## Oxygenation

<table>
<thead>
<tr>
<th>HICPAC SSI Prevention Guidelines</th>
<th>WDPH SSI Prevention Guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. For patients with normal pulmonary function undergoing general anesthesia with endotracheal intubation, administer an increased fraction of inspired oxygen (FiO2) both intraoperatively and post-extubation in the immediate postoperative period. To optimize tissue oxygen delivery, maintain perioperative normothermia and adequate volume replacement (Category IA).</td>
<td>1. No difference in guidance recommendation.</td>
</tr>
<tr>
<td>2. No recommendation can be made regarding the safety and effectiveness of administering a perioperative increased fraction of inspired oxygen (FiO2) for the prevention of SSI in patients with normal pulmonary function undergoing either general anesthesia without endotracheal intubation or neuraxial anesthesia (i.e., spinal, epidural, or local nerve blocks) (No recommendation/unresolved issue).</td>
<td>2. Consider use of high oxygen supplementation as an SSI risk reduction strategy during colorectal procedures. The use of high oxygen supplementation as an SSI risk reduction strategy is controversial. However, oxygen supplementation (80% FiO2) during the perioperative period has been documented to reduce the risk of SSI in patients undergoing colorectal surgeries.25,26 In heterogeneous patient populations comprised of abdominal, gynecological, breast-related or bariatric patient populations, supplemental oxygen administration demonstrated no SSI reduction benefit.27-29</td>
</tr>
<tr>
<td>3. No recommendation can be made regarding the safety and effectiveness of administering increased fraction of inspired oxygen (FiO2) via facemask or nasal cannula only during the postoperative period for the prevention of SSI in patients with normal pulmonary function (No recommendation/unresolved issue).</td>
<td></td>
</tr>
<tr>
<td>4. No recommendation can be made regarding the optimal target level, duration, and delivery method of the fraction of inspired oxygen (FiO2) for the prevention of surgical site infection (No recommendation/unresolved issue).</td>
<td></td>
</tr>
</tbody>
</table>
Polling Question

In my facility, we

a. Have reliable processes to provide pre-surgical skin antisepsis/bathing for our patients
b. No, we don’t have this in place
c. Not sure
## Antiseptic and Non-Parenteral Antimicrobial Prophylaxis

<table>
<thead>
<tr>
<th>HICPAC SSI Prevention Guidelines</th>
<th>WDPH SSI Prevention Guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Perform intraoperative skin preparation with an alcohol-based antiseptic agent, unless contraindicated (Category IA).</td>
<td>1. Use 2% chlorhexidine gluconate (CHG) with 70% alcohol as the preferred intraoperative skin preparation agent. CHG is also a safe and effective antiseptic agent for obstetrical and gynecologic procedures.</td>
</tr>
<tr>
<td>2. Advise patients to shower or bathe (full body) with either soap (antimicrobial or non-antimicrobial) or an antiseptic agent on at least the night before the operative day (Category IB).</td>
<td>2. Ensure that all patients undergoing elective surgical procedures involving skin incisions undergo a standardized preadmission shower/cleansing with 4% aqueous or 2% (cloth coated) CHG.</td>
</tr>
<tr>
<td>3. No recommendation can be made regarding the optimal timing of the preoperative shower or bath, the total number of soap or antiseptic agent applications, or the use of chlorhexidine gluconate washcloths for the prevention of SSI (No recommendation/unresolved issue).</td>
<td>3. Standardize the preadmission shower or cleansing process according to the protocols below. Recent randomized controlled trials have documented that high skin surface concentrations of CHG can be obtained by standardization of the preadmission shower or cleansing process using 4% aqueous chlorhexidine gluconate (CHG) or 2% CHG coated on a disposable polyester cloth.</td>
</tr>
<tr>
<td>HICPAC SSI Prevention Guidelines</td>
<td>WDPH SSI Prevention Guidance</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td></td>
<td>instructions regarding the standardized CHG cloth cleansing, emphasizing gentle application of the cloths to the skin.</td>
</tr>
<tr>
<td>4. Consider intraoperative irrigation of deep or subcutaneous tissues with aqueous iodophor solution for the prevention of SSI. Intra-peritoneal lavage with aqueous iodophor solution in contaminated or dirty abdominal procedures is not necessary (Category II).</td>
<td>- Instruct patients to use a total of 12 cloths per cleansing—6 cloths the night before surgery, and another 6 cloths the morning of surgery. Ensure patients understand they should use both sides of the cloth to maximize release of the CHG onto the skin.</td>
</tr>
<tr>
<td>5. No recommendation can be made regarding the safety and effectiveness of soaking prosthetic devices in antiseptic solutions prior to implantation for the prevention of SSI (No</td>
<td>5. No difference in guidance recommendation.</td>
</tr>
</tbody>
</table>
Interventions Omitted from Consideration in the HICPAC SSI Prevention Guidelines

Staphylococcal Surveillance

Although staphylococcal surveillance and use of surgical care bundles are not included in the HICPAC SSI Prevention Guidelines, members of the WDPH SSI Prevention Expert Panel recommend these strategies in addition to the interventions described above, as part of a comprehensive surgical care improvement program.

Results of several published studies suggest that suppression of the methicillin-sensitive Staphylococcus aureus (MSSA) and methicillin-resistant S. aureus (MRSA) carrier state is effective in reducing the occurrence of SSIs caused by these surgical wound pathogens. Nasal mupirocin (twice daily for 5 to 7 days) with a minimum of two 4% aqueous CHG showers has been widely used for the suppression of nasal carriage of MSSA and MRSA. Although mupirocin has been viewed as the “gold standard” for suppressing staphylococci in the nares, the suppression of organisms in the nares on the morning of surgery using a swab coated with 5% or 10% povidone iodine (0.5% available iodine) has been shown to be an effective alternative. Considering the current
### Table II. Selective elements of the surgical care bundle from the evidence-based literature

<table>
<thead>
<tr>
<th>Element</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appropriate antimicrobial prophylaxis</td>
<td>Antimicrobial (triclosan) sutures</td>
</tr>
<tr>
<td>Weight-based dosing</td>
<td>Smoking cessation</td>
</tr>
<tr>
<td>Glycemic control</td>
<td>Staphylococcal surveillance (cardiothoracic and orthopedic procedures)</td>
</tr>
<tr>
<td>Normothermia</td>
<td>Oral antibiotics plus mechanical bowel preparation (colorectal)</td>
</tr>
<tr>
<td>Appropriate hair removal</td>
<td>Minimally invasive surgery</td>
</tr>
<tr>
<td>Supplemental O₂ (colorectal procedures)</td>
<td>Short duration of surgery</td>
</tr>
<tr>
<td>Use of wound edge protectors</td>
<td>Glove change prior to fascia and skin closure</td>
</tr>
<tr>
<td>Dedicated wound closure tray for fascia and</td>
<td>Limit traffic in the operating room</td>
</tr>
<tr>
<td>skin</td>
<td></td>
</tr>
<tr>
<td>Pre-operative 4% CHG shower or 2% CHG</td>
<td>CHG cleansing of surgical wound</td>
</tr>
<tr>
<td>cleansing</td>
<td></td>
</tr>
<tr>
<td>70% alcohol with 2% CHG perioperative skin</td>
<td>Keep sterile dressing intact for first 48 hours</td>
</tr>
<tr>
<td>preparation</td>
<td></td>
</tr>
</tbody>
</table>
Making Good Even Better...
Getting Science to the Surgeons
Number? Rate? Ratio?
Is it easier if you are ‘larger’?
Gather the Troops

Expert

Widely recognized knowledge in deciding right actions.
Patient/Family Engagement
Important topics to discuss with your health care provider before your surgery.

You can do three very important things to help your body fight off infections and heal well after surgery. Talk with your doctor before your surgery if these topics are relevant for you.

1. Be at a healthy weight.
2. Do not smoke before surgery or during your recovery after surgery.
3. Keep your diabetes under control before surgery and during your recovery after surgery.

What Can I do to Prevent an Infection After Surgery?

MORE INFORMATION

American College of Surgeons
www.facs.org/patienteducation/surgery.html

Association for Professionals in Infection Control and Epidemiology
www.consumers.site.apic.org

Centers for Disease Control and Prevention
www.cdc.gov/HAI/sst/ssl.html

Institute for Healthcare Improvement
www.ihi.org/engage/initiatives/completed/ProjectJOINTS/Pages/default.aspx

Wisconsin Department of Health Services
Division of Public Health
Bureau of Communicable Disease
P-01228 (03/2016)
Making It Real....
Champion...obvious or hidden away?
Gwen Borlaug, CIC, MPH, FAPIC
Director, HAI Prevention Program
Wisconsin Division of Public Health
1 West Wilson Street
Madison, WI 53702

gwen.borlaug@wi.gov
608-267-7711
BRING IT HOME

Elizabeth Ross, MPH, Program Manager, HRET
Important topics to discuss with your healthcare provider before your surgery.

You can do three very important things to help your body fight off infections and heal well after surgery. Talk with your doctor before your surgery if these topics are relevant for you.

1. Be at a healthy weight.
2. Do not smoke before surgery or during your recovery after surgery.
3. Keep your diabetes under control before surgery and during your recovery after surgery.

MY QUESTIONS AND NOTES

What Can I do to Prevent an Infection After Surgery?

MORE INFORMATION

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P-01228 (03/2016)
## SSI Patient Brochure

### What is this about? Why is this information important?
Infections sometimes develop after surgery in the area of the body where the surgery took place. These are called “Surgical Site Infections” or SSIs.

**Every year in Wisconsin, hundreds of people** develop SSIs, causing people to suffer and adding to the cost of their healthcare. The patient is an important partner in solving this problem. If patients and their health care teams work together, most SSIs are preventable.

This brochure provides suggestions about what you can do to prevent SSIs and offers ideas about topics to discuss with your health care provider.

*Before your surgery, please discuss the lists in this brochure with your doctor. Talk with your doctor about what is appropriate for you.*

### What can you do?

#### BEFORE SURGERY:
- Use medicine in your nose if you have tested positive for staph bacteria.
- Answer as accurately as possible all questions your health providers ask about your medications, vitamins, supplements and lifestyle.
- Do not shave around the area of your body where the surgery will take place for at least two days before surgery.
- Take two showers using “**CHG soap**” to wash the surgical area or follow instructions to use “CHG cloths” to clean the surgical area.

#### AFTER SURGERY:
- Tell your doctor or nurse if you are in pain. Take pain medications as directed.
- Wash your hands before touching your wound or changing surgical bandages.
- Call your doctor if you have a fever, increased pain, drainage or redness/swelling around the surgical wound.
- Make sure you understand instructions for care at home; ask questions if you are unsure.

### What can you ask your health care provider to do?

#### BEFORE SURGERY:
- Test me for staph bacteria, and if positive, give me medicine to apply in my nose.
- Give me “CHG soap/cloths” or tell me where I can get these on my own.
- Give me antibiotics at the right time, if necessary. Adjust antibiotic amount, based on my weight.
- Use clippers (not a razor) if hair needs to be removed from my body.

#### DURING SURGERY:
- Use an alcohol-based “CHG” skin prep in the operating room.
- Keep my blood sugar levels below 200 mg/dl.
- Keep my body temperature and oxygen at recommended levels.

#### AFTER SURGERY:
Give me clear instructions about the care I will need at home after I leave the hospital.

**CHG (chlorhexidine gluconate) is an antiseptic skin cleanser.**
**Wisconsin Division of Public Health Supplemental Guidance for the Prevention of Surgical Site Infections: An Evidence-Based Perspective**

January 2017 (Rev. 5/2017)

P-01715
SSI Change Package & Top 10 Checklist

For more SSI resources, visit [http://www.hret-hiin.org/topics/surgical-site-infection.shtml](http://www.hret-hiin.org/topics/surgical-site-infection.shtml)
SSI Resources - LISTSERV

- Join the LISTSERV®
  - Ask questions
  - Share best practices, tools and resources
  - Learn from subject matter experts
  - Receive follow up from this event and notice of future events

Sign up at http://www.hret-hiin.org/engage/listserv.shtml
Upcoming Events

HRET HIIN Sepsis | Life After Sepsis: Post-Sepsis Syndrome
July 6, 2017 12:00 p.m. - 1:00 p.m. CT | Register here.

Please join us for the HRET HIIN Sepsis Virtual Event “Life After Sepsis: Post-Sepsis Syndrome” presented by the HRET HIIN on July 6, 2017. HIINformation about Post-Sepsis Syndrome, which affects up to 50 percent of sepsis survivors and causes life-changing challenges, will be presented by Dr. Elizabeth Scruth, PhD, a subject matter expert for sepsis. Suzanne Fletcher, RN, CMSRN, from Wesley Memorial Hospital will then discuss strategies to assist patients who have Post-Sepsis Syndrome. Gather your sepsis teams, your quality personnel, physicians and nursing leaders and get HIINspirated to decrease harm from sepsis.

It’s not just about keeping them alive...it’s about helping them return to their normal life!
Upcoming Events

HRET HIIN Falls | Hit the Wall on Falls? Time to Recalibrate!
Webinar: July 11, 2017 2:00 p.m. - 3:00 p.m. CT | Register here.

What do you do when you have hit the wall, plateaued or experienced an increase in falls? Join the July 11th Falls Virtual Event to learn how to dissect your falls program to regroup and re-calibrate. Amy Hester PhD, RN, BC, Director of Nursing Research and Innovation at UAMS Medical Center, and Chief Scientific Officer for HD Nursing, will review the common sense key elements that need to be examined to determine how to intervene to revive a stagnant falls and how care planning can fall short. She will shine light on common mistakes that make a program unsustainable. Dr. Hester will challenge participants to go back to the basics to evaluate the effectiveness of current tools and work-flows, rather than adding more interventions that further dilute the effectiveness of their work. Participants will share which risk and care planning tools, as well as electronic health record systems, they are currently using to promote peer sharing.
HRET HIIN Readmissions | Reduce Readmissions Fishbowl Series
July 13, 2017 11:00 a.m. - 12:00 p.m. | Register here.

Does your organization have an opportunity to gain new insights and test strategies to reduce readmissions? Join the HRET HIIN on May 25th for the first reducing readmissions "Fishbowl" event where you will watch the process improvement journey of five HRET HIIN hospitals. Listen in as the hospitals create reduction aim statements, focus on their target population and develop their first small test of change to implement in their readmissions reduction efforts.

Upcoming Readmissions Fishbowl Series dates:
- August 10, 2017 11:00 a.m. - 12:00 p.m. | Register here.
- September 14, 2017 11:00 a.m. – 12:00 p.m. | Register here.
Thank You!

Find more information on our website: www.hret-hiin.org

Questions or Comments: HIIN@aha.org