

# Infections Still High? Time to Do More about SSI!



June 15, 2017  
Portland, OR

Continuing Nursing Education Provider

 Pfiedler  
ENTERPRISES

Funds Provided By

 Applied  
Medical

**Infections Still High?  
Time to Do More about SSI!**



---

---

## OVERVIEW

The National Healthcare Safety Network uses standardized infection ratio (SIR) to track healthcare-associated infections (HAIs) at national, state, or local level over time, and although surgical site infection (SSI) prevention programs are in place, SSIs are still occurring. The focus of this session will be to evaluate data provided in a case study and develop strategies for sustainment of an SSI prevention program. Methods to increase accountability for the SSI program will be presented.

## LEARNER OBJECTIVES

After completing this continuing education activity, the participant should be able to:

1. Evaluate data to select the appropriate SSI prevention protocol measures for performing a gap analysis.
2. Identify compliance to protocol measures for SSI prevention.
3. Generate methods to improve accountability in order to sustain a SSI prevention program

## INTENDED AUDIENCE

This continuing education activity is intended for infection preventionists, perioperative nurse leaders, and other health care professionals who are attending the 2017 APIC Conference and want to learn more or need to gain knowledge and skills for implementation of an infection prevention program to address SSIs.

## TEACHING METHODOLOGIES

This continuing education activity is governed by principles of adult learning. PowerPoint images will be used to augment the speaker's presentations and a supportive study guide with content and references is provided to each participant. Attendees will have an active role in discussion as well as opportunities to ask questions and share experiences.

## GUIDE TO ACTIVITY

Steps for Successful Course Completion

To earn continuing education credit, the participant must complete the following steps:

1. Please give the completed evaluation and registration forms to the Applied Medical representative upon the completion of the seminar.
2. A certificate of completion indicating nursing credit will be provided via email after receipt of program participation is received by Pfiedler Enterprises.
3. Please keep this certificate for your records. ***Credits will not be valid or recorded by Pfiedler Enterprises without the return of the completed registration and evaluation forms.***
4. Contact Pfiedler Enterprises at 720-748-6144 for questions regarding credit or certificates.

## ACCREDITATION INFORMATION

### ***State Board Approval***

Pfiedler Enterprises is a provider approved by the California Board of Registered Nursing, Provider Number CEP14944, for **1.0 contact hour**.

Obtaining full credit for this offering depends upon attendance, regardless of circumstances, from beginning to end. Licensees must provide their license numbers for record keeping purposes.

**The certificate of course completion issued at the conclusion of this course must be retained in the participant's records for at least four (4) years as proof of attendance.**

---

---

## **EXPIRATION DATE**

This nursing activity was planned and produced exclusively for participants of the 2017 APIC Conference held in Portland, OR. Credit will be awarded only to individuals who complete and submit the registration and evaluation forms by June 30, 2017.

## **COMMERCIAL SUPPORT**

Healthcare organizations engaged in continuing medical, nursing and allied health education have adopted standards to promote balanced and evidence-based content. This course is supported by commercial funds and complies with the intent of these standards. Pfiedler Enterprises gratefully acknowledges educational grants provided by: **Applied Medical Resources Corporation**.

## **DISCLAIMER/NON-ENDORSEMENT OF PRODUCT**

Pfiedler Enterprises does not endorse or promote any commercial product that may be discussed in this activity.

## **ACTIVITY PLANNING COMMITTEE**

### **Tresa L. Osborne, BS, RN, CNOR**

Program Manager  
Pfiedler Enterprises  
Denver, CO

## **FACULTY**

### **Dale W. Bratzler, DO, MPH, MACOI, FIDSA**

Edith Kinney Gaylord Presidential Professor Tenured Professor  
Department of Health Administration and Policy  
Associate Dean  
College of Public Health  
Professor  
College of Medicine, University of Oklahoma Health Sciences Center  
Chief Quality Officer  
OU Physicians Group  
Medical Director  
Clinical Skills Education and Testing Center  
Oklahoma City, OK

### **Wendy Ferro-Grant, RN, RNFA, MSN, MBA, CNOR**

Executive Director Perioperative Services  
Mission Hospital  
Mission Viejo, CA

### **W.F. Anthony Miles, MD**

Colorectal Surgeon  
Clinical Governance Lead  
Worthing and Southland NHS Trust  
United Kingdom

### **Ann Marie Pettis, RN, BSN, CIC, FAPIC**

Director of Infection Prevention  
UR Medicine  
Rochester, NY

---

---

**Peggy Thompson, RN, BSN, CIC**  
Director, Infection Prevention and Vascular Access Team  
Tampa General Hospital  
Tampa, FL

## **DISCLOSURE & COMMERCIAL SUPPORT STATEMENTS FOR SYLLABUS/ LEARNER INFORMATION**

### **Disclosure of Relationships with Commercial Entities for Those in a Position to Control Content for this Activity**

Pfiedler Enterprises has a policy in place for identifying and resolving conflicts of interest for individuals who control content for a Nursing or Allied Health Professional activity. Information below is provided to participants, so that a determination can be made if identified external interests or influences pose potential bias in content, recommendations or conclusions. The intent is full disclosure of those in a position to control content, with a goal of objectivity, balance and scientific rigor in the activity. For additional information regarding Pfiedler Enterprises' disclosure process, visit our website at: <http://www.pfiedlerenterprises.com/disclosure>

**Disclosure includes relevant financial relationships with commercial interests related to the subject matter that may be presented in this continuing education activity.** "Relevant financial relationships" are those in any amount, occurring within the past 12 months that create a conflict of interest. A commercial interest is any entity producing, marketing, reselling, or distributing health care goods or services consumed by, or used on, patients.

#### **Activity Planning Committee**

**Tresa L. Osborne, BS, RN, CNOR**  
No conflicts of interest

**Dale W. Bratzler, DO, MPH, MACOI, FIDSA**  
No conflicts of interest

**Wendy Ferro-Grant, RN, RNFA, MSN, MBA, CNOR**  
No conflicts of interest

**W.F. Anthony Miles, MD**  
Consultant to commercial entities

**Ann Marie Pettis, RN, BSN, CIC, FAPIC**  
No conflicts of interest

**Peggy Thompson, RN, BSN, CIC**  
No conflicts of interest

#### **HIPAA COMPLIANCE**

Pfiedler Enterprises makes every effort to be in compliance with HIPAA. To protect patient privacy, faculty and participants have been requested to de-identify patient-related material.

#### **PRIVACY AND CONFIDENTIALITY POLICY**

*Pfiedler Enterprises is committed to protecting your privacy and following industry best practices and regulations regarding continuing education. The information we collect is never shared for commercial purposes with any other organization. Our*

---

---

privacy and confidentiality policy is covered at our website, [www.pfiedlerenterprises.com](http://www.pfiedlerenterprises.com) and was effective on March 27, 2008 and is reviewed annually.

To directly access more information on our Privacy and Confidentiality Policy, type the following URL address into your browser: <http://www.pfiedlerenterprises.com/privacy-policy>

### **Contact Information**

Questions or suggestions regarding our privacy policy, please contact us at:

Phone: 720-748-6144

Email: [registrar@pfiedlerenterprises.com](mailto:registrar@pfiedlerenterprises.com)

Postal Address: 2170 S. Parker Rd., Suite 125, Denver, CO 80231

Website URL: <http://www.pfiedlerenterprises.com>

### **AGENDA**

- |                |   |
|----------------|---|
| 6:30 – 7:00 am | Introductions                           |
| 7:00 – 8:00 am | Case-Study Presentation and Work Groups |
| 8:00 – 8:15 am | Discussion Q & A                        |

---

---

## SURGICAL SITE INFECTION CASE STUDY

Your hospital implemented a colorectal SSI prevention bundle two years ago. Despite having that practice in place, your hospital has the highest colon surgery SSI SIR in the region. Hospital leadership became concerned about the care of patients within their institution and how this would affect public perception. To improve patient outcomes, they mandated that an SSI Task Force be created to improve the colon SSI SIR over the next 12 months.

NHSN REPORTABLE DATA	
<b>Number of Colectomy Procedures</b>	<b>213</b>
<b>Number of Colon Infections Reported</b>	<b>22</b>
<b>SSI Rate</b>	<b>10.33%</b>
<b>SIR</b>	<b>3.288</b>

With your colleagues, use the following questions to guide you in leading the SSI Task Force to address the problem.

1. There is evidently a gap between the chosen protocol measures and the expected SSI outcomes. Which elements of the SSI bundle will you decide to audit to evaluate compliance? During your group discussion be prepared to discuss your position on each element of the bundle.

SSI PREVENTION BUNDLE COMPONENTS
<b>Mechanical Bowel Prep + Oral Antibiotic</b>
<b>CHG Bathing</b>
<b>Antibiotic Prophylaxis</b>
<b>Normothermia</b>
<b>Glucose Control</b>
<b>Use of Wound Protector</b>
<b>Patient Education</b>

- 
- 
2. With the group discuss how you will track compliance for each of those measures. Discuss the use of systematic audit and root cause analysis—the benefits and limitations of both. How do you ensure that your data is reliable and appropriate to each measure?

- 
- 
3. After monitoring the selected measures, you are able to show a variation in compliance which is unexpected and may be related to high SSI rates. We understand that for the bundle to work, every element must be included. As a first step, where would you start to begin learning and showing results? Which content would you include in your dashboard to show the results of monitoring compliance? At what frequency will you review it with the relevant team members?

SSI PREVENTION BUNDLE COMPONENTS	COMPLIANCE
<b>Mechanical Bowel Prep + Oral Antibiotic</b>	<b>50%</b>
<b>CHG Bathing</b>	<b>65%</b>
<b>Antibiotic Prophylaxis</b>	<b>90%</b>
<b>Normothermia</b>	<b>75%</b>
<b>Glucose Control</b>	<b>70%</b>
<b>Use of Wound Protector</b>	<b>60%</b>
<b>Patient Education</b>	<b>50%</b>

4. Create a plan to communicate the information to the surgical staff. How do you communicate the areas for improvement to the surgeon? The anesthesiologist? The nurses? etc.

---

---

## ANSWER KEY

### SURGICAL SITE INFECTION CASE STUDY

Your hospital implemented a colorectal SSI prevention bundle two years ago. Despite having that practice in place, your hospital has the highest colon surgery SSI SIR in the region. Hospital leadership became concerned about the care of patients within their institution and how this would affect public perception. To improve patient outcomes, they mandated that an SSI Task Force be created to improve the colon SSI SIR over the next 12 months.

With your colleagues, use the following questions to guide you in leading the SSI Task Force to address the problem.

NHSN REPORTABLE DATA	
<b>Number of Colectomy Procedures</b>	<b>213</b>
<b>Number of Colon Infections Reported</b>	<b>22</b>
<b>SSI Rate</b>	<b>10.33%</b>
<b>SIR</b>	<b>3.288</b>

1. There is evidently a gap between the chosen protocol measures and the expected SSI outcomes. Which elements of the SSI bundle will you decide to audit to evaluate compliance? During your group discussion be prepared to discuss your position on each element of the bundle.

SSI PREVENTION BUNDLE COMPONENTS
<b>Mechanical Bowel Prep + Oral Antibiotic</b>
<b>CHG Bathing</b>
<b>Antibiotic Prophylaxis</b>
<b>Normothermia</b>
<b>Glucose Control</b>
<b>Use of Wound Protector</b>
<b>Patient Education</b>

- Select a manageable number of measures as the focus: use 3 as a rule of thumb.
- Prioritize based on measures that are:
  - Feasible
  - Most impactful
  - Relevant (timely)
  - Already know to have buy-in
  - Low-hanging fruit
  - Available
  - Most predictive of colon SSI
  - Able to be accurately measured
- Review the literature and/or gather input from the team on their knowledge of risk factors for colon SSIs.

2. With the group discuss how you will track compliance for each of those measures. Discuss the use of systematic audit and root cause analysis—the benefits and limitations of both. How do you ensure that your data is reliable and appropriate to each measure?
  - Analyze misses – by how much did you miss?
  - Sample a set of SSIs and audit surveillance documentation. Were SSIs reported accurately? Was the compliance measurement completed accurately?
  - Is something an intent measure or an actual measure of what happened?
  - Ensure data is reliable and appropriate to each measure
    - Know your institution
    - Need to have trust in data
    - Develop faith by performing audit
    - Encourage team to review and find faults in data
    - Perform direct observation (OR cameras)
    - Overall, never 100% reliability
  - Next sample colon procedures that did not result in an SSI. Compare and contrast compliance to prevention measures in non- versus SSI cases.
  - Audit a pre-determined number of procedures. Ensure you have multiple audits and auditors. Involving more people helps increase buy-in.
  - Examine whether the measure correlates to the outcome. For example, the metrics for normothermia may surround measuring the patient temperature a few times throughout the case to ensure it falls between X and Y degrees Fahrenheit. Are the measurements taken in a systematic and repeatable way for each patient? Does achieving those measurements ensure that the patient was normothermic throughout the entire case? Consider modifying your surveillance of the measures to ensure that they are appropriate to the outcome.
3. After monitoring the selected measures, you are able to show a variation in compliance which is unexpected and may be related to high SSI rates. We understand that for the bundle to work, every element must be included. As a first step, where would you start to begin learning and showing results? Which content would you include in your dashboard to show the results of monitoring compliance? At what frequency will you review it with the relevant team members?

SSI PREVENTION BUNDLE COMPONENTS	COMPLIANCE
<b>Mechanical Bowel Prep + Oral Antibiotic</b>	<b>50%</b>
<b>CHG Bathing</b>	<b>65%</b>
<b>Antibiotic Prophylaxis</b>	<b>90%</b>
<b>Normothermia</b>	<b>75%</b>
<b>Glucose Control</b>	<b>70%</b>
<b>Use of Wound Protector</b>	<b>60%</b>
<b>Patient Education</b>	<b>50%</b>

- Modify the content and frequency of communication based on the team’s needs.
  - Frequency
    - Consider methods of communicating the dashboard to the entire OR team—physicians, nurses, techs. This could be through an already scheduled monthly meeting or perhaps as a meeting 20 minutes before the OR starts. Another option is to schedule a quarterly meeting that devotes 30 minutes to allow discussion of surgeon outcomes.

- 
- 
- Other methods may include e-mail communication, communication boards or televised communication systems within the hospital.
  - Content
    - The content chosen to be displayed within the dashboard must be purposeful; the inclusion of each dataset should be there to change practice. For example, when the team has become fully compliant with a measure there may no longer be a need to include that measure. Instead of showing data that supports something already happening well, focus on areas for improvement.
    - Consider the culture of the team when choosing the content and modify based on your judgment.
    - Monitor the selected measures for a predetermined timeframe to analyze compliance improvement. For example, 3-6 months or 6-8 months monitor compliance of the measures. Thereafter, redirect efforts to start next iteration of monitoring compliance of other selected measures.
    - Ensure audience is educated on the measures. For example, do they know the difference between a rate and a standardized infection ratio?
  - Evaluate if there are any efficiencies that can be integrated into the dashboard process.
    - Determine who on the team will be able to help you get the data.
    - Consider IT support.
  - 4. Create a plan to communicate the information to the surgical staff. How do you communicate the areas for improvement to the surgeon? The anesthesiologist? The nurses? etc.
    - Consider the audience for each communication.
    - Be ready to discuss objections and to collaborate to provide solutions. For example, if a physician was not compliant with a measure because the product was not available, be willing to work with Materials Management to ensure its availability.
    - When looking at the compliance data, address what the percentages represent. What change in compliance is considered clinically relevant?
    - Focus on the measures that are most relevant to each role.
    - Individual compliance should be communicated in private—never in a public forum.
    - Communicate under the assumption that even with achieving SSI measure compliance, efforts to improve SSI outcomes will remain a focus.



2170 S. Parker Road, Suite 125  
Denver, CO 80231  
720-748-6144  
[www.pfiedlerenterprises.com](http://www.pfiedlerenterprises.com)



Stay social with us:



Live Nursing Meeting 4072