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Refresh
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Hospital Inpatient Value, Incentives, and Quality Reporting (VIQR) Outreach and Education Support Contractor (SC)

Today’s Presentation
Hospital Improvement Innovation Networks and Hospitals Collaboration to Improve Quality of Care: Healthcare-Associated Infections

November 28, 2017
Speakers

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American Hospital Association

Erik St. Pierre, MD
Emergency Department Director,
Northern Maine Medical Center

Moderators

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Hospital Inpatient Value, Incentives, and Quality Reporting (VIQR)
Outreach and Education Support Contractor (SC)

Maria Gugliuzza, MBA
Project Manager,
Hospital VBP Program
Hospital Inpatient VIQR Outreach and Education SC
Purpose

This event will provide an overview of how the HIINs work at the regional, state, national, as well as hospital-system level to sustain and accelerate national progress and momentum toward continued harm reduction in the Medicare Program. The HIINs and their hospitals will share their solutions and processes to lower incidence of three HAIs.
Objectives

Participants will be able to perform the following:

• Apply initiatives and activities to improve patient safety
• Identify tools to achieve quality-measurement goals
• Recall the systems and protocols implemented by hospitals to monitor progress for HAI measures
### Acronyms and Abbreviations

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
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<tbody>
<tr>
<td>ADE</td>
<td>Adverse Drug Events</td>
</tr>
<tr>
<td>HAI</td>
<td>hospital-acquired infection</td>
</tr>
<tr>
<td>OABP</td>
<td>oral antibiotic bowel preparation</td>
</tr>
<tr>
<td>AM</td>
<td>morning</td>
</tr>
<tr>
<td>HANYS</td>
<td>Healthcare Association of New York State</td>
</tr>
<tr>
<td>PACU</td>
<td>post-anesthesia care unit</td>
</tr>
<tr>
<td>ATB</td>
<td>antibiotic</td>
</tr>
<tr>
<td>HbA-1C</td>
<td>glycated hemoglobin</td>
</tr>
<tr>
<td>PAT</td>
<td>preadmission testing</td>
</tr>
<tr>
<td>BMI</td>
<td>body mass index</td>
</tr>
<tr>
<td>HCAHPS</td>
<td>Hospital Consumer Assessment of Healthcare Providers and Systems</td>
</tr>
<tr>
<td>PDSA</td>
<td>Plan-Do-Study-Act</td>
</tr>
<tr>
<td>CAUTI</td>
<td>Catheter-Associated Urinary Tract Infection</td>
</tr>
<tr>
<td>HIIN</td>
<td>Hospital Improvement Innovation Network</td>
</tr>
<tr>
<td>PFE</td>
<td>Person and Family Engagement</td>
</tr>
<tr>
<td>CDI</td>
<td><em>Clostridium difficile</em> Infection (C. difficile)</td>
</tr>
<tr>
<td>HRET</td>
<td>Health Research &amp; Educational Trust</td>
</tr>
<tr>
<td>PFE</td>
<td>Partnership for Patients- Blood Stream Infections</td>
</tr>
<tr>
<td>CE</td>
<td>continuing education</td>
</tr>
<tr>
<td>ICU</td>
<td>intensive care unit</td>
</tr>
<tr>
<td>PI</td>
<td>performance improvement</td>
</tr>
<tr>
<td>CHG</td>
<td>change</td>
</tr>
<tr>
<td>ID</td>
<td>infectious disease</td>
</tr>
<tr>
<td>POA</td>
<td>post operative day</td>
</tr>
<tr>
<td>CLABSI</td>
<td>Central Line-Associated Blood Stream Infections</td>
</tr>
<tr>
<td>MBP</td>
<td>mechanical bowel preparation</td>
</tr>
<tr>
<td>SSI</td>
<td>surgical site infection</td>
</tr>
<tr>
<td>CLIP</td>
<td>Central Line Insertion Practices</td>
</tr>
<tr>
<td>MR</td>
<td>medical record</td>
</tr>
<tr>
<td>SCABA</td>
<td>South Carolina Hospital Association</td>
</tr>
<tr>
<td>CMS</td>
<td>Centers for Medicare &amp; Medicaid Services</td>
</tr>
<tr>
<td>MRSA</td>
<td>Methicillin-Resistant <em>Staphylococcus aureus</em></td>
</tr>
<tr>
<td>SIR</td>
<td>standardized infection ratio</td>
</tr>
<tr>
<td>COPD</td>
<td>chronic obstructive pulmonary disease</td>
</tr>
<tr>
<td>MSB</td>
<td>maximal sterile barrier</td>
</tr>
<tr>
<td>T</td>
<td>temperature</td>
</tr>
<tr>
<td>ED</td>
<td>emergency department</td>
</tr>
<tr>
<td>NHSN</td>
<td>National Healthcare Safety Network</td>
</tr>
<tr>
<td>TPN</td>
<td>total parenteral nutrition</td>
</tr>
<tr>
<td>EMR</td>
<td>electronic medical records</td>
</tr>
<tr>
<td>NICU</td>
<td>neonatal intensive care unit</td>
</tr>
<tr>
<td>UTI</td>
<td>urinary tract infection</td>
</tr>
<tr>
<td>ERAS</td>
<td>enhanced recovery after surgery</td>
</tr>
<tr>
<td>N.B.</td>
<td>nota bene (note well)</td>
</tr>
<tr>
<td>VAE</td>
<td>Ventilator-Associated Events</td>
</tr>
<tr>
<td>EVS</td>
<td>environmental services</td>
</tr>
<tr>
<td>NSQIP</td>
<td>National Surgical Quality Improvement Program</td>
</tr>
<tr>
<td>VTE</td>
<td>Venous Thromboembolism</td>
</tr>
<tr>
<td>FiO₂</td>
<td>fraction of inspired oxygen</td>
</tr>
<tr>
<td>NYSPFP</td>
<td>New York State Partnership for Patients</td>
</tr>
<tr>
<td>Q</td>
<td>quarter</td>
</tr>
<tr>
<td>GNYHA</td>
<td>Greater New York Hospital Association</td>
</tr>
<tr>
<td>NYCHH</td>
<td>NYC Health + Hospitals</td>
</tr>
<tr>
<td>QIN-QIO</td>
<td>Quality Innovation Network - Quality Improvement Organization</td>
</tr>
</tbody>
</table>
### HAI Event CDC Location(s)

<table>
<thead>
<tr>
<th>HAI Event</th>
<th>Location(s)</th>
</tr>
</thead>
</table>

If your hospital does not have at least one of the device-associated HAI reportable locations listed above, then your hospital must submit an IPPS Measure Exception Form with CMS in order to successfully meet HAI reporting requirements. The form, available through QualityNet, allows a facility to indicate that, in accordance with NHSN location definitions, it has no qualifying intensive care unit (ICU) or adult or pediatric medical (M), surgical (S), or medical/surgical (MS) ward locations. Questions regarding the CMS IPPS Measure Exception Form should be directed to the QualityNet Hospital-Inpatient Questions and Answers Tool: [https://cms-ip.custhelp.com/](https://cms-ip.custhelp.com/).

**IPPS Measure Exception Form:** [https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier2&cid=1138115987129](https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier2&cid=1138115987129)

**NHSN Location Mapping Resource and Checklist:** [https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier2&cid=1228760487021](https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier2&cid=1228760487021)
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CLABSI: Getting to Zero
About Us

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Premier HIIN: Partnership for Patients HIIN Initiative

Premier is one of 16 HIINs for the CMS National Partnership for Patients Initiative

Two Overarching Goals

- 20% reduction in all-cause harm
- 12% reduction in 30-day all-cause readmissions

<table>
<thead>
<tr>
<th>Across 11 Harm Event Areas</th>
<th>Other Topic Areas of Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adverse Drug Events (ADE)</td>
<td>All Cause Harm</td>
</tr>
<tr>
<td>Catheter-Associated Urinary Tract Infections (CAUTI)</td>
<td>Airway Safety</td>
</tr>
<tr>
<td>Central Line Associated Blood Stream Infections (CLABSI)</td>
<td>Methicillin-Resistant <em>Staphylococcus aureus</em> (MRSA)</td>
</tr>
<tr>
<td><em>Clostridium difficile</em> Infections (CDI) and Antibiotic Stewardship</td>
<td>Person and Family Engagement (PFE)</td>
</tr>
<tr>
<td>Injury from Falls</td>
<td>Health Disparities</td>
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<tr>
<td>Pressure Ulcers</td>
<td>Leadership and Safety Culture</td>
</tr>
<tr>
<td>Preventable Readmissions</td>
<td></td>
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<tr>
<td>Sepsis and Septic Shock</td>
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<tr>
<td>Surgical Site Infections (SSI)</td>
<td></td>
</tr>
<tr>
<td>Venous Thromboembolism (VTE)</td>
<td></td>
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<tr>
<td>Ventilator-Associated Events (VAE)</td>
<td></td>
</tr>
</tbody>
</table>

Premier HIIN provides hospitals with the following:

- Initiatives and strategies to improve patient safety
- Safety across the board programmatic approach
- Collaborative learning and networking opportunities
Premier HIIN

One Team—One Voice
Transforming Healthcare Together
Across 40 States

489 Hospitals

Diversity of Types:
- Academic
- Community
- Critical Access
- Indian Health Service
- Large Urban
- Small Rural
- Teaching

Improvement
- Safety
  Harms Avoided
- Quality
  Readmissions Avoided
- Cost
  Costs Avoided
- Patient Experience
  Patient/Family Engagement

Team: Premier HIIN leaders, Premier HIIN partners, hospitals, QIN-QIOs, patients/families, industry experts, and other key stakeholders

11/28/2017
Greer Memorial Hospital

• Part of the Greenville Health System — seven acute care facilities and two long-term care facilities
• Magnet designated — 82-bed acute care facility with medical surgical services
• Operating room with minimally invasive surgeries, plastics, general, orthopedics
• Emergency department
• Women and children’s services
Greer Memorial Hospital
Culture of Safety

- Full-service community hospital
- 93% Culture of Safety Survey participation
- SC safe care commitment to high reliability
- Safe surgery certification
- SCHA Zero-Harm Awards for CLABSI and SSI
- Magnet designation
- Focus on patient and family engagement
- $100 million cost removal initiative
- Safety and quality goals set at zero harm/zero defects
- Daily safety huddle led by campus senior leadership
- Leadership and staff accountability
- Just culture
- HCAHPS Five-Star Rating
- Leapfrog Group A Safety Score
Central Line Utilization
CLABSI Rate (ICU/NICU)

PFP-BSI-2: Central line associated blood stream infection rate per 1,000 device days (adult ICU/NICU)

YTD Rate: 0.00
Monthly Rate: 0.00
Baseline Rate: 0.00
Goal Rate: 0.00

OUTCOME (rate is per1000, lower is better)  Baseline Time Period: 01/01/2015 - 12/31/2015
Get to Zero — Stay at Zero

Do It Now
Multidisciplinary Approach

- Healthcare professionals who order insertions and removals
- Personnel who insert and maintain central lines
- Infection prevention
- Infusion specialists or IV teams
- Healthcare managers and executives (those who allocate resources)
- Patients who are capable of assisting in the care of their catheters (patient and family engagement)
Facilitating Proper Practices

• **Bundling** all needed supplies in one area (e.g., a standardized cart or a kit) helps ensure items are available for use.

• **Using a checklist** to ensure all components of the central line insertion and maintenance practices are followed; this is not only an evidence-based best practice, it is a CMS requirement.

• **Empowering staff** to stop a nonemergent line insertion if proper procedures are not followed or if any components of the CLIP bundle are not followed.
Primary Interventions for Prevention

- Always assess line necessity; ask the question daily
  - Does the patient really need the line?
  - Frequent blood draws alone aren’t a sufficient reason unless the patient has no peripheral access.
  - The central line needs to be best for patient, not for convenience.

- Indications for use
  - Prolonged intravenous medical treatment (antibiotics, etc.)
  - Nutritional support (TPN, lipids)
  - Chemotherapy
  - Hemodialysis

- Central line catheters may also be used for the following:
  - Blood transfusions
  - Patients who have difficulty receiving a peripheral IV line
Primary Interventions for Prevention

• Provide education to patient and family prior to insertion; this should be documented in the medical record
• Practice hand hygiene
• Adhere to aseptic technique
• Perform appropriate skin prep and allow to dry
• Follow maximal sterile barrier (MSB) technique; all staff within three feet of the sterile procedure must have donned MSB
• Cover site with sterile transparent dressing

Any missing component indicates nonadherence and is opportunity for improvement.
Secondary Interventions

- CLABSI PI task force for drill down on each event
- Discuss central line utilization and best practices in daily patient safety huddles and interdisciplinary rounds
- CHG bathing on patients with central lines
- Minimize blood draws from central lines; obtain labs peripherally, when possible
- Chlorhexidine-impregnated dressings — may also be used
- Antimicrobial-antiseptic impregnated catheters — may be appropriate for catheters expected for greater than five days and when core strategies have not decreased CLABSI rates
Unique Interventions for Consideration

• New-hire probation period — every line access and dressing change audited for 90 days
• Education for ancillary staff-radiology access central lines, Home Health Care Nurses — RCA led to this intervention
• Routine maintenance bundle compliance audits
• Unit score cards with rates, device utilization, hand hygiene compliance, etc.
Prevent CLABSI

Clean hands

Look at the device (Dressing intact? BIOPATCH® in place?)

Audit for appropriate insertion practices

Bathe the patient

Scrub the hub

Is the line necessary?
Be Empowered

• Zero is possible
• Follow evidence-based guidelines
• Hold staff accountable
• Think outside the box
• Inspect what you expect
• Leadership culture of safety
• Safety across the board
Using a Bundled Approach to Reduce SSIs
NYSPFP HIIN Overview

Healthcare Association of New York State (HANYS)

Greater New York Hospital Association (GNYHA)

IPRO

More than 170 Hospitals
More than 15 Project Managers
Why Focus on SSIs?

- 2.6% of 30 million operations per year are complicated by SSIs (800,000 to 2 million SSIs annually)
- SSI accounts for 38% of HAI in surgical patients
- Colorectal surgery SSI rate varies from 5% to 30%
- SSIs are associated with the following:
  - Increased length of stay
  - Increased hospital costs (estimated increase of $1,300 to $5,000 per case)
  - Increased patient morbidity and mortality
  - Increased readmission rates
NYSPFP SSI SIR: Colon

COLO SSI SIR

<table>
<thead>
<tr>
<th>Year and Month</th>
<th>Baseline 01-15 – 12/15</th>
<th>Comparison 04/17-06/17</th>
<th>Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan-15</td>
<td>1.16</td>
<td>0.84</td>
<td>↓ 27.42%</td>
</tr>
<tr>
<td>Mar-15</td>
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<td>May-15</td>
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<td>Jul-15</td>
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<td>Jan-16</td>
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<td>Mar-17</td>
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<tr>
<td>May-17</td>
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</tr>
</tbody>
</table>
NYSPFP Advanced Colon Bundle Elements

- Normothermia
- Glucose Control
- Antimicrobial Prophylaxis
- Increased Perioperative Oxygenation
- Skin Preparation
- Clean Standardized Fascia Close
- Wound Management
- New Mechanical Bowel Preparation in Combination with Oral Antibiotics
Advanced Colon Surgery Bundle Flowchart

1. **PRE-ADMISSION**
   - Hand Hygiene
   - Pre-admission Testing for active medical conditions increasing risk for SSI (e.g. malnutrition, diabetes, smoking, infection screening)
   - Pre-operative mechanical bowel preparation (MBP) in combination with oral antibiotic bowel preparation (OABP)
   - Patient and caregiver education on how to administer MBP and OABP, discharge needs, wound care post-operatively, what to expect, etc.

2. **PRE-OPERATIVE**
   - Hand Hygiene
   - Glucose Control Normothermia
   - Antimicrobial Prophylaxis (weight based dosing and re-dosing for long cases)
   - Skin Preparation (use antiseptic agent with alcohol for skin preparation unless contraindicated)

3. **INTRA-OPERATIVE**
   - Hand Hygiene
   - Glucose Control Normothermia
   - Antimicrobial Prophylaxis (weight based dosing and re-dosing for long cases)
   - Increased Perioperative Oxygenation
   - Clean Standardized Fascia Close (change gown, gloves, and surgical instruments for closure of fascia and standardized wound dressings)

4. **POST-OPERATIVE**
   - Hand Hygiene
   - Glucose Control Normothermia
   - Standardize Wound Management (standardize post-operative wound dressing: provide patient and caregiver discharge instructions on wound care and recognizing symptoms of infection)
   - Increased Perioperative Oxygenation
   - Follow up phone calls to patients within one week of discharge from hospital

Disclaimer: The information contained in the Advanced Colon Bundle is provided by the NYS Partnership for Patients (NYSPP) for informational purposes only. NYSPP makes no representations, guarantees or warranties of any kind, express or implied, about the completeness, accuracy, reliability or suitability with respect to any of the information above. NYSPP disclaims any liability for any and all damages or losses arising from use of this information. The Advanced Colon Bundle is not meant to provide medical advice and is not a substitute for professional medical or clinical judgement.
**Advanced Colon Surgery Bundle Summary Table**

<table>
<thead>
<tr>
<th>Essential Bundle Element</th>
<th>Strategies for Application of Bundle Element</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pro-operative Mechanical Bowel Preparation Combined with Oral Antibiotics</td>
<td>For patients undergoing elective bowel surgery, establish standardized pre-operative mechanical bowel preparation regimen combined with pre-operative oral antibiotics the day prior to surgery. Mechanical bowel preparation in combination with oral antibiotics prior to surgery should be used in addition to standard intravenous antibiotic prophylaxis pre-operatively.</td>
</tr>
<tr>
<td>Antimicrobial Prophylaxis</td>
<td>Maintain therapeutic levels of the prophylactic antimicrobial agent in serum and tissues throughout the operation, using weight-based dosing and re-dosing as appropriate.</td>
</tr>
<tr>
<td>Skincare Preparation</td>
<td>Use an antiseptic agent with alcohol for skin preparation unless contraindicated.</td>
</tr>
<tr>
<td>Normothermia</td>
<td>Maintain core temperature ≥ 36°C during the preoperative period.</td>
</tr>
<tr>
<td>Glucose Control</td>
<td>Maintain blood glucose level &lt; 200 mg/dL on the day of surgery and throughout the postoperative period.</td>
</tr>
</tbody>
</table>

**ESSENTIAL BUNDLE ELEMENT CONTINUED**

<table>
<thead>
<tr>
<th>Essential Bundle Element</th>
<th>Strategies for Application of Bundle Element</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Perioperative Oxygenation</td>
<td>Maintain optimal tissue oxygenation throughout the preoperative period by administering supplemental oxygen at intra-operatively and post-operatively.</td>
</tr>
<tr>
<td>Clean Standardized Fascia Close</td>
<td>Change green, gloves, and surgical instruments for closure of fascia.</td>
</tr>
<tr>
<td>Wound Management</td>
<td>Standardize wound management strategy for all types of colorectal surgeries.</td>
</tr>
<tr>
<td>SSI Prevention Basics</td>
<td>• Hand Hygiene (for staff, patient, and family) • Environmental Cleaning (maintaining aseptic environment in the OR) • Basic Safe Surgery bundle</td>
</tr>
</tbody>
</table>

*The only bundle element that is specific for colon surgery. All colon bundle elements can be used to reduce SSI in all surgeries.*
## Advanced Colon Surgery Bundle

### Gap Analysis

<table>
<thead>
<tr>
<th>ESSENTIAL BUNDLE ELEMENT</th>
<th>BUNDLE ELEMENT SPECIFICS</th>
<th>IS THE ELEMENT A ROUTINE PART OF PRACTICE AT MY HOSPITAL (YES/NO)</th>
<th>ACTION PLAN</th>
</tr>
</thead>
</table>
| Pre-operative Mechanical Bowel Preparation with Oral Antibiotics | Provide pre-operative mechanical bowel preparation for patients  
Prescribe pre-operative oral antibiotics for patients to take following mechanical bowel preparation.  
Provide patient and family education on:  
• How to use mechanical bowel preparation and take oral antibiotics pre-operatively  
• Why pre-operative bowel preparation and oral antibiotics is important to reduce risk of surgical site infection  
Document whether the patient was able to complete pre-operative mechanical bowel preparation in combination with oral antibiotics or not. | • Physician office or Pre-admission testing (PAT)  
• Physician office or PAT  
• Physician office or PAT | |
# Advanced Colon Surgery Bundle Resource Guide

## Key Resources

<table>
<thead>
<tr>
<th>RESOURCE</th>
<th>SUMMARY</th>
<th>FINDINGS</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reducing Colorectal Surgical Site Infections (The Joint Commission Center for Transforming Health Care)</td>
<td>Collaborative to reduce the rate of colorectal surgical site infections using data derived from the American College of Surgeons’ National Surgical Quality Improvement Program (NSQIP) across seven tertiary care academic hospital systems.</td>
<td>After implementation of all solutions identified in the Collaborative, SSIs were reduced by 32% and the number of observed SSI was less than expected after adjusting for age, sex, BMI, and other factors. Superficial incisional SSIs were reduced by 45%. Reductions in average length of stay and costs were also noted.</td>
<td>Large number of interventions that achieved sustained change in a number of academic tertiary centers. Single Collaborative combining multiple evidence-based practices.</td>
</tr>
<tr>
<td>Colorectal Surgery Surgical Site Infection Reduction Program: A National Surgical Quality Improvement Program-Driven Multidisciplinary Single-Institution Experience (Cima R., et al.)</td>
<td>Implementation of: - patient cleansing with Hibiclenz - antibiotic administration - closing protocols - patient and staff hand hygiene - weight-based intra-operative dosing and re-closing of cefazolin - discharge instruction on wound care and post-discharge follow-up phone calls.</td>
<td>Significant decline in SSI rate—overall SSI rate dropped from 9.8% to 4.0%, and superficial SSI declined 1.5%.</td>
<td>Results from single academic tertiary care center. Sustained decline in SSI after bundle implementation. Interventions successfully built into workflow. Mechanical bowel preparation use was mixed among the participating surgeons. Pre-operative oral antibiotics were not used.</td>
</tr>
<tr>
<td>The Preventive Surgical Site Infection Bundle in Colorectal Surgery: An Effective Approach to Surgical Site Infection Reduction and Health Care Cost Savings (Keenan et al.)</td>
<td>Implementation of a bundle including the following elements: - Pre-operative mechanical bowel preparation with oral antibiotics - Intravenous pre-operative prophylactic antibiotic - Standardized alcohol containing surgical skin preparation - Wound protector used intra-operatively for procedures with open incisions - Reduced operating room traffic.</td>
<td>Significant reduction in superficial SSIs was observed. SSI rate decreased from 19.3% to 5.7% in groups matched for confounding variables (larger reductions were seen in unmatched groups). Additionally, postoperative sepsis rates declined from 3.5% to 2.4%, (in matched groups) following implementation of the surgical bundle.</td>
<td>Results are from a single academic center. Authors noted some concurrent changes in medical practice that could be potential confounders. Propensity match performed in the study was intended to limit the effect of the confounding variables. Statistically significant reductions in SSI were noted in both the pre- and post-matched groups.</td>
</tr>
</tbody>
</table>
Advanced Colon Surgery Bundle Companion Document

**NO HARM ACROSS THE BOARD**

To be used as a companion document to the Advanced Colon Bundles Gap Analysis

<table>
<thead>
<tr>
<th>BUNDLE ELEMENT SPECIFICS (If not present at your hospital or answering no, please see next column for suggested next steps)</th>
<th>IF THE SPECIFIC BUNDLE ELEMENT IS MISSING, CONSIDER THE FOLLOWING STEPS:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Essential Bundle Element</strong></td>
<td><strong>Pre-operative Mechanical Bowel Preparation and Oral Antibiotics</strong></td>
</tr>
<tr>
<td>Does your hospital provide pre-operative mechanical bowel preparation and prescribe/provide pre-operative oral antibiotics for patients in the physician office/pre-admission testing (PAT)</td>
<td></td>
</tr>
<tr>
<td>□ Yes</td>
<td></td>
</tr>
<tr>
<td>□ No</td>
<td>• Determine who will provide, as standard, patients with the prescription for or provide the mechanical bowel preparation and oral antibiotics for patients to take pre-operatively</td>
</tr>
<tr>
<td></td>
<td>• Work with surgeons, office staff, or PAT staff to identify and overcome barriers to ensure that the prescription for or mechanical bowel preparation and antibiotic formulations are provided to the patient</td>
</tr>
<tr>
<td></td>
<td>• Add provision of pre-operative mechanical bowel preparation and oral antibiotics to standardized workflow in preparing the patient for surgery</td>
</tr>
<tr>
<td></td>
<td>• Provide patient and caregiver education on how to properly use the mechanical bowel preparation and take the oral antibiotics prior to hospital admission for the procedure and why the bowel preparation and oral antibiotics are necessary</td>
</tr>
<tr>
<td></td>
<td>• Build into workflow a pre-operative check with patient as to completeness of mechanical bowel prep in combination with oral antibiotics</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Essential Bundle Element</strong></th>
<th><strong>Normothermia</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Does your hospital have active patient warming (e.g., using forced air warming device, warm blankets, warmed IV fluids in OR) in the:</td>
<td></td>
</tr>
<tr>
<td>□ Pre-operative Holding Area</td>
<td></td>
</tr>
<tr>
<td>□ OR</td>
<td></td>
</tr>
<tr>
<td>□ PACU</td>
<td>• Work with staff to identify and overcome barriers to active patient warming</td>
</tr>
<tr>
<td></td>
<td>• Determine what equipment and supplies are needed to provide active patient warming</td>
</tr>
<tr>
<td></td>
<td>• Add active patient warming to workflow and care protocols</td>
</tr>
</tbody>
</table>

**Disclaimer:** The information contained in the Advanced Colon Bundle is provided by the NYS Partnership for Patients (NYSPPP) for informational purposes only. NYSPPP makes no representations, guarantees or warranties of any kind, express or implied, about the completeness, accuracy, reliability or suitability with respect to any of the information above. NYSPPP disclaims any liability for any and all damages or losses arising from use of this information. The Advanced Colon Bundle is not meant to provide medical advice and is not a substitute for professional medical or clinical judgement.
### Observation Tool: Operating Room

**Colon Surgery**

#### Patient Data Entry

In the section below, please enter the current period being tracked. Then enter the total number of patients receiving Colon Surgery in the specified period for which the bundle elements were tracked. Please only count patients that have visited all of the following sites: pre-operative, OR, and PACU.

<table>
<thead>
<tr>
<th>Period Tracked:</th>
<th>Total # of Patients Tracked:</th>
</tr>
</thead>
</table>

In the section below, please enter an "x" for each patient receiving Colon Surgery for whom the following bundle elements were completed at the specified site. Please only count patients that have visited all of the following sites: pre-operative, OR, and PACU. If you would like to track a custom protocol, this may be entered where it says ‘Other Hospital Protocol’. Custom information may be entered in the cells outlined with a dotted line.

<table>
<thead>
<tr>
<th>Bundle Element</th>
<th>Site</th>
<th>Patient #</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
</table>
| Surgical Checklist
  - Surgical checklist utilized pre-operatively |
  - Debriefed at end of procedure |
| Normothermia
  - Checked and maintained core temperature > 36°C |
| Glucose Control
  - Blood glucose maintained between 50-200 mg/dl |
| Antibiotics
  - Prophylactic antibiotics administered within one hour prior to surgical incision (N.B. Vancomycin or a fluoroquinolone should be administered within 60-120 minutes before the initial incision due to the longer half-life of these antimicrobials)
  - Antibiotic dose was weight-based with patient's weight documented
  - Patient had a procedure lasting > 120 minutes |
### OR Observation Tool: Operating Room

**Colon Surgery**

**Aggregate Data Entry**

In the section below, please enter the total number of patients receiving Colon Surgery in the specified period for which the bundle elements were tracked. Also specify the subset of these patients for whom their procedure lasted greater than 120 minutes, and the subset of patients with normal pulmonary function. Please only count patients that have visited all of the following sites: pre-operative, OR, and PACU.

<table>
<thead>
<tr>
<th>Period 1</th>
<th>Period 2</th>
<th>Period 3</th>
<th>Period 4</th>
<th>Period 5</th>
<th>Period 6</th>
<th>Period 7</th>
<th>Period 8</th>
<th>Period 9</th>
<th>Period 10</th>
<th>Period 11</th>
<th>Period 12</th>
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</thead>
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<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total # of patients tracked**

<table>
<thead>
<tr>
<th>Total # of patients tracked with a procedure lasting &gt; 120 minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total # of patients with normal pulmonary function</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

In the section below, please enter the total number of patients receiving Colon Surgery for whom the following bundle elements were completed at the specified site. Please only count patients that have visited all of the following sites: pre-operative, OR, and PACU.

If you would like to track a custom protocol, this may be entered where it says ‘Other Hospital Protocol’ (beginning on row 41). Custom information may be entered in the cells outlined with a dotted line.

<table>
<thead>
<tr>
<th>Bundle Element</th>
<th>Best Practice</th>
<th>Site</th>
<th>Aggregate Patient Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surgical Checklist</td>
<td>Surgical checklist utilized pre-operatively at end of procedure</td>
<td>OR</td>
<td>Period 1</td>
</tr>
<tr>
<td>Normothermia</td>
<td>Checked and maintained core temperature &gt; 35°C</td>
<td>Pre-operative</td>
<td>OR</td>
</tr>
<tr>
<td>Glucose Control</td>
<td>Blood glucose maintained between 50-200 mg/dl</td>
<td>Pre-operative</td>
<td>OR</td>
</tr>
<tr>
<td>Antibiotics</td>
<td>Prophylactic antibiotics administered within one hour prior to surgical incision</td>
<td>OR</td>
<td>Period 1</td>
</tr>
<tr>
<td></td>
<td>(e.g., Vancomycin or a fluoroquinolone) should be administered within 50-120 minutes before the initial incision due to the longer half-life of these antimicrobials</td>
<td>PACU</td>
<td>Period 1</td>
</tr>
<tr>
<td></td>
<td>Antibiotic dose was weight-based with patient’s weight documented</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11/28/2017
Tools and Resources on NYSPFP Website

Surgical Site Infections

Infection Prevention Initiatives

INITIATIVE OVERVIEW MEETING MATERIALS TOOLS & RESOURCES

Check this page often for updated tools and resources from the NYSPFP Surgical Site Infection and OR Safety Initiative.

Suggested Best Practices and Corresponding Tools & Resources

- Operating Room Safety
  - NYSPFP Advanced Colon Bundle
    - Advanced Colon Bundle Flow Chart
    - Advanced Colon Bundle Summary
    - Advanced Colon Bundle Resource Guide
    - Advanced Colon Bundle Gap Analysis
    - Advanced Colon Bundle Companion Document
      - NYSPFP Presentation: The Advanced Colon Bundle In-Person Conference
      - Colorectal Surgical Site Infections: A Process Improvement Approach (Robert Cima, M.D., M.A.)
      - Reducing Surgical Site Infections: The Lutheran Medical Center Colon Bundle (Michael Timoney, M.D., F.A.C.S)
      - The Expanding Role of the Anesthesiologist in Reducing SSI (Mark Lema, M.D, Ph.D)

Reference Guides:
- Advanced Colon Bundle Resource Guide
- NYSN Surgical Site Infection Surveillance
- World Health Organization Surgical Safety Checklist

No Harm Across the Board Resources:
- Surgical Site Infection Poster
- Guiding Principles

Data Tracking and Measurement:
- Observation Tool
- Observation Tool Tutorial
- Analytical Tool

Action Planning:

Surgical Site Infections

INFECTION PREVENTION INITIATIVES

INITIATIVE OVERVIEW MEETING MATERIALS TOOLS & RESOURCES

Below please find materials from NYSPFP SSI Initiative learning sessions, conference calls, and Webinars.

- 2016
- 2015
- 2014

Reduce Colon SSI through Effective Glucose Management (September 18, 2014)

Meeting Materials:

- NYSPFP Staff Slides
- Shaun Sullivan, MD, Perioperative Medical Director, Anesthesiologist at the Skagit Valley Hospital, Mount Vernon, Washington and Janice Whitman, RN, MSN, Clinical Nurse Specialist at Skagit Valley Hospital

Webconference Recording
Going Beyond the Bundle to ERAS

What is enhanced recovery after surgery (ERAS)?

• Surgical intervention leads to endocrine and metabolic stress reactions that can slow recovery.
• ERAS is a program incorporating multimodal, multidisciplinary interventions in the perioperative period to expedite recovery.
• Common modalities in ERAS can include (but are not limited to) the following:
  - Early removal of drains
  - Optimized pain management
  - Early enteral nutrition
  - Preoperative optimization of a patient’s nutritional status and other organ function
  - Patient education
  - Goal-directed fluid therapy
  - Early ambulation
Why consider implementing ERAS?

- Studies have shown that ERAS can:
  - Reduce morbidity
    - Reductions in SSI, ileus, and other associated complications have been reported.
      » A recent meta-analysis reported that programs with high compliance ERAS elements can achieve up to a 50% reduction in complications.
  - Reduce reoperations
  - Result in patient’s faster return to normal function
  - Reduce length of stay and readmissions
  - Lead to better quality of life outcomes in the medium and long term
  - Reduce costs
NYSPFP and ERAS Webinars

Enhanced Recovery After Surgery in Combination with the Advanced Colon Bundle

Speaker: Christopher Mantyh, MD, FACS/FASCRS, Duke University Medical Center.

Tools provided by speaker:
- Duke Health ERAS patient information leaflet
- Duke Health ERAS protocol
- FAQ for NYSPFP

ERAS Combined with the Advanced Colon Bundle

Speakers: Surgical team from St Jude’s Medical Center, Fullerton CA.

Tools provided by speakers:
- Bundle audit tool
- ERAS/bundle checklists
## Tools to Support Hospital Efforts to Reduce SSI

### ERAS
- **American Society for Enhanced Recovery**
  - Sample protocols: [http://aserhq.org/protocols/](http://aserhq.org/protocols/)
- **ERAS Society Guidelines**
- **American Association of Nurse Anesthetists**

### NYSPFP Advanced Colon Bundle
- **NYSPFP Tools**
  - Flowchart
  - Resource guide
  - Gap analysis
    - Companion document
  - Summary document
  - Data collection and analytical tools

*All of the above are available at www.nyspfp.org.*
Contact Information

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Senior Project Manager
wlee@gnyha.org

Maria Sacco
Program Manager
msacco@hanys.org

11/28/2017
Reducing Colon SSI: Implementation of the Advanced Colon Surgery Bundle
Our Team

<table>
<thead>
<tr>
<th>Service/Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surgery</td>
</tr>
<tr>
<td>Anesthesia</td>
</tr>
<tr>
<td>Peri-Operative/PACU</td>
</tr>
<tr>
<td>Preadmission Testing/Ambulatory</td>
</tr>
<tr>
<td>Surgery (Amb Surg)</td>
</tr>
<tr>
<td>Surgery Clinic</td>
</tr>
<tr>
<td>Pharmacy</td>
</tr>
<tr>
<td>Materials Management</td>
</tr>
<tr>
<td>Infection Control</td>
</tr>
<tr>
<td>Central Sterile Supply</td>
</tr>
</tbody>
</table>
Hospital Demographics

- NYC H+H/Metropolitan
  - 317-bed acute care hospital
  - 60,000 ED visits per year
  - 1,088 inpatient surgeries
  - 5,403 outpatient surgeries

- Patient population
  - Diverse ethnic background
  - East Harlem and Upper Yorkville
Pre-Bundle Colon Surgery SSI Rate

![Graph showing the number of procedures and the SSI rate for Colon Surgery from 2013 to 2014. The graph indicates a decrease in SSI rate from 17% in 2013 to 30% in 2014.](image-url)
Reasons for Action

- Recognition that our colon surgery SSI rate was higher than the state average
- Partnership with NYSPFP
- Look at systems across the continuum of care
- Tracer methodology to identify opportunities for improvement
- PDSA cycles
Education

• Grand rounds
• Multidisciplinary
  o Surgery
  o Anesthesia
  o Nursing
  o Infection control
  o Administration
## Advanced Colon Bundle Elements

<table>
<thead>
<tr>
<th>Element</th>
<th>Actions</th>
</tr>
</thead>
</table>
| **Preoperative Skin Preparation**    | • Patient education on preoperative skin prep (pre-op clinic and PAT), using a standardized patient instruction form  
                                        • Chlorhexidine 2% skin wipes applied the night before (at home) and the morning before procedure (Amb Surg)  |
| **Normothermia**                     | • Bair Hugger® and blanket warmers  
                                        • Starts at Amb Surg where patient gets connected to the Bair Hugger®, maintained intraoperatively by Anesthesia and followed through at PACU, where temperature is checked upon intake and every 30 minutes until discharged from PACU  
                                        • Warmed IV fluids  |
| **Antimicrobial Prophylaxis**        | • Pharmacy updated the antimicrobial protocol to reflect recommendations  
                                        • Printed, laminated protocol placed in all anesthesia boxes  
                                        • OR nurse checks for antibiotic prophylaxis start within one hour of incision  |
| **Glucose Control**                  | • Glucose management instituted pre-op in Amb Surg and post-op in PACU  
                                        • Referral to Anesthesia for glucose management if above parameter  |
| **Operative Skin Preparation**       | • Standardized skin preparation in the OR using DuraPrep® (iodine antiseptic plus alcohol)  |
| **Standardized Fascia Closure**      | • Separate tray for closure  
                                        • Colon cases have a separate closure instrument tray and whole surgical team within the sterile field; change gown and gloves before closure.  
                                        • A laparotomy pack drape is used over the operative field  |
| **Patient Education**                | • Standardized patient and caregiver education on optimal post-discharge wound care  |
Implementation

Partnering

- Clinic
- Pre-admission
- Pharmacy
- Central Sterile Supply
- Materials Mgmt
- OR Nursing
- PACU
- Anesthesia
- Post-op Nursing
- Infection Control
Bundle Compliance

Preadmission Testing

- Skin prep wipes
- Patient education

---

**ADVANCED COLON BUNDLE MONITORING TOOL**

- MR#: 
- Patient’s Name: 
- Date of Procedure: 

---

**PRE-ADMISSION TESTING**

<table>
<thead>
<tr>
<th>INDICATOR/CRITERIA</th>
<th>YES</th>
<th>NO</th>
<th>N/A</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2% Chlorhexidine skin prep distributed to patient during PAT visit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient educated/able to articulate and demonstrate use of 2% Chlorhexidine skin prep</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post op wound management handout given to patient.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient educated on post-op wound management and able to articulate post-op wound management care</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Scheduled Procedure:**

**RN’s Name:**

**Date:**
Bundle Compliance

Ambsurg

- Pre-op skin prep
  - Evening prior
  - Day of surgery
- Blood glucose
  - Morning of surgery
- Body temperature
  - Active warming
    - Bair Paws® gown
Bundle Compliance

Operating Room

- Normothermia
  - Active warming
- Pre-op blood glucose
- Skin prep
  - Duraprep®
- Antibiotic
  - Timing prior to incision
- Wound closure
  - Use of closure tray
  - Team changing gown and gloves
  - Redraping field
Bundle Compliance

PACU Tool

• Normothermia
  o Active warming
  o Temperature on arrival
  o Temperature every 30 minutes until discharge from PACU

• Normoglycemia
  o Blood glucose
  o Glucose management protocol for glucose greater than 200 mg/dl

ADVANCED COLON BUNDLE MONITORING TOOL (PACU)

<table>
<thead>
<tr>
<th>INDICATOR/CRITERIA</th>
<th>[Column for criteria]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Normothermia</td>
<td>[Cell for criteria]</td>
</tr>
<tr>
<td>1a. Active Warming</td>
<td>[Sub-cell for criteria]</td>
</tr>
<tr>
<td>1b. Temp was checked</td>
<td></td>
</tr>
<tr>
<td>1c. Immediately</td>
<td>[Sub-cell for criteria]</td>
</tr>
<tr>
<td>2. Every 30 min</td>
<td>[Cell for criteria]</td>
</tr>
<tr>
<td>2a. Blood glucose</td>
<td>[Cell for criteria]</td>
</tr>
<tr>
<td>2b. Glucose mg/dl</td>
<td>[Cell for criteria]</td>
</tr>
</tbody>
</table>

11/28/2017
Post-Bundle SSI Rates

Advanced Colon Bundle implemented

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Procedures w/o SSI</th>
<th>SSI Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>6/35</td>
<td>17%</td>
</tr>
<tr>
<td>2014</td>
<td>7/23</td>
<td>30%</td>
</tr>
<tr>
<td>2015</td>
<td>7/33</td>
<td>21%</td>
</tr>
<tr>
<td>2016</td>
<td>3/37</td>
<td>8%</td>
</tr>
<tr>
<td>Jan-Sept 2017</td>
<td>1/22</td>
<td>4.5%</td>
</tr>
</tbody>
</table>
Mariana I. Albert Lesher, MS
Director, Data, Health Research & Educational Trust
American Hospital Association

HRET HIIN
1,634 Hospitals
HRET HIIN – C. difficile Rate

Data as of October 2, 2017
n~1,400 hospitals reporting
Getting on Track with Antibiotic Stewardship
Northern Maine Medical Center

- A 49-bed rural acute care hospital
- Services
  - ED
  - ICU
  - Long-term care/skilled/rehab
  - Obstetrics
  - On-site lab and radiology
  - Pharmacy
  - Psychiatry
  - Surgery
Reduction of Hospital-Acquired Infections (C. difficile)

- Northern Maine Medical Center has taken a very aggressive approach to reduce rates of hospital-acquired infections.
- These include:
  - Development of an antibiotic stewardship program
  - Staff education on the prevention of hospital-acquired infections
  - Aggressive handwashing and monitoring program
  - Collaboration with Environmental Services Director to improve and standardize practices
Antibiotic Stewardship Program

• September 2015, Dustin Butler (pharmacist) presented a grand rounds on antibiotic stewardship (motivation)
• Formed a team/committee
  o Erik St. Pierre, MD (ER physician) and Dustin Butler (pharmacist), co-chairs
  o Physicians (ER, surgeon, hospitalist, outpatient)
  o Administration, nursing, infection control, lab, computer systems, quality improvement, housekeeping, public relations
• Reviewed articles and best practices to educate the team/committee
• Provided educational sessions and media for the staff and the community
• Training for the pharmacist as an antibiotic/ID specialist
Antibiotic Stewardship Program Committee

- Met monthly
- Set goals, objectives, and timelines
- Determined the hospital’s most common infections (outpatient, hospital, and surgical)
  - Bronchitis, COPD, cellulitis, otitis, pharyngitis, pneumonia, sinusitis, UTI
  - COPD, cellulitis, pneumonia, sepsis
  - Appendicitis, cholecystitis, diverticulitis
- Developed evidence-based algorithms and protocols individualized to the community, based on antibiogram
- Integrated the antibiotic stewardship program into hospital intranet and hospital EMR
- Incorporated local long-term care facilities into the program
Measures – What and How

- **Compliance**
  - Are the providers following the algorithms? (one at a time)
  - Are the hospitalists documenting into the hospital record?
    - ATB used, the dose, timing, duration, review cultures, deviation from protocol, document the antibiotic time out

- **Outcomes**
  - Resistance rates
  - Opportunistic infections (C. difficile, MRSA)
  - Costs and overall antibiotic use

- Quality department and computer systems are responsible for gathering data, abstracting, and reporting back to the committee.

- Results are showing improved compliance, decreased resistance to antibiotics, decreased incidence of hospital-acquired infections, and cost savings.
Healthcare-Associated CDI Rate

Healthcare Associated C-Diff.
Rate per 10,000 patient days

<table>
<thead>
<tr>
<th>Quarter</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Q2</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Q3</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Q4</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Patient Days</td>
<td>165</td>
<td>1427</td>
<td>1127</td>
<td>1327</td>
<td>1370</td>
</tr>
<tr>
<td>Healthcare Associated C-Diff.</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>
Barriers and How They Were Resolved

• Most small and critical access hospitals do not have monetary resources to fund an antibiotic stewardship program. Importance of delegation and making this part of existing job responsibilities.

• Gathering data can be time consuming and challenging.

• Need to get buy-in from all providers on the importance of antibiotic stewardship.

• Community and patient education must be a part of the program.

• Most small hospitals will not be able to find an infectious disease specialist as a resource. Utilize existing physicians and pharmacists as experts. Only use the ID specialist sparingly.
Advice for Others

• Avoid making only one person responsible for the program (use co-chairs for the committee), preferably a physician and a pharmacist
• Choose team wisely (motivated and responsible)
• Set achievable goals and timelines
• Meet regularly and delegate
• Achieve buy in from all: administration, physicians, and providers
• Educate not only the physicians/providers, but also the rest of the hospital staff, patients, and community
• Collaborate with other hospitals/networks to share ideas, algorithms, data, specialists, etc.
Staff Education on Reducing Hospital-Acquired Infections

- Handwashing education and monitoring activities are always linked back to the prevention of hospital-acquired infections to connect the dots.
- Monthly feedback on monitoring activities provides regular opportunity to connect back to prevention of infection.
- Environmental services staff education and feedback to compliance with checklists to connect back to prevention of infection.
Handwashing Education and Monitoring

- Assessing all hand hygiene/sanitizer locations on a periodic basis for utility/barriers/need to add
- Staff interview/discussion at the same time regarding barriers to hand hygiene
- Monthly secret shopper observations
- Observations collected to include staff names, department, and compliance with gel in and gel out
- Staff and their department supervisor are provided monthly feedback with full transparency of staff names
- Organization-wide monthly feedback by department on compliance
- Monthly tracer activity by the Quality and Infection Prevention Department includes staff interview/discussion/observation of hand hygiene
Collaboration with Environmental Services

- Evaluated best practices for routine and terminal cleaning of rooms
- Initiated cleaning standardized checklists for EVS staff
- Incorporated dedicated bathroom caddies and toilet brushes
- Switched to microfiber floor mops across the institution
- Used disposable cloths for wiping surfaces
- Revisited and hard-wired the weekly, monthly, quarterly, biannual, and annual cleaning checklists
- Incorporated environmental services supervisor daily rounding to ensure new processes implemented
Next Steps

- Embarking on a high-reliability journey
- Reporting and transparency of a total harm rate, which would include any HAI or complication
- Continue developing involvement with long-term care facilities.
Hospital Improvement Innovation Networks and Hospitals Collaboration to Improve Quality of Care
Healthcare-Associated Infections

Questions
Continuing Education Approval

This program has been approved for 1.5 continuing education (CE) units for the following professional boards:

- Florida Board of Clinical Social Work, Marriage & Family Therapy and Mental Health Counseling
- Florida Board of Nursing Home Administrators
- Florida Council of Dietetics
- Florida Board of Pharmacy
- Board of Registered Nursing (Provider #16578)
  - It is your responsibility to submit this form to your accrediting body for credit.
CE Credit Process

• Complete the ReadyTalk® survey that will pop up after the webinar, or wait for the survey that will be sent to all registrants within the next 48 hours.

• After completion of the survey, click “Done” at the bottom of the screen.

• Another page will open that asks you to register in the HSAG Learning Management Center.
  o This is a separate registration from ReadyTalk®.
  o Please use your **personal** email so you can receive your certificate.
  o Healthcare facilities have firewalls up that block our certificates.
CE Certificate Problems

• If you do not immediately receive a response to the email that you signed up with in the Learning Management Center, you have a firewall up that is blocking the link that was sent.

• Please go back to the New User link and register your personal email account.
  ○ Personal emails do not have firewalls.
CE Credit Process: Survey

10. What is your overall level of satisfaction with this presentation?
   - Very satisfied
   - Somewhat satisfied
   - Neutral
   - Somewhat dissatisfied
   - Very dissatisfied

   If you answered "very dissatisfied", please explain:

11. What topics would be of interest to you for future presentations?

12. If you have questions or concerns, please feel free to leave your name and phone number or email address and we will contact you.
CE Credit Process: Certificate

Thank you for completing our survey!
Please click on one of the links below to obtain your certificate for your state licensure.
You must be registered with the learning management site.

New User Link:
https://lmc.hshapps.com/register/default.aspx?ID=da0a12bc-db35-408f-b429-d9f6b9cc1ae

Existing User Link:
https://lmc.hshapps.com/test/adduser.aspx?ID=da0a12bc-db39-408f-b429-d9f6b9cc1ae

Note: If you click the 'Done' button below, you will not have the opportunity to receive your certificate without participating in a longer survey.

Done
CE Credit Process: New User
CE Credit Process: Existing User
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