Preventing Healthcare-Acquired Infections

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Partnering to improve health outcomes through relationships and data

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Hospital Quality Improvement Contractors
CENTERS FOR MEDICARE & MEDICAID SERVICES
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WHY IS THIS IMPORTANT?

The U.S. Department of Health and Human Services (HHS) has identified the reduction of healthcare-associated infections (HAIs) as an Agency Priority Goal. HAIs are infections people get while they are receiving healthcare for another condition. HAIs can happen in any healthcare facility, including hospitals, ambulatory surgical centers, end-stage renal disease facilities and long-term care facilities. Bacteria, fungi, viruses or other less common pathogens can cause HAIs.[1] HAIs cause patient harm, are sometimes deadly and can cost thousands of dollars per incident. For example, central-line associated blood stream infection (CLABSI) is estimated to have the greatest excess mortality (15%) and the highest cost per incident ($17,896-$94,879).[2]

BACKGROUND

Healthcare-acquired infections, also known as hospital-acquired infections (HAI), are nosocomial infections that are typically not present or might be incubating at the time of admission.[3] These infections are usually acquired after hospitalization and manifest 48 hours after admission to the hospital.[2] The infections are monitored closely by agencies such as the National Healthcare Safety Network (NHSN) of the Centers for Disease Control and Prevention (CDC).[2] This surveillance is done to prevent HAIs and improve patient safety. HAIs include CLABSI, catheter-associated urinary tract infections (CAUTI), surgical site infections (SSI), hospital-acquired pneumonia (HAP), MRSA Bacteremia, ventilator-associated pneumonia (VAP) and *Clostridium difficile* infection (CDI).[2]

This resource package will focus on CAUTI, CLABSI, MRSA Bacteremia, CDI and SSI.

HAIs are a significant cause of illness and death, and they can have serious emotional, financial and medical consequences. At any given time, about 1 in 31 inpatients have an infection related to hospital care.[1] For the last few decades, hospitals have taken hospital-acquired infections seriously.[2] Several hospitals have established infection tracking and reporting systems along with robust prevention strategies to reduce the rate of hospital-acquired infections.[2] The impact of hospital-acquired infections is seen not just at an individual patient level, but also at the community level as they have been linked to multidrug-resistant infections.[2] Identifying patients with risk factors for hospital-acquired infections and multidrug-resistant infections is very important in the prevention and minimization of patient harm.[2]

The prevalence of healthcare-acquired infections highlights the critical need for quality improvement in healthcare. By addressing root causes, providers can develop targeted strategies to mitigate risks. Implementing evidence-based guidelines, enhancing patient monitoring and ensuring continuous education for healthcare professionals are essential steps to reduce these events and promote safer, more effective care.

PREPARING FOR CHANGE

The Plan-Do-Study-Act (PDSA) cycle provides a sound framework for quality improvement. Plan by mapping the current process to identify gaps, identifying who will be involved, and confirming what resources may be needed. Do the work by implementing a change or intervention and collecting data on the results as you go. Study the data – were the desired results achieved? Act on the results – accept or adjust the implemented change. Alongside this framework, Telligen recommends utilizing its comprehensive Quality Improvement Workbook which provides valuable resources to support your team's quality improvement efforts. Additionally, Telligen quality improvement facilitators developed the change pathway tool – a topic-specific, step-by-step guide to quality improvement, created using evidence-based practice resources and guidelines.

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[1] https://sam.gov/api/prod/opps/v3/opportunities/resources/files/1c1717ffa2aa41b3b82c60c03f4c6ae5/download?&status=archived&token=

[2] https://www.ahrq.gov/hai/pfp/haccost2017-results.html#considerations

[3] https://www.ncbi.nlm.nih.gov/books/NBK441857/

CATHETER-ASSOCIATED URINARY TRACT INFECTION (CAUTI)

INFECTION PREVENTION

CHANGE PATHWAY

The change pathway tool is a topic-specific, step-by-step guide to quality improvement. The change pathway is created using evidence-based practice resources and guidelines. Key quality improvement activities such as formulating an aim statement, conducting a root cause analysis and identifying interventions are included in each guide. Interventions are outlined as beginner, intermediate and expert so that you may explore opportunities for improvement that meet your needs.

- Change Pathway: CAUTI Prevention

RESOURCES

AHRQ – Toolkit for Reducing CAUTI in Hospitals	CDC – CAUTI Deep Dive for Infection Preventionists
AHRQ – The CUSP Method	CDC – CAUTI TAP Facility Assessment Tool
APIC – CAUTI Professional and Consumer Resources	CDC – TAP Strategy Toolkit
CDC – CAUTI Implementation Guide	Telligen – Gap Assessment Tool

RECORDINGS AND SLIDE DECKS

CAUTI Prevention in Action: Strategies from the Field (2022): Recording and Slides

EFFECTIVENESS CHECKS

1. Audit for the specific change you were aiming for.
2. Collect and analyze the data.
3. Share findings, opportunities and successes with staff, leadership and if possible, with patients.

Based on your data findings, if the change seen did not lead to the desired improvement, re-evaluate the root cause and consider launching another PDSA cycle.

For additional information and resources, visit Telligen's hospital resources page.

CENTRAL-LINE ASSOCIATED BLOOD STREAM INFECTION (CLABSI)

INFECTION PREVENTION

CHANGE PATHWAY

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- Change Pathway: Central Line-associated Bloodstream Infections

RESOURCES

AHRQ – Toolkit for Reducing CLABSI	CDC – CLABSI Implementation Guide
AHRQ – The CUSP Method	CDC – CLABSI TAP Facility Assessment Tool
CDC – CLABSI Deep Dive for Infection Preventionists	CDC – TAP Strategy Toolkit

RECORDINGS AND SLIDE DECKS

CLABSI During COVID-19: Slides and Handout

Moving Forward Using Lessons Learned to Prevent Central Line-associated Bloodstream Infections (CLABSI): Recording and Slides from Alliant Health
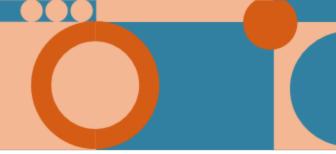
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MRSA BACTEREMIA

INFECTION PREVENTION

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- Change Pathway: Infection Prevention Back to Basics: Multidrug-Resistant Organisms (MDROs)

RESOURCES

AHRQ – MRSA Prevention	CDC – Strategies to Prevent Hospital-onset S. aureus Bloodstream Infections in Acute Care Facilities
AHRQ – The CUSP Method	CDC – TAP Strategy Toolkit
APIC – MRSA Professional and Consumer Resources	Telligen – Implementing an Antibiotic Stewardship Program Resource Package
CDC – Infection Control Guidance: Preventing MRSA in Healthcare Facilities	

RECORDINGS AND SLIDE DECKS

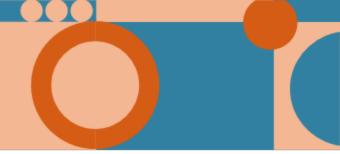Infection Prevention Back to Basics: Multidrug-Resistant Organisms (MDROs): Slides

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CLOSTRIDIUM DIFFICILE INFECTION (CDI)

INFECTION PREVENTION

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- Change Pathway: Infection Prevention Back to Basics: Multidrug-Resistant Organisms (MDROs)

RESOURCES

Actionable Patient Safety Solutions™ CDI	CDC – CDI Implementation Guide
AHRQ – Best Practices in the Diagnosis and Treatment of CDI	CDC – CDI TAP Facility Assessment Tool
AHRQ – The CUSP Method	CDC – TAP Strategy Toolkit
APIC – CDI Professional and Consumer Resources	Telligen – CDI Drill Down Template
CDC – CDI Deep Dive for Infection Preventionists	Telligen – Implementing an Antibiotic Stewardship Program Resource Package

RECORDINGS AND SLIDE DECKS

Infection Prevention Back to Basics: Multidrug-Resistant Organisms (MDROs): Slides

EFFECTIVENESS CHECKS
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SURGICAL CARE FRAMEWORK PATHWAY

Telligen developed this comprehensive educational guide which focuses on the surgical continuum of care: pre-, intra- and post-operative processes. This guide assists hospitals and surgical care teams in examining surgical workflows, identifying practice gaps, and implementing best practices to prevent surgical site infections (SSIs), post-operative pulmonary embolism (PE) and/or deep-vein thrombosis (DVTs). Additionally, this guide provides quality improvement recommendations that support the safety and efficacy of pain management for patients within all phases of surgical care.

- [Guide to Strengthening Your Hospital Surgical Care Framework](#)

RESOURCES

[AHRQ Toolkit to Promote Safe Surgery](#)	[CDC – Surgical Site Infection Basics](#)
[AHRQ – The CUSP Method](#)	[CDC – TAP Strategy Toolkit](#)
[APIC – Disinfection and Sterilization Professional and Consumer Resources](#)	

RECORDINGS AND SLIDE DECKS

Effective Infection Prevention Practices in the Current Environment: [Slides](#)

TAP Strategy Series:
- Session 1(Introduction): [Recording](#) and [Slides](#)
- Session 2 (Target and Assess): [Recording](#) and [Slides](#)
- Session 3 (Analyze Assessment Results): [Recording](#) and [Slides](#)
- Session 4 (Prevent Infections): [Recording](#) and [Slides](#)

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