Infection Prevention
Implement processes to prevent healthcare-associated infections (HAIs).

Domain

Processes to Support Care:
Processes that are essential to support and maintain the delivery of care to all types of patients, across all units and settings in the hospital

Aims

Safe:
Delivery of care in a manner that minimizes any risk of harm to a patient

Process Attributes

$ Cost to Implement
The monetary resources required to implement this process

Moderate: In addition to the improvement effort, relies on additional personnel and/or technology

Time to Implement
The amount of time, from months to years, it will take on average to establish this process

1 to 2 years

Difficulty to Implement
The challenges of implementing this process

Moderately Challenging: Either involves multiple units or disciplines OR requires a substantial shift in culture and/or operations, but not both of these

Level of Evidence
The degree to which the actions in this process are supported by research and experience; based on the Cochrane scale

Strong Evidence: Level I or Level II — Studies published using randomized trials

Details

Elements

• Establish a process for the detection of healthcare-associated infections (HAI)

• Program for the prevention of healthcare-associated infection (HAI)
Prioritizing and then implementing healthcare-associated infection (HAI) prevention efforts

- Catheter-associated bloodstream infections
- Catheter-associated urinary tract infections
- Clostridium difficile
- Methicillin-resistant Staphylococcus aureus (MRSA)
- Surgical site infections
- Ventilator-associated pneumonia
- Emerging resistant gram negative bacteria

Outcomes

- **Mortality (HSMR):** Decreased mortality (hospital standardized mortality ratio, or HSMR)
- **Harm:** Decreased harm to patient (e.g., Harms per 100 patient days, as measured by the IHI Global Trigger Tool)
- **Cost of Care:** Decreased cost per inpatient case
- **Readmissions within 30 Days:** Decreased readmissions within 30 days
- **Reliability:** Increased delivery of evidence-based care 100% of the time

Service Lines and Critical Functions

- Applies in All Patient Settings
- Infection Prevention and Management

Key Measures

- Catheter-associated bloodstream infection rate
- Catheter-associated urinary tract infection (UTI) rate
- Clostridium difficile rate
- Methicillin-resistant Staphylococcus aureus (MRSA)-specific infection rates (BSI, SSI, other)
- Surgical site infection rate
- Ventilator-associated pneumonia rate

Reasons and Implications

Importance for Patients and Families
When patients get an infection during their hospitalization, it increases their length of stay and their risk for harm. By implementing the appropriate interventions, patients are safer and go home sooner.
Requirement, Standards, Policies, and Guidelines

- Agency for Healthcare Research and Quality (AHRQ)
- APIC
- Centers for Disease Control and Prevention (CDC)
  Infection Control Guidelines
- Centers for Medicare & Medicaid Services (CMS)
  Inpatient Prospective Payment System (IPPS) Fiscal Year (FY) 2009 Final Rule
- Centers for Medicare & Medicaid Services (CMS)
  Hospital Process of Care Measures
- Infectious Disease Society of America (IDSA)
- National Priorities Partnership (NPP)
  Safety
- National Quality Forum (NQF)
  Patient Safety: Safe Practices 2010
  Safe Practice 24: Multidrug-Resistant Organism Prevention
- Society of Healthcare Epidemiology of America (SHEA)
- The Joint Commission (TJC)
  2010 National Patient Safety Goals
- The Joint Commission (TJC)
  Standards Improvement Initiative (SII) Chapter Outline, National Patient Safety Goal 7: Reduce the risk of health care-associated infections
- The Leapfrog Group

Financial Implications

- Expense reduction can occur due to decrease in incidence of HAIs, with less personnel and equipment costs.
- Expense increase can occur due to increased need for gowns, gloves, other personal protective equipment, and hand gels and dispensers (supply costs).

Prerequisites

None for this process
Resources
Additional Resources

- **American Hospital Association (AHA)**
  Hospitals in Pursuit of Excellence – Individual Case Studies
  Attacking MRSA Through Positive Deviance
  Albert Einstein Medical Center

- **Centers for Disease Control (CDC)**
  Healthcare-associated infections

- **The Commonwealth Fund**
  Why Not the Best?
  Comparative performance data on surgical care, including infection control processes

- **Agency for Healthcare Research and Quality (AHRQ)**
  Chapter 13. Impact of Barrier Precautions in Reducing the Transmission of Serious Nosocomial Infections.

- **American Hospital Association (AHA)**
  Hospitals in Pursuit of Excellence – Individual Case Studies
  DICON to Reduce MRSA Infection Prevention
  Community Memorial Healthcenter

- **American Hospital Association (AHA)**
  Hospitals in Pursuit of Excellence – Individual Case Studies
  Collaboration to Prevent Infections
  Bronson Methodist Hospital

- **The Joint Commission Accreditation Program: Hospital**
  National Patient Safety Goals

- **Agency for Healthcare Research and Quality (AHRQ)**

- **Association for Professionals in Infection Control and Epidemiology, Inc. (APIC)**

- **US Department of Health and Human Services**
  Partnership for Patients

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