

## PREVENTION OF HEALTHCARE-ASSOCIATED INFECTIONS AND ANTIMICROBIAL RESISTANCE

Healthcare-associated infections impose a significant burden on the healthcare system in the United States, both economically and in terms of patient outcomes. The Centers for Disease Control and Prevention (CDC) estimate that nearly 2 million patients develop healthcare-associated infections each year, and approximately 88,000 die as a direct or indirect result of their infections. These infections often lead to increases in length of hospitalization, and result in about \$4.5 billion in excess costs annually. The central aim of infection control is to prevent healthcare-associated infections and the emergence of resistant organisms. Hospitalists work in concert with other members of the healthcare organization to reduce healthcare-associated infections, develop institutional initiatives for prevention, and promote and implement evidence based infection control measures.

### KNOWLEDGE

*Hospitalists should be able to:*

- Describe acceptable methods of hand hygiene technique and timing in relationship to patient contact.
- Describe the prophylactic measures required for all types of isolation precautions, which include Standard, Contact, Droplet, and Airborne Precautions, and list the indications for implementing each type of precaution.
- List common types of healthcare-associated infections, and describe the risk factors associated with urinary tract infections, surgical site infections, hospital-acquired pneumonia, and blood stream infections.
- Explain the utility of the hospital antibiogram in delineating antimicrobial resistance patterns for bacterial isolates, and how it should be used to make empiric antibiotic selections.
- Identify major resources for infection control information, including hospital infection control staff, hospital infection control policies and procedures, local and state public health departments, and CDCP guidelines.
- Describe the indicated prevention measures necessary to perform hospital-based procedures in a sterile fashion.

### SKILLS

*Hospitalists should be able to:*

- Perform consistent and optimal hand hygiene techniques at all indicated points of care.
- Implement indicated isolation precautions for patients with high risk transmissible diseases or highly resistant infections.
- Identify and utilize local hospital resources, including antibiograms and infection control officers.
- Perform indicated infection control and prevention technique during all procedures.
- Implement precautions and infection control practices to protect patients from acquiring healthcare-associated infections.

### ATTITUDES

*Hospitalists should be able to:*

- Appreciate that specific infection control practices and engineering controls are required to protect very high risk patient populations, which may include hematopoietic stem cell transplant or solid organ transplant recipients, from healthcare associated infections.
- Serve as a role model in adherence to recommended hand hygiene and infection control practices.
- Communicate effectively the rationale and importance of infection control practices to patients, families, visitors, other health care providers and hospital staff.
- Communicate appropriate patient information to infection control staff regarding potentially transmissible diseases.
- Avoid devices that are more likely to cause hospital-acquired infections if alternatives are safe, effective and available.
- Encourage removal of invasive devices, especially central venous catheters and urinary catheters, early during hospital stay and as soon as clinically safe to do so.
- Collaborate with multidisciplinary teams, which may include infection control, nursing service, and infectious disease consultants, to rapidly implement and maintain isolation precautions.

- Collaborate with multidisciplinary teams that may include infection control, nursing service, care coordination, long term care facilities, home health care staff, and public health personnel to plan for hospital discharge of patients with transmissible infectious diseases.
- Lead, coordinate or participate in efforts to educate other health care personnel and hospital staff about necessary infection control prevention measures.
- Lead, coordinate or participate in multidisciplinary teams that organize, implement, and study infection control protocols, guidelines or pathways, using evidence based systematic methods.
- Lead, coordinate or participate in multidisciplinary efforts to develop empiric antibiotic regimens to minimize the development of resistance within a particular hospital or region.