Considerations Unique to Long Term Care Facilities

In United States long term care facilities, 1.6 to 3.8 million infections occur each year. More specifically, the overall rate for endemic (widespread) infections ranges from 1.8 to 13.5 infections per 1,000 resident care days. According to the Center for Disease Control (CDC), concerns in long term care include endemic infections such as urinary tract, respiratory tract, and gastrointestinal infections. The CDC cites infections in long term care facilities as the reason for almost half of all resident hospital transfers, resulting in an estimated cost of $673 million to $2 billion annually. Along with the increased number of infections, Administrators and Directors of Nursing must focus on regulatory as well as legal risk factors in prevention and control strategies.

Increased Focus on Healthcare-associated Infections

Healthcare-associated infections (HAIs) are defined as those infections that patients acquire while receiving treatment for medical or surgical conditions. HAIs occur in all healthcare settings including acute care, day surgery centers, outpatient clinics, as well as long term care facilities. HAIs have a significant impact on human life and are now considered to be one of the top ten leading causes of death in the United States. It is estimated that HAIs account for approximately two million infections and 100,000 deaths every year. While the concept of HAIs and infection prevention concepts are not new to the healthcare industry, the risks associated with HAIs create escalating risks to healthcare providers including litigation, monetary exposure, negative regulatory outcomes, negative publicity, and negative outcomes to patient care.

Trends That Will Most Likely Affect Long Term Care in the Future

Currently, the focus on HAIs has been in the acute care setting and is changing healthcare standards, enforcement, and liability to include:

- Hospital-acquired infections are no longer considered an “inherent” risk of any hospital stay
- Hospital-acquired infections are considered to be “preventable”
- Healthcare focus is shifting from response to prevention
- The reduction of HAIs will save lives, reduce costs, and improve the quality of care
- Medicare/Medicaid, along with many other providers, will no longer reimburse hospitals for secondary diagnosis, which includes many hospital-acquired infections
- Burden of proof is shifting to the hospital to prove infection was not a result of patient stay. Strict liability standards are proposed for hospital-acquired infections
- There is an increase in plaintiff’s litigation against healthcare facilities on behalf of
patients who acquire an infection during hospital stay

- Insurance for HAIs will be in great demand as hospitals experience increased exposure and potential liability.

Although these trends are currently observed mostly in the hospital setting, it is reasonable to expect that they will cross over to the long term care setting—or already have crossed over. It is imperative that long term care facilities begin to respond now in their focus on prevention of HAIs to reduce exposure and to enhance quality of care outcomes.

To narrow the scope of this article, the main focus of infection prevention strategies and discussion will review the most prevalent infections in the long term care setting: urinary tract infection and, in addition, the emerging threat of Clostridium difficile (C. diff). The CDC estimates that the onset of C. diff cases in long term care facilities exceeds 263,000 residents and results in $2.2 billion in excess costs and 16,500 deaths annually.

**Definitions and Diagnosis**

A urinary tract infection (UTI) is defined as an inflammatory response in the urinary tract by invasion and colonization of a pathogen, usually bacterial. Factors that have been linked to the development of UTI in the elderly are increased age, menopause, instrumentation of the urinary tract (catheterization), or dehydration. Diagnosing asymptomatic (without symptoms) UTI is challenging in the elderly population. Common symptoms such as dysuria, acute incontinent episodes, urinary frequency, fever, and flank pain may not be present. According to the Association for Practitioners in Infection Control (APIC) and the Society for Healthcare Epidemiology of America (SHEA), lab confirmation of more than 100,000 colony forming units (CFU)/ml is standard to confirm a positive urine culture.

However, a positive urine culture does not always indicate whether a nursing home resident has a UTI or bacteriuria (defined as a positive culture without characteristic symptoms or other indications of infections for a week prior to obtaining a urine sample). Asymptomatic bacteriuria is not considered a UTI and should not be treated unless accompanied by characteristic UTI symptoms. The diagnosis of asymptomatic bacteriuria versus UTI needs to be based on the combination of laboratory and clinical findings not just laboratory findings alone. Another possible indicator of UTI is an acute onset of falls, which increase the risk factor for future litigation. Left untreated, a UTI can result in septicemia and or death.

C. diff is defined as a gram-positive anaerobic spore-forming bacillus (rod-shaped bacterium) responsible for antibiotic-associated diarrhea and/or colitis. It is named Difficile because of its slow growth and difficulty in culturing. C. diff infection commonly manifests as occasional abdominal cramping and mild to moderate diarrhea. Diagnosis of C. diff should be suspected in all residents with diarrhea who received antibiotics within the previous two months and/or diarrhea 72 hours or more after hospitalization. Normal gut flora is known to resist colonization and C. diff overgrowth; however, antibiotic use suppresses normal flora and allows proliferation of C. diff. While persons of any age are at risk for infection, particularly susceptible are the frail elderly. C. diff associated diarrhea can be a serious condition with a mortality rate as high as 25 percent. Reports focusing on the more seriously ill resident suggest mortality rates of up to 30 percent. The most common diagnosis for C. diff is through stool culture analysis. Recurrent infections will occur in 20–25 percent of patients due to germination of persistent C. diff spores in the colon after treatment or reingestion of the pathogen.
Both infections left undiagnosed or untreated increase risk factors for regulatory and legal ramifications for alleged negligence or wrongful death litigation with burden of proof resting on the facility to prove that it was not a HAI that was “preventable.”

**HAI Tied To Regulatory Scrutiny—Revised Interpretive Guidelines for Long Term Care Facilities, Tag F441**

Facilities will be reviewed for infection control practices during the annual survey or complaint survey. Infection control practices are tied to regulatory requirement 42CFR 483.65 Infection Control (F441). This was revised effective September 30, 2009. The revised instructions combine F-tags 441, 442, 443, 444, 445, and incorporate the guidance into tag 441. The intent of the new guidance was to bring everything that relates to infection control into one location to best utilize the surveyor’s time and resources.

The intent of this regulation is to ensure that the facility develops, implements, and maintains an Infection Prevention and Control Program in order to prevent, recognize, and control, to the extent possible, the onset and spread of infection within the facility. The infection program shall:

- Perform surveillance and investigation to prevent, to the extent possible, the onset and the spread of infection
- Prevent and control outbreaks and cross-contamination using transmission-based precautions in addition to standard precautions
- Use records of infection incidents to improve its infection control processes and outcomes by taking corrective actions, as indicated
- Implement hand hygiene (hand washing) practices consistent with accepted standards of practice to reduce the spread of infections and prevent cross-contamination
- Properly store, handle, process, and transport linens to minimize contamination

**Litigation Risk Factors (Causes for Action) Tied to Survey Outcomes and HAIs**

The traditional elements to prove negligence in a nursing home setting are:
- A duty of care was owed by the employee to the resident
- There was a breach of that duty
- Conduct that is a proximate cause of that injury
- Injury involving actual damages

Also to succeed in a negligence complaint, the plaintiff attorney must prove the nursing home violated a “standard of care.” Standards of care are derived from certain duties owed to the resident, and violations of such standards can be negligence regardless of the staff’s intentions. Violations that result from breaches of state or federal law result in a prima facie (open and shut) case of negligence.

Deficiencies and corresponding deficiencies that involve infection control practices relating to HAIs can help build an argument for negligence, clinical malpractice, or related wrongful death complaints, especially if the deficient practice cited involved the plaintiff.

**HAIs: Systems to Review**

Focus and diligence in the practice of infection control and—most importantly—prevention of HAIs must include assessment, reassessment, and interventions. These areas are also the keys to success in improving resident care, successful survey outcomes, and decreasing the risk of successful litigation against the facility.

**Screening, Assessing, and Care Planning**

- Utilize standard screening process and provide screening on admission and/or readmission as well as any change in condition
- Request all laboratory results for residents discharging from hospital
- Review hospital discharge information to determine if resident was catheterized during hospital stay
Perform comprehensive assessment for residents at high risk for infection or recurrent infection due to prior healthcare setting and/or related illness

Perform comprehensive assessment of resident with active signs or symptoms of infection

Designate responsibility and accountability for care plan development and oversight

Ensure care plan adherence to accepted current clinical care guidelines that involve pharmaceutical and non-pharmaceutical modalities

Define goals for resident to maintain their current function and abilities throughout course of infection

Monitor response to plan of care, review, and adjust as indicated by response to treatment

**Infection Management and Prevention**

- Establish an interdisciplinary infection control and surveillance team with designated leadership (Infection Preventionist), accountability, and meeting schedule
- Identify and implement a comprehensive infection control management program
- Establish and implement policies and protocols for an infection control and surveillance program
- Provide training to staff and assign accountability for components of infection prevention, surveillance, and antibiotic use
- Empower staff to assess for inadequate hydration, skin care, etc.
- Use clear, standardized charting processes so that all staff may understand the residents’ risks for infection and current prevention status and/or treatment regardless of staff turnover issues

- Adopt a system of feedback of surveillance data to staff
- Encourage adequate hydration for all residents—make water easily available, offer other appealing opportunities for hydration such as ice pops, hot apple cider, lemonade with strawberries (in sugar-free forms as well), etc., throughout the day to enhance consumption
- Focus on training and observing all staff for proper hand washing techniques
- Recognize and reward staff members who are vigilant with regards to infection prevention and detection

**About the Authors**

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Checklist: Infection Screening

Does your facility have a process to screen residents for specific signs/symptoms of infection upon admission/readmission?

A screening is a brief evaluation of the transfer documents, with questions that determine if the resident has any signs such as fever, rash, cough, wounds, or symptoms such as urinary urgency, frequency, sputum production, etc. It does not include a thorough history or physical examination, which should be performed if the inquiry reveals suspicion that the resident presently has an infection.

_____ No. If no, this is an area for improvement. Use this checklist to guide your team in implementing a process for infection screening.

_____ This is an area we are working on. Our target date for implementing a process for screening is: ________________________.

Does your facility have a process for infection screening that addresses all the areas listed below?

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If any of the above elements in your process are missing:

- Choose one element on which to focus your quality improvement effort first
# Checklist: Infection Assessment

Does your facility complete a comprehensive assessment for residents who are found to have signs/symptoms of the following common infections upon screening?

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Does your facility’s process for comprehensive infection assessment include all of the elements below?

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1. On admission, readmission, or reassessment of infection are the following elements included?
   a. Temperature, including the mode used (oral, rectal, axillary, ear probe)?
   b. Presence of rash, including location and description?
   c. Presence and description of the pertinent signs of infection? (e.g., for a new onset cough, the frequency and intensity of the cough, and amount and color of sputum, etc.)
   d. Date and time of onset or, after treatment is begun, the recurrence of symptoms, signs? (e.g., “sudden chill at 2 p.m.,” or “spiked a fever of 101 degrees at 0800,” or, for hepatitis, “onset of jaundice last August,” etc.)
   e. Pertinent history of recent infection? (e.g., “Hospitalized for pneumonia last year”)  
   f. Information concerning possible contagion? (e.g., regularly plays cards with Mrs. A, Mr. B, and Miss C in the activities room)
   g. Which licensed staff performs admission assessments?

If any of the above elements in your process are missing:

- Choose one element on which to focus your quality improvement effort first

Resource: This material was developed by the Quality Improvement Organization (QIO) Program from the Centers for Medicare and Medicaid Services’ (CMS), Nursing Home Quality Initiative (NHQI) and is intended as general information. Any individual using the material must consider the possibility of human error, changes in medical sciences, and the need to use clinical judgment in each specific case.