Public Health and Infection Prevention: Preventing Healthcare Associated Infections Together

Healthcare associated infections (HAI) are a threat to patient safety. HAIs are infections that people acquire while receiving treatment for another condition in a health care setting. Compared to persons in the community, patients receiving medical care are more likely to develop severe and life-threatening infections. This increased susceptibility is due to a range of host factors including immunosuppression, invasive procedures, and antibiotic use; putting patients at higher risk for antibiotic resistant infections. The impact of HAIs is significant, contributing to increased hospitalizations, financial burden, and potential loss of trust in healthcare. A prevalence survey conducted by the Centers for Disease Control and Prevention (CDC) found that on any given day, about one in 25 hospital patients has at least one HAI.¹ HAIs affect multiple healthcare settings and can spread in hospitals, nursing homes, rehabilitation facilities, clinics, or other clinical settings.

**Surveillance**

HAI surveillance has been a formal part of the public health infrastructure for just under a decade. Historically, the Washington State Department of Health’s HAI Program has focused its efforts on quality reporting of select HAIs. The scope of HAI epidemiology is now taking on an even bigger role in the public health spectrum. The prevention of HAIs is a top priority of the U.S. Department of Health and Human Services (HHS). Much of this renewed interest in HAI prevention stemmed from the 2014 Ebola outbreak in West Africa and the increasing battle against antibiotic resistant infections. This past year, the CDC published infection control assessment tools to assess infection prevention practices and guide quality improvement. These tools are part of a bigger movement in HAI-focused...
public health, known as **Infection Control Assessment and Response (ICAR)**. The development of the CDC’s ICAR tools included intensive reviews of the most current, evidence-based infection prevention publications and the infection control regulations required for the licensing of healthcare facilities. The ICAR concept is simple, to understand the current landscape of infection prevention capacity in healthcare settings. This understanding will ultimately lead to the generation of infection prevention improvement resources for healthcare facilities.

**HAIs are not unique to the hospital environment.** This realization was further solidified when the term “hospital acquired infections” was adapted to the more inclusive concept of “healthcare associated infections” was adapted to the more inclusive concept of “healthcare associated infections”. The healthcare system has shifted from hospital – based care to a complex matrix of inpatient and outpatient services. The astounding growth of ambulatory surgical centers is one example of this phenomenon. The first such centers were established in the 1970s, however Medicare did not provide coverage for ambulatory care center services until 1982.² Now, the majority (63%) of Medicare covered surgeries occur in these centers.² The tremendous growth of ambulatory care centers and other outpatient settings has not kept pace with infection prevention and public health resources. ICAR provides a way to kick start infection prevention in a multitude of healthcare settings.
ICAR tools are available for acute care (including hospitals and long-term acute care hospitals), outpatient, long-term care, and hemodialysis facilities.

In order for the healthcare system to plan for emerging special pathogens, such as Ebola and Middle East Respiratory Syndrome (MERS), the foundational building blocks of infection prevention must be in place. The ICAR tools take us back to these critical infection prevention basics. The tools include a user-friendly checklist format to assess the full range of infection prevention activities and include hand hygiene, surveillance, injection safety, prevention of Clostridium difficile, device reprocessing, and more. The CDC encourages healthcare facilities to download the tools and use them to conduct internal quality improvement audits.

Assessments

In 2015, the Washington State Department of Health received federal funding from the CDC to conduct enhanced ICAR assessments. The funding has enabled us to hire a full-time ICAR nurse, Patty Montgomery. Additionally, the funds are providing a means to bolster infection prevention capacity at the local health jurisdictions. We have begun a 3-year pilot to evaluate the utility of a local health jurisdiction-based ICAR program. There are two pilot programs in Washington: Clark County Health Department and Spokane Regional Health District. Dana Nguyen (Clark County) and Dorothy MacEachern (Spokane Region) are the local ICAR leads. In coordination with the corresponding local health jurisdiction, the ICAR consultants will conduct site visits in a variety of healthcare settings. The ICAR visits are consultative, voluntary, and typically take a half day to complete. Following the visits, the ICAR consultants will provide the facility with a report of the findings and provide improvement tools. Over the next year, Patty will focus on ambulatory care sites, while the local health jurisdiction-based ICAR consultants will work closely with their respective long-term care facilities. In grant years two and three, the visits will expand to include acute care hospitals and dialysis centers.

The ICAR visits will provide a bridge for healthcare facilities to better access public health resources and expertise. A recent infection prevention publication described the public health and healthcare communication bridge as “extremely important”. This bridge is a two-way street, as the benefits for public health are abundant. We are excited to learn about innovative infection prevention practices that many healthcare facilities have implemented across Washington State and to build stronger relationships with the healthcare community. For questions about the ICAR project or to schedule a site visit, please contact Patty Montgomery at (206) 418-5558 or patricia.montgomery@doh.wa.gov.
Resources:

CDC’s Infection Control Assessment Tools:

Washington State Healthcare Associated Infections Program:
http://www.doh.wa.gov/YouandYourFamily/IllnessandDisease/HealthcareAssociatedInfections

Centers for Disease Control and Prevention Healthcare Associated Infections: http://www.cdc.gov/hai/

References:

