Healthcare-Associated Infections (HAIs)
Healthcare-associated infections (HAIs) are an increasingly recognized problem by the healthcare community. The number of people who are sickened and the financial impact from HAIs are unacceptably high. In 2014, results of a project known as the HAI Prevalence Survey described the burden of HAIs in U.S. hospitals, and reported that there were an estimated 722,000 HAIs in U.S. acute care hospitals. Additionally, about 75,000 patients with HAIs died during their hospitalizations. Intrinsic to the problem is the inconsistent implementation of proven preventive measures. In addition, there is little information about the burden of infections outside hospitals, particularly in long-term care facilities, ambulatory surgical centers, and other outpatient settings. With the emergence of HAIs caused by multidrug resistant microorganisms, there is an increasing concern about these types of infections across the continuum of care.

Requirements for the Elimination of HAIs
APIC believes the public policy recommendations needed to move in the direction of HAI elimination were succinctly outlined in Moving toward elimination of healthcare-associated infections: A call to action. They include:

- increasing sustainability through the alignment of financial incentives and reinvesting in successful strategies;
- collecting data to target prevention efforts;
- promoting adherence to evidence-based practices through partnering, educating, implementing, and investing;
- filling knowledge gaps to respond to emerging threats through basic, translational, and epidemiological research.

Align Financial Incentives
A thoughtful integration of payment incentives that focuses on prevention is critical in moving toward elimination of HAIs. Payment policies should provide sufficiently broad incentives to catalyze the development of systems of care that are prevention oriented. In such systems, prevention of HAIs would not be an added requirement, but would be completely embedded in the processes of care delivery. A broad, strategic approach toward prevention oriented healthcare payment is likely to shift the focus from strategies based on individual healthcare encounters (i.e. reduced payment for individual HAIs) to performance-modeled payment to providers or groups of providers based on the population-based results (i.e. numbers or rates of HAIs among all hospital admissions, all providers’ patients, or particular groups of patients).

Collect Data to Target Prevention Efforts
Timely and accurate data on HAI occurrences are necessary to define the scope of the problem, its variability across locations, and to assess progress toward elimination. Incidence data allows healthcare epidemiologists and infection preventionists to detect HAI trends, inform clinicians about how best to prioritize prevention interventions, and assess the impact of those interventions. Data also allows public health officials to identify local and regional facilities in need of improvement. Measurement can also provide institutions and the public with information for comparisons across facilities and regions to better understand current risks for HAIs as well as risks over time.

Investments for timely and high-quality data should be focused on:
- reshaping standard definitions and surveillance methods to fit the new, emerging information system paradigms (e.g. electronic health information records and data mining);
- creating national and global data standards for key HAI prevention metrics;
- creating or refining the data analysis and presentation tools available to prevention experts, clinicians, and policy makers at the local, state, national, and international levels.
Adherence to Evidence-Based Prevention Practices

The cornerstone of HAI elimination is to increase adherence to what is already known to be effectively implemented, on the basis of scientific evidence. These recommendations are based on research conducted by experts in prevention and are included in several clinical guidelines.** Adherence to evidence-based practices will require flexibility to respond to the changing healthcare environment. Below are two areas where changes can be made to help the elimination of HAIs:

- **Successful HAI prevention strategies have primarily targeted infections in ICUs.**
  Prevention efforts must move increasingly into non–critical care hospital settings and nonhospital healthcare settings to achieve the best possible outcomes.

- **Collaboration between competing facilities is key to HAI elimination.**
  Partnerships among healthcare facilities, health departments, and hospitals, have allowed sharing of best practices and strategies. Partnering with payers can also create an incentive for facilities to prevent HAIs by rewarding progress toward elimination.

Address Gaps in Knowledge

Healthcare professionals need to better understand how and why HAIs occur. Although there are successful prevention initiatives for some device-associated infections in ICUs, research is still needed to develop evidence-based prevention recommendations for many other HAIs. In some cases, additional research is needed to augment a limited understanding of the basic epidemiology of healthcare-associated pathogens (e.g. colonization and transmission dynamics), to inform development of rational prevention strategies.

Policymakers and infection preventionists must continue to work together to increase adherence to practices supported by the body of knowledge on existing prevention interventions and toward the alignment of incentives to accelerate the elimination of HAIs. We must invest in research to find innovative solutions to combat challenges, such as antimicrobial resistance, the increasing burden of HAIs outside of traditional hospital settings, and the refinement of existing intervention bundles to be the safest and most cost-effective. We must be flexible and responsive to emerging challenges and the changing healthcare environment. Most of all, we must focus on the patient and must challenge ourselves to no longer accept the unacceptable. HAIs are preventable. We must work together to eliminate HAIs for the generations to come.

*Note: APIC collaborated with the Centers for Disease Control and Prevention (CDC), the Society for Healthcare Epidemiology of America (SHEA), the Infectious Diseases Society of America (IDSA), the Association of State and Territorial Health Officials (ASTHO), the Council of State and Territorial Epidemiologists, the Pediatric Infectious Diseases Society (PIDS) on Moving toward elimination of healthcare-associated infections: A call to action, 2010. The recommendations in this document are detailed in that paper.

**Source documents include Center for Disease Control and Prevention’s Healthcare Infection Control Practices Advisory Committee [HICPAC] infection control guidelines, Society for Healthcare Epidemiology of America and Infection Diseases Society of America’s Compendium of Practical Strategies to Prevent Healthcare-Associated Infections in Acute Care Hospitals, and APIC’s Elimination Guides.

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About APIC

APIC’s mission is to create a safer world through prevention of infection. The association’s more than 15,000 members direct infection prevention programs that save lives and improve the bottom line for hospitals and other healthcare facilities. APIC advances its mission through patient safety, implementation science, competencies and certification, advocacy, and data standardization. Visit APIC online at www.apic.org. Follow APIC on Twitter: www.twitter.com/apic and Facebook: www.facebook.com/APICInfectionPreventionandYou. For information on what patients and families can do, visit APIC’s Infection Prevention and You website at www.apic.org/infectionpreventionandyou.

What do infection preventionists do?

Infection preventionists play a significant role in:

- Developing proven policies to ensure a safe environment for patients;
- Ensuring compliance with standards and regulations designed to protect patients and healthcare workers;
- Tracking and monitoring activities to identify and prevent healthcare-associated infections and other infectious agents;
- Leading and participating in healthcare quality improvement efforts designed to protect patients;
- Educating the public and healthcare personnel about infectious diseases and how to limit their spread;
- Serving as leaders in preparing healthcare facilities and personnel to be ready for events such as an influenza pandemic; infectious diseases such as Ebola; and acts of bioterrorism;
- Reporting communicable diseases to the CDC.