



ARCHIVES Y EDUCATION RESOURCES Y ONLY ONLINE Y GUIDES & LISTINGS Y HALL OF FAME ADVERTISE ABOUT US Y SUBSCRIBE Y

Magazine 2018 Expert Exclusives Infection Prevention June Periscope



# Smart equipment choices can help lower HAI incidents

By Cindy Juhas - May 23, 2018



Healthcare-associated infections (HAI) lead to thousands of patient deaths while draining medical facilities of billions of dollars each year.

Despite the 2013 Patient Protection and Affordable Care Act's new criteria for Medicare reimbursements, which resulted in significant progress on reducing infection, HAI cases persist. While the monetary loss facilities face when dealing with an HAI is astounding, the honest question is: What can a healthcare facility do to protect its patients and employees?

The answer begins with purchasing agents and infection preventionists reviewing equipment options together. This alliance builds foresight and understanding on the long-term benefits of materials being obtained, allowing the facility to move beyond a standard infection control and prevention plan by integrating the right equipment into the HAI battle.

While purchasing agents act as experts in supplying healthcare facilities with the right equipment for a prosperous existence, Infection preventionists are the experts on practical and specific methods to prevent and control the spread of infectious diseases. When looking to tackle something as big and costly as HAI, it only makes sense that the two professionals align their efforts to make wise equipment choices. Having the correct equipment from the start may save a facility millions of dollars in lost reimbursements, readmissions and patient grievances. More importantly, setting a solid foundation on sanitation and sterilization may save lives.

Preventionists should be included in the conversations and directions buyers pursue in selecting devices, materials and systems that will take an active approach to decreasing the spread of infections. Together, the buyer and preventionist should look for the following tools for combating HAI:

## **UV-C light technology**

Reducing the levels of bacteria found in the air and on surfaces is critical. While a correctly installed active air purification system, like the units located in Desert Springs Hospital in Las Vegas, have been shown to reduce airborne bacteria by 80 percent, buyers also must focus on finding UV-C Light systems that will help disinfect surface areas.

Ultraviolet light sources have been proven to attack and destroy the DNA and RNA of HAI-causing organisms so much that the technology is seen as a critical failsafe in the turnover process, being used in conjunction with conventional cleaning methods. Buyers and infection preventionists should look for mobile units that, when placed at strategic points in a room, emit a full-range-of-motion UV light, targeting bacterial and viral pathogens within the chamber. Leading units only need to run for 15 minutes, and quickly maneuverable systems can be wheeled to multiple areas for disinfection. Rooms may be immediately occupied after treatment cycles.

#### Antimicrobial surfaces

There is a passive way to fight HAI with a solution that requires no staff involvement or procedure. Buyers and preventionists should look for antimicrobial surfaces on popular equipment purchases. One such coating is copper, which has specific properties that kill germs before they become a full-fledged infection. A recent article in Current Trends in Microbiology states surfaces made of copper alloys have 83 percent less live bacteria than surfaces without copper components. A copper alloy surface placed on items such as handrails, stretchers and IV-poles, could continuously kill bacteria and add another level of combat to your sanitization procedures.

Other products with antimicrobial surfaces should be highly considered when implementing your infection prevention plan. The industry offers an array of screen protectors, keyboards, computer mice and universal remotes all manufactured with the focus on germ-repelling surfaces. Manufacturers also have produced antimicrobial digital platform scales and even shelving units, allowing for commonly used and shared surfaces to join in the fight against HAI-causing bacteria.

#### Contamination detection

Any medical device could harbor and transport HAI, but suction regulators and vacuums are dangerous culprits. A part of the risk comes from the reliance on healthcare staff to check for contamination and perform the necessary cleaning, which not only is a difficult task but exposes the staff member to the dangerous pathogens contained in the unit.

Buyers and preventionists could opt for units with optical sensors that track and identify contamination while using disposable cartridges to trap pathogens. While these alert systems appear on various apparatus, it is a critical feature for regulators. This alert system accompanied by built-in precautions make product cleaning more accessible and less hazardous to staff. While these units are priced 5 percent to 10 percent higher than alternative regulators, the benefits highly outweigh the upfront cost.

Even popular and seemingly conventional products can help with infection control. Some manufacturers have a series of televisions with Infection Control Screens. Infection control is something companies know they must address, regardless of their products perceived impact on outbreaks and prevention.

### Hands-free infection prevention

Hand hygiene has been the cornerstone of infection prevention for more than a century. Despite the importance, sinks host higher levels of infection-associated bacteria than comparably trafficked areas. Even more, water may splash as far as three feet away from the sink, bringing potentially dangerous contaminants closer to patients. While many healthcare facilities have addressed this with sink relocation and redesign, the integration of hands-free equipment can help mitigate this issue.

But don't stop at faucets and soap dispensers. There are multitudes of hands-free product choices, including exam lights, mayo stands, stools and hampers.

The industry is continually seeking more efficient and effective ways to combat HAI. Following these trends and staying up to date on innovative solutions is a team initiative, relying on both the buyer and preventionist sharing their knowledge. Together they will have a direct impact on the success of their facility and the war on HAI.