Mobile Equipment:
Are Pathogens Hitching A Ride?

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Mobile healthcare equipment is increasingly a part of every patient care encounter. From isolettes for the tiniest of new patients, to wheelchairs carrying patients to their cars, from simple supply carts to complex mobile X-ray systems, the ability to bring care to the patient has only improved. But have we also brought along some undesirable passengers? The future of infection prevention may bundle in concern for mobile equipment disinfection.

Mobile hospital equipment is moving more than you think.
As research increasingly implicates the patient care environment as a transmission risk factor for hospital acquired infections (HAIs), surfaces that come into contact with patients both directly and indirectly are prime targets for improved disinfection. Bed rails, sinks and bed tables have each been studied for their connection to HAI transmission, and the results are worrying: a recent study found that mere “Receipt of antibiotics by prior bed occupants was associated with increased risk for Clostridium difficile infection in subsequent patients”. More evidence mounts to support that patient-to-patient transmission of infection may be helped along by all the things that patients and healthcare workers touch. Studies have found alarming levels of bacteria on mobile equipment like pulse oximeters (85% contaminated), wheelchairs (85% positive for MRSA), and patient charts (83% contaminated), with equipment housed on critical care units more likely to be carrying pathogens of concern.

Is mobile equipment getting cleaned?
Several researchers are examining the possibility that equipment cleaning may be neglected by personnel who share the responsibility, each of whom assume the other had performed cleaning between each patient. These neglected items are sometimes termed orphan items. As Dr. Mark Stibich of Xenex Disinfection Services points out, “Orphan items can happen easily when the responsibility for cleaning of equipment is shared between departments, or when environmental service workers are afraid of damaging expensive equipment with harsh chemicals. Epidemiologically speaking, some of these neglected items may play a significant vector role in room-to-room transmission of HAIs.”

Furthermore, some equipment is simply difficult to disinfect, as demonstrated in a recent study where 37% of computer keyboards tested positive for MRSA despite regular manual cleaning.
Can hitchhiker pathogens be stopped?
When pathogens like C.difficile, Acinetobacter baumannii, MRSA and VRE “hitch” a ride on mobile equipment, disinfection of that equipment becomes a priority. To address this significant infection control issue, Xenex recently partnered with an industry leader in reflective pod design, Mintie, to create the LightStrike™ Disinfection Pod™.

Designed to quickly disinfect mobile equipment like isolettes, glucometers, pressure monitors and workstations, the LightStrike Disinfection Pod enables the power of LightStrike’s intense, full spectrum pulsed xenon light to be used anywhere in a facility. The pod is collapsible, mobile, and sized for the ability to be positioned in a hospital hallway. Reflective interior fabric ensures 360° coverage of difficult-to-clean equipment including anesthesia carts, ventilators, and mobile imaging machines.

Launching in June at the national APIC conference, the LightStrike Disinfection Pod is used in conjunction with LightStrike Robots to help hospitals reduce the risk of infection. Now, for the first time, hospitals can utilize the power of their LightStrike Robots to disinfect mobile equipment as effectively as they disinfect the rooms within their facilities.


June 13th 2017