

New Ultrasound System Design Supports HAI Reduction Programs and Infection Control

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CARESTREAM Touch Prime and XE Systems offer sealed control panel for easy cleaning

Healthcare-associated infections (HAIs) are once again grabbing headlines. In December, *Kaiser Health News* reported, "[Medicare Penalizes 758 Hospitals For Safety Incidents](#)." The following month, *The Osgood File on CBS Radio News* aired a segment on "[Preventing Infections in Hospitals](#)," urging patients to be more proactive and advocate for themselves during hospital stays. And the [CDC Vital Signs March report](#) called on healthcare providers to focus efforts to prevent HAIs in three areas: prevent spread of bacteria between patients, improve antibiotic use, and prevent infections related to surgery or placement of a catheter.

However, it's not media attention that makes the reduction of HAIs a priority for hospital administrators and staff – it's the threat to patients and the hospital's financial health.

CDC data found that on any given day, about [one in 25 hospital patients](#) has at least one healthcare-associated infection. The additional expense of extended stays to treat these infections, combined with Medicare payment reforms and private payer actions, puts revenues at risk. In [Becker's Hospital Review](#) it was calculated that a hospital with \$50 million in annual Medicare inpatient revenue could have \$6.6 million in reimbursement in danger. And that doesn't take into account Medicaid and private payer reductions or litigation costs from patients who acquire infections.

Ultrasound departments are one area of the hospital feeling the pressure to drive progress on HAIs metrics. Prevention and control strategies are being scrutinized. Antimicrobial stewardship programs are strengthening. The Joint Commission on Accreditation of Healthcare Organizations (JCAHO) is requesting documented instructions for cleaning and disinfecting equipment. Many administrators are turning to vendors for help with their strategies.



One long-standing challenge departments have struggled to address is adequate cleaning of the ultrasound system to limit the spread of pathogens. The design of traditional systems in use at virtually every hospital poses several obstacles:

- Control panels are littered with keys, buttons and knobs or even tiny speaker holes that can collect bacteria and contaminants.
- Common disinfectant wipes are not recommended for use of the system as the plastic can become discolored, the knobs and buttons can harden and break off, and the unsealed control panel is sensitive to harsh cleaning agents that could denigrate electronic components.
- Filters must be manually removed from the system to clear debris.
- Limited transducers are approved for sterilization systems. (This is generally reserved for the OR and not available for images used in general imaging or portable rounds.)

White Paper | CARESTREAM Touch Prime Ultrasound System

To protect patients and reimbursement, some departments have accepted the design limitations of their ultrasound systems and have absorbed high service costs for a third-party weekly deep cleaning service.

This is a challenge Carestream addressed head-on. We developed our ultrasound portfolio with a clean slate – pun intended. The [CARESTREAM Touch Prime and XE Ultrasound Systems](#) offer:

- A completely sealed all-touch control panel that is void of any buttons, knobs, and keys, and can be locked and wiped down within seconds at any time – between patients or even during exams.
- The same approved disinfecting cleaning agent can be used on the sealed control panel, monitor, and all the plastic surfaces of the system.
- The system has no filters to clean or change – eliminating the need to remove the system from service to clear debris.
- All of the transducers available with the Touch Prime family can be sterilized. The Trophon system and connector end caps can be purchased for use with STERIS and Sterrad systems.

The CARESTREAM Touch Prime and XE Systems give administrators one more way to demonstrate that they are supporting HAI and other infection-control initiatives. Work procedures are in place. Cleaning/disinfecting protocols are documented. Metrics and performance checks are regularly scheduled. Now administrators have the opportunity to choose an ultrasound system that supports prevention.

Consider this experience I had at a hospital recently during an ultrasound system demo. In the middle of an exam, I squirted gel all over our sealed control panel. Within seconds the sonographer locked the screen, wiped it off with a transducer disinfecting wipe, and was able to carry on with the exam.

The sonographer immediately called the nurse in charge of infection control into the scanning room to show how easy it was to clean the system mid-exam before it was even moved to a new patient room for another exam. This led to a great discussion about the limitations of conventional systems in the marketplace and the unique opportunity administrators—and infection control leaders—have now with the CARESTREAM Touch Prime and XE systems to evaluate how their new investments in ultrasound systems can align with their HAI reduction goals.

For more data and information, see [CDC's Healthcare-associated Infections \(HAI\) Progress Report](#).