

Application Note:

Hand Hygiene Compliance Monitoring

Improves Patient Safety and Increases Compliance Rates to Reduce the Risk of Healthcare-Associated Infections

Challenges

Proper hand hygiene is imperative to patient safety and preventing Healthcare Associated Infections (HAIs). According to the World Health Organization (WHO), "Hand hygiene at the right times saves lives." The practice of consistent hand hygiene has long been recognized as the best way to reduce the transmission of infectious agents within a hospital or healthcare setting. Failure to properly comply with simple hand washing procedures has been estimated to contribute to approximately 50% of all HAIs, which kill about 100,000 people each year in the U.S. and cost hospitals up to \$35 billion annually. CMS denies Medicare reimbursements to hospitals for costs associated with HAIs.

The Joint Commission National Patient Safety Goal (NPSG) 7 states that healthcare organizations must perform an accurate "baseline assessment of hand hygiene in order to identify opportunities for improvement." Obtaining this baseline data requires monitoring staff in clinical areas as they provide patient care, documenting hand washing before and after each patient encounter. These monitoring processes, especially when performed manually, can be inaccurate, time consuming and resource intensive.

Solution

STANLEY Healthcare's automated Hand Hygiene Compliance Monitoring Solution enables hospitals to automatically detect whether staff members wash their hands as they enter and exit patient rooms. By turning this reliable data into actionable information, facilities are able to focus on staff education with measurable outcomes of compliance improvement initiatives.

The solution is comprised of the following components:

- Wi-Fi Badges worn by caregivers
- Embedded Exciters in soap, gel and foam dispensers, to capture each hand washing event
- Exciters in patient rooms to identify hand washing opportunities
- STANLEY Healthcare MobileView® Hand Hygiene application, to provide compliance data analytics
- Business Intelligence dashboards which facilitate in-depth analysis of compliance by role, location, time and individual



Benefits

- Leverages existing investment in Wi-Fi network and automatic soap/gel/foam dispensers from leading vendors
- Enables Infection Control staff to focus on compliance, education and data analysis rather than manual monitoring and tabulating compliance rates
- Drives hand hygiene accountability to the individual level
- Provides comprehensive and accurate continuous monitoring information for data analysis that is both reliable and uninfluenced
- Actionable data analytics provides rapid process improvement opportunities

// Transition must occur from reactive to proactive surveillance and behavioral intervention.

– Association for Professionals in Infection Control (APIC)

How It Works

As a caregiver enters or leaves a patient room and dispenses soap, gel or foam from a touch-free dispenser, an embedded AeroScout® Exciter unit in the dispenser is activated. This Exciter triggers a badge worn by the caregiver, sending a message over the hospital's Wi-Fi network identifying the caregiver, solution type, hand hygiene episode, and the time and location of the wash event. Event rules (i.e. timing for what is considered meaningful patient contact time, wash-in timing and wash-out timing) are configurable based on individual hospital policy and procedure.

The Hand Hygiene solution supports collection and reporting of uniform hand hygiene compliance monitoring across the organization. Visual dashboards driven by the MobileView Hand Hygiene solution provides hand washing compliance data based on an individual staff member; a defined staff role (e.g., nurses or physicians); location (e.g., specific patient unit); and time or day. These dashboards are used on a daily, weekly or monthly basis to identify current compliance rates and target opportunities for hand hygiene process improvement efforts.

Monitoring trends that reflect implemented process improvements and training is possible without requiring additional resources for manual monitoring and data capture or impacting staff as they provide patient care. MobileView Analytics includes standard dashboards that can be customized based on specific facility requirements.

The Hand Hygiene solution enables healthcare facilities to achieve their goal of increased hand hygiene compliance across their organization and address the serious challenge posed by HAIs. The solution leverages the same infrastructure and components used for the full suite of STANLEY Healthcare RTLS solutions for Asset Management, Temperature & Humidity Monitoring, Staff Assist/Duress, Nurse Call Integration, Patient, Elopement, Staff Visibility, Staff Workflow and Patient Flow.

Solution Components

- **Staff badge**
 - Supported models: T2s, T14 & T3s
 - Worn by each staff member
 - Allows for continuous monitoring and staff/role identification
- **Exciters for rooms**
 - Supported models: 4000 and 5000 Series
 - Record room entrance/exit
- **“Touch-free” dispensers with embedded Exciter**
 - Supported models: Next Gen, Nexa Classic, and Nexa Compact
 - No components exterior to the dispenser
 - No additional power required (uses the dispenser's batteries)
- **MobileView software**
 - Hand Hygiene and Analytics modules

Solution Highlights

- Automated 24/7 monitoring of hand hygiene events and opportunities
- Leverages existing Wi-Fi network for hospital-wide visibility
- Easy-to-Use solution with no disruption to routine patient care workflows
- Fully integrated with leading hand hygiene dispensers
- Delivers sophisticated dashboards for analysis and optimization of hand hygiene compliance



STANLEY
Healthcare

Phone: +1-888-622-6992

North America: stanleyhealthcare@sbdinc.com

Latin America: stanleyhealthcare-latam@sbdinc.com

Middle East: stanleyhealthcare-MEA@sbdinc.com

Asia Pacific: stanleyhealthcare-asiapac@sbdinc.com

Europe: shs-uk@sbdinc.com