



Hand Hygiene Monitoring

Real-Time Location System monitors hand hygiene events, drives behavior, reduces infection and saves lives

In healthcare, we've known for over 150 years that handwashing can prevent infection, yet the CDC estimates hand-hygiene compliance for healthcare workers is less than 50%, on average.¹ Using TeleTracking's Real-Time Location System (RTLS) to monitor hand washing compliance can save lives, improve patient safety and reduce costs associated with hospital associated infections.

Electronically Monitor Hand Hygiene Events

Today, your hospital can automatically track caregiver hand hygiene activity. TeleTracking's Hand Hygiene Monitoring application routinely monitors caregivers' usage of sanitizer and soap dispensers along with their entry and exit to patient care areas. This automated monitoring eliminates costly manual monitoring and drives compliance and behavior modification.

Visibility to the Hand Hygiene Index

Hand hygiene data is integrated into TeleTracking's Capacity Management™

Suite systems so that it can be monitored in real-time at the unit or bed level through the PatientTracking Portal™ application. Reporting at the unit, bed, staff and location level provides transparency to aid in managing compliance, identifying education opportunities and to drive behavior modification. Commonly known as the Hawthorne Effect, observed individuals behave or perform better than unsupervised individuals when they know about the observation, increasing the intended behavior.

Demonstrate Compliance in Accordance with Joint Commission

The Joint Commission has requested hospitals to demonstrate hand hygiene compliance protocols and continuous improvement to reduce hospital acquired infections (HAI). In fact, the Joint Commission has gone on record that hospitals should monitor hand hygiene activity at all times of the day, every day of the week.

Using TeleTracking RTLS staff badges along with sanitizer/soap dispenser

sensors, the system records instances of a staff member's hand hygiene events. TeleTracking's Hand Hygiene Index delivers enterprise compliance reports that indicate whether staff had a hand hygiene event prior to a patient encounter and after a patient encounter.

KEY BENEFITS

- Increase patient and staff safety
- Automated hand hygiene compliance monitoring
- 24/7 hand hygiene event monitoring with automatic tracking at the caregiver level
- Collects compliance data on events before and after patient encounter
- An integrated dispenser or monitor mounts to any hand sanitizing dispenser with multiple mechanisms to activate the hand hygiene dispenser
- Enabled by TeleTracking® RTLS solutions

How Hand Hygiene Monitoring Works



Hand Hygiene Hardware

Staff Badge

The staff badge can be mounted onto the loop used to hold a standard hospital-issued employee badge. The staff badge is designed to stay with the caregiver, thus eliminating the need for separate processes that require daily badging of personnel. It is water resistant and can be easily cleaned.

Hygiene Monitor

In addition to integrated dispensers, hygiene monitors can be mounted to any dispenser, canister, or pump to track usage. TeleTracking's software associates a hand hygiene event from the hygiene monitor along with the staff badge and can report on whether these events happen before entry or exit from a patient care area, or based upon any hospital-determined requirements, such as the Five Moments of Hand Hygiene, set by the World Health Organization (WHO). Red and Green LED indicators work by flashing a red light when the dispenser is activated and then by flashing a green light to indicate the monitor and badge have interacted and the badge ID has been received.

Hospital Acquired Infection (HAI) Facts

- ▶ In 2009, the Centers for Disease Control and Prevention (CDC) reported that annual direct medical costs from HAIs in U.S. hospitals range from \$28.4 to \$45 billion.²
- ▶ On any given day, 1 in 25 hospital patients has at least one healthcare-associated infection and an estimated 722,000 HAIs happened in U.S. acute care hospitals in 2011. About 75,000 hospital patients die of these infections during their hospitalizations and more than 50% of all HAIs occurred outside of the intensive care unit.³
- ▶ MRSA infection-related expenses attributed to hand hygiene noncompliance costs a 200-bed hospital \$1,779,283 annually. It is estimated that a 1% increase in hand hygiene compliance for a hospital this size would result in an annual savings of almost \$40,000.⁴
- ▶ HAIs persevere and are a growing threat to the safety of patients and healthcare professionals, drive hand hygiene compliance by monitoring hand hygiene activity automatically with TeleTracking.

¹ "Guideline for Hand Hygiene in Health-Care Settings" Centers for Disease Control and Prevention, Morbidity and Mortality Weekly Report, (2002, October 25):23. <http://www.cdc.gov/mmwr/PDF/rr/r5116.pdf>

² Scott II, R. Douglas, "The Direct Medical Costs of Healthcare-Associated Infections in U.S. Hospitals and the Benefits of Prevention" (2009, March): 3. http://www.cdc.gov/HAI/pdfs/hai/Scott_CostPaper.pdf

³ Magill SS, Edwards JR, Bamberg W, et al. Multistate Point-Prevalence Survey of Health Care-Associated Infections. N Engl J Med 2014;370:1198-208.

⁴ "Evidence of Hand Hygiene to Reduce Transmission and Infections by Multidrug Resistant Organisms in Health-Care Settings." World Health Organization, literature review of infections by multidrug-resistant organisms (MDROs). (2014, May 5): 3. http://www.who.int/gpsc/5may/MDRO_literature-review.pdf?ua=1