

LEARN HOW ATLANTIC HEALTH SYSTEM HAS **ACHIEVED SUBSTANTIAL HAND HYGIENE IMPROVEMENTS AND INFECTION RATE REDUCTIONS BY INCORPORATING THE DEBMED SYSTEM INTO ITS MULTIMODAL INFECTION PREVENTION STRATEGY**

A SIGNIFICANT SUCCESS STORY in the Battle to Reduce HAIs.

With six medical centers and several urgent care, outpatient and ambulatory care sites, Atlantic Health System represents 1,750 licensed beds in the New Jersey and New York metropolitan area.

Atlantic Health System, having safety and quality at the forefront of everything it does, sought to improve hand hygiene compliance at its hospitals using the feedback from the DebMed Electronic Hand Hygiene Compliance Monitoring System.

“We wanted to get a stronger handle on preventing infection and ensuring that our staff understood and took advantage of every hand hygiene moment throughout their shifts” said Laura Anderson, MSN, RN, CIC, Director, Infection Prevention, Atlantic Health System.

CHALLENGE / HISTORY: Identifying Their True Compliance Rate

With 5 to 10% of hospitalized patients affected by healthcare-associated infections (HAIs) each year in the U.S., resulting in 99,000 deaths and approximately \$20 billion in healthcare costs¹, good hand hygiene is critical.

“Hand hygiene compliance has always been a top priority for us, but it was difficult to track rates with our previous auditing system” said Anderson.

Atlantic Health System was collecting hand hygiene compliance data using the same practice as many other healthcare facilities, direct observation, with the addition of an electronic badge-based hand hygiene compliance system on some units. They found the direct observation data to be unreliable and overstated due to factors such as auditor bias, small sample size and the Hawthorne effect. Although the badge-based electronic monitoring system helped overcome some of the limitations of direct observation, the cost of the system was high and compliance rates were limited to wash-in and wash-out practices. Studies have found the hand hygiene opportunities that occur within the patient room, based on the WHO 5-Moment Guidelines, represent as much as 50% of total opportunities^{2,3}.

THE SOLUTION: Actionable Reporting Based On The Who 5-Moment Guidelines

With initial goals to decrease HAIs and accurately measure hand hygiene compliance, Atlantic Health System introduced the DebMed Electronic Hand Hygiene Compliance Monitoring System in July 2015. The DebMed system is the only research-based, badge-free system able to track compliance based on the World Health Organization’s ‘5-Moments’ and the Centers for Disease Control and Prevention’s hand hygiene standards.

This cost-effective solution is able to capture 100% of hand hygiene events 24/7. It measures the compliance of an entire unit, promoting a spirit of collaboration and accountability, and provides actionable feedback for the group without singling out individuals. The DebMed system is also not subject to human error or manipulation, making it a reliable solution that provides management with key data to drive improved compliance.

“Our previous auditing system was not working as effectively as intended. We wanted a system that could provide us with real data while also enhancing hand hygiene compliance to better protect our patients,” said Anderson. “Upon initial implementation in targeted units that had higher infection rates, especially *C. difficile*, we began to see increased hand hygiene compliance and sustainable results that continued over time.”

Today, DebMed’s Electronic Hand Hygiene Compliance Monitoring System is used at all six of Atlantic Health System’s hospitals and has become an essential part of staff routine. With reliable and real-time compliance scores, employees are regularly rewarded for, or reminded of, their hand hygiene compliance rates and dedication to keeping patients safe.

“This system is great for educating our staff on all of the necessary hand hygiene moments and holding them accountable,” said Anderson. “Employees can see a tangible number demonstrating how well they are doing. Meanwhile, the user-friendly online dashboard and weekly emails make it easy for managers to review reports and provide immediate feedback.”

The Results: 69.5% INCREASE IN COMPLIANCE

Over the last three years, Atlantic Health System has experienced the following benefits since implementing the DebMed Electronic Hand Hygiene Compliance Monitoring System:

IMPROVED HAND HYGIENE COMPLIANCE RATES

Today, Atlantic Health System is nearing 90% compliance using the WHO 5-Moments for Hand Hygiene guidelines.

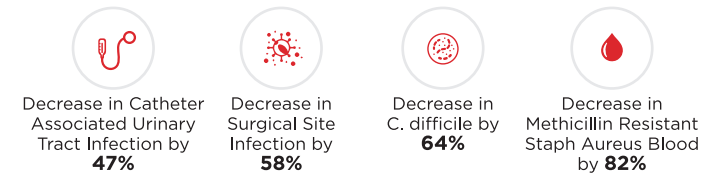
Since 2015, the participating units have increased overall compliance by nearly 70%, demonstrating a 69% improvement. After expanding the program to all six of its medical centers, Atlantic Health System has achieved and sustained a 57% improvement.

INCREASED TEAMWORK

Under the previous system, individual staff members were held accountable for their hand hygiene compliance. Since switching to the DebMed System, hand hygiene has become an enjoyable team effort and commitment.

HAI REDUCTION

By incorporating the DebMed System into its HAI reduction efforts, Atlantic Health System has seen an overall decrease in HAIs, including:

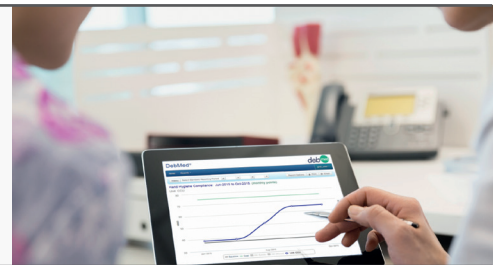


HAI reductions occurred steadily over a two-year period starting in 2015.

RELIABLE DATA

The DebMed Dashboard provides consistent and easy-to-access data that allows units to identify areas for improvement and encourages hand hygiene conversations among staff, infection preventionists, managers and hospital board and committee members.

“Over the past few years, we’ve worked diligently to understand our hand hygiene habits, identify compliance challenges and implement helpful solutions,” said Anderson. *“We’re incredibly pleased with the DebMed system and the overall change it has inspired within Atlantic Health System. We’re thrilled to report that we’re working together to create a clean and sanitary environment that our patients can recover and thrive in.”*



1. <https://www.cdc.gov/washington/-cdcatWork/pdf/infections.pdf> 2. Steed C, Kelly J, Blackhurst D, Boeker S, Diller T, Alper P, Larson E. Hospital hand hygiene opportunities: Where and when (HOW2)? The HOW2 Benchmark Study. Am J Infect Control 2011;39:19-26. 3. Diller T, Kelly J, Blackhurst D, Steed C, Boeker S, McElveen D. Estimation of hand hygiene opportunities on an adult medical ward using 24-hour camera surveillance: Validation of the HOW2 Benchmark Study. Am J Infect Control 2014;42:602-7.