THOMASVILLE MEDICAL CENTER IMPROVES HAND HYGIENE COMPLIANCE DRAMATICALLY AND REDUCES HAI WITH SUCCESSFUL HAND HYGIENE CAMPAIGN AND SWIPESENSE'S DIGITAL SOLUTION

BACKGROUND

Hand hygiene plays a crucial role in preventing infections. According to World Health Organization (WHO) data, the global average hand hygiene compliance rate is around 40% when no targeted interventions are implemented to improve adherence. However, compliance rates tend to be higher in critical care settings, averaging around 60%.1 This discrepancy underscores the importance of implementing effective strategies to enhance hand hygiene practices, particularly in critical care areas where infection prevention is paramount.

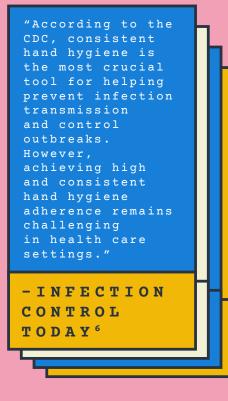
Studies underscore the critical relationship between hand hygiene compliance and the prevalence of specific HAIs. For instance, research has shown that low hand hygiene



compliance rates correlate with increased incidence of Clostridioides difficile (C. difficile) infections², while improved hand hygiene practices have been associated with reduced rates of Central Line-Associated Bloodstream Infections (CLABSIS)³ and Surgical Site Infections (SSIS).⁴

THE FIVE KEY MOMENTS FOR HAND HYGIENE Identified by ${\tt WHO^{5}}$

- 1. Before touching a patient
- 2. Before a procedure
- 3. After a procedure or exposure to body fluids
- 4. After touching a patient
- 5. After touching patient surroundings



THE CHALLENGE

Novant Health Thomasville Medical <u>Center</u> in Davidson County, North Carolina is committed to delivering remarkable patient care, including reducing infection risks. Recognizing the critical role of hand hygiene in infection prevention, the 146bed community hospital looked for a solution to bolster hand hygiene adherence and proactively mitigate the risk of HAIs in order to contribute to enhanced patient safety and quality of care.

Drawn to <u>SwipeSense</u>'s commitment to creating a safer environment for both caregivers and patients along with its change management expertise, Novant Health implemented the digital solution in March, 2021.

THE SOLUTION

SwipeSense is designed to enhance infection control and behavior

change through smart sensors and digital applications. Healthcare systems use the system to monitor and enhance hand hygiene compliance, ultimately aiding in the reduction of healthcare-associated infections (HAIs).

The solution incorporates caregiver badges, hygiene sensors, location hubs, and communication hubs strategically installed throughout facilities to effectively track hand hygiene practices. Within designated care areas, hygiene sensors, location hubs, and communication hubs work collaboratively to detect completion of hand hygiene tasks, providing real-time data on compliance rates. Team members are equipped with caregiver badges, which interact with the system upon entering these care areas.

THE RESULTS

The data gathered from SwipeSense revealed a positive trajectory in hand hygiene compliance over subsequent years. By the end of 2021, compliance had reached 53%, marking the initial impact of integrating SwipeSense into the medical center's protocols. By the close of 2022, compliance further improved to 58%, demonstrating a continued trend of adherence to hand hygiene practices.

This transition from manual hand hygiene observations to SwipeSense provided more accurate data on hand hygiene opportunities and compliance rates among team members. At Thomasville Medical Center, SwipeSense compliance data is collected and accessed through an online data dashboard, which provides detailed information on individual team members' hand hygiene compliance scores.

This dashboard serves as a valuable tool for identifying areas of improvement and optimizing workflow related to hand hygiene practices. Through regular review of the data, the facility was able to recognize certain patterns, gain insights into different dynamics and explore proactive strategies to make improvements.

AMPLIFYING SUCCESS: THE 90'S CLUB

A significant milestone was achieved at the medical center with the launch of the "90's club" initiative in April 2023. This

initiative was developed to incentivize and recognize individuals or teams consistently demonstrating high levels of hand hygiene compliance. Following the introduction of the "90's club," hand hygiene compliance surged to an impressive 78% by the end of 2023, highlighting the effectiveness of targeted promotions in sustaining improved hand hygiene behaviors across the facility.

In addition to the positive impact on hand hygiene compliance, the facility observed promising trends in infection rates during 2023. Specifically, there was a significant reduction in Healthcare-Associated Infections (HAIS), including a 100% decrease in Methicillin-Resistant Staphylococcus aureus (MRSA) Bacteremia, a 50% decrease in Clostridioides difficile (C. difficile) infections, and a 33% decrease in MRSA infections.

"Hand hygiene systems develop best practices in staff, increase adherence to hospital mitigate the risks associated with HAIs. Successfully implementing an electronic hand hygiene monitoring system can improve results, mainly when the system provides real-time insights and a thoughtful approach to guided change management is taken from the start."

- INFECTION CONTROL TODAY⁶



CASE STUDY 2024

The goal of the initiative was to raise awareness and motivate and incentivize staff to achieve a 90% compliance rate by introducing a fun and engaging reward system. To promote the 90's SwipeSense Club, vibrant flyers were distributed throughout the facility, inviting team members to join.

Leaders within the hospital actively discussed the club during staff meetings, safety huddles, and oneon-one interactions, emphasizing the importance of hand hygiene and Team members who reached 90% compliance in a month were eligible for induction into the club and received a punch on a loyalty card. Accumulated punches allowed members to redeem 90's themed nostalgia prizes, and the chance to win a gift certificate.

the benefits of participation. Compliance percentages were tracked monthly using SwipeSense, and those achieving 90% or higher received recognition through punches on their loyalty card.

Members who maintained a 90% or higher compliance rate for 90 consecutive days received special acknowledgment from executive leadership, including a personalized letter and a lapel pin symbolizing their dedication to hand hygiene and patient safety. The establishment of the 90's SwipeSense Club successfully fostered a culture of awareness and commitment to hand hygiene among team members, ultimately contributing to improved compliance rates and a safer healthcare environment.

A COMMITMENT TO CONTINUOUS IMPROVEMENT

The combination of SwipeSense technology and strategic initiatives like the "90's club" has played a pivotal role in continuously enhancing hand hygiene practices at Thomasville Medical Center. The success of these efforts exemplifies the facility's



dedication to patient safety and underscores the collective effort required to maintain a safe healthcare environment. Fostering a culture of accountability and continuous improvement in hand hygiene practices along with ongoing vigilance and adaptation of infection control strategies will further contribute to sustained improvements in patient outcomes and overall quality of care. Thomasville Medical Center continues to highlight the effectiveness of good hand hygiene practices in sustaining a safe environment for patients. In 2024 the facility continued its success with the 90's Club and ended the year with an 83% hand hygiene compliance rate.

By leveraging SwipeSense data analytics and ongoing monitoring of infection rates, the facility continues to refine strategies to further enhance patient safety outcomes. This data-driven approach enables the identification of areas for continuous improvement and informs targeted interventions aimed at reducing HAIS. The utilization of SwipeSense's comprehensive data dashboard underscores the facility's commitment to continuous improvement in infection control and patient safety, ensuring that hand hygiene remains a priority across various operational contexts within the healthcare facility. This proactive approach facilitates targeted interventions and initiatives aimed at fostering a culture of excellence in hand hygiene practices among all team members - efforts which ultimately support the hospital's commitment to provide remarkable care to its patients.

Read more about Thomasville Medical Center's experience in <u>Infection</u> <u>Control Today</u>.



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Teresa Garrison is a registered nurse and board certified in Infection Control and as a Nurse Executive. She has been in the healthcare industry for 34 years in various roles including staff nurse, wound care nurse, nurse manager, and is currently an infection preventionist for Novant Health Thomasville Medical Center. Teresa is a highly qualified leader with an extensive background in healthcare. Teresa seeks collaboration and innovation on all levels to improve the safety experience for all patients.

Savannah Hauberg, a registered nurse with board certification in Emergency Nursing, brings seven years of experience in the emergency department. Recently transitioning to clinical education within the same department, Savannah mirrors Teresa's commitment by actively seeking collaboration and innovation across all areas to elevate the safety experience for each.

References

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