HAIs beyond the ICU

The real cost and scale of healthcare-associated infections — and the path forward for prevention

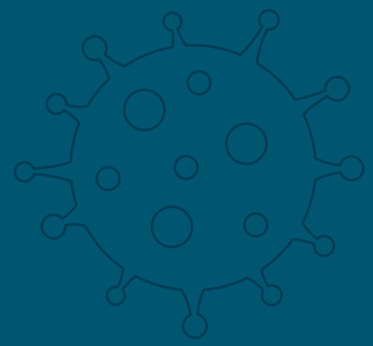
Mölnlycke®

Healthcare-associated infections (HAIs) are an all-too-common problem in healthcare — impacting all facility types, from hospitals and surgical centers, to nursing homes and rehabilitation facilities.[1]

According to the CDC, about 1 in 25 hospital patients contracts an HAI annually.[2]

That works out to an estimated **1.7 million infections**

1.7M



— 99,000 of which could result in death.[1]

[1] "Healthcare-Acquired Infections (HAIS)," PatientCareLink, www.patientcarelink.org/improving-patient-care/healthcare-acquired-infections-hais/, Accessed May 2023.
[2] Magill, Shelley S., et al., "Multistate Point-Prevalence Survey of Health Care–Associated Infections," The New England Journal of Medicine, March 2014.

Are we looking for HAIs in the right places?

The intensive care unit (ICU) is typically seen as the front line in the fight against infection.[3]

But surveys show that

70% of HAIs

actually occur outside of ICUs.[4]

That leaves millions of patients vulnerable to a litany of serious infections, including:

- CLABSIs (Central line-associated bloodstream infections)[5]
- CAUTIs (Catheter-associated urinary tract infections)[5]
- SSIs (Surgical site infections)[5]
- MRSA (Methicillin-resistant Staphylococcus aureus)[5]
- VAEs (Ventilator-associated events)[5]
- CDIs (*Clostridioides difficile* infections)[5]

[3] "Infections," https://sunnybrook.ca/content/?page=navigating-icu-icu-problems-infections, Sunnybrook Health Sciences Centre, Accessed May 2023.
[4] "National and State Healthcare Associated Infections Progress Report," Centers for Disease Control and Prevention, 2016.
[5] "National and State Healthcare Associated Infections Progress Report," Centers for Disease Control and Prevention, 2021.

The reality is:

HAIs — and the pathogens that cause them — aren't confined to just one ward. **Infection prevention protocols** shouldn't be either.

Low-risk wards can still have high volumes of infection

While ICUs may be at higher risk for infection, most HAIs occur elsewhere.

72% of CAUTIs occur in non-ICU patients[6]

68% of CLABSIs are contracted outside of ICUs[7]

And this challenge is compounded as patients and pathogens move throughout the hospital. In fact, **every intrahospital transfer increases the odds of a patient acquiring an HAI by 9%.[8]**

These numbers speak to the potential enormity of the issue — and the opportunity available for infection prevention beyond the ICU.

[6] Lewis, Sarah S et al. "Comparison of non-intensive care unit (ICU) versus ICU rates of catheter-associated urinary tract infection in community hospitals." Infection control and hospital epidemiology vol. 34,7 (2013): 744-7. doi:10.1086/671000.

[7] "A Successful Team Approach to Reduce Central Line Associated Bloodstream Infection (CLABSI)," American Hospital Association, www.aha.org/case-studies/2016-09-16-successful-team-approach-reduce-central-line-associated-bloodstream, Accessed May 2023.

[8] Boncea, Emanuela Estera et al. "Association between intrahospital transfer and hospital-acquired infection in the elderly: a retrospective case-control study in a UK hospital network." BMJ quality & safety vol. 30,6 (2021): 457-466. doi:10.1136/bmjqs-2020-012124.

Every HAI has a cost — no matter where it occurs

Whether they're contracted in or outside of the ICU, the consequences of HAIs on treatment cost, time and outcomes have significant impacts for patients and providers alike.

Patients who contract an HAI suffer from:

Longer lengths of stay: Nearly 8 extra days in the hospital per HAI[9]

Increased treatment costs: $25K per admission[10]

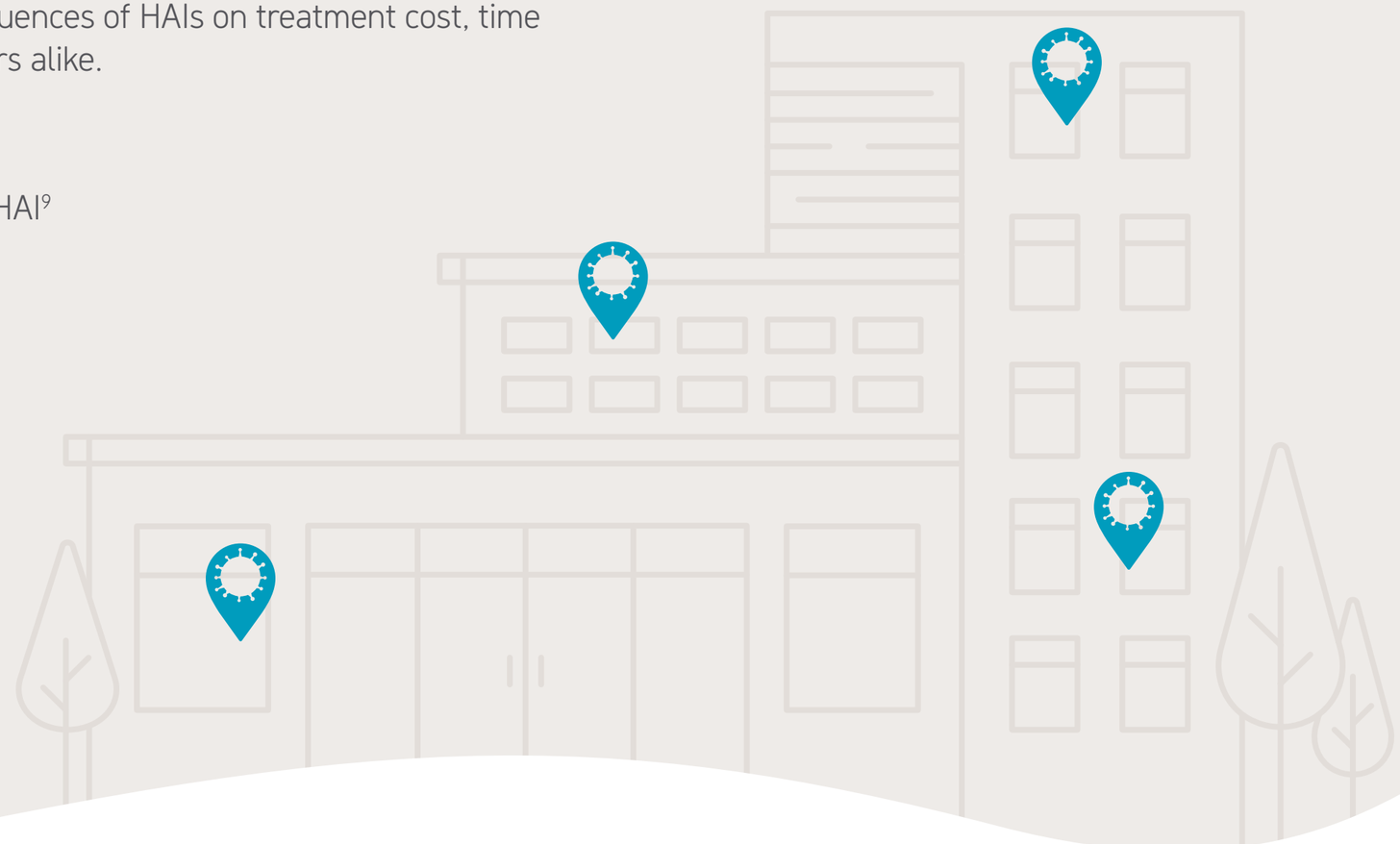
Higher readmission rates: 6x more likely (for SSIs)[11]

Hospitals with high HAI rates face:

Reduced capacity: 58,000 extra bed-days per year[9]

CMS penalties: for 25% of hospitals[12]

Legal vulnerability: $250K+ average cost per claim[13]



So, how can we reduce HAI rates across all care settings?

[9] Stewart, S et al. "Impact of healthcare-associated infection on length of stay." The Journal of hospital infection vol. 114 (2021): 23-31. doi:10.1016/j.jhin.2021.02.026.

[10] Scott, R. Douglas, II, "The Direct Medical Costs of Healthcare-Associated Infections in U.S. Hospitals and the Benefits of Prevention Centers for Disease Control and Prevention, 2009

[11] Shepard, John et al. "Financial impact of surgical site infections on hospitals: the hospital management perspective." JAMA surgery vol. 148,10 (2013): 907-14. doi:10.1001/jamasurg.2013.2246.

[12] "Hospital-Acquired Condition Reduction Program," Centers for Medicare & Medicaid Services, www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/HAC-Reduction-Program, Accessed March 2023

[13] "Legal Liability for HAIs: Understanding Infection Prevention's Role in Risk Management," Infection Control Today, 2016.

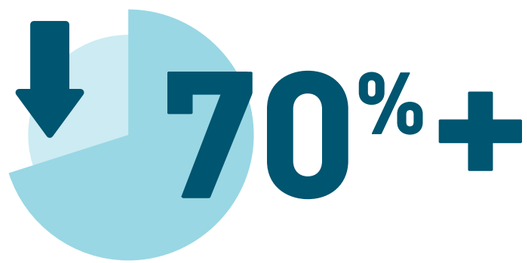
Take the fight against infection system-wide

As hospitals seek to combat HAIs wherever they appear, embracing a horizontal approach to infection prevention presents an opportunity to enhance protocols across the board.

Hospital-wide decolonization of pathogens that cause HAIs is a great place to start.[14] This includes:

- **Selective nasal and oral decolonization** of higher risk patients — sometimes with a chlorhexidine gluconate (CHG) product.[14,15]
- **Universal topical decolonization** of the hands and skin with a CHG skin cleanser.[14,16]

Studies show that comprehensive infection prevention protocols can **lower HAI rates by 70%** or more.[17]



Why choose CHG for universal topical decolonization? Let's talk about it.

[14] "Horizontal Versus Vertical: Two Approaches to HAI Prevention," Infection Control Today, 2014.
[15] Huang, Susan S et al. "Decolonization to Reduce Postdischarge Infection Risk among MRSA Carriers." The New England journal of medicine vol. 380,7 (2019): 638-650. doi:10.1056/NEJMoa1716771.
[16] Abbas, Salma et al., "Chapter 14: Horizontal Vs. Vertical Infection Control Strategies," Guide to Infection Control in the Hospital, International Society for Infectious Diseases, 2018.
[17] "What are Nosocomial Infections?," Healthline, https://www.healthline.com/health/hospital-acquired-nosocomial-infections, Accessed May 2023.

CHG enhances infection prevention efforts

Routine, consistent decolonization with a CHG skin cleanser is a key measure that healthcare systems can take to support HAI reduction hospital-wide.

As an effective antiseptic, antibacterial ingredient, CHG provides real value to clinician hand hygiene and patient bathing practices.

That's because (unlike soap and water) **CHG cleansers actually bind to the skin to continue killing germs — even after rinsing.**

CHG can benefit your patients and protocols by helping to:

- **Kill** infection-causing pathogens and **reduce** the risk of cross-transmission
- Reduce risk of pathogens on skin as patients move **through the hospital**
- **Standardize infection prevention** protocols across every ward
- **Streamline** processes and **eliminate** decision fatigue for providers

One observational study found that a comprehensive bathing program that included standardized protocols using 4% CHG and support tools **significantly reduced HAIs** in multiple studied units.[18]

[18] Chapman, L., Hargett, L., Anderson, T., Galluzzo, J. and Zimand, P., 2021. Chlorhexidine Gluconate Bathing Program to Reduce Health Care-Associated Infections in Both Critically Ill and Non-Critically Ill Patients. Critical Care Nurse, 41(5), pp.e1-e8.

Look beyond the ICU. Embrace a hospital-wide approach to HAIs.

Broad infection prevention strategies that include decolonization with a CHG cleanser — in every unit of the hospital — can support standardization of protocols, reduce HAI rates and improve patient outcomes.

Reach out to a sales rep to learn more about how you can take a whole-hospital approach to infection prevention.

Contact us

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