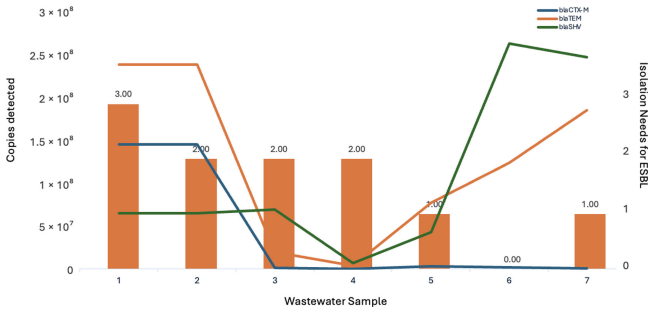
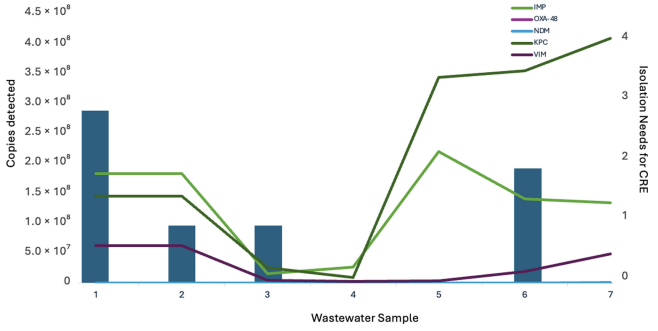
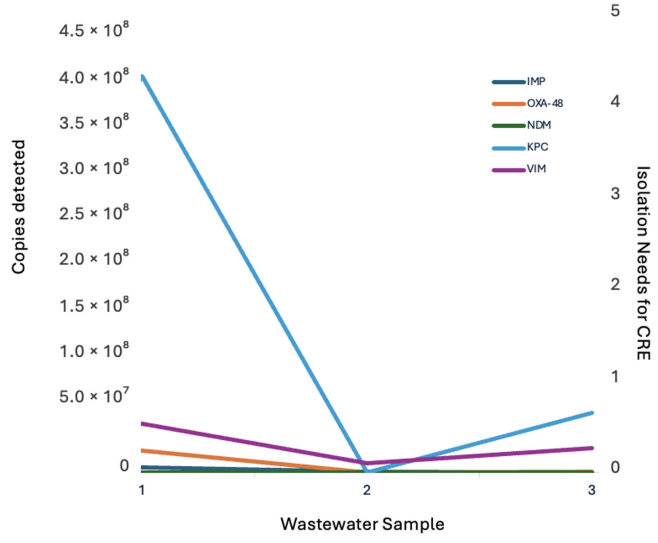


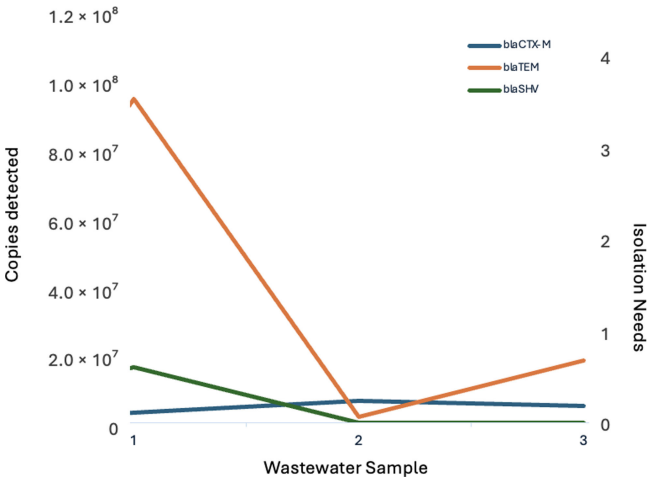




isolation, whereas carbapenemase surges frequently preceded increases in CRE isolation, suggesting wastewater may provide early warning of rising resistance pressure. Differences between hospitals likely reflect both patient populations and environmental persistence. Wastewater surveillance may complement infection prevention efforts but should not be interpreted as a direct surrogate for patient colonization. Figure 1. Temporal trends in ESBL-producing resistance genes in wastewater and isolation needs at an academic center Figure 2. Temporal trends in CRE-producing resistance genes in wastewater and isolation needs at an academic center Figure 3. Temporal trends in ESBL-producing resistance genes in wastewater and isolation needs at a community hospital Figure 4. Temporal trends in CRE-producing resistance genes in wastewater and isolation needs at a community hospital

Antimicrobial Stewardship & Healthcare Epidemiology 2026;6(Suppl. S1):s140–s141
doi:10.1017/ash.2026.10657

‡The abstract titles in this supplement have been corrected since original publication. A notice detailing the changes has been published at https://doi.org/10.1017/ash.2026.10802.



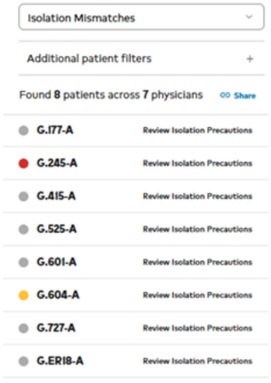
Presentation Type:
Poster Presentation
Subject Category: Medical Informatics

Rapid Patient Isolation Precautions Reconciliation via Technology Enabling Tool Comparing Nursing Documentation with Surveillance Data‡

Julia Moody[1], Michelle Clark[2], Grayson Ruhl, Suzy Denno, Alex Stephens, Meghna Sathe and Keetha Kratzer[3]
[1]HCA Healthcare; [2]HCA and [3]HCA Healthcare corporate ofice

Background: A foundational daily activity for infection preventionists (IP) is reconciling nursing isolation documentation to surveillance system current and historical isolation markers. Inefficiencies and isolation delays occur when: (i) electronic healthcare records [EHR] and IP surveillance tools are separate applications requiring manual person dependent resolution; (ii) EHR has logic limited isolation alerts or lack patient isolation history markers to activate on readmission; and (iii) IP staffing when limited to weekdays. Outcomes result in potential communicable disease exposures and added resources for bed reassignment and room cleaning of semi-private rooms. Surveys identified up to 25% of patients require a change in patient isolation status in an average 250-300 bed acute care hospital. **Methods:** EHR nursing isolation was aggregated to isolation alerts from IP third party surveillance software into a technology enabling advanced analytics platform in use for daily device rounds. Real time data overlays updated for admitted patients including pending ER hold admissions. Nursing and IP developed rules defining match agreement and review isolation conditions, visual displays and patient specific information. A pilot proof of concept was tested in 11 acute care hospitals ranging in size from 100 to 740 beds displaying both full facility and unit specific views. High performing nursing units operationalized the tool at the

Figure 1. Real Time Patients for Review of Isolation Precautions

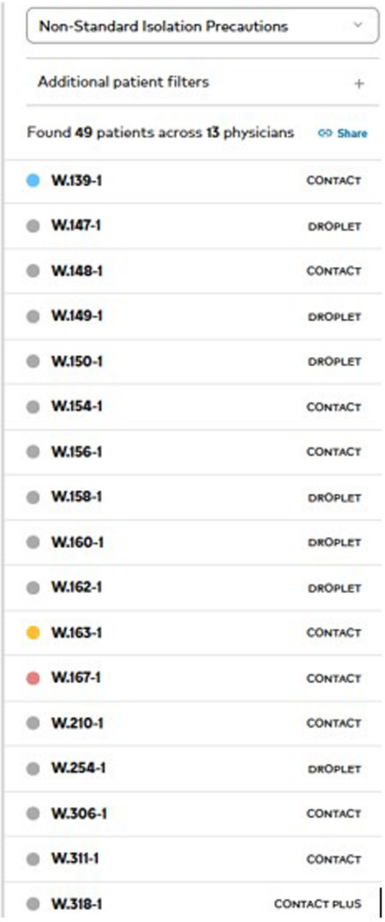


https://doi.org/10.1017/ash.2026.10658 Published online by Cambridge University Press

Figure 2. Review Isolation Precautions Patient Level Detail



Figure 3. Patients with Reconciled Isolation



beginning of each shift during daily patient safety rounds including weekends and holidays. **Results:** Tool visuals displayed a patient list to prioritize review of isolation status (Figure 1), patient specific details of mismatch (Figure 2) and reconciled isolation (Figure 3). The average resolution within 24h was 86% (range 79-95%). Charge nurse adoption improved time to isolation, reduced reliance on IP manual processes, improved first time bed assignments and guided nursing patient care assignments. The tool solved for lab "new results" alert gaps to caregivers for MRSA, Candida auris, etc. and provided timely information to care team members unable to access EHR isolation status. Feedback was overwhelmingly positive from users. Short term limitations to reconciliation occurred for patients with clinical conditions warranting isolation pending diagnostic test results (i.e. C. difficile). **Conclusion:** The technology enabler tool brings together various data streams into a single view for patient care teams and leadership to prioritize activities. The tool enabled shared responsibility between nursing and IP for reconciling isolation status, improved communications, driving operational efficiencies and improving safety.

Antimicrobial Stewardship & Healthcare Epidemiology 2026;6(Suppl. S1):s141–s142
doi:10.1017/ash.2026.10658

Presentation Type:
Poster Presentation
Subject Category: Microbiology

Does Chlorhexidine Bathing Contribute to Chlorhexidine Resistance?‡

Rachel Medernach[1], Ellen Gough[1], Mckenzi King[1], Mary Carl Froilan[1], Mackenzie May, Lahari Thotapalli[1], Michael Schoeny[1], Sarah Sansom[2], Erica Hartmann[3] and Mary Hayden[1]
[1]Rush University Medical Center; [2]Rush University and [3]Northwestern University

Background Bacterial resistance to frequently used antimicrobial therapies is a significant threat to human health. Chlorhexidine digluconate (CHG) is a topical antiseptic used to reduce healthcare-associated infections, including those caused by multidrug-resistant organisms. There is concern that exposure to CHG may lead to elevated bacterial CHG minimum inhibitory concentrations (MICs) in healthcare environments where the antiseptic is used. We investigated whether skin bacteria of CHG-exposed patients had elevated CHG MICs compared to patients without CHG exposure. Additionally, we evaluated whether bacteria isolated from environmental surfaces of CHG-exposed patients and from surfaces with detectable concentrations of CHG had higher CHG MICs compared to bacteria isolated from room surfaces without CHG exposure or from surfaces without detectable CHG. Methods We recruited a prospective observational cohort including two patient groups: 15 patients without CHG exposure during hospitalization, and 15 patients with daily CHG bathing for ?14 days prior to enrollment. Informed consent was obtained, and clinical data were recorded. Skin and environmental swab samples were collected using E-swabs and sponge sticks respectively and cultivated on non-selective media (Figure 1). A subset of isolates underwent CHG and antibiotic MIC determination by microbroth dilution. Swab samples of the same locations were collected using pre-moistened sterile water swabs and processed via colorimetric assay. Data were analyzed using multilevel models. Results No significant clinical differences between groups were noted, including in antimicrobial exposure or infection history. 360 unique bacterial isolates were identified, with Staphylococcus epidermidis and Staphylococcus hominis being the most common organisms isolated from all skin and environmental sites (Table 1). CHG MICs were not significantly different across all organisms detected at all sites in exposed versus non-exposed groups (p=0.4) (Table 2). No residual CHG was found on skin or environmental surfaces of the CHG non-exposed group. Residual CHG in the exposed group was most frequently detected on the anterior chest (n=13/15) and bed handle (n=8/15), and levels of residual CHG on body sites were significantly elevated compared to environmental sites (p=<0.0001). Bacteria found where residual CHG was detected on both skin and environmental sites did not have significantly elevated CHG MICs (p=0.21). Conclusion We found no evidence that CHG exposure correlates with elevated CHG MICs of skin or environmental bacteria, suggesting routine CHG use to prevent infections does not contribute to resistance. This study is the first to correlate bacterial

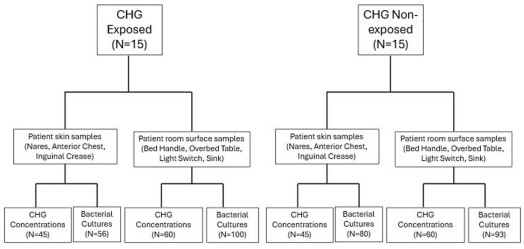


Figure 1: Experimental design. Bacterial culture value (N=) reflects number of unique isolates obtained at each location

‡The abstract titles in this supplement have been corrected since original publication. A notice detailing the changes has been published at https://doi.org/10.1017/ash.2026.10802.

https://doi.org/10.1017/ash.2026.10658 Published online by Cambridge University Press