#### Presentation Type:

Poster Presentation

Subject Category: Decolonization Strategies

## From Label to Enable: Addressing Chlorhexidine Allergies for Safer Patient Care

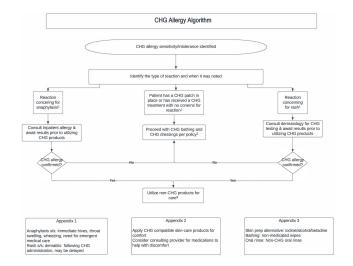
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Background: Chlorhexidine gluconate (CHG) bathing reduces skin bacterial colonization and reduces the risk of hospital-acquired bloodstream infections, central venous catheter-related bloodstream infections, and transmission of multidrug-resistant organisms. Although mild skin irritation to CHG is common, true IgE-mediated allergy is rare. We implemented a program to delabel low-risk CHG allergies in hospitalized patients. Methods: Patients ≥ 18 years of age admitted to inpatient cardiology or hematology-oncology units with an allergy to CHG documented in the electronic medical record were identified. A hospital epidemiologist contacted primary care teams directly, providing a personalized and collaborative approach to evaluate the listed CHG allergy. Using an algorithm devised in partnership with dermatology and allergy experts (Figure 1), guidance was tailored to the reported type of reaction. Each point of contact with care teams was considered an intervention. The primary endpoint was the number of patients for whom a CHG allergy or intolerance was removed from the medical record. Results: During a two-month period, 42 interventions for 31 unique patients reporting an allergy to CHG were performed. The cohort was fairly evenly distributed between hematologyoncology and cardiology units (52% vs 48%, respectively), and was 51% male with a median age of 63 (IQR, 20.5 years). Rash was the most frequently listed concern (58%), followed by nonspecific burning or irritation (35%). 5 patients (16%) were delabeled; of these, 2 were directly delabeled due to tolerance of other CHG products (e.g., CHG dressing), and 3 were delabeled by dermatology patch testing. There were no adverse reactions reported after CHG allergy de-labeling. Conclusion: Similar to handshake rounds for antimicrobial stewardship, collaborative and targeted education can be an effective strategy to delabel CHG allergies and intolerances.

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# Bundled Interventions to Improve CHG Bathing Compliance as a Strategy to Decrease MRSA Healthcare-Associated Infections

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Background: Universal decolonization using chlorhexidine gluconate (CHG) foaming soap in a hospital system has been shown to reduce healthcare-associated infections (HAIs) and colonization by multidrug-resistant organisms. Limited data exist on optimal strategies to improve compliance, and the impact of improved compliance on HAI rates. This study evaluates the effect of increasing CHG compliance on MRSA HAI rates. Methods: In 2022, our acute care VA hospital started universal CHG bathing treatment, by requiring a daily CHG bath for all patients in intensive care units and medical/surgical floors, unless contraindicated. Despite this, compliance was below goal. We performed root cause analyses to identify factors contributing to poor compliance, and then initiated a bundled intervention, including nursing staff education on the benefits of CHG bathing to reduce HAIs, how to reframe discussions with patients about refusals, removal of one alternative soap product from the inventory, and moving the CHG bathing product in clean supply rooms to be in proximity with other patient hygiene products for easier access. We evaluated the utilization of CHG bathing products through inventory data on utilization of 4 fluid ounce bottles of 4.0% weight/volume CHG solution, documentation of at least one CHG bath in the electronic medical record (EMR) per unique hospitalization, and HAI rates per National Healthcare Safety Network (NHSN) definitions for methicillin resistant Staphylococcus aureus (MRSA), before (08/2023-02/2024) and after (03/2024-12/2024) implementation of the bundle. Results: Identified barriers to CHG adherence included use of less effective alternative soap agents, perceptions of patient skin irritation from CHG, difficulty integrating CHG into existing workflows, and lack of understanding of the benefits of CHG bathing. After bundled interventions, inventory usage CHG bottles increased from 170 to 270 bottles per 1,000 bed days of care (BDOC) (p Conclusion: An intervention of staff education, removal of an alternative soap product, and improving access to CHG bathing products in supply rooms, resulted in improved CHG bathing adherence, and was associated with a reduction in MRSA HAIs in an acute care VA hospital. Interestingly, the decrease in MRSA HAIs was achieved despite an absence of complete adherence. Further data on additional strategies to improve compliance and strategies to improve healthcare worker documentation should be explored.

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Evaluation of Healthcare-Associated Infections and Daily Bathing Compliance on BMT Unit after Introduction of 2% CHG Wipes

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**Background:** Healthcare-associated infections (HAI) and multi-drug resistant organisms (MDRO) are a significant cause of morbidity and mortality in the hospital setting. Bacteria often colonize a patient's skin and can become a source of infection. Bathing patients with chlorhexidine (CHG) has been shown to decrease colonization with MDROs, central-line