

not aware of their high risk of infection. Although many were willing to expend a lot of effort to prevent an infection, this willingness decreased during an infection prevention intervention. There were few PVI side effects and most patients stated that PVI felt neutral/pleasant, yet many patients chose to not use PVI. Future research should aim to improve patient education on their risk of infection and assess barriers to adherence with infection prevention interventions.

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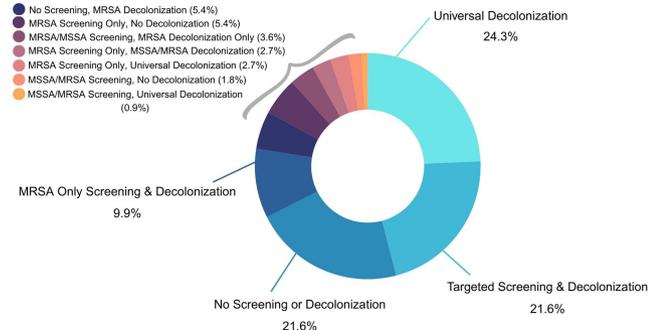
**Subject Category:** Decolonization Strategies

**Heterogeneity in Pre-operative Staphylococcus aureus Screening and Decolonization Strategies among Healthcare Institutions**

Sarah Bennis, University of Minnesota; Shalini Kulasingam, University of Minnesota; Patricia Ferrieri, University of Minnesota and Susan Kline, University of Minnesota

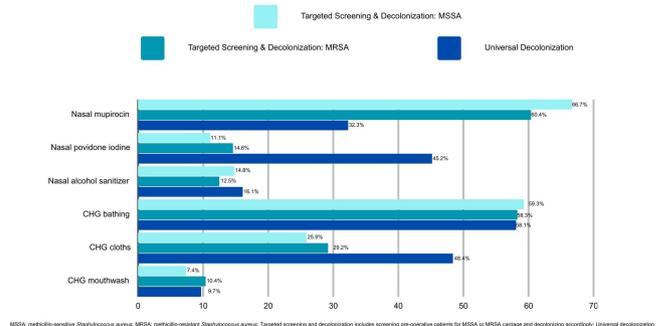
**Background:** Staphylococcus aureus (SA) is the most common pathogen causing surgical site infections (SSIs). In the past decade, strategies incorporating new SA decolonization products have been implemented to prevent SSIs in surgical patients. The objective of this cross-sectional study was to determine which pre-operative screening and decolonization strategies are currently utilized in healthcare institutions. **Methods:** A survey was programmed in REDCap and emailed to members of the Society for Healthcare Epidemiology of America Research Network, the Minnesota chapter of the Association of Practitioners in Infection Control and Epidemiology, and the Minnesota Hospital Association between May-August 2023. We report the prevalence of institutional screening and decolonization strategies and decolonization products used for the prevention of SA SSIs. **Results:** A total of 153 unique institutions initiated the survey and 111 provided complete data on their institutional screening and decolonization strategies. The most commonly reported strategies included universal decolonization (decolonization of pre-operative patients without screening for carrier status) (n=31, 27.9%), no screening or decolonization (n=24, 21.6%), targeted screening for methicillin-sensitive Staphylococcus aureus (MSSA) or methicillin-resistant Staphylococcus aureus (MRSA) and decolonization based on carrier status (n=24, 21.6%), or MRSA only screening and decolonization (n=11, 9.9%) (Figure 1). Institutions that utilized targeted screening and decolonization strategies frequently reported using nasal mupirocin (n=18, 66.7%MSSA, n=29, 60.4%MRSA), chlorhexidine gluconate (CHG) bathing (n=16, 59.3%MSSA, n=28, 58.3%MRSA), and CHG cloths (n=7, 25.9%MSSA, n=14, 29.2%MRSA) (Figure 2). Among the 31 institutions that reported implementing the universal decolonization strategy, CHG bathing (n=18, 58.1%), CHG cloths (n=15, 48.4%), and nasal povidone iodine

**Figure 1. Distribution of screening and decolonization strategies employed by surveyed institutions (N=111).**



MRSA: methicillin-resistant Staphylococcus aureus; MSSA: methicillin-sensitive Staphylococcus aureus; Targeted screening and decolonization includes screening pre-operative patients for MSSA or MRSA carriage and decolonizing accordingly; Universal decolonization includes decolonization of all pre-operative patients regardless of carrier status

**Figure 2. Prevalence of products utilized to decolonize pre-operative patients by strategy.**



MSSA: methicillin-sensitive Staphylococcus aureus; MRSA: methicillin-resistant Staphylococcus aureus; Targeted screening and decolonization includes screening pre-operative patients for MSSA or MRSA carriage and decolonizing accordingly; Universal decolonization includes decolonization of all pre-operative patients regardless of carrier status; CHG: chlorhexidine gluconate; Note: percentages may not add up to 100% due to rounding

(n=14, 45.2%) were the most prevalent decolonization products. Additionally, a smaller percentage of institutions used nasal alcohol gel (n=5, 16.1%) for universal decolonization. **Conclusion:** Compared to the survey we conducted in 2012, we report a new shift towards universal decolonization and a small increase in targeted SA screening and decolonization. In the 2012 survey we reported 37% of respondents' institutions screened pre-operative patients for SA carriage and the majority of those institutions decolonized carriers. Universal decolonization was not reported in the 2012 survey. We highlight the continued heterogeneity in practice at this time, which may reflect the ongoing uncertainty in optimal decolonization practices and emphasizes the need for future research. References: 1. Kline, S. et al. *Infect Control Hosp Epidemiol* 2014;35(7):880-882.

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**Analyzing the Relationship Between Socioeconomic Deprivation and Outpatient Medicare Part D Fluoroquinolone Claims in Texas**

Mayar Al Mohajer, Baylor College of Medicine; Edgar Samarasundera, School of Public Health, Imperial College London; Judite Gonçalves, School of Public Health, Imperial College London and Alicia Heath, Imperial College London

**Background:** Only a few studies have assessed the relationship between deprivation and excessive antibiotic use. In Texas, antimicrobial prescription is particularly high compared with the rest of the US. This study analyzed the association between local area socioeconomic deprivation and providers' fluoroquinolone claim rates among beneficiaries 65 years and older in Texas. **Method:** This ecological study utilized provider- and area-level data from Medicare Part D Prescribers and the Social Deprivation Index (SDI) repositories. To identify geographic patterns and autocorrelation in and between SDI and fluoroquinolone claims, spatial dependence of these two variables was assessed by bivariate Local Indicators of Spatial Association (LISA) cluster mapping along with the global and local Moran's I analyses. Negative binomial regression models were employed to evaluate the relationship between provider- and area-level characteristics (prescriber's gender, specialty, rural-urban community area, beneficiaries' demographics, area-level population, and normalized SDI) and fluoroquinolone claim rates per 1,000 beneficiaries. **Result:** A total of 11,996 providers were included. There was no spatial dependence between SDI and rates of fluoroquinolone claims in Texas (Global Moran's I = 0.01, P = 0.618). Bivariate LISA maps showed 85 high-high and 38 low-low spatial clusters. Higher SDI (incidence rate ratio (IRR) 0.98, 95% confidence interval (CI) 0.97-0.99 per 1-unit increment) and male providers (IRR 0.96, 95% CI 0.94-0.99) were associated with lower claim rates. In contrast, several factors were associated with higher claim rates, including non-metropolitan areas (1.04, 95% CI 1.00-1.09), and practices with a high