



Fig. 2.

contains a high degree of genetic resistance, including a mismatch between presence of *mecA* and phenotypic oxacillin resistance and genetic propensity for chlorhexidine resistance. Mupirocin resistance was not observed. Of all isolates, 29.8% belonged to multiple clusters, confirming hospital spread of this commensal organism in some cases.

**Funding:** None

**Disclosures:** None

*Antimicrobial Stewardship & Healthcare Epidemiology* 2022;2(Suppl. S1):s54–s55

doi:10.1017/ash.2022.160

**Presentation Type:**

Poster Presentation - Poster Presentation

**Subject Category:** MRSA/VRE

**Targeted *Staphylococcus aureus* decolonization in acute inpatient and intensive care settings of an academic medical center**

David DiTullio; Courtney Takats and Sarah Hochman

**Background:** *Staphylococcus aureus* is a common cause of healthcare associated infections and is associated with high mortality. *S. aureus* colonization of skin and mucosa contributes to its pathogenesis. Universal *S. aureus* decolonization reduces methicillin-resistant *S. aureus* (MRSA) and other bloodstream infections among ICU patients. However, universal decolonization in acute-care settings has not shown a similar benefit. We describe a targeted decolonization protocol implemented at a large academic hospital across acute-care and intensive care settings. We assessed the impact of decolonization on *S. aureus*-related infections. **Methods:** Adults admitted in 2018–2019 to the medicine, oncology, transplant, and ICU services were screened for *S. aureus* colonization using nasal swabs for MRSA/MSSA by culture. Those with *S. aureus* detected underwent decolonization with 5 days of chlorhexidine 2% baths and mupirocin intranasal ointment. Decolonization was considered complete if given for 5 days. The primary outcome was *S. aureus* invasive infection from hospital day 3 until discharge, defined by positive clinical cultures from sterile sites. Secondary outcomes included 30-day readmission and 30-day mortality. The control population was patients with negative MRSA/MSSA nasal screening in the same hospital units. **Results:** In total, 4,465 (23%) of 19,065 screening tests were positive for MSSA (75%) or MRSA (25%). The median age was 69 years (IQR, 56–80), and the median length of stay (LOS) was 6 days (IQR, 4–10). Among patients with LOS  $\geq 3$  days, 541 (16%) completed decolonization and 2,161 (64%) received no decolonization. The rate of complete decolonization increased to 35% among those with LOS  $\geq 7$  days. In total, 802 screened patients developed invasive *S. aureus* infections. Of 4,437 colonized patients, 536 (12%) had invasive infections, compared with 265 (2.1%) invasive infections in 12,917 noncolonized patients. Among patients with *S. aureus* colonization, 24% of decolonized patients developed invasive infection and 13% of patients who were not decolonized developed invasive infection. Rates of 30-day readmission and mortality were 28% and 10%, respectively, among fully decolonized patients, versus

20% and 6.6% among those receiving no decolonization. **Conclusions:** These data provide an assessment of the efficacy of a targeted screening and decolonization program. Although decolonization did not reduce rates of invasive infection or secondary outcomes, further analysis is needed. Patients with longer lengths of stay are more likely to receive full decolonization but are also at higher risk of invasive infection, which may contribute to our unexpected results.

**Funding:** None

**Disclosures:** None

*Antimicrobial Stewardship & Healthcare Epidemiology* 2022;2(Suppl. S1):s55

doi:10.1017/ash.2022.161

**Presentation Type:**

Poster Presentation - Poster Presentation

**Subject Category:** Other

**Stethoscope hygiene, workflow, and patient safety: The crux of health-care-associated infections**

William Peacock; Stuart Kipper and Sean-Xavier Neath

**Objective:** We evaluated the impressions and perceived workflow consequences following installation of a touch-free aseptic stethoscope barrier dispenser in the clinical environment. **Methods:** Beginning in 2020, we conducted a volunteer survey of aseptic stethoscope diaphragm barrier (AseptiScope, San Diego, CA) users in multiple departments at 7 US healthcare facilities. A 10-question survey was presented on an iPad near the aseptic barrier dispenser, which was usually located in the patient exam room, to be available immediately after the practitioner completed their examination, which included the use of the stethoscope barrier. This evaluation was considered a quality improvement project and was exempt from institutional review board approval. For this analysis, only 1 survey per practitioner was included. **Results:** Overall, 147 surveys were obtained from 7 institutions geographically distributed across the United States, immediately after placement of the DiskCover system in the patient care environment. Responses were generally positive and included ease of use (95.2% rated easy or very easy), comparison to a disposable stethoscope (97.9% as similar to, improved over, or significant improvement), workflow changes (53.7% improvement, 97.3% no impact, or improved), and perceived effect on patient safety (90.3% felt that patient safety was improved or significantly improved). **Conclusions:** The use of a touch-free aseptic stethoscope barrier system was reported to be easy to use, superior to a disposable stethoscope, and an improvement to practitioner workflow and perceived patient safety.

**Funding:** AseptiScope, Inc.

**Disclosures:** None

*Antimicrobial Stewardship & Healthcare Epidemiology* 2022;2(Suppl. S1):s55

doi:10.1017/ash.2022.162

Hands Free Stethoscope Aseptic Barrier Dispenser



Fig. 1.