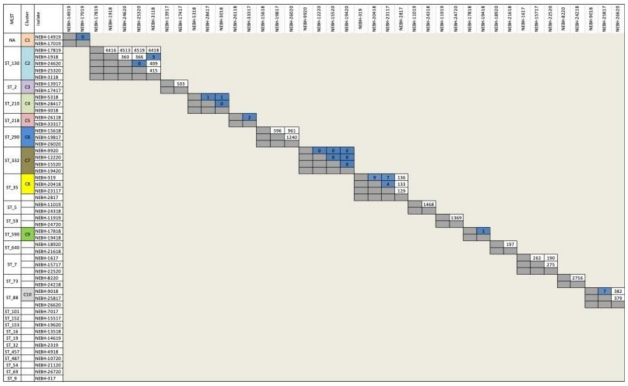

Fig. 2.

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.

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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 ≥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 ≥ 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.

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Disclosures: None

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Presentation Type:
Poster Presentation - Poster Presentation
Subject Category: Other
Stethoscope hygiene, workflow, and patient safety: The crux of healthcare-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.

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Disclosures: None

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Fig. 1.

Survey

Please circle one answer for each question.

1. **Have you participated in this survey before?**
   Yes No
2. **What is your clinical profession?**
   RN MD NP PA Other
3. **Which statement best describes your experience applying a DiskCover to your stethoscope?**
   Very hard Hard Not hard or easy Easy Very easy
4. **Compared to a disposable stethoscope, your stethoscope with a DiskCover performs?**
   Much worse Slightly worse No difference Slightly better Much better
5. **How often do you clean your stethoscope with alcohol for 60 secs (per CDC recommendations)?**
   After each pt. After a few pts. Daily Weekly Monthly Never
6. **Does the DiskCover System impact your workflow?**
   Significantly disrupt Slightly disrupt No impact Slightly improve Significantly improve
7. **As an alternative to cleaning between patients, how do you think the DiskCover System will impact STETHOSCOPE HYGIENE COMPLIANCE among the medical staff?**
   Significantly worsen Slightly worsen No impact Slightly improve Significantly improve
8. **How do you think the DiskCover system will impact PATIENT SAFETY?**
   Significantly worsen Slightly worsen No impact Slightly improve Significantly improve
9. **Where is the DiskCover System best placed for optimum workflow and stethoscope hygiene compliance?**
   As close to the patient as possible
   Outside the patient's room
   In the same place as the hand hygiene
   At the nursing station
10. **Based on your experience with the DiskCover System, and as compared to your current practice, do you see applicability of touch-free dispensing as valuable for other infection vectors (ultrasound probes, hands, etc.)?**
    Absolutely not No Maybe Yes Absolutely yes
11. **Additional comments and feedback:**

    _____

Thank you!

Fig. 1.

Presentation Type:
Poster Presentation - Poster Presentation
Subject Category: Other
Changing the use of isolated urine-culture testing with diagnostic testing stewardship
Jessica Penney; Angie Rodday; Paola Sebastiani; David Snydman and Shira Doron

Background: Urine testing is one of the more frequently ordered diagnostic tests among hospitalized patients. Many hospitals have implemented urinalysis with reflex culture (UARC) as a method of diagnostic testing stewardship to guide appropriate use of urine testing. Isolated urine culture, or urine culture without preceding urinalysis, is the most appropriate diagnostic test for patients who are neutropenic, pregnant, or those about to undergo an invasive urologic procedures. This testing is often used beyond these indications in hospitals though, potentially leading to overdiagnosis of UTI and overtreatment of asymptomatic bacteriuria. **Methods:** We compared outcomes in the preimplementation period (December 2018–November 2019) to those in the postintervention period (December 2019–October 2020) at an academic medical center. The intervention was the addition of an indication selection (ie pregnancy, neutropenia, etc) to the isolated urine-culture order in the electronic medical record (EMR). The primary outcomes were isolated urine culture rate per 1,000 patient days and urine-culture positivity. Our exploratory analysis included a review of selected indications after the intervention was implemented and a chart review of a subset of these tests for appropriateness. The primary analysis was performed using interrupted time-series negative binomial regression. **Results:** There was no significant change in isolated urine-culture rates after the intervention (11.18 cultures per 1,000 patient days before the intervention versus to 7.75 cultures per 1,000 patient days after the intervention; $P > .90$), and there were as no significant pre- or postintervention trends. We detected no significant change in isolated urine-culture positivity: 26.9% before the intervention versus 26.7% after the intervention ($P > .90$). These results are shown graphically in Fig. 1. In the exploratory analysis, of 661 isolated urine-culture tests ordered in the postintervention period, the indication for testing was left blank in 71.9% of tests. The other most common reasons for testing included other (16%), pregnancy (5.7%), and neutropenia (4.4%). In the 100 tests reviewed for appropriateness, only 8% had a documented diagnosis corresponding with the selected indication for testing. **Discussion:** The addition of an indication selection for isolated urine culture testing did not change the rates of culture ordering or the culture's subsequent likelihood of positivity. In the exploratory analysis, most providers were incorrectly selecting this testing rather than UARC as prompted. Next steps could potentially be removing the "other" category and requiring a selected answer or requiring approval from stewardship team prior to ordering. Continued education of providers is paramount to the appropriate use of diagnostic testing.
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Disclosures: None

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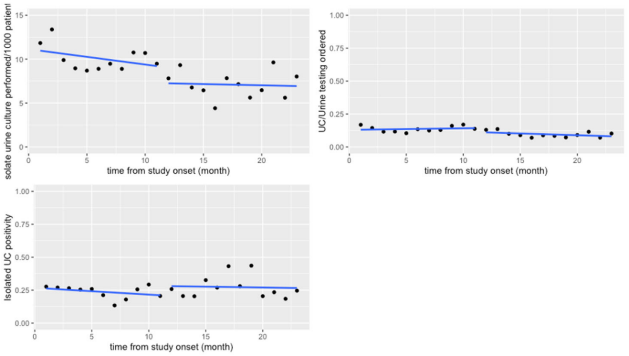

Fig. 1.

Presentation Type:
Poster Presentation - Poster Presentation
Subject Category: Other
Risk factors for candidemia: A case–control study
Serin Edwin Erayil; Katelyn Tessier and Susan Kline

Background: *Candida* bloodstream infections (candidemia) have significant mortality and morbidity rates, as well as healthcare cost implications. Emerging multidrug-resistant *Candida* spp such as *Candida auris*, as well as increasing resistance among non–*albicans* species, which are becoming more prevalent, also raise concern. Understanding the epidemiology of this infection could enhance prevention and management efforts. We studied risk factors for candidemia. **Methods:** This matched case–control study was conducted at a university hospital from December 2019 through May 2021. Cases of candidemia were identified using positive blood-culture results. Controls were matched 5:1 to cases by age, sex, and month and year of admission. Risk factors of interest included total parenteral nutrition (TPN), central venous access (CVA), neutropenia, *Clostridium difficile*, pancreatic disease, *Candida* in urine culture, cancer, invasive procedures, H_2 blockers, chemotherapy,