drains and 6 of 75 resident room sink drains. WGS and SNP analysis suggest relatedness among resident and environmental KPC-CRE isolates. Gaps in IPC measures including hand hygiene, use of personal protective equipment (PPE), environmental cleaning and disinfection, and sink hygiene practices were observed during onsite assessments. Use of an EPA-registered biofilm disinfectant in facility drains and repeated environmental sampling has demonstrated a decrease in KPC-harboring bacteria within the premise plumbing, but not complete elimination. **Conclusion:** Containing the spread of KPC-CRE within LTCF-A has been challenging due to environmental reservoirs of KPC-CRE along with insufficient implementation of IPC practices. Continued colonization screening has been necessary to detect newly colonized residents and reinforce efforts to increase IPC compliance. Strict implementation and adherence to IPC measures, including those that minimize the spread of KPC-CRE from facility premise plumbing, are needed to fully halt KPC-CRE transmission within LTCF-A.

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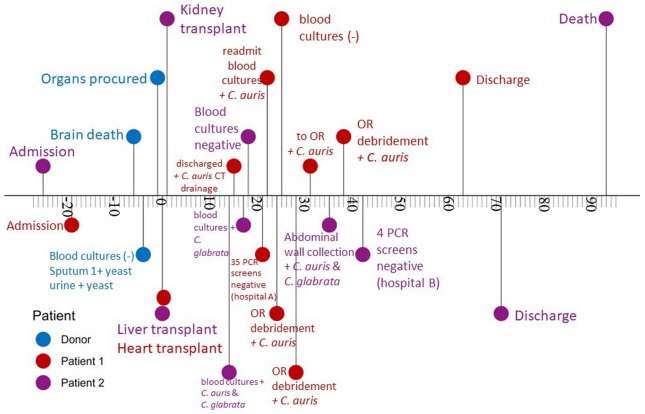

Figure: Timeline of *C. auris* cluster at the Medical University of South Carolina hospitals A & B in September – December 2023. Axis depicts days relative to the heart and liver transplant date (day 0). PCR screens refer to axilla-groin screening PCR tests for patients co-located in inpatient units with patients 1 & 2.

Presentation Type:
Poster Presentation - Poster Presentation
Subject Category: Outbreaks
Candida auris cluster in a center with no previous infections associated with a single organ donor

Evan Rivere, Medical University of South Carolina; Eric Meissner, Medical University of South Carolina; Alexandra Mills, Medical University of South Carolina; Courtney Harris, Medical University of South Carolina; Adrienne Lorek, Medical University of South Carolina and Scott Curry, Medical University of South Carolina

Background: Candida auris is an opportunistic pathogen reported in the US since 2016. C. auris infections (CAI) are frequently healthcare-associated, but only one case of donor-derived CAI in a lung transplant recipient has been reported (PMID 28520901). We describe a cluster of two CAIs at a single center in South Carolina occurring in 2 different recipients from the same solid organ transplant donor. **Methods:** We describe two cases of invasive CAIs occurring in an academic medical center without prior CAI in Charleston, SC in October 2023. C. auris was identified using Bruker MALDI-TOF and confirmed by the state health department. **Results:** Patient 1: 40-49 year-old male underwent heart transplantation on day 19 from admission complicated by growth of C. auris on post-op day #15 from a drain. He was readmitted post-op days 22-63 with positive blood cultures for C. auris and underwent re-operation with debridement and hardware removal. C. auris pericarditis required multiple returns to the OR (Figure). He was discharged on micafungin/posaconazole with plans for long-term antifungal therapy. Patient 2: 50-59 year-old male underwent liver and kidney transplantation on day 25 from admission from the same donor as Patient 1 in a separate hospital complex. His course was complicated by possible infected biloma not amendable to drainage and C. auris/C. glabrata fungemia, which was further complicated by abdominal wall collection cultures growing C. auris on post-operative day 35 on washout. He was managed with dual micafungin/posaconazole however, he died of unrelated causes at 93 days after transplant (Figure). Investigation: The donor for both recipients was a 10-19 year-old male who suffered brain death after trauma and was hospitalized for 56 days prior to procurement in Atlanta, GA without known CAI. Airway cultures at the time of organ procurement were positive for rare Pseudomonas and light unidentified yeast of multiple morphologies; urine cultures also grew 40,000 cfu/ml un-identified yeast. Screening of 35 and 4 inpatients in units exposed to patients 1 & 2, respectively, with axilla/groin PCR was negative (Figure). A third organ recipient for this donor (kidney) at our center was identified and had negative urine fungus cultures. **Conclusions:** Despite no definitive link to a known donor infection, this cluster of CAI occurring simultaneously in 2 patients in separate hospitals/units at a single center with no known prior cases represents likely donor-derived CAI. Our experience suggests that organ procurement organizations should consider improved screening techniques for C. auris in donor cultures.

Disclosure: Scott Curry: Consultant- Ferring; Abbott Diagnostics- Speaker honorarium

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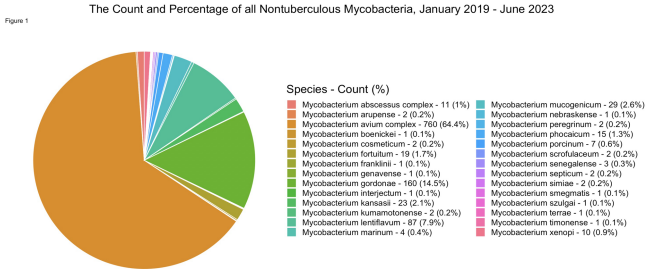
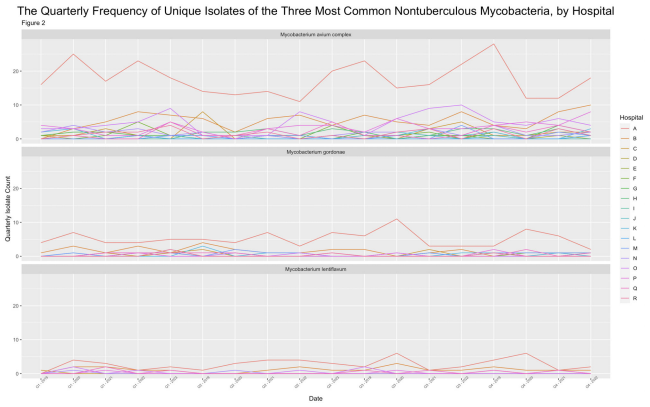
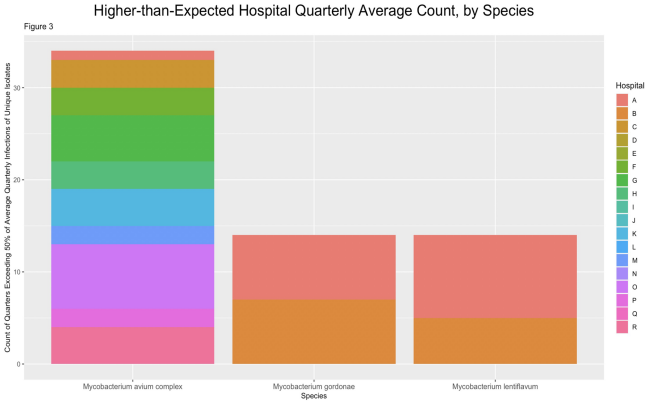
Presentation Type:
Poster Presentation - Poster Presentation
Subject Category: Outbreaks
Multi-year Epidemiology of Nontuberculous Mycobacteria Across a Diverse Healthcare System

Spencer Schrank, UPMC, University of Pittsburgh; Lee Harrison, University of Pittsburgh; Elise Martin, VA Pittsburgh Healthcare System and Graham Snyder, UPMC, University of Pittsburgh

Background: Nontuberculous mycobacteria (NTM) are ubiquitous potential pathogens implicated in healthcare-associated outbreaks. There is a paucity of studies describing transmission risk in the healthcare setting. To estimate the potential healthcare-associated transmission of NTM, we characterized the frequency of NTM clinical isolates across our multi-facility healthcare system. **Method:** We performed a retrospective review of all clinical NTM isolates at 21 healthcare facilities in a large health system between January 2019 through June 2023 (inclusion criteria: all first unique species). We analyzed the quarterly frequency of isolates for each species, by facility. We identified higher-than-expected species frequencies, which was defined as a quarterly frequency ≥50% higher than the average quarterly frequency for that facility, for the entire study period (analysis omitted for any hospital with an average quarterly frequency 10 unique patient isolates in any 12-month period or >2 in a single month except for M. abscessus at Hospital A. The quarterly frequency of the three most common species among hospitals with ≥2 unique isolates per 12-month period are displayed in figure 2. An increase of 50% from the average







quarterly infection count occurred 34 times for M. avium complex across 10 hospitals, 14 times for M. gordonae across 2 hospitals and 14 times for M. lentiflavum across 2 hospitals (Figure 3). **Conclusion:** A diverse group of NTM were isolated across our healthcare system over the study period, most commonly M. avium complex, M. gordonae, and M. lentiflavum, each with hospital-specific temporal frequencies that suggest the potential for undetected outbreaks, while frequencies of less commonly isolated species were rarely suggestive of potential undetected outbreaks. Further epidemiologic investigation of in-hospital transmission routes, with whole genome sequencing to determine genetic relatedness, is necessary to identify undetected outbreaks.

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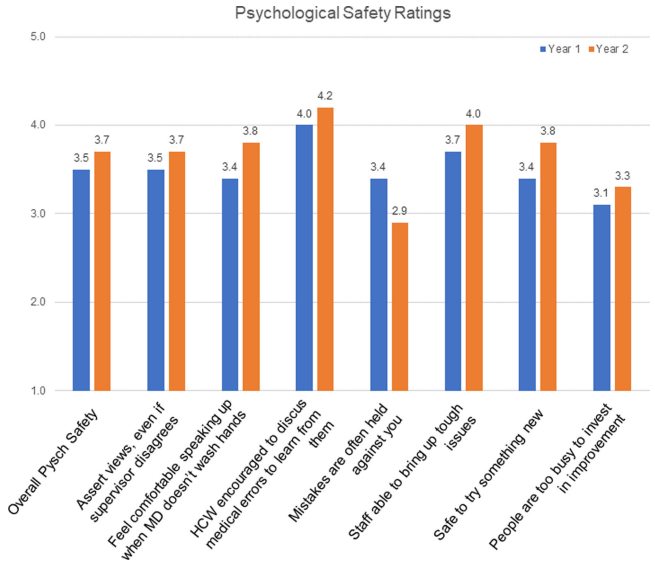
Presentation Type:
Poster Presentation - Poster Presentation
Subject Category: Patient Safety

Low levels of psychological safety in inpatient medical-surgical nurses on the tail end the COVID-19 pandemic

Cara Johnson, Columbia University School of Nursing; Dr. Ulanda Marcus-Aiyeku, Hackensack Meridian Health, University of Tennessee Health Science Center and Amanda Hessels, Columbia University

Background: The COVID-19 pandemic required an increased reliance on and utilization of the inpatient nursing workforce. We aim to examine the psychological safety of U.S. inpatient acute care nurses in the two years following the onset of COVID-19. **Method:** Participants were recruited for participation across two major metropolitan medical centers in the tri-state area, six units per site (12 total). Anonymous Qualtrics survey invitations were distributed through work listservs in the first halves of 2022



and 2023. The invitation was open to registered nurses who provided at least 16 hours/week of direct patient care for at least six months at the hospital. The survey was open for 4-6 weeks, with reminders sent every other week. Nurses were offered a $25 gift card the firs year and $35 the second. Nurses were asked to rate how frequently they experience seven conditions indicative of psychological safety in their work environment from 1 = "Never" to 5 = "Always". Two items were reverse coded in analysis as the prompts were negatively phrased. Blank and ineligible responses were excluded from the analytic sample. As response distributions were skewed, Wilcoxon rank-sum tests were used to analyze differences between years (alpha = 0.5). Blank and ineligible responses were excluded from the final analytic sample. **Result:** We achieved an overall response rate of 52% for each survey year (n=258 Year 1, n=221 Year 2). Psychological safety was found to be low overall for both years, but lowest for Year 1 (3.5 vs. 3.7, p=0.0132). The highest rated condition in both years was "When a medical error occurs at this hospital, health care workers are encouraged to discuss mistakes in order to learn how to prevent similar future errors" (4.0 Year 1 vs. 4.2 Year 2, p=0.0054). The lowest rated condition changed across years. For Year 1, "At this hospital, people are too busy to invest time in improvement" (reverse coded) received the lowest rating at 3.1 (vs. 3.3 in Year 2, p=0.0685). For Year 2, "If you make a mistake at this hospital, it is often held against you" became the lowest rating at 2.9 (vs. 3.4 year 1, <.0001). A summary of the psychological safety conditions is presented in Figure 1. **Conclusion:** Nurses in our study reported low psychological safety during the end of the COVID-19 pandemic. This has implications for overall patient safety and for nursing staff retention in acute care units.

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Presentation Type:
Poster Presentation - Poster Presentation
Subject Category: Pediatrics

Creation of a Multi-Year Pediatric Candidemia Antibiogram in Georgia Identifies Changing Epidemiology and Resistance Trends

Diane Saint-Victor, Children's Healthcare of Atlanta; Mark Gonzalez, Children's Healthcare of Atlanta; Collin Dubick, Emory University and Matt Linam, Emory University

Background: Invasive candidiasis, including candidemia, is a significant cause of morbidity and mortality in medically complex and immunocompromised children. Understanding the epidemiology and antifungal susceptibility patterns of Candida infections could help guide empiric antifungal therapy. **Methods:** This fungal antibiogram was created at a