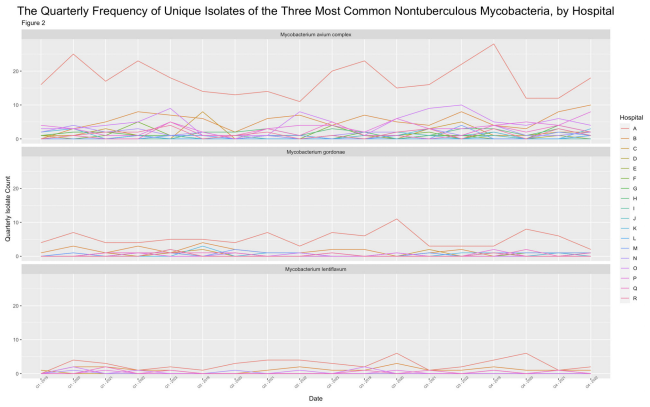

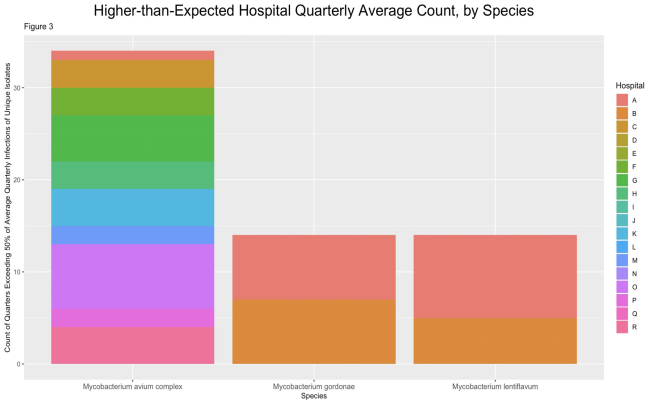

quarterly infection count occurred 34 times for M. avium complex across 10 hospitals, 14 times for M. gordonae across 2 hospitals and 14 times for M. lentiflavum across 2 hospitals (Figure 3). **Conclusion:** A diverse group of NTM were isolated across our healthcare system over the study period, most 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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Subject Category: Patient Safety

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

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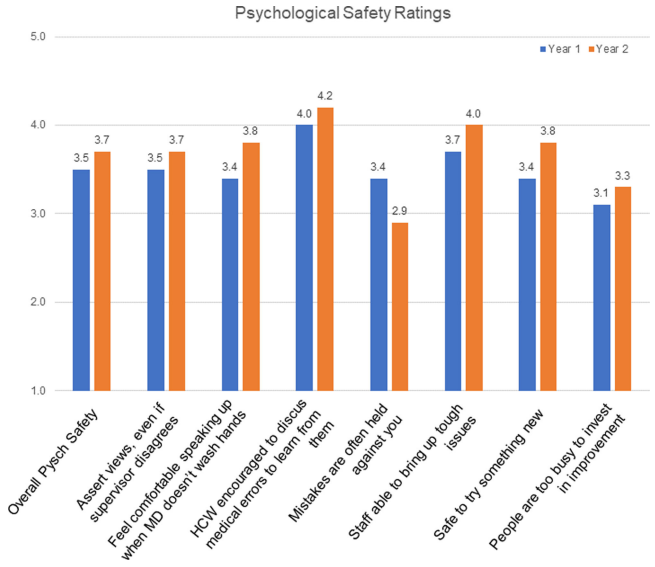
Background: The COVID-19 pandemic required an increased reliance on and utilization of the inpatient nursing workforce. We aim to examine the psychological safety of U.S. inpatient acute care nurses in the two years following the onset of COVID-19. **Method:** Participants were recruited for participation 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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Creation of a Multi-Year Pediatric Candidemia Antibiogram in Georgia Identifies Changing Epidemiology and Resistance Trends

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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

large quaternary children's health system in Georgia. Blood isolates positive for Candida spp. from 2019 through 2023 were included. The number and percentage of isolates for each Candida spp was recorded by year and then as the combined 5-year total. The Clinical and Laboratory Standards Institute (CLSI) antifungal interpretative criteria were used, and we only included one unique Candida spp isolate per patient. Due to the limited number of isolates, the combined 5 years of isolates were used to create the fungal antibiogram. Data are shown as percent susceptible using CLSI interpretative criteria and number of isolates. **Results:** Between 2019 and 2023 there were 124 unique blood isolates of Candida spp identified. The most common isolates were C. albicans (33%), C. parapsilosis (27%), C. glabrata (14%) and C. tropicalis (11%). Over the 5 years of the study, the percentage of C. albicans isolates decreased from 47% to 21%. The change in epidemiology was not driven by a single Candida species but varied from year to year. For C. albicans, susceptibility was 100% for fluconazole and micafungin. For C. parapsilosis, susceptibility to fluconazole and micafungin was 97% and 94%, respectively. Fluconazole susceptibility was lowest for C. glabrata (88%) and C. krusei (0%). Using CLSI epidemiological cutoff values (ECV) to evaluate the amphotericin B results, none of the isolates had results greater than the CLSI ECVs. Comparing 2019 and 2023, the percentage of Candida blood isolates resistant to fluconazole increased from 5% to 18.5%. **Conclusion:** C. albicans was the most frequently identified cause of candidemia in children, but there was a gradual increase in fungemia caused by other Candida spp. over the past 5 years including Candida with fluconazole resistance. Overall, our findings demonstrate high susceptibility rates to fluconazole and echinocandins in Candida spp. blood isolates. Further research is needed to identify risk factors for antifungal resistant candidemia in pediatric patients. **Disclosure:** Mark Gonzalez: Honoria for a one time consulation with NaviDx consulting in May of 2022. Honoria from the American Society for Microbiology for writing of a chapter in the Clinical Microbiology Procedures Handbook.

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The Difference We Make at Home: Impact of Infection Prevention and Control in Pediatric Homecare Tracheitis Reduction
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Background: Quality improvement (QI) efforts within Infection prevention and control (IP&C) programs to reduce risk of device-related infections in the acute care setting are well described. However, less focus has been placed on continued prevention in the homecare setting. This QI project illustrates the benefits of IP&C involvement in reducing tracheitis in pediatric homecare patients. **Methods:** The homecare multidisciplinary IP&C team implemented a series of QI initiatives aimed at reducing incidence of tracheitis beginning in 2016. Initial interventions included increasing oral care frequency to every four hours, inpatient training for new tracheostomy patients and families before discharge, and an optional inpatient simulation training resource to provide hands-on practice. Enhanced educational interventions included caregiver learning modules and competencies completed with their primary nurse in the home every ninety days and following a tracheitis infection. Practice changes and education efforts were further sustained with the creation and distribution of laminated tracheostomy care teaching sheets to patient homes. Quarterly tracheitis infection rates were tracked using a U-chart. Organism distribution in tracheitis cases were compared across the baseline (2015-2018) and post-intervention periods (2019-2023) using the Chi square test. Analyses

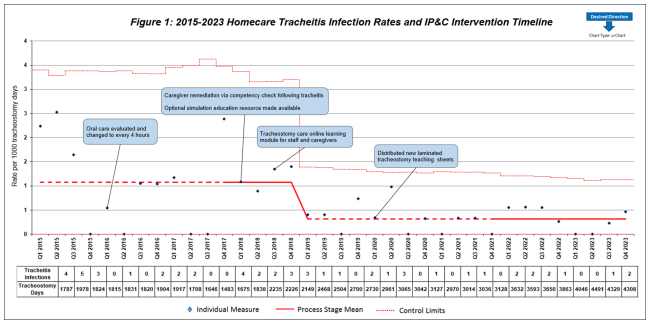

Table 1: 2015 - 2023 Tracheitis Infection Organisms

	Baseline (2015-18)		Intervention (2019-23)	
Total infections	**33**		**21**	
	n	**%**	***n***	**%**
Pseudomonas sp.	19	25%	13	28%
Stenotrophomonas sp.	12	16%	4	9%
Staphylococcus aureus	11	15%	4	9%
Serratia marcescens	9	12%	9	19%

were performed using Stata Statistical Software: Release 18 (College Station, TX: StataCorp, LLC) with two-tailed alpha level of 0.05. **Results:** Quarterly tracheitis infection rates from 2015 through 2023 are displayed in the Figure. Notably, the baseline period, established Q1 2015 through Q4 2017, revealed a consistent rate of 1.08 tracheitis infections per 1000 tracheostomy days. During this initial phase, changes in oral care frequency and enhanced educational resources were implemented to decrease rates. Following these interventions, a significant shift was observed in Q1 2019, with the new baseline rate drastically reduced to 0.32 infections per 1000 tracheostomy days. This denotes a remarkable 70% improvement from the prior average infection rate which has been sustained through Q4 2023 with the laminated teaching sheets. The most frequently identified organisms across both time periods are displayed in the Table. Pathogen distribution was similar following QI interventions ($p = 0.50$). **Conclusions:** Tracheitis infections were reduced by 70% through implementation of multidisciplinary homecare IP&C QI efforts. IP&C programs are integral to pediatric homecare.

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Epidemiology of Neonatal Sepsis in Haiti
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Introduction: Neonatal sepsis (NS) is a global public health concern, particularly affecting developing countries. Challenges in diagnostics, more specifically, culture and antimicrobial susceptibility testing hinder effective management of the disease. **Objective:** This study aims to evaluate the burden, describe the management, and assess the evolution of NS in a hospitalized pediatric population in Haiti. **Methods:** A retrospective cohort study from January 2013 to December 2018 at La Paix University Hospital was conducted. All-cause hospitalizations and deaths were extracted from hospital's Neonatology Unit records and were used to derive data regarding hospitalization and death among patients under 28 days with NS. Clinical and laboratory data were extracted from the patients' medical records. **Results:** Out of 2,424 post-childbirth hospitalizations, 1,590 involved sepsis. The percentage of hospitalization due to NS was approximately 69% and the percentage of deaths, 65%. The mean