programs were located under Quality (65% vs. 45% for multi-facility and free-standing hospitals, respectively) and 18% under Nursing (12% vs 27% for multi-facility and free-standing hospitals, respectively). Compared to free-standing hospitals, ICP departments in multi-facility hospitals reported higher median number of IPs (3.0 vs.1.0; p) Conclusion: This study reveals differences in IPC staffing and resources between free-standing and multi-facility hospitals with free-standing hospitals facing notable challenges, including limited access to HEs/ID Physicians. Future research should focus on identifying optimal staffing models and resource allocation to address these staffing and resource disparities and ensure equitable access to expertise. Interventions that leverage the collective expertise between IPC and HE are necessary to advance patient safety.

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Poster Presentation

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<90% of the recommended weight-based volume were classified as underfilled. Blood culture results were compared between bottle characteristics using chi squared and Wilcoxon rank tests as appropriate. Results were presented to stakeholders to facilitate discussions on blood culture collection. When Less isn't More: Pre-Implementation Data from a Pediatric Blood Culture Volume Quality Improvement Program Erica Prochaska<sup>1</sup>, Aigue Anne Okogun<sup>1</sup>, Christina Schumacher<sup>2</sup>, Karen Carroll<sup>1</sup>, Slade Decker<sup>3</sup>, Alexandra Minor<sup>3</sup>, Raphael Gadot<sup>1</sup>, Sophia Xu<sup>1</sup> and Aaron Milstone<sup>1</sup>

<sup>1</sup>Johns Hopkins University; <sup>2</sup>Johns Hopkins School of Medicine and <sup>3</sup>Johns Hopkins School of Medicine

Background: Blood culture volume is crucial to accurate diagnosis of a bloodstream infection. Underfilling blood culture bottles decreases test sensitivity and has been associated with contaminants. Pediatric blood culture volume recommendations are patient weight-based and difficult to audit. Our objectives were to assess healthcare worker pediatric blood culture volume knowledge and to measure culture volumes during the preimplementation phase of a blood culture quality improvement program. Methods: Data were collected May 2024-November 2024. Surveys were administered to healthcare personnel who regularly obtained blood cultures. To estimate the collected blood volume, blood culture bottles in the laboratory were weighed, and weights were subtracted from the averaged weight pre-filled bottles. Bottles that were Results: <90% of the recommended weight-based volume were classified as underfilled. Blood culture results were compared between bottle characteristics using chi squared and Wilcoxon rank tests as appropriate. Results were presented to stakeholders to facilitate discussions on blood culture collection. 65 surveys were completed. 59 (90.8%) of respondents reported receiving blood culture training. Of those who received training, 51 (78.5%) reported that they had received weight-based blood culture training. A convenience sample of 1,076 bottles were weighed, representing 38.8% of blood cultures collected. Of those, 816 (75.8%) were underfilled (median percentage of recommended volume -57.8% (interquartile range (IQR) -80.3%, -12.3%)). Only 574 (54.3%) cultures were appropriately inoculated into a pediatric bottle based on patient weight. 83 bottles (7.7%) grew bacteria or fungi, 61 (73.5%) were non-commensals. There was no association between underfilling and positivity (p = 0.47). The median percentage of recommended volume did not differ between positive and negative cultures (-60.6% and -57.3%, respectively; p = 0.92). The median percentage of recommended volume for culture growing non-commensals and commensals was -55.5% and -69.1%, respectively (p = 0.01). Stakeholder groups reported that barriers to appropriate volume included: uncertainty regarding blood culture protocols, technical issues obtaining blood and

total blood draw limits. **Conclusions:** In a large, regional children's center, the majority of weighed pediatric blood culture bottles were underfilled despite the majority of respondents reporting blood culture volume training. Fill volume was not associated with positivity, which may be due to the large proportion of underfilled bottles in this sample. Non-commensal blood cultures did have a higher median percentage of recommended volume as compared to commensal blood cultures, which is consistent with prior publications. Future quality improvement programs will focus on dissemination of policy and addressing systems and technical barriers.

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Does Universal Masking Policy Prevent Hospital-onset COVID-19 among Patients in a Children's Hospital?

Kenta Kuruma<sup>1</sup>, Ayumi Tada<sup>2</sup>, Hanako Funakoshi<sup>1</sup>, Meiwa Shibata<sup>1</sup> and Yuho Horikoshi<sup>1</sup>

 $^1\text{Tokyo}$  metropolitan children's medical center and  $^2\text{Department}$  of Infectious Diseases, Medical Mycology Research Center, Chiba University

Background: Following the COVID-19 pandemic, various infection prevention strategies were implemented globally. Due to the challenges of asymptomatic transmission during the presymptomatic period, healthcare facilities in Japan adopted a strict universal masking policy for hospital staff and visitors. However, with the widespread availability of vaccines and therapeutic agents, as well as the reduced pathogenicity of the Omicron variant, particularly in younger populations, the universal masking policy was lifted for patients and visitors at our institution. This study evaluates the incidence of hospital-onset COVID-19 cases in a children's hospital before and after this policy change. Methods: A retrospective analysis was conducted to assess hospital-onset COVID-19 cases among hospitalized patients at Tokyo Metropolitan Children's Medical Center, Japan, between March 2020 and December 2024. Hospital-onset infection was defined as symptomatic COVID-19 diagnosed on or after the fifth day of hospitalization with a positive SARS-CoV-2 PCR result. Cases with a Ct value of  $\geq$ 30, indicative of past infection, were excluded. The infection rate was calculated as the number of hospital-onset COVID-19 cases per 10,000 patient-days. During the universal masking policy period, all adults and children capable of wearing masks were required to wear them at all times in public spaces. From July 2023, patients and visitors were no longer required to wear masks unless otherwise indicated, while hospital staff continued universal masking during patient care but were allowed to remove masks for non-patient-care activities. The study compared two periods: the universal masking policy period (March 2020-June 2023) and the postuniversal masking policy period (July 2023-December 2024). Results: During the universal masking policy period, there were 8 hospital-onset COVID-19 cases, compared to 10 cases in the post-universal masking policy period. The median ages of the patients were 106 months (IQR: 48-132) and 94 months (IQR: 56-152), respectively. The hospital-onset COVID-19 infection rates were 0.19 and 0.52 per 10,000 patient-days, respectively (p=0.07). None of the hospital-onset COVID-19 cases progressed to severe disease. Conclusion: The universal masking policy may have contributed to reducing the incidence of hospital-onset COVID-19 among patients and visitors in our children's hospital to some extent. Further studies are needed to evaluate the long-term impact of masking policies on infection prevention in pediatric settings.

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