A pediatric infectious disease physician and four pediatric pharmacists designed a Ped ASP utilizing direct and indirect patient care activities to optimize pediatric antibiotic use in 21 bed-pediatric services within a 685-bed, adult-centered medical center. Implemented in 2020, Ped ASP activities include thrice weekly chart reviews followed by handshake rounds and quarterly reviews of documented interventions. The Ped ASP team also developed policies, education, and other resources to further guide appropriate antibiotic use, in collaboration with the adult team.

**Results.** Ped ASP was initiated on general pediatric (PED) and pediatric intensive care (PICU) units. In 2020, a total of 286 charts were reviewed with 199 antibiotic interventions provided, including optimization of antimicrobial selection (23%), IV-to-PO conversion (15%), and antimicrobial dosage adjustment (13%). Annual average antibiotic length and days of therapy per 1000 patient-days were 241 and 290 respectively in PED, and 388 and 432 in PICU. The overall trend from 2020 to 2021 decreased in PED but increased in PICU (Fig. 1). The ratio of narrow to broad spectrum antibiotic use increased for both PED and PICU (Fig. 2). Simultaneously, a pediatric-specific antibiogram, extended-infusion protocol of beta-lactams, and neonatal sepsis treatment algorithm were developed and implemented.

**Methods.** A pediatric infectious disease physician and four pediatric pharmacists designed a Ped ASP utilizing direct and indirect patient care activities to optimize pediatric antibiotic use in 21 bed-pediatric services within a 685-bed, adult-centered medical center. Implemented in 2020, Ped ASP activities include thrice weekly chart reviews followed by handshake rounds and quarterly reviews of documented interventions. The Ped ASP team also developed policies, education, and other resources to further guide appropriate antibiotic use, in collaboration with the adult team.

**Results.** Ped ASP was successfully developed in a non-freestanding children’s hospital. Continual metrics served as an important tool to identify areas for improvement. Future goals include expansion of Ped ASP to other service lines, enhanced ASP education and development of additional pediatric antimicrobial treatment pathways.

**Disclosures.** All Authors: No reported disclosures

110. MRSA nasal swab as a stewardship tool to guide IV Vancomycin in diabetic foot infections
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Session: P-07. Antimicrobial Stewardship: Program Development and Implementation

**Background.** The Infectious Disease Society of America (IDSA) guidelines suggest empiric Methicillin-Resistant Staphylococcus Aureus (MRSA) coverage for Diabetic Foot Infection (DFI) with a history of MRSA infection, if local prevalence is high, or if the infection is severe. However, data suggests that there is overutilization of vancomycin in this population and this medication is associated with toxicity. MRSA nasal screen has a high negative predictive value (NPV) for ruling out MRSA in pneumonia and other sites. We performed a medication utilization evaluation (MUE) for Vancomycin IV in DFI patients who had an MRSA nares screen to determine our own NPV of this test and feasibility to use it as an antibiotic stewardship program (ASP) tool to guide vancomycin use in this population.

**Methods.** We retrospectively reviewed 224 patients from January 2015 to January 2020 who had a diagnosis of DFI and an MRSA nasal screen. 139 patients had cultures done. For the NPV, we excluded patients who had any MRSA positive culture or screen up to a year from admission (Fig. 1).

**Results.** We found 148 (66%) patients with DFI who had received IV vancomycin empirically during the admission and 136 of them were MRSA-nares negative (Figure 2). The average days of therapy (DOT) in the MRSA-nares negative patients was 5.2 days vs 4.8 in the MRSA-nares positive patients. Out of the 139 patients with a negative MRSA nasal swab, 124 had no MRSA in cultures, yielding an NPV of 89%. If we considered only the deep cultures, the NPV increased to 90%.

Figure 1. Flowchart from our medication utilization evaluation showing patient’s distribution by MRSA-screen result

**Conclusion.** We identified overutilization of IV vancomycin in patients with a diagnosis of DFI in our institution. Also, our NPV of the MRSA-nasal screening to rule out MRSA infection in DFI was high at 89% similar to previous studies. Based on these findings, we plan to implement a local ASP protocol (Figure 3) using MRSA nasal swab screen to decrease the empirical use of vancomycin. The results of these efforts will be analyzed and published in future iterations with the hopes to share this knowledge to reduce the use of IV vancomycin in this population in other centers.
Figure 3. Protocol draft to be used as an ASP tool to guide IV vancomycin de-escalation based on MRSA nasal screen for DFI patients

Disclosures. All Authors: No reported disclosures

111. Assessment of Empiric Management Practices of Common Infections in Solid Organ Transplant Recipients at a Canadian Tertiary Care Centre - A Retrospective Cohort Study
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Session: P-07. Antimicrobial Stewardship: Program Development and Implementation
Background. Post-transplant infections remain a leading cause of morbidity and mortality in solid organ transplant recipients (SOTR). Standardized antimicrobial treatment guidelines for infectious syndromes may contribute to improved clinical care. Our study seeks to assess the rate of therapeutic compliance with local standard guidelines in the treatment of common infections in SOTR, and their associated outcomes.

Methods. Consecutive adult SOTR admitted to the transplant floor from January–May 2020 for treatment of an infectious syndrome of interest were reviewed for study inclusion. Patients were followed until discharge or for 30 days following the date of diagnosis, whichever was shorter. Data was extracted from electronic medical records.

Results. 475 SOTR were admitted to the transplant floor, of which 156 patients (33%) were admitted with infectious syndromes. Guidelines were applicable to 117 patients, constituting the following 122 syndromes: 51 pneumonias; 34 urinary tract infections (UTI); 22 bacteremias and 15 intra-abdominal infections (Fig. 1). Intra-abdominal infections occurred earliest at a median time of 9 months post-transplant followed by bacteremias, pneumonias, and UTIs (medians 10, 38 and 54 months respectively) (Table 1). 47% of patients were empirically treated with a regimen compliant with guidelines and 66% were provided compliant tailored therapies. Non-compliance with empiric management guidelines resulted in a significantly higher proportion of patients requiring ICU transfer when compared to compliance (25% vs. 9%; P = .02) (Table 2). Non-compliance with tailoring protocols resulted in an increased overall length of stay (medians 11 days vs. 8 days; P = .04). Within 30 days of discharge, no differences in readmission, development of Clostridium difficile infection, rejection, graft loss or death were observed between patients receiving compliant or non-compliant regimens.

Table 1. Baseline Characteristics of Patient Cohort

Table 2. Outcomes of compliant vs. non-compliant treatment in patients receiving antimicrobial therapy for an infectious syndrome

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