weekend report of blood culture result from microbiology department and stopping ordering antimicrobials beforehand for the next day. We compared days of therapy (DOT) during the post-implementation period (September 2017 to March 2018) with that of the pre-implementation period (March 2013 to August 2017).

Results. During the pre- and post-ASP implementations, 913 and 92 patients were admitted to NICU. Mean DOT/1,000 patient-days were 217.9 and 56.6 in pre- and post-ASP implementations ($P < 0.001$) with 74.0% reduction of antimicrobial prescriptions. Mortality rates were 0.4% and 0.0% ($P = 0.54$), and 4.6% and 5.3% of patients had sepsis ($P = 0.76$), respectively. Weekend reports of blood culture result were performed in six patients and shortened their length of antimicrobial treatment during the post-ASP implementation period.

Conclusion. This ASP program was easily implemented in a NICU department of a community hospital and significantly reduced antimicrobial prescription. This kind of simple protocol may be successfully scaled-up in resource limited community hospitals without any pediatric infectious disease specialists or antimicrobial stewardship teams.

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

265. Identification of Solid-Organ Transplant Antimicrobial Stewardship Opportunities in Pediatric Liver Transplant Patients

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Background. Through the prospective audit with feedback program, postoperative antimicrobial use for pediatric liver transplant was observed to extend beyond the recommended 24 hours for surgical site infection (SSI) prophylaxis. Bacterial infections in the immediate post-transplant period represent significant risk in pediatric liver-transplant recipients, including SSI. We describe our posttransplant antimicrobial (PTA) utilization in the largest pediatric liver transplant center to determine opportunities for the antimicrobial stewardship program (ASP).

Methods. All children who underwent a liver transplant between January 1, 2017 and September 30, 2017 at our institution were included. Antimicrobials initiated within 14 days posttransplant were captured, presence of fever within 14 days, positive microbiologic data within 30 days, and massive transfusion protocol (MTP) status were collected. The primary endpoint was duration of PTA. Clinical factors associated with PTA use >48 hours were evaluated.

Results. Thirty-eight children underwent a liver transplant during the study period and 29 (76%) received a broad-spectrum Gram-negative (GN) antibiotic for > 48 hours posttransplant. Half of the patients received vancomycin and 15 (40%) received an antifungal posttransplant. Fever occurred in 21 (55%) of patients with a median onset of 1 day; 3 (8%) patients had a culture-proven posttransplant bacterial infection, with no resistant Gram-positive organisms identified. Eight patients (21%) met MTP and received PTA for ≥7 days and none had a positive bacterial culture. No differences were detected in fever or culture proven posttransplant infection between patients who received ≤48 hours of GN antibiotics compared with those who received >48 hours.

Conclusion. The majority of children received PTA beyond 48 hours which was not attributable to prolonged posttransplant fevers or positive cultures. We identified ASP opportunities, including limiting GN antibiotics to 48 hours posttransplant, eliminating empiric vancomycin, restricting antifungals to MTP only, and limiting MTP PTA to 5 days.

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266. Implementation and Evaluation of a Pharmacist-Managed Pediatric Vancomycin Protocol

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Background. Pediatric studies have shown that pharmacist-guided vancomycin dosing leads to reduction in time to initial target vancomycin trough, duration of vancomycin therapy, time to clinical stability, and shorter hospital stay. At Boston Medical Center, 65% of pediatric patients receiving vancomycin did not achieve initial therapeutic troughs between 10 and 20 μg/mL from October 1, 2016 to September 30, 2017. Through implementation of a pharmacist-managed pediatric vancomycin protocol, the project aim was to increase the percentage of patients achieving initial therapeutic troughs from 35% to 60% and percentage of patients achieving therapeutic troughs within 3 days from 67% to 90% by May 1, 2018. Secondary aims included reducing the incidence of supratherapeutic troughs from 10% to 5% and maintaining the incidence of vancomycin-associated nephrotoxicity (VAN) at 0%.

Methods. A quality improvement (QI) initiative based on the Institute for Healthcare Improvement Model was utilized, testing change through Plan-Do-Study-Act (PDSA) cycles. In PDSA cycle 1, pharmacists designed and implemented a standardized vancomycin dosing protocol for pediatric patients. In PDSA cycle 2, the addition of area under the curve (AUC)-guided dosing was implemented in select patients. Process and balancing measures included percentage of appropriately drawn vancomycin troughs, provider adherence to the new dosing protocol, and incidence of supratherapeutic troughs.

Results. A total of 32 pediatric patients were assessed. Compared with baseline data, percentage of patients achieving initial therapeutic troughs increased from 35% to 44% and percentage of patients achieving therapeutic troughs within 3 days increased from 67% to 92%. The incidence of supratherapeutic troughs decreased from 10% to 0% and the incidence of vancomycin-associated nephrotoxicity was maintained at 0%.

Conclusion. Standardized initial vancomycin dosing with increased pharmacy involvement led to more patients achieving initial therapeutic troughs, shorter times to therapeutic troughs, and a reduction in supratherapeutic troughs. Next steps include hospital-wide implementation of a pediatric vancomycin per pharmacy protocol.

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

267. Viral Respiratory Infections in Children with Neuromuscular Disease and Chronic Lung Disease Hospitalized in the Pediatric Intensive Care Unit and Associated Antibiotic Use

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Background. Viral respiratory infections (VRIs) cause significant morbidity in children with neuromuscular disease (NMD) and chronic lung disease (CLD). Antibiotics may be prescribed to children with NMD and/or CLD during hospitalizations in the pediatric intensive care unit (PICU) due to concerns of bacterial coinfection or superinfection. The purpose of this study was to describe the bacteriologic features of these VRIs and associated antibiotic use.

Methods. From May 2012 to April 2015, we identified children with NMD and/or CLD who were hospitalized in the PICU and had a respiratory virus identified by multiplex PCR. Case patients were those with CLD and/or NMD, while control patients were without these conditions. Patients with immunodeficiency, congenital heart disease, and those with positive bacterial cultures at sterile body sites, or bacterial infections identified by multiplex PCR were excluded. Virus types, bacterial respiratory culture results, peripheral WBC, X-ray findings, and receipt of antibiotics were compared between the two groups.

Results. There were 104 infections among cases and 300 among controls. The most common viruses were rhinovirus/enterovirus (188, 47%), respiratory syncytial virus (91, 23%), and influenza (34, 8%). Cases were more likely to have a positive Gram stain from respiratory culture (44% vs. 10%, $P < 0.01$), respiratory WBC count >25 (26% vs. 9%, $P < 0.01$), and growth of nonrespiratory flora (46% vs. 9%, $P < 0.01$); but did not differ in proportion with peripheral WBC count >15 (16% vs. 21%, $P = 0.43$), or proportion with >60% neutrophils or >10% bandemia (54% vs. 41%, $P = 0.05$), or presence of an infiltrate (39% vs. 34%, $P = 0.45$). Proportion of patients treated for >5 days of antibiotics did not differ between the two groups (38% vs. 33%, $P = 0.40$).

Conclusion. Broad-spectrum antibiotic use during VRI was common among patients with and without CLD and/or NMD. Though laboratory features differed between the two groups, antibiotic use was similar.

	Cases ($n = 104$)	Controls ($n = 300$)
Ampicillin	3.9%	3.7%
Azithromycin	3.9%	9.0%
Ceftriaxone	38.5%	35.7%
Vancomycin	12.5%	13.7%
Clindamycin	10.6%	5.3%
Levofloxacin	2.9%	1.3%

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268. Cardiothoracic Surgery Antimicrobial Prophylaxis in Pediatric Patients: Reducing Antimicrobial Exposure

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Background. Pediatric cardiothoracic (CT) surgery poses significant infectious risks, mitigated by antimicrobial prophylaxis and standardized infection control practices. Little is known about the most appropriate postoperative antimicrobial regimen and duration of therapy. In efforts to decrease exposure to broad-spectrum (BS) antimicrobial prophylaxis while preventing postoperative infection, we implemented a risk-stratified algorithm CT surgery prophylaxis algorithm (Figure 1) at our institution.

Methods. This quasi-experimental study included pediatric CT surgery patients at an urban academic medical center. Algorithm implementation in conjunction with daily prospective audit-with-feedback started simultaneously in September 2017, with retrospective review of pre- and postintervention groups. Data related to length of