Pseudomonas, 50% of antibiotic use in hospitals is inappropriate. In order to assist with reducing inappropriate antibiotic use, the Centers for Disease Control and Prevention has recommended systematic evaluation of ongoing antibiotic therapy need, such as antibiotic time-outs (ATO’s), be implemented. This has further been supported by the Joint Commission in their antimicrobial stewardship medication management standard.

Our system implemented a prescriber-led ATO process in 2018, but documented completion of the ATO remained low. Due to this, pharmacists were integrated into the ATO process with the goal of increasing completion rates.

Methods. This pre-post interventional study analyzed the impact of an antibiotic time-out process implemented for patients receiving piperacillin/tazobactam (P/T) or cefepime (CEF) for a minimum of 48 hours. The pre-group (Jan-April 2018) had ATOs completed by the primary medical team, while pharmacists completed the ATO in the post group (Jan-April 2020). For each group, a computerized alert prompted completion of the ATO in the electronic health record (EHR). The alert included systematic questions to assess the need for continued P/T and CEF use. The primary outcome was percentage of ATO documentation completed. Secondary outcomes included inappropriate continuation of P/T and CEF and de-escalation within 24 hours after ATO completion.

Results. A total of 248 and 234 patients in the pre- and post-groups were included, respectively. Significantly more ATOs were documented in the post-group compared to the pre-group (65.5% vs 48.5%, p< 0.001). Similarly, inappropriate continuation of P/T and CEF after the ATO process was significantly lower in the post-group compared to the pre-group (11.6% vs 64.0%, p< 0.001). While not statistically significant, there was a trend toward increased de-escalation in the post-group within 24 hours of ATO completion (58.9% vs 47.9%, p=0.105).

Conclusion. A pharmacist-led ATO process reduced inappropriate use of P/T and CEF compared to a prescriber-led process. Incorporating pharmacists into an ATO process may optimize antimicrobial stewardship outcomes.

Disclosures. No reported disclosures

123. Formal Pediatric Antimicrobial Stewardship Program at a Children's Hospital Within a Larger Academic Medical Center Decreases Antimicrobial Prescribing

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Background. Antimicrobial stewardship is a coordinated approach to antimicrobial overprescribing, an avoidable contributor to adverse events in children. Implementation of a formal pediatric antimicrobial stewardship program (pASP) in a children's hospital within a hospital poses unique challenges due to staffing, funding, and institutional priorities. We hypothesized that a formalized pASP would decrease antimicrobial prescribing in a children's hospital within a large academic medical center.

Methods. We extracted pharmacy administration data for all patients receiving systemic antimicrobials in a tertiary care, academic children's hospital in Upstate NY from 3/1/2020-5/31/2021. We grouped patients into floor (including patients with surgical, hematologic, and oncologic processes), pediatric intensive care unit (PICU), and neonatal intensive care unit (NICU). We calculated antimicrobial days of therapy per 1000 patient days (DOT/1000PD) for 6 months before, 3 months during, and 6 months after institution of pASP. The formalized pASP involved physician and pharmacy leadership of prospective audit and feedback. We developed run charts and used two-way analysis of variance (ANOVA) with an effect of location, an effect of the intervention, and an interaction effect. Significant effects were then tested using Tukey's test for multiple comparisons.

Results. Run charts are displayed in figures 1-3. Overall, the pediatric floor (DOT/1000PD=1181) had significantly higher prescribing than the PICU (847), which was significantly higher than the NICU (327) (p< 0.001, ANOVA). Antimicrobial prescribing after pASP dropped by 80 DOT/1000PD (98% CI: 23 to 137) (p<0.008; Tukey's test) after including the effect of location. The interaction effect was not significant (p=0.77; ANOVA) suggesting that the intervention did not have a significantly different effect in the three locations.

Conclusion. Variation in Antimicrobial Prescribing on the Pediatric Floors

Disclosures. No reported disclosures