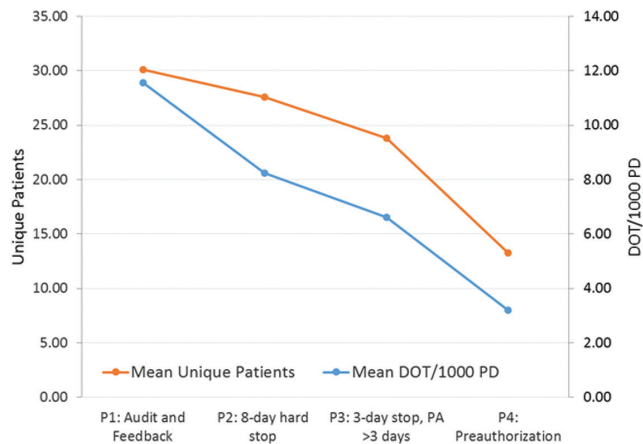


call AMS prior to initiation. Daptomycin utilization rates (DOT/1,000 PD) and mean unique patients receiving daptomycin were collected for each period.

Results. As restriction strategies enhanced, mean rate of daptomycin use (DOT/1,000 PD) progressively declined with a significant decrease during each period transition (Figure 1); P1->P2 (11.6 vs. 8.3; $P < 0.01$), P2->P3 (8.3 vs. 6.6; $P = 0.017$), and P3->P4 (6.6 vs. 3.2; $P < 0.01$). The mean number of unique patients on daptomycin decreased with implementation of new AMS strategies; P1->P2 (30.1 vs. 27.6; $P = 0.18$), P2->P3 (27.6 vs. 23.8; $P < 0.01$) and P3->P4 (23.8 vs. 13.3; $P < 0.01$). Of note, linezolid "balloon effect" only occurred following transition from P3 to >P4 (6.1 vs. 10.5 DOT/1,000 PD; $P < 0.01$).

Conclusion. This single-center descriptive analysis of AMS restriction strategies reveals a progressive decrease in daptomycin use with stepwise implementation. This significant decrease was most profound with ultimate transition to PA. AMS programs unable to initially implement highly restrictive policies can consider using a stepwise approach to ease practitioners into the new model and still have a meaningful impact on antimicrobial utilization.

Daptomycin Trends over Time and Restriction Styles



Disclosures. All authors: No reported disclosures.

224. Cost Analysis of a Significant Decrease in Vancomycin Use as a Result of an Antimicrobial Stewardship Intervention

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Session: 51. Antimicrobial Stewardship: Interventions to Improve Outcomes
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Background. A previous pre-post quasi-experimental study performed at an academic medical center assessed benefits of daily stewardship review with and without rapid diagnostic technology (RDT). The study found no difference in time to effective antibiotic therapy when comparing daily stewardship review to RDT and historical control groups. However, vancomycin duration of therapy significantly decreased with daily stewardship review compared with control (31.8 vs. 66 hours, $P < 0.001$). Subsequent elimination of this RDT saved the institution \$53,000 in annual costs. However, the effect of the decrease in vancomycin use on this institution's annual costs is unknown.

Methods. The purpose of the present study is to determine the difference in institutional costs associated with vancomycin after implementation of a stewardship intervention. A retrospective cost analysis was performed which included hospitalized adults on vancomycin for positive blood cultures from June to October 2014 (preintervention) and June to October 2015 (postintervention). The primary outcome was the amount of institutional cost saved, including drug, phlebotomy, laboratory, nursing, and pharmacy costs. Secondary outcomes included vancomycin DOT/1,000 patient-days, nephrotoxicity, in-hospital mortality, and length of stay.

Results. Institutional cost savings associated with vancomycin over 5 months amounted to \$2,900 for an extrapolated cost savings of \$6,960 per year. Although this cost savings was minimal, there were decreases in each individual vancomycin cost component. Drug acquisition was associated with the largest cost reduction represented by a 26% decline. Next, phlebotomy and laboratory costs each decreased by 24%, while nursing and pharmacy costs decreased by 7% and 4%, respectively. There were no differences in vancomycin DOT/1,000 patient-days, nephrotoxicity, in-hospital mortality, or length of stay.

Conclusion. Vancomycin is associated with many hidden ancillary costs, and pharmacy and nursing labor remain substantial despite a reduction in its use. The tracking of antimicrobial stewardship actions is highly recommended; however, more research is needed to determine the optimal process for a vancomycin cost analysis.

Disclosures. All authors: No reported disclosures.

225. Antimicrobial Stewardship Program Interventions Targeting Intravenous Vancomycin Use at a Community Hospital Improves Prescribing and Safety

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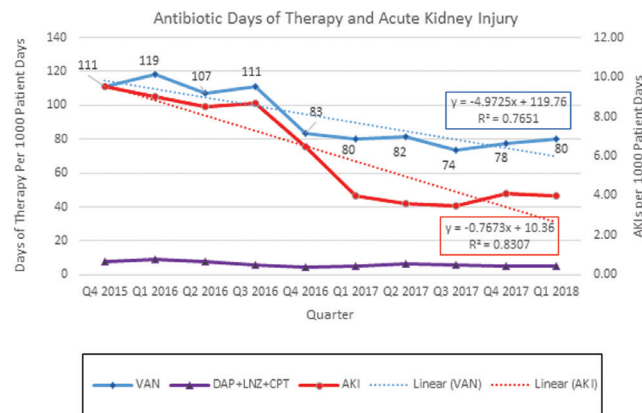
Session: 51. Antimicrobial Stewardship: Interventions to Improve Outcomes
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Background. Intravenous vancomycin (VAN) continues to be a workhorse for suspected or documented methicillin-resistant *Staphylococcus aureus* (MRSA) infections. VAN over-prescribing, and suboptimal dosing or monitoring can be detrimental to efficacy, safety, and resource utilization. A local antimicrobial stewardship program (ASP) was implemented in September 2015 as an expansion of a pre-existing health-system ASP. The local ASP included an infectious diseases (ID) pharmacist, partial FTE ID physician, ASP software, and a goal to decrease inappropriate vancomycin use and improve safety.

Methods. We performed a serial cross-sectional study assessing the impact of ASP interventions on VAN consumption and AKI incidence at a single-center community hospital from October 2015 through March 2018. ASP interventions included a revised vancomycin dosing and monitoring guideline, education, and prospective audit and feedback by clinical pharmacists working under the guidance of ID pharmacist and physician. Antibiotic days of therapy (DOT) were tracked and reported quarterly with Theradoc[®] software. Acute kidney injury was defined as an increase of ≥ 0.5 mg/dL or 50% in serum creatinine from baseline in all hospitalized patients with baseline < 2 mg/dL.

Results. Figure 1 demonstrates MRSA antibiotic utilization and AKI over time. VAN use declined from a peak quarterly use of 119 DOT/1,000 PD to a minimum of 74 DOT/1,000 PD (37.8% decrease). During the same timeframe AKI/1,000 PD decreased over 50%. R^2 values of the trends are 76.5% and 83.1%, respectively. The use of VAN alternatives daptomycin (DAP), linezolid (LNZ), and cefazolin (CPT) remained stable. There were 809 ASP recommendations made regarding VAN over-prescribing (primarily to de-escalate or discontinue VAN therapy) and 340 ID pharmacist interventions to improve VAN dosing and monitoring.

Figure 1.



Conclusion. ASP initiatives, education, and interventions were associated with reduced VAN use and reduction in AKI at a community hospital.

Disclosures. All authors: No reported disclosures.

226. An Emergency Department Antimicrobial Stewardship Intervention to Improve Antibiotic Selection and Duration for Skin and Soft-tissue infections in Adult and Pediatric Outpatients

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Session: 51. Antimicrobial Stewardship: Interventions to Improve Outcomes
Thursday, October 4, 2018: 12:30 PM

Background. Skin and soft-tissue infections (SSTIs) are common infections seen in the Emergency Department (ED). However, adherence to IDSA guidelines for treatment, in terms of antibiotic selection and duration, is poor.

Objective. To evaluate the ability of a multifaceted intervention to improve adherence to the 2014 IDSA guidelines for the management of SSTIs in an academic adult and pediatric ED.

Methods. A non-randomized study of a multifaceted intervention for SSTI in the ED was employed which included educational presentations, implementation of an electronic order set based on 2014 IDSA guidelines, dissemination of ED-specific antibiograms, monthly departmental peer comparisons, and bimonthly individual feedback. SSTI visits were identified using ICD-10 codes L00, L02.x1, L03, L08.89, and L08.9. The primary endpoint was adherence to IDSA guidelines. Outcomes during