between groups. There was no difference in the incidence of VAN-associated nephrotoxicity (16% vs. 10%, $P = 0.20$).

Table 1. Baseline Demographics

	Pre-Revision (n = 100)	Post-Revision (n = 100)	P Value
Age, years	53.7 ± 13.7	48.8 ± 15.6	0.06
Gender, male	21%	17%	0.47
BMI, kg/m^2	44.5 (41.0–49.0)	45.5 (41.5–50.8)	0.33
Frequency of LD	30%	68%	< 0.01
Initial MD, mg/kg	15.0 (12.8–17.0)	14.0 (12.9–15.0)	< 0.01

Table 2. Initial VAN TCs

	Pre-Revision (n = 86)	Post-Revision (n = 69)	P Value
Therapeutic	35%	51%	0.05
TC, µg/mL	17.1 (12.9 – 22.6)	17.4 (13.4 – 24.0)	0.57
Subtherapeutic	34%	19%	0.04
Supratherapeutic	31%	30%	0.90

Conclusion. The revised VAN dosing protocol for MO patients improved initial TTC attainment and decreased incidence of subtherapeutic TCs compared with current standard of care recommendations with no difference in clinical or safety outcomes.

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

1559. Balancing the Efficacy and Safety of Implementing a Piperacillin/tazobactam (PTZ) Antibiotic Time-out

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Background. With the rise of antimicrobial resistance, the Centers for Disease Control and Joint Commission have promulgated a national initiative for antimicrobial stewardship programs (ASP). ASP use a multimodal approach such as antibiotic time outs to limit the duration of empiric therapy. Yale New Haven Hospital implemented the use of a 72-hour stop in the electronic medical system (EMR) for empiric PTZ orders. To mitigate the risk of orders inadvertently falling off, a dynamic scoring system was created in the EMR to alert pharmacists of expiring orders in real time. The primary objective of this study was to evaluate the duration of empiric PTZ prior to and after the implementation of the antibiotic time-out. Secondary outcomes included de-escalation, appropriateness of dosing, and safety.

Methods. A retrospective cohort study using the EMR was conducted. Cases were defined as adult inpatients who had empiric orders for PTZ without positive cultures. The control group consisted of patients from September to October of 2014, prior to the 72-hour stop. The intervention group included patients from September to October of 2016. Due to the nationwide shortage of PTZ in 2015, this year was excluded in addition to patients with culture documented infections, stem cell/solid organ transplants or febrile neutropenia. Data collected included baseline demographics, renal function, PTZ dose, frequency and duration, indication and final antibiotic selection.

Results. Of the 537 random patients reviewed, 300 met inclusion criteria; 150 patients in the control group and 150 patients in the intervention group. The average duration of PTZ decreased from 4 days in the control group to 3 days in the intervention group ($P = 0.0013$). Overall antibiotic use decreased from 6 days in the control group to 5 days in the intervention group ($P = <0.0001$). There was an increase in the correct dose and frequency from 35% to 60% of orders in the intervention group compared with the control group ($P = 0.004$). With the aid of the scoring system, there were no orders that fell off inappropriately in the intervention group.

Conclusion. Following the successful implementation of a 72-hour antibiotic timeout we saw a significant decrease in the duration of empiric use, inappropriate dosing and an increase in the rate of antibiotic de-escalation.

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1560. Safety of a Carbapenem Restriction Policy in Patients with Gram-Negative Bacteremia

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Background. Antibiotic restriction policies may decrease antimicrobial use and reduce resistance rates. However, it is unknown whether they inadvertently harm patients. We evaluated whether the implementation of a carbapenem restriction policy led to adverse patient outcomes.

Methods. A carbapenem restriction policy was implemented at the University of Washington Medical Center on 11/1/15. This policy required Infectious Disease consultation for meropenem and imipenem use beyond 72 hours (except for cystic fibrosis and neonatal patients). We conducted retrospective chart review on all inpatients with Gram-negative bacteremia and compared outcomes between the pre- and post-restriction periods. Medical records were reviewed for culture, antibiotic, APACHE score, and patient outcome data. Primary outcomes were (1) time from blood culture to effective antibiotic therapy and (2) number of drug-bug mismatches (DBM). Secondary outcomes included (1) inpatient mortality, (2) length of stay (LOS), (3) whether sepsis resulted in transfer to the intensive care unit (ICU), and (4) ICU LOS.

Results. There were 153 patients in the pre-restriction group and 163 in the post-restriction group. The mean time to effective antibiotic was 11.1 and 14.9 hours in the pre- and post-restriction groups, respectively ($P = 0.13$), with median times of 2.8 and 3.3 hours. DBM occurred in 12% of cases before the restriction and 19% after ($P = 0.11$). Hospital mortality rate was 16% pre-restriction and 17% post-restriction ($P = 0.7$). ICU transfer due to sepsis occurred in 12% of cases pre-restriction and 17% post-restriction ($P = 0.3$). There was a significantly longer mean LOS post-restriction (adjusted difference 6.7 days, $P = 0.01$). Among patients with ICU days >0, mean ICU LOS was 1.2 (95% CI: -1.6 to 4.3) days shorter before the restriction ($P = 0.2$).

Conclusion. When carbapenem use was restricted, there was no statistically significant or clinically meaningful difference in time to effective antibiotic therapy, percent of DBM, hospital mortality, or ICU transfers. There was a statistically significant increase in mean LOS post-restriction in the adjusted analysis, which may not be clinically important. We conclude that carbapenem restriction may be safe, and we plan to continue this policy at our institution.

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1561. Impact of an Antimicrobial Stewardship Bloodstream Surveillance Program (BSP) in Hospitalized Patients

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Background. Bloodstream infections (BSI) in hospitalized patients represent sentinel events characterized by increased mortality. These infections represent an attractive stewardship opportunity because they warrant rapid initiation of empiric antimicrobial therapy, deft transition to directed (gram stain guided) and definitive (susceptibility guided) therapy.

Methods. Under a retrospective pre-post study design, a review of patient charts 18 months before and 18 months after initiation of a hospital BSP was carried out. Pre-intervention, the hospital ward and attending physician were notified of all positive blood cultures (standard of care). Post-intervention an infectious disease pharmacist collaborating with an infectious disease consultant was notified in addition to standard notifications.

Results. 226 patients with BSI were identified pre-intervention and 195 patients post-intervention. The two cohorts were similar in baseline characteristics: the most common source of infection was urinary tract (Figure 1); the most common blood stream isolates were *E. coli*, *S. aureus,* β-hemolytic streptococci and *K. pneumoniae* (Figure 2); 71.7% of infections were community acquired; 11.4% were polymicrobial. Empiric therapy was given in 82.6% of patients (16.3% non-susceptible). Directed therapy was given in 54.9% of patients (3.5% non-susceptible). The post-intervention cohort received directed therapy on average 4.36 hours earlier ($P = .003$), were more likely to receive adequate definitive therapy (99.0% post vs. 79.1% pre, $P < .001$), and were stepped down to oral therapy earlier (6 days vs. 8 days). Prescription of second generation cephalosporins (0.0% vs. 4.3%, $P = .05$), quinolones (16.7% vs. 32.7%, $P = .005$), clindamycin (2.6% vs. 10.3%, $P = .03$) and aminoglycosides (6.1% vs. 14.6%, $P = .05$) were decreased for directed therapy post-intervention.

Conclusion. A hospital BSP can improve time to first dose of parenteral antimicrobial directed therapy and adequacy of definitive therapy, shorten time from IV to oral step-down and reduce prescription of targeted antimicrobial classes. A BSP can be an effective stewardship strategy in hospitalized patients.

Fig.1 Bloodstream Infection by Source