and ≥3 months of PJP prophylaxis with any agent. The primary endpoint of this study was the proportion of patients who could have been safely switched to TMP-SMX 3 months after atovaquone initiation. Other endpoints included the incidence of breakthrough PJP, reasons for TMP-SMX avoidance, and estimated cost savings.

Results. Two-hundred and eighteen patients were evaluated and 164 were included. Most common indications for atovaquone prophylaxis were bone marrow transplant (44.5%), solid-organ transplant (30.5%) and use of immunosuppressive agents (21.9%). Atovaquone was started in 145 patients (88.4%) according to institutional guidance. Three months after initiation, 89 patients (45.7%) could have been safely switched to TMP-SMX. Failure to timely change to TMP-SMX was associated with 1,615 additional patient-days of atovaquone therapy and $103,683 in excess costs within 3 months of initiation. Major reasons for TMP-SMX avoidance were thrombocytopenia (51.3%), neutropenia (35.4%), renal impairment (31.7%), allergy history (26.8%), and hyperkalemia (19.5%). No breakthrough PJP infections were observed while patients were on atovaquone.

Conclusion. Institutional-guideline compliance was high during atovaquone initiation. However, after 3 months, many patients who could have been safely transitioned to TMP-SMX continued to receive atovaquone. This resulted in excess costs and potentially sub-optimal therapy.

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

1025. Inappropriate Aztreonam Usage – Antimicrobial Stewardship Strikes Back

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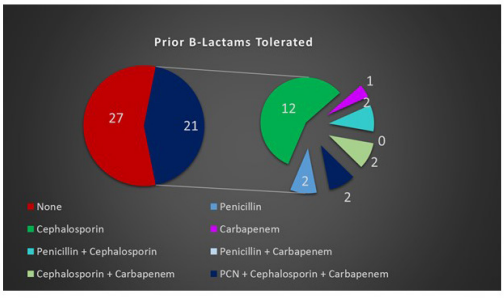
Background. Several studies have demonstrated that patients with reportedly β-lactam allergies (BLA) receive less efficacious and more toxic alternative antibiotics. A previous study at our institution utilizing aztreonam as a surrogate marker for BLA demonstrated nearly 50% of patients receiving aztreonam had previously tolerated an alternative β-lactam (BL). In response to those results, our Antimicrobial Stewardship Program (ASP) provided dedicated hospitalist, medical resident and pharmacist education on appropriate utilization of aztreonam and BLA. Additionally, members of the ASP team began receiving real-time clinical surveillance alerts for all aztreonam orders.

Methods. A retrospective chart review of inpatients >18 years old who received at least one dose of aztreonam between July 1, 2018 – December 31, 2018. Patients were excluded if they did not have a documented BLA or if they received aztreonam as de-escalation therapy. Cost of aztreonam therapy was compared with the cost of alternative BL agents based on prior and subsequently tolerated classes of BLs. Comparator agents included: piperacillin/tazobactam (penicillin), cefepime (cephalosporin) and meropenem (carbapenem). Comparisons of total number of aztreonam patients and doses, cost of aztreonam, and cost of alternative therapy were compared with the index population from 2017

Results. Similar to our prior study, 43.7% (48.5% in 2017) had prior BL tolerance with an additional 31.3% (19.4% in 2017) demonstrated subsequent BL tolerance following aztreonam administration. Following the ASP interventions, orders, doses and cost of aztreonam was reduced. Forty-eight patients during the 6-month period received aztreonam, a 26.7% reduction. There was a 38.5% reduction in the number of aztreonam doses (P = 0.001), which yielded a cost savings of $14,067.67 (extrapolated to 1 year). Median aztreonam cost in 2017 $382.40 vs. $191.20 in 2018 ($P$ = 0.004). In 2018, 41.7% of patient's allergy profiles were appropriately updated compared with 3.3% in 2017.

Conclusion. Our study demonstrates that ASP interventions including increased education, allergy documentation and clinical surveillance alerts targeted at reducing aztreonam utilization can reduce pharmaceutical expenditures.

	2017	2018	2018 (extrapolated)	Difference 2017 → 2018
Total patients	131 (12 months)	48 (6 months)	96 (estimated 12 months)	↓ **35 patients (26.7%)**
# Aztreonam Doses	1233	379	758	↓ **475 doses (38.5%)**
Cost Aztreonam	$38,410.83	$12,171.58	$24,343.16	↓ **$14,067.67**
Est Cost Alternative	$13,143.25	$3,724.17	$7,448.34	n/a
Potential Cost Savings	$27,625.59	$8,447.41	$16,894.82	$>16,894.82



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1026. Ertapenem Use During Antibiotic Stewardship Interventions in Community Hospitals

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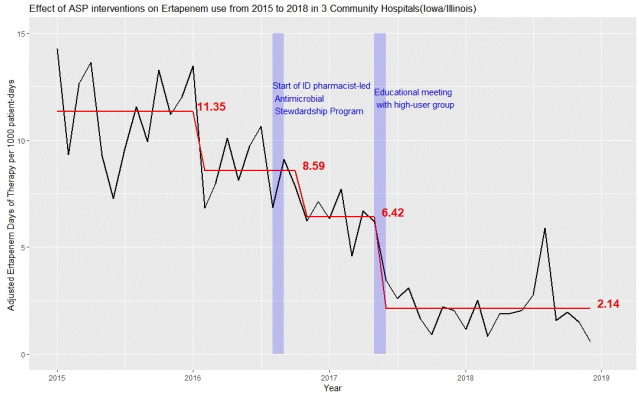
Background. Antimicrobial stewardship programs (ASP) promote the judicious use of antimicrobials to reduce antimicrobial resistance and improve patient outcomes. In our institution, we identified the overutilization of ertapenem and implemented several interventions to decrease its usage. The objective of this study was to assess the impact of these interventions on ertapenem use, rates of surgical site infection (SSI), carbapenem-resistant Enterobacteriaceae (CRE), and hospital-onset Clostridioides difficile infection.

Methods. This was a retrospective study conducted in 3 community hospitals in Iowa and Illinois using surveillance of anonymized antibiotic and infection control data from 2015 to 2018. Target ASP interventions included a daily retrospective review of ertapenem use, alternative alerts to providers through electronic health records (EHR), carbapenem restriction to infectious disease (ID) providers, and educational meetings with high-use provider groups. The primary outcome was the usage trend of ertapenem, and secondary outcomes were rates of SSI, CRE, and hospital-onset C. difficile infection. Interrupted time series analysis was performed to assess changes in the rates over the study period.

Results. An overall significant reduction in ertapenem use was observed in all 3-community hospitals from 2015 to 2018. Ertapenem days of therapy adjusted for case-mix index per 1000 patient-days was 11.2 in 2015 and 2.05 in 2018. Two breakpoints were identified; the addition of an ID trained pharmacist to the ASP (10/2016) and educational meetings with colorectal surgeons (5/2017). No significant difference was seen for hospital-onset C. difficile infection, SSI, or CRE. Purchase costs decreased for ertapenem by 81% in 2018 compared with 2015(P < 0.001).

Conclusion. Adding an ID trained pharmacist to an ASP decreased usage of ertapenem. The majority of ertapenem use was for surgical prophylaxis, and our data suggested that educational meetings with a high-usage group were effective. Surgical site infection rates did not increase when narrower spectrum surgical prophylaxis was used. Overall hospital-acquired C. difficile rate was unchanged, possibly due to alternative antibiotic use. Our study suggests ASP interventions can be cost saving.



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

1027. Vancomycin Use in Community-Acquired Pneumonia: Assessing Inappropriate Therapy

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Background. Current Infectious Disease Society of America guidelines recommend anti-methicillin-resistant *Staphylococcus aureus*(MRSA) agents for treatment of community-acquired pneumonia (CAP) only in specific high-risk patients. There are limited data on duration of vancomycin use that is appropriate in hospitalized patients with CAP. The objective of this study was to evaluate the use of vancomycin for CAP among inpatients.

Methods. We conducted a retrospective cohort study of inpatients at Oregon Health and Science University Hospital from August 1st, 2017 to July 31st, 2018 who received IV vancomycin and had a pneumonia encounter ICD-9 diagnosis code.