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Background. The Infectious Diseases Society of America's guideline for implementing antibiotic (abx) stewardship recommends routine review of abx use. Several studies demonstrate antibiotic time out (ATO) programs result in de-escalation, but there is limited evidence of improved outcomes. The aim of this study was to evaluate the clinical impact of ATO.

Methods. This retrospective study included hospitalized patients at The Ohio State University Wexner Medical Center receiving abx and a documented ATO from 7/1/2017 to 6/30/2018. ATO patients were matched by infection type to abx-treated patients lacking an ATO note. Patients were excluded if they were identified as a protected population, were in the ICU at the time of ATO, had an ATO within 48 hours of discharge, cystic fibrosis, or febrile neutropenia. The primary objective was to evaluate abx optimization in patients with documented ATO vs. those without ATO. Abx optimization was defined as the selection of ideal abx based on guidelines, culture and susceptibility results, or expert opinion when undefined. Secondary outcomes included vancomycin-associated acute kidney injury (VAN-AKI), infection-related length of stay (LOS), all-cause 30-day readmission or mortality, abx days, and nosocomial *C. difficile* infection (CDI) rates. The Student t-test/Fisher's exact test and Wilcoxon-rank sum were utilized as appropriate.

Results. One hundred ATO patients were compared with 100 non-ATO patients. Baseline characteristics and infection types were similar between groups. ATO resulted in improved optimization of abx selection ($P = 0.05$) and duration ($P < 0.01$), and reduced piperacillin/tazobactam (P/T) and vancomycin (VAN) utilization. No difference was observed in VAN-AKI (22 vs. 20%, $P = 0.73$), 30-day readmission (28 vs. 27%, $P = 0.87$), mortality (5 vs. 5%, $P = 1$), or CDI rates (6 vs. 5%, $p = 0.76$) in the ATO vs. non-ATO group. However, inpatient abx days (12 vs. 8, $P = 0.004$) and infection-related LOS (10 vs. 8, $P = 0.0006$) were shorter in the non-ATO group.

Conclusion. ATO improved optimization of abx selection and duration, and reduced P/T and VAN use. Despite this, clinical outcomes were not improved.

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

1037. A Pharmacist-Driven 48 Hour Antibiotic Time Out Pilot at a Large Academic Medical Center

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Background. The Centers for Disease Control and Prevention published The Core Elements of Hospital Antibiotic Stewardship Programs in 2014, which recommended that all clinicians perform an antibiotic time out (ATO) after 48 hours. The best methods to operationalize these recommendations remain unclear. Given our information technology barriers, we developed a targeted, pharmacist-driven, 48 hour ATO pilot.

Methods. This pre-post intervention pilot study included hospitalized adults admitted to one of the four wards between 5/1/18 and 6/30/18. Patients who received ≥48 hours of broad-spectrum intravenous antibiotics (vancomycin, piperacillin–tazobactam, cefepime, a carbapenem, or a fluoroquinolone) were prospectively identified via TheraDoc (Premier Inc., Charlotte, NC). An infectious diseases (ID) trained pharmacist reviewed patients on a daily basis during June. The primary outcome was days of therapy (DOT), which was assessed with Spearman's rank-order correlation. All *P*-values were from 2-sided tests, and results were deemed statistically significant at $P < 0.05$.

Results. A total of 151 unique patients were identified during the study period. The most common antibiotic indications were skin and soft-tissue infection (31.1%), urinary tract infection (22.5%), and intraabdominal infection (22.5%). An ID physician was consulted on 59% of patients. The pharmacist reviewed an average of 7 patients (3 unique) each day during the intervention month. A total of 27 recommendations were made with 15 (56%) being accepted. The most common recommendations were to de-escalate therapy ($n = 8$), stop antibiotics ($n = 6$), and add a stop date to the antibiotic order ($n = 4$). DOT in the pre- and post-intervention period did not differ ($P = 0.28$).

Conclusion. A month-long, targeted, pharmacist-driven, 48 hour ATO pilot was unable to demonstrate a reduction in DOT. Furthermore, only 56% of pharmacist recommendations were accepted despite targeting low-acuity infections, which may have limited our ability to observe a reduction in DOT. Larger studies are warranted to further evaluate how ATOs influence DOT over time.

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

1038. Impact of an Electronic Antibiotic Timeout on the Utilization of Frequently Prescribed Antibiotics in Hospitalized Patients

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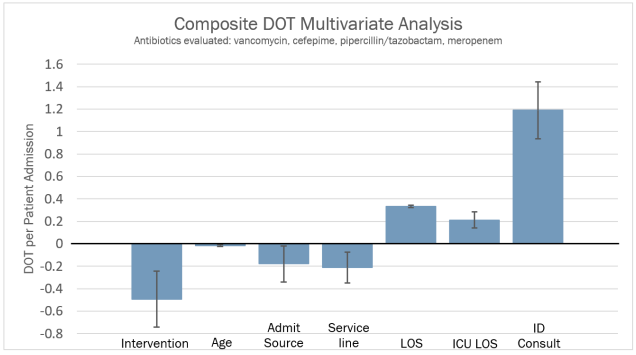
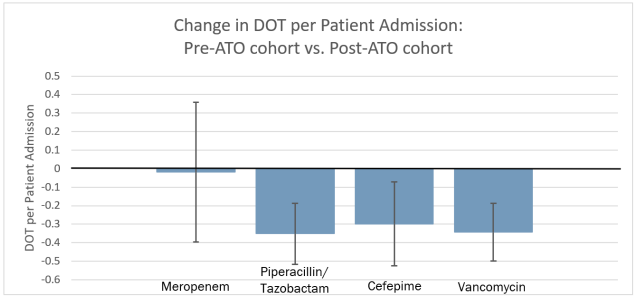
Background. Methods to operationalize antibiotic timeouts (ATO) among hospitalized patients are often constrained by the high volume of antibiotic orders that surpass the capabilities of the antimicrobial stewardship program (ASP) to intervene. Houston Methodist Hospital implemented a streamlined electronic ATO process that alerted providers to evaluate the need for continued antibiotics on day 4 of predefined anti-infective therapy. Unresolved alerts were reviewed by clinical pharmacists the following day. The objective of this study was to determine the impact of this electronic ATO on frequently prescribed antibiotics.

Methods. This was a quasi-experimental study in a 924-bed quaternary care hospital comparing days of therapy (DOT) in patients admitted prior to (February 2017 – January 2018) and after implementing an ATO process (March 2018 – February 2019). Antibiotics evaluated included vancomycin, cefepime, piperacillin/tazobactam, and meropenem. ATO alert logic was simulated retrospectively to capture the pre-ATO cohort. The primary outcome was mean composite DOT per patient admission. Secondary outcomes included total hospitalization cost, Clostridioides difficile infection (CDI) and multidrug-resistant organism (MDRO) rates.

Results. A total of 8,458 patients met ATO alert criteria for inclusion in the pre-ATO timeframe and 6,901 patients with an ATO alert in the post-ATO group; 2,642 (38%) prompted a pharmacists' review. The average composite DOT was 11.5 per admission in the pre-ATO cohort compared with 11.1 in the post-ATO cohort ($P = 0.02$). After multivariate linear regression, the ATO was significantly associated with a decrease of 0.5 DOT per patient admission ($P < 0.001$). Other factors associated with a reduction in DOT included age ($P < 0.001$), service line ($P = 0.003$), and admission source ($P = 0.031$). Mean hospital costs per admission were significantly reduced in the post-ATO group: $67,613 vs. $66,615 ($P = 0.01$). There was no difference in rates of CDI and MDRO.

Conclusion. Implementation of our electronic ATO process demonstrated significant reductions in overall DOT for frequently prescribed antibiotics and decreased total hospital costs across a diverse patient population. This process provides a real-world strategy to operationalize a large-scale ATO as an adjunct to an ASP.





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1039. Forty-eight-hour Antibiotic Time-out: Impact on Antibiotic Duration and Clinical Outcomes

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Background. A core element of the Centers for Disease Control and Prevention Antimicrobial Stewardship standard for the inpatient setting includes a 48-hour antibiotic time-out (ATO) process to reassess antibiotic indication. We implemented an automated alert in the electronic health record (EHR) that identifies patients that have received >=48hours of antibiotic therapy. The alert requires the clinician (physician or