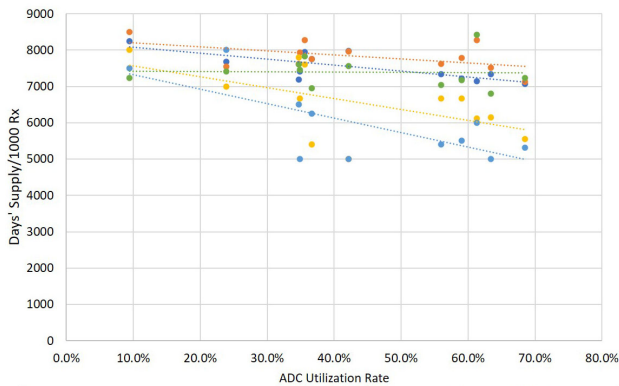


Figure 1. Days' supply per 1000 prescriptions versus pyxis utilization rate



Drug	Pearson correlation coefficient for days' supply/ 1000 prescriptions vs ADC utilization (95% CI)
Amoxicillin/clavulanate 875/125mg	-0.769 (-0.932, -0.350)
Cephalexin 500mg	-0.507 (-0.837, 0.094)
Levofloxacin 500mg	-0.562 (-0.859, 0.018)
Levofloxacin 750mg	-0.720 (-0.922, -0.211)
Sulfamethoxazole/trimethoprim 800/160mg	-0.037 (-0.598, 0.548)

Conclusion. EMR-driven reductions in ADC default Rx durations led to a corresponding decrease in overall outpatient antibiotic prescribing. Higher DS/1000 Rx were often associated with lower ADC utilization. Informatics-driven antibiotic interventions may be potential outpatient stewardship tools to increase guideline-concordant prescribing across multisite healthcare systems.

Disclosures. Sharanie Sims, PharmD, AbbVie (formerly Allergan) (Speaker's Bureau)

96. Impact of Hospital-Based Pharmacist Discharge Prescription Review on the Appropriateness of Antibiotic Therapy

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Session: P-06. Antimicrobial Stewardship: Non-Inpatient Settings

Background. Inappropriate antibiotic prescribing upon hospital discharge poses an increased risk of excess costs, adverse drug reactions, readmission, and resistance. Despite high rates of antibiotic prescription errors upon discharge, there is no widely accepted antimicrobial stewardship initiative to prevent such errors. This study evaluated the impact of hospital-based clinical pharmacist discharge prescription review on the appropriateness of antibiotic prescriptions.

Methods. This was a retrospective assessment of patients with discharge antibiotic prescriptions for treatment of pneumonia, urinary tract infections, *Clostridioides difficile* infections, acute skin and skin structure infections (ABSSSI), or Gram-negative bacteremia between January 2019 and July 2020. The two cohorts that were studied were patients on Hospitalist services versus patients on Medicine services, in which only the Medicine services had rounding pharmacists who perform discharge prescription reviews. Outcomes included demographics, appropriateness of therapy, 30-day readmission rates, and error types in discharge prescriptions. Appropriateness of therapy was validated by evidence-based guidelines and three Infectious Diseases-trained pharmacists.

Results. Our study included 300 patients, 150 per cohort. Baseline characteristics were similar between groups, with the exception of increased age ($p=0.025$) and fewer cases of ABSSSI ($p=0.001$) in the Hospitalist cohort. A statistically significant higher rate of inappropriateness was seen in the Hospitalist group versus Medicine (pharmacist) group, [69/150 (46% versus 25/150 (17%, respectively ($p<0.00001$)). The difference in appropriateness was mainly driven by pneumonia and UTI prescriptions. Thirty day readmission rates were 17% (26/150) for the Hospitalist cohort versus 11% (16/150) in the Medicine (pharmacist) cohort ($p=0.134$). The most common prescription error was the duration of therapy.

Conclusion. Appropriateness of antibiotic discharge prescriptions significantly improved in the setting of pharmacist discharge prescription review. This initiative highlights the important role of clinical pharmacists in the setting of outpatient antimicrobial stewardship.

Disclosures. All Authors: No reported disclosures

97. Pharmacist Driven Antimicrobial Stewardship Interventions on the Management of Urinary Tract Infections in the Emergency Department at a Tertiary Military Treatment Facility

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Session: P-06. Antimicrobial Stewardship: Non-Inpatient Settings

Background. With the Joint Commission standards targeting ambulatory settings serving as a catalyst, we designed a quality improvement (QI) project was designed to evaluate the existing management and prescribing patterns for urinary tract infections (UTI) in the Walter Reed National Military Medical Center (WRNMMC) Emergency Department (ED) in order to identify targets for ASP intervention.

Methods. This was a Pharmacist-driven, prospective, QI project conducted over a 3-month period. The clinical presentations and microbiological data of uncomplicated cystitis and pyelonephritis cases managed in the ED were reviewed. Within 24-72 hours of ED discharge, recommendations were relayed to both patients and ED staff. Diagnostic criteria and management concordant with established clinical guidelines were assessed. Inclusion criteria included age ≥ 18 , admission status, urine culture and antibiotics for UTI or pyelonephritis.

Results. A daily urinalysis (UA) report identified 1781 ED encounters of which 117 cases met inclusion criteria. Nitrofurantoin was most prescribed empirically at 39.3% followed by a cephalosporin (23.1%) or a fluoroquinolone (19.7%), accounting for 32% of inappropriate empiric antibiotic selection. Cases were identified with inappropriate duration of therapy (22.2%), dosage (9.4%), and drug-bug mismatch (9.4%). Nearly 38% of cases required intervention to discontinue (32.5%) or initiate new antibiotics (3.4%). Diagnostic concordance was defined as having positive urinary symptoms, clinically significant UA and positive urine culture. This was only observed in 37.6% of all cases, of which only 43.2% were treated with a guideline concordant empiric regimen, dosage and duration of therapy. Although not included in the final analysis, it was noted 916 urine culture results were ordered where 70% were not associated with genitourinary complaints or sepsis.

Conclusion. Despite guidelines for UTI management, considerable practice discordance was found in the ED. Multiple Pharmacist targeted interventions were identified. Prioritized areas for ED provider education included first-line therapy, treatment duration, and diagnostic stewardship. This QI project has potential for optimizing prescribing practices in Military Health System ambulatory settings.

Disclosures. All Authors: No reported disclosures

98. Outcomes of Clinical Decision Support for Outpatient Management of *Clostridioides difficile* Infection

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Session: P-06. Antimicrobial Stewardship: Non-Inpatient Settings

Background. Our antimicrobial stewardship program identified high rates of suboptimal metronidazole prescribing for *Clostridioides difficile* infection (CDI) within ambulatory clinics. An outpatient best practice advisory (BPA) was implemented to notify prescribers "Vancomycin or fidaxomicin are preferred over metronidazole for *C. difficile* infection" when metronidazole was prescribed to a patient with CDI.

Methods. We conducted an IRB approved quasi-experiment before and after implementation of the BPA on June 3, 2020. Inclusion: Adult patients diagnosed with and treated for a first episode of symptomatic CDI at an ambulatory clinic between 11/1/2019 and 11/30/2020. Exclusion: fulminant CDI. Primary endpoint: guideline-concordant CDI therapy, defined as oral vancomycin or fidaxomicin. Oral metronidazole was considered guideline-concordant if prescribed due to cost barrier. Secondary endpoints: reasons for alternative CDI therapy, patient outcomes, prescriber response to the BPA. Descriptive and bivariate analyses were completed.

Results. 189 patients were included in the study, 92 before and 97 after the BPA. Median age: 59 years, 31% male, 75% Caucasian, 30% with CDI-related comorbidities, 35% with healthcare exposure, 65% with antibiotic exposure, 44% with gastric acid suppression therapy within 90 days of CDI diagnosis. The BPA was accepted 23 out of 26 times and optimized the therapy of 16 patients in six months. Guideline-concordant therapy increased after implementation of the BPA (72% vs. 91%, $p=0.001$) (Figure 1). Vancomycin prescribing increased and metronidazole prescribing decreased after the BPA (Figure 2). Reasons for alternative CDI therapy included medication cost, lack of insurance coverage, and non-CDI infection. There was no difference in clinical response or unplanned encounter within 14 days after treatment initiation. Fewer patients after the BPA had CDI recurrence within 14-56 days of the initial episode (27% vs. 7%, $p<0.001$).

Figure 1. Guideline-concordant CDI therapy

