to determine the sustained impact of the initial initiative; group 2 was compared to group 1 to determine the impact of re-education, which involved a presentation to ED providers and a posted algorithm and fact sheet.

**Results.** From all time periods are summarized in Table 1. Improvement in inappropriate tx was still noted 3 years after the intervention (28% vs 32%; p = NS). Re-education did not further improve inappropriate prescribing, with 28% of group 2 pts still receiving tx.

Table 1.

| Study | Pre-direct Communication | Post-direct Communication | Current Study |
|-------|--------------------------|---------------------------|---------------|
| Group 1 | 33/334 (10.0%) | 19/334 (5.7%) | 23/334 (6.9%) |
| Group 2 | 33/287 (11.5%) | 19/287 (6.6%) | 24/287 (8.4%) |

**Conclusion.** The decrease in inappropriate use of ABX for ASP/ASB was still noted 3 years after implementation of a multi-faceted AS initiative. Re-education did not result in further improvement.

**Disclosures.** James Johnson, PharmD, FLGT (Shareholder) Vera Luther, MD, Nothing to disclose

52. Direct Communication Improves Response Time to Acceptance of Antimicrobial Stewardship Interventions

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**Session:** P-04. Antimicrobial Stewardship: Outcomes Assessment (clinical and economic)

**Background.** Hospital antimicrobial stewardship program (ASP) reviews broad-spectrum antibiotics and recommends interventions to optimise antimicrobial use. However, about 30% of interventions are not accepted. This project aims to improve acceptance rate and time for acceptance of ASP interventions by direct communication with providers (via call or text messaging) once an intervention was made.

**Methods.** Pre-direct communication (PC) phase lasted from 1st Jan - 31st Dec 2017. A typed intervention was placed into the patient's medical records for the team to review. Thereafter, a direct communication (DC) phase ran from 1st Jan 2018 - 31st Jan 2019. Teams were immediately notified of any ASP interventions made via a call or text message, in addition to the document placed in the medical records. Specialty, acceptance rates, type of intervention and time to acceptance was recorded. Overall acceptance was counted if team followed the ASP recommendations within 48 hours.

**Results.** A total of 621 interventions were made over the 25-month period (PC n=334, DC n=287). We found that direct communications did not improve the overall acceptance rates (PC 66% vs DC 65%, p=0.791), but significantly improved same day acceptance rates (PC 15% [49/334] vs DC 33% [96/287], p= 0.001). This trend for higher same-day acceptance was also noted regardless of specialty. It increased from 15% to 45% (p<0.001) for medicine & 15% to 25% (p=0.025) for surgery. Furthermore, overall acceptance for medical discipline was significantly higher in the DC phase (68% vs 80%, p=0.024); no significant difference noted for the surgical disciplines. Same-day acceptance also improved when we compared the most common types of interventions (culture based de-escalation, discontinue antibiotic, narrow empirical coverage).

In addition, DC helped narrow empiric antibiotic choices, with improvements in both same-day and overall acceptance of interventions (increased from 8% to 41%, p< 0.001 and 8% to 27%, p<0.12, respectively).

**Conclusion.** Direct communication with clinicians boosted same-day acceptance for ASP interventions. In addition, it increased overall acceptance for medical disciplines, and to narrow empiric antibiotic use. Future efforts will focus on in-person strategy with surgical teams for fruitful results.

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

53. Optimizing Transitions of Care Antimicrobial Prescribing at a Community Teaching Hospital

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**Session:** P-04. Antimicrobial Stewardship: Outcomes Assessment (clinical and economic)

**Background.** Antimicrobial stewardship integral to patient care. Institutions with stewardship decrease antibiotic use, cost, and antibiotic-associated infections. However, few efforts have been formally made to address discharge antimicrobial prescribing, even though many patients started on antibiotic therapy in the hospital are prescribed oral antibiotics to complete their regimens.

**Methods.** This was an IRB approved, quasi-experimental, pre-post study. Patients were included if they were >18 years and were discharged from the hospital with an oral antibiotic prescription. Patients discharged against medical advice, prescribed indefinite prophylactic antimicrobial therapy for legitimate reasons, or discharged to a skilled nursing facility were excluded. The retrospective analysis was conducted on a random sample of patients discharged in 2/2020. The prospective group included patients discharged between 1/2021 - 6/2021. In the prospective group, a clinical pharmacist assessed the indication for antibiotics and provided discharge antibiotic prescriptions for physician review. Antibiotic choice and duration of therapy were based on local and national guidelines.

**Results.** Outcomes including overall appropriate prescribing, appropriate duration, spectrum, frequency, and dose, as well as days of inappropriate therapy

**Conclusion.** Literature demonstrates that prospective evaluation of discharge antibiotics by a clinical pharmacist is effective in improving appropriateness of discharge antibiotic prescriptions, optimizing duration of outpatient antibiotics as well as reducing unnecessarily broad-spectrum therapy. The prospective results from this study demonstrate that this innovative approach can improve outpatient oral antibiotic prescribing and provide a framework for other institutions to implement similar programs.

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

54. The Effect of Targeting High-Risk Patients for Antimicrobial Stewardship Intervention on Hospital-Onset Clostridium difficile Infection Rates

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**Session:** P-04. Antimicrobial Stewardship: Outcomes Assessment (clinical and economic)

**Background.** Clostridium difficile infection contributes to significant burden on patients and the healthcare system, costing billions in excess costs every year for hospital care. Continued use of antibiotics after C. difficile infection diagnosis is a risk factor for recurrent infection. Also, individuals who have had a recurrence of C. difficile infection are at a higher risk of subsequent episodes.

**Methods.** This prospective, observational, pre-post study evaluated the effect of implementing a targeted antimicrobial stewardship initiative towards a high-risk target population on the rate of in-hospital C. difficile infection rates. High-risk targets were identified through an electronic health system report of admitted patients at a large academic medical center who were toxin assay positive or had a documented history of C. difficile infection. Subjects who met the criteria were assessed for interventions by the pharmacy-driven antimicrobial stewardship service. The primary outcome compared the hospital-onset C. difficile rates and standardized infection ratio (SIR) before and after implementation of the initiative. The SIR is reported to the National Healthcare Safety Network (NHSN) and is calculated as a ratio between the number of observed and predicted infections, which is adjusted for facility-specific factors that contribute C. difficile risk. Negative binomial regression was used to calculate the predicted C. difficile infections in the SIR. Poisson regression was used to generate a 95% prediction interval for the predicted C. difficile infection rate.

**Conclusion.** Literature demonstrates that prospective evaluation of discharge antibiotics by a clinical pharmacist is effective in improving appropriateness of discharge antibiotic prescriptions, optimizing duration of outpatient antibiotics as well as reducing unnecessarily broad-spectrum therapy. The prospective results from this study demonstrate that this innovative approach can improve outpatient oral antibiotic prescribing and provide a framework for other institutions to implement similar programs.

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