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. 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.

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.

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52. Direct Communication Improves Response Time to Acceptance of Antimicrobial Stewardship Interventions Humaira Shah, MBBS, MD,1 Stephen G. Donoghue, MSc Pharmacy;2 Jonathan S. Seah, PharmD2 Pu Ea Ow Yong, RPh2; Wee Boon Lee, BSc. (Pharmacy)1,1 Changi General Hospital, Singapore, Singapore;3 MPH, Studied, Not Applicable, Singapore;2 'Changi General Hospital, Singapore, Singapore, Not Applicable, Singapore

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 compliance 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 1 January – 31 December 2017. A targeted intervention was placed into the patient's medical records for the team to review. Thereafter, a direct communication (DC) phase ran from 1 January 2018 - 31 January 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, time of intervention and time to acceptance was recorded. Overall acceptance rates rounded to the nearest common decimal point evaluated 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% [9/334] 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% to 80%, p=0.025) as compared to the PC phase. In addition, DC helped narrow empiric antibiotic choices, with improvements in both same-day and overall acceptance of interventions (increased from 8% to 45%, p< 0.001 and 5% to 78%, 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 Kushal Naik, PharmD1; Jeremy J. Frens, PharmD2; Jordan R. Smith, PharmD2;1 Cone Health. Greensboro, North Carolina; 2High Point University, High Point, NC

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 group evaluated a random sample of patients discharged in 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 pending discharge antibiotic prescriptions for physician review. Antibiotic choice and duration of therapy were based on local and national guidelines.

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 Clostridioides Difficile Infection Rates Albert Yang, PharmD1; Monica Donnelly, PharmD2; University of California, Davis Health, Sacramento, California; UC Davis Medical Center, Davis, California

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

Background. Clostridioides 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 infection 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.
55. Impact of Testing Methodology and Reporting on Time to Preferred Antibiotic Treatment in Extended Spectrum Beta-Lactamase producing Enterobacteriaceae (ESBL-E) Bloodstream Infections

Lisa Bui, PharmD, Robin Tveekel, PharmD,F; Stephanie Carnes, PhD,F; Jeanne D. Chan, PharmD, MPH,F; Andrew Bryan, MD, PhD,F; Lori Bourassa, PhD MPH,F; Rupali Jain, PharmD,F; Brenton Matsuda-Feng, n/a,F; 1UW Medicine, Seattle, Washington; 2Fred Hutchinson Cancer Research Center, Seattle, Washington; 3UW Medicine, Harborview Medical Center, Seattle, WA; 4University of Washington, Seattle, Washington; 5University of Washington School of Medicine, Seattle, WA

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

Background. Harborview Medical Center (HMC) identifies organisms and an ESBL genotype (CTX-M) via Verigene® Gram-Negative Blood Culture Nucleic Acid Test (BC-GN). University of Washington-Montlake (UWML) uses matrix-assisted laser desorption ionization time-of-flight mass spectrometry (MALDI-TOF MS) for organism identification directly from positive blood cultures and ceftaz sidedness results by Kirby Bauer disk diffusion (KB) are reported 18 hours later. No ESBL comment is reported at UWML. We aimed to determine whether the methodology in identification and reporting of ESBL-E from blood cultures between two hospitals has an impact on time to prefer treatment with a carbapenem antibiotic.

Methods. Retrospective observational study conducted at UWML and HMC in Seattle, WA between 1/10/2015 and 9/15/2020. Adult patients were eligible if they had ≥1 positive blood culture with an Enterobacteriaceae isolate resistant to ceftriaxone and were on antibiotic treatment. The primary outcome was the difference in time to preferred definitive therapy with a carbapenem antibiotic in patients an ESBL-E bloodstream infection (BSI) identified by Verigene® vs. MALDI-TOF MS/KB.

Results. A total of 199 patients were screened, 67 were included for UWML and 68 at HMC. The average time to initiation of a carbapenem antibiotic was 42.1±26.9 hours at UWML and 28 ±19.7 hours at HMC. A t-test detected a difference in time to preferred therapy between a Verigene® vs. MALDI-TOF MS/KB tested ESBL-E BSI [95% confidence interval (CI), 5.3-22.9]. The hazard ratio for carbapenem initiation for HMC vs. UWML was 1.73643 [95% CI, 1.1405-2.644].

Conclusion. A statistically significant difference in time to preferred definitive therapy among patients with an ESBL-E BSI processed by Verigene® was found compared to MALDI-TOF MS/KB. The results suggest standardization in protocols between the UWML and HMC hospitals is warranted.

Disclosures. All Authors: No reported disclosures

56. High Frequencies of Adverse Drug Events with Intravenous vs Oral High-Dose Trimethoprim-Sulfamethoxazole: An Opportunity for Antimicrobial Stewardship

Lisa Vuong, PharmD,F; Susan L. Davis, PharmD,F; Susan L. Davis, PharmD,F; Tyler Jedlicka, PharmD,F; Devon Medier, PharmD,F; Kristen Zołtak, PharmD,F; Michael P. Veve, PharmD,F; Rachel Kenney, PharmD,F; 1Henry Ford Hospital, Detroit, Michigan; 2Wayne State University, Detroit, MI; 3Johns Hopkins Medicine, Baltimore, Maryland

Trimethoprim-sulfamethoxazole: intravenous versus oral therapy

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

Background. Trimethoprim-sulfamethoxazole (TMP-SMX) is a high-bioavailability antibiotic associated with potentially serious adverse drug events (ADE). The objective of this study was to evaluate the safety of intravenous (IV) and oral (PO) high-dose TMP-SMX.

Methods. IRB-approved retrospective cohort of hospitalized patients from January 2016 to November 2020. Inclusion: ≥ 18 years old and > 72 hours of renally restricted antimicrobial agents. An additional $433,341 was saved for overall antimicrobial restrictions and reduction in overall days of therapy/1000 patient days (DOT) were based on EPIC costs.

Result. The reduction in number of administrations with implementation of EI TDP resulted in $226,420 saved in 2020. $182,837 was saved due to decreased usage of restricted antimicrobial agents. An additional $433,341 was saved for overall antimicrobial costs due to 19,775 days reduction in overall DOT/1000 patient days.

Conclusion. A community-based regional ASP has resulted in substantial financial impact and identified areas for future cost savings within the region.

Disclosures. All Authors: No reported disclosures