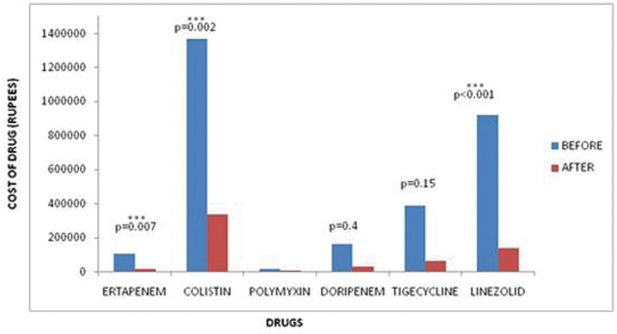
Results. In the post implementation period, 868 patients were prescribed targeted antibiotics. Fifty-one percent (442) prescriptions required adjustment for drug selection, route, dose, or duration. Loading dose was indicated but not prescribed in 31% (266) of prescriptions, 14% (118) had inappropriate maintenance dose and 13% (110) were continued beyond standard recommended durations. Compliance was noted with 50% of ASP recommendations. Departments with high compliance rates included Neurosurgery (63%), Urology (62%), and Medicine (59%). Significant decreases in cost (Figure 1) were noted for ertapenem (Rs 106200 reduced to Rs 15930), colistin (Rs 1368258 to Rs 338322) and linezolid (Rs 919296 to Rs 137472) (all $P < 0.05$) (1USD~64 Rs). Utilization of Colistin and Linezolid decreased from 422 vials to 94 (22%) and 1320 vials to 202 (15%), respectively.

Conclusion. Preliminary results of an ASP in a large Indian hospital are encouraging. Potential antibiotic and department-specific targets for advanced stewardship interventions were identified.

Figure 1: Financial Impact of ASP in an Indian Hospital



Disclosures. **K. S. Kaye**, Xellia: Consultant, Consulting fee. Merck: Consultant and Grant Investigator, Consulting fee and Research support. The Medicines Company: Consultant and Grant Investigator, Consulting fee and Research support.

738. Grading the Impact of a Standardized B Lactam Antibiotic Allergy Assessment Protocol for Treatment Decisions: An Antimicrobial Stewardship Target

Kanizeh Hernandez, PharmD[1]; Stephen Maynard, BS[1]; Ryan Chapin, PharmD[1]; Monica V. Mahoney, PharmD, BCPS-AQ ID[1]; Timothy Lax, MD[2]; Howard S. Gold, MD, FIDSA[3] and Christopher McCoy, PharmD, BCPS-AQ ID[1]; [1]Department of Pharmacy, Beth Israel Deaconess Medical Center, Boston, Massachusetts, [2]Allergy and Inflammation, Beth Israel Deaconess Medical Center, Boston, Massachusetts, [3]Department of Medicine, Division of Infectious Diseases, Beth Israel Deaconess Medical Center, Boston, Massachusetts

Session: 75. Stewardship: Program Implementation
Thursday, October 5, 2017: 12:30 PM

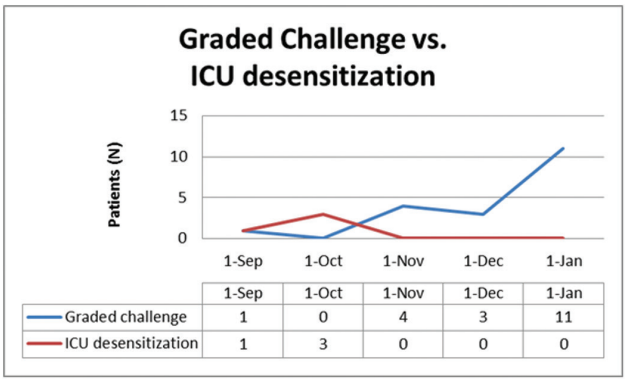
Background. Approximately 30% of patients at our institution have β-lactam (BL) antibiotic allergies documented in their medical record. This translates to high use of non-β-lactams (NBL) or other structurally dissimilar agents. Patients treated with NBL are three times as likely to experience an adverse effect or be readmitted for infection. BL allergy assessment, re-challenge and de-labeling remain an important target for antimicrobial stewardship (AST). Published protocols have been validated at large teaching institutions with improvements in documentation and the care of patients with labeled allergies, including drug challenge protocols and desensitization for true allergies. At BIDMC, a multidisciplinary committee developed a guidance document to include a series of standard questions, medical record review and appropriate clarifications for the medical record. The guideline also includes recommendations an algorithm for the approach to drug challenge or desensitization.

Methods. The guideline was launched in September 2016 and this study examined the first 4 months of use. The primary endpoint compared the number of full desensitizations requiring ICU admission, and number of graded/full challenges pre- and post-implementation. Aztreonam, which is structurally dissimilar to other BL, was used as a surrogate marker of avoidance of BL.

Results. Pre-implementation rates of graded challenges and full desensitizations were equivalent. This was bifurcated by 1,000% within 4 months such that the use of graded challenge was 10 times the desensitization rate (Figure 1). Aztreonam use decreased from a 2.33 patient days of therapy (pDOT) per 1,000 days in September to 1.74 in January (Figure 2). The decrease in utilization was most pronounced on the General Medicine units. Utilization was driven most heavily by patients being treated by the Hematology Oncology Service. No adverse reactions were documented during any post guideline β lactam challenges.

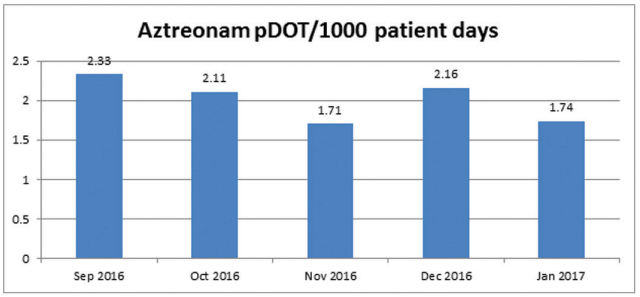
Conclusion. Introduction of a multidisciplinary guideline by AST and Allergy led to preferred utilization of graded challenge over full ICU desensitization and an overall decrease in aztreonam use.

Figure 1



	1-Sep	1-Oct	1-Nov	1-Dec	1-Jan
Graded challenge	1	0	4	3	11
ICU desensitization	1	3	0	0	0

Figure 2



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

739. Use of a *Clostridium difficile* Risk Calculator to Optimize Antimicrobial Stewardship

Davin Kamiyama, PharmD[1]; Bruce Weng, DO[2]; Monica Donnelley, PharmD, BCPS[1]; Elizabeth Zhu, PharmD, BCPS[1]; Machelle Wilson, PhD[3]; Margaret Morita, BS, CIC[4] and Jennifer Brown, MD[2]; [1]Department of Pharmacy, University of California, Davis Medical Center, Sacramento, California, [2]Division of Infectious Diseases, University of California, Davis Medical Center, Sacramento, California, [3]Division of Biostatistics, University of California, Davis, Sacramento, Colorado, [4]Department of Hospital Epidemiology and Infection Prevention, University of California, Davis Medical Center, Sacramento, California

Session: 75. Stewardship: Program Implementation
Thursday, October 5, 2017: 12:30 PM

Background. In 2013, our institution implemented a prospective audit and feedback antimicrobial stewardship program (ASP) that targets daptomycin, linezolid, carbapenem, fluoroquinolone, and piperacillin/tazobactam use. Subsequently, we found that most patients who developed *Clostridium difficile* infection (CDI) had received non-targeted, commonly prescribed antibiotics. We sought to determine whether the use of a risk calculator could identify patients at risk for CDI and potential ASP interventions for those receiving non-targeted antimicrobials.

Methods. We retrospectively reviewed inpatient adults diagnosed with CDI from October 1, 2013 to December 15, 2016 at our institution. Data collected included demographics, medical co-morbidities, CDI risk score, antecedent antimicrobials, and potential for ASP intervention.

Results. Of 316 patients who developed CDI, 175 (55.4%) were men and 132 (41.8%) were immunocompromised. The mean patient age was 65.1 years (range: 18-102). Overall, 232/316 (73.4%) received antibiotics within 3 months of admission and 206 (65.2%) did on admission. The risk calculator scored 219 (69%) patients as high-risk and 97 (31%) as low-risk for CDI. At admission, potential ASP interventions were found for 52 (23.7%) high-risk score patients vs. 14 (14.4%) low-risk score patients ($P = 0.07$). At 72 hours post-admission, potential ASP interventions were found for 70 (32.0%) high-risk patients vs. 18 (18.6%) low-risk patients. For non-ASP antimicrobials, potential interventions were found for 32 (76%) high-risk patients at admission and 49 (82%) at 72 hours post-admission as compared with 10 (91%) at admission and 15 (88%) at 72 hours post-admission for those with low-risk scores. Potential interventions on admission were: stopping antimicrobials (60%), de-escalating antimicrobials (21%), and stopping proton-pump inhibitors (19%). Potential interventions at 72 hours post-admission were stopping antimicrobials (63%), de-escalating antimicrobials (19%), and stopping proton-pump inhibitors (18%).