Febrile neutropenia (FN) is a common complication of cancer therapy and often necessitates prolonged antibiotic treatment. Antibiotic de-escalation can be challenging given the tenuous clinical status. Furthermore, microbiological or clinical etiology is identified in a minority of FN patients. In 2016 we implemented several evidence-based strategies to guide antibiotic use in high-risk FN patients including specifying vancomycin use indications, minimizing carbapenem escalation in stable patients with ongoing fevers, and defining antibiotic durations regardless of neutrophil count. The study objective was to characterize and evaluate our experience implementing these strategies on antibiotic use and clinical outcomes.

**Methods.** Interrupted time series analysis of all admissions to the Malignant Hematology service at the University of California, San Francisco between June 2014 and December 2018. The primary outcome was monthly days of therapy (DOT) per 1,000 patient-days of broad-spectrum IV antibiotics (aztreonam, ceftazidime, piperacillin-tazobactam, meropenem, and vancomycin). Secondary outcomes included DOT/1,000 patient-days for each IV antibiotic, incidence rates of bloodstream infections (BSI) and *C. difficile* infections (CDI), and in-hospital all-cause mortality. A segmented regression analysis was conducted to evaluate the impact of the FN management algorithm implementation on antibiotic use and clinical outcomes. Summary statistics and time series scatter plots were used to visualize the trends and outliers.

**Results.** 2319 unique patients with 6,788 encounters were included. The median (IQR) age was 59 (46–68) years and 60% were male. Regression results and time series plots are shown in Table 1 and Figures 1–3.

**Conclusion.** Implementation of an evidence-based FN management algorithm led to decreased vancomycin and meropenem use without a statistically significant impact on overall antibiotic use, CDI rates, or mortality. While BSI rates fluctuated in the 2 months post-implementation, rates returned to baseline thereafter. A multidisciplinary effort facilitated successful implementation of this stewardship project. This collaboration remains essential to addressing future antimicrobial management strategies in this population.
in-hospital mortality (P = 0.36) between the short and long groups (Table 2). There were 7 adverse drug outcomes, 2 in the short group and 5 in the long group (Table 3).

**Conclusion.** Antibiotic de-escalation in AML patients with neutropenic fever with no identifiable infectious source was associated with a lower rate of recurrent fever without affecting ICU transfer, adverse drug events, and death. Physicians should consider de-escalation prior to ANC recovery in the appropriate setting.

**Transcriptions of the data were analyzed using thematic coding aided by MAXQDA qualitative analysis software.**

**Results.** Understandings and interpretations of ASPs varied greatly between the practice groups. ID practitioners commonly focused on "changing prescribing behavior" and "restricting inappropriate usage," while MICU and SICU practitioners more often emphasized "following guidelines" and maintaining clinical "balance." Additionally, direct observation data demonstrate that MICU and SICU practitioners are bounded by social and institutional determinants of antimicrobial prescribing (Table 1) that affect the pursuit of "appropriate antimicrobial use."

**Conclusion.** Ethnographic interrogation found that practice groups understand and integrate ASPs differently according to everyday encounters with the social and institutional determinants of antimicrobial prescribing. ASP effectiveness might be enhanced by adopting a more mindful approach to accounting for and addressing the distinct understandings and interpretations of ASPs among diverse practice groups operating within the same institution.

**Table 1. Key Factors Influencing Antimicrobial Prescribing**

| Key Factors | Examples of Context |
|-------------|---------------------|
| Practice group | Primary service (MICU) |
| Communication | Attendance-attending, attending-fellow |
| Resources | Lab result availability and timeliness |
| Time pressures | Professional rank and standing |
| Interpersonal dynamics | Person (e.g. resident number) |

**Table 2. Treatment and Outcomes**

| Variable | Cohort 1 early de-escalation (N=18) | Cohort 2 until engagement (N=30) | Combined (N=48) | P-value |
|----------|-----------------------------------|-----------------------------------|-----------------|--------|
| Initial gram negative treatment, | Cefepime | Piperacillin/tazobactam | Adenomycin | Metronidazole | Other | None | 24 (60%) | 34 (70%) | 27 (62%) | 0.1356 |
| initial gram positive treatment, | Ceftriaxone | None | 32 (67%) | 10 (21%) | 0.5170 |
| DOT, | 1 (5%) | 6 (10%) | 64 (82%) | 3.3584 |
| in-hospital mortality, | 1 (5%) | 4 (10%) | 6 (10%) | 6 (10%) |

**Table 3. Adverse Events**

| Variable | Cohort 1 early de-escalation (N=18) | Cohort 2 until engagement (N=30) | Combined (N=48) | P-value |
|----------|-----------------------------------|-----------------------------------|-----------------|--------|
| Colonization with MDRO, | 5 (26%) | 6 (20%) | 11 (23%) | 0.6745 |
| resistance | 1 (5%) | 2 (6%) | 3 (6%) | 0.0459 |
| Adverse Events from antibiotics | 2 (10%) | 1 (3%) | 3 (6%) | 0.0459 |

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

**1090. Impact of Relieving Infectious Diseases Fellows from Off-Hour/Weekend Antimicrobial Stewardship Coverage**

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**Session:** 134. Antibiotic Stewardship: Stewardship Education

**Friday, October 4, 2019: 12:15 PM**

**Background.** Antimicrobial stewardship programs (ASPs) often utilize Infectious Diseases fellows (IDFs) to cover pre-authorization processes during evening and weekend hours. IDFs often provide ASP coverage in addition to their inpatient consult roles. In response to increasing consult volume, we worked with our fellowship program to relieve IDFs of evening and weekend coverage (a decrease in fellow coverage by 26 hours per week) starting in October 2017. Members of the ASP assumed the majority of these evening and weekend hours. Additional post-prescriptive activities and a rotation in Infection Control and Antimicrobial Stewardship were implemented in response. We sought to analyze the impact of this intervention.

**Methods.** Intervention and medication data were extracted from the electronic medical record during 1 July 2017 through 30 September of 2017 (IDF Coverage) and the same 3 months of 2018 (ASP Coverage). Comparisons between the two periods were performed using descriptive statistics of the number of interventions, number of weekend interventions, types of interventions, and days of therapy (DOT; per 1000 patient-days).

**Results.** Comparing July-September of 2017 and 2018, total ASP interventions increased 16% (1192 to 1391); weekend ASP interventions increased 75% (139 to 252). The most common interventions were "Choice of Therapy" (41% in both years), "De-Escalation" (17% in 2017, 16% in 2018), and "Dose/Interval Optimization" (10% in both years). The most intervened agents were piperacillin-tazobactam, cefepime, vancomycin, meropenem, and ceftazidime.

**Comparing the same time periods, total antibiotic DOT decreased 4% (714.1 to 684.9). There was a 28% decrease in piperacillin-tazobactam (41.47 to 29.85), 19% decrease in meropenem (28.08 to 22.61), and 7% decrease in vancomycin (125.09 to 116.17) use. Ceftazidime was unchanged (18.13 to 18.08). Cefepime increased by 9% (56.78 to 61.97).**

**Relieving IDFs of evening and weekend ASP coverage during busy inpatient consult rotations may help decrease burnout. The assumption of these hours by ASP members of ASP led to an increase in documented total and weekend ASP interventions. In addition, the change was associated with a relative decrease in piperacillin–tazobactam, meropenem, and vancomycin use.**

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

**1093. Evaluation of an Antimicrobial Stewardship Elective Rotation for Medicine Residents**

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**Session:** 134. Antibiotic Stewardship: Stewardship Education

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**Background.** In 2017, an Antibiotic Stewardship (ASP) elective was established for the medicine residents to engage directly in stewardship practice, learn how to...