Results. Between 30 August 2020 and 6 May 2021 (250 days), 139 PCN allergic patients were assessed (81 delabeled versus 58 not delabeled) (Figure 2). Some patients (37%) were delabeled via history alone, while 63% had further skin/oral testing. Baseline characteristics were similar between groups (Table 1). In the delabeled group, we observed increased narrow-spectrum PCN use (p<0.001), and decreased vancomycin (p<0.001), fluoroquinolone (p=0.011), carbapenem (p<0.011), and overall restricted antimicrobial use (Table 2). Rates of 30-day readmission, LOS, and mortality were comparable. Four (5%) of delabeled patients had had PCN allergy re-entered in the chart at 30-days.

Figure 2. Allergy Description of Patients Assessed for Penicillin Allergy Delabeling

Patients were similar between groups on all baseline clinical and allergy characteristics except for more patients with infection classified as "other" in the non-delabeled group.

Table 1: Baseline Characteristics of Patients Assessed with a Penicillin Allergy

| Characteristic | Overall (n=139) | Delabeled (n=81) | Not Delabeled (n=58) | P value |
|---------------|----------------|-----------------|---------------------|--------|
| Male, n (%)   | 52 (46)        | 33 (41)         | 19 (33)             | 0.314  |
| Age, years mean (SD) | 61 (20-89) | 60 (49-86) | 62 (53-73) | 0.228  |
| Self-Reported Rate, n (%) | 61 (45) | 38 (46) | 23 (39) | 0.395  |
| White         | 56 (45)        | 36 (44)        | 20 (35)             | 0.564  |
| Other         | 13 (10)        | 15 (19)        | 8 (14)              | 0.469  |
| Unknown       | 4 (3)          | 2 (2)          | 2 (4)               | 0.684  |
| Admitting Team, n (%) | 103 (74.1) | 59 (72.9) | 44 (75.9) | 0.114  |
| Medical       | 28 (20.5)      | 15 (18.6)      | 13 (22.4)           | 0.645  |
| Intensive Care Unit Admission, n (%) | 27 (20.0) | 17 (21.0) | 10 (17.2) | 0.602  |
| CCL, median days (IGR) | 6 (3-9) | 6 (3-9) | 7 (3-8) | 0.214  |
| Solid Organ Transplant, n (%) | 12 (8.6) | 7 (8.6) | 5 (8.6) | 0.997  |
| History of mental illness, n (%) | 35 (25) | 22 (27) | 13 (22.4) | 0.525  |

In the delabeled patients, we observed increased narrow-spectrum PCN use and decreased vancomycin, fluoroquinolone, carbapenem, and overall restricted antimicrobial use. Use of first and second generation cephalosporins was comparable between groups. Rates of 30-day readmission, LOS, and mortality were comparable.

Conclusion. This QI effort between the departments of Allergy and ID to employ an ANP increased narrow spectrum antibiotic use and reduced use of restricted antimicrobials. Challenges included the part time position of the ANP unable to see every patient, reemergence of allergy in the chart, and clinical or other exclusions for delabeling (Fig 3).

Disclosures. All Authors: No reported disclosures

62. Secondary Prophylaxis in Clostridioides difficile Infections: a Closer Look at Outcomes

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

Background. Clostridioides difficile infection (CDI) is an urgent public threat and carries a 25% chance of recurrence (rCDI). Data on safety and efficacy of oral vancomycin prophylaxis (OVP) in reducing rCDI is limited. We implemented a best practice advisory (BPA) to alert the prescriber and antibiotic stewardship (ASP) team for patients with CDI in the previous 60 days being initiated on systemic antimicrobials. The alert states “Don’t use antibiotics in patients with recent CDI without convincing evidence of need. Antibiotics pose a high risk of recurrence.” ASP team recommended OVP if antibiotics are continued. This study evaluated the impact of the BPA alert on OVP prescribing and patient outcomes.

Methods. IRB approved, retrospective, observational cohort study comparing patients who received OVP to no OVP. Inclusion: adults with history of laboratory confirmed CDI, 6 days post-CDI treatment completion, BPA from 3/7/19 – 3/31/20, receiving non-CDI systemic antimicrobials, and without history of bezlotoxumab infusion. Data were reported using descriptive statistics and bivariate analysis. Primary endpoint: rCDI within 2-8 weeks post-OVP completion. Secondary endpoints: bezlotoxumab reemergence in the chart, and 1-year mortality.

Results. 70 patients included: 32 (46%) no-OVP and 38 (54%) OVP. Baseline characteristics, previous CDI treatment, and outcomes were similar (Table 1). Index CDI was severe in the OVP group (18, 47% vs. 9, 28%), and mortality was higher (10, 31% vs. 16, 42%) (P = 0.458).
Fever with neutropenia (FN) is common and the timing of non-CDI antibiotics. Efficacy interpretation is limited by inconsistent dosing regimens and significant comorbid illness in the cohort. Future work will focus on further optimizing the BPA and standardizing the CDI regimen.

Disclosures. Rachel Kenney, PharmD; Medtronic, Inc. (Other Financial or Material Support, spouse is an employee and shareholder) Susan L. Davis, PharmD. Nothing to disclose.

63. Impact of Infectious Disease Fellow-Driven Antimicrobial Stewardship Interventions on Inpatient Fluoroquinolone Use
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Session: P-04. Antimicrobial Stewardship: Outcomes Assessment (clinical and economic)

Background. Fluoroquinolone (FQ) antibiotics are frequently used in hospitalized patients to treat a wide range of infections but are often misused and implicated in antibiotic-associated adverse events. The purpose of this study is to evaluate the impact of Infectious Disease fellow (IDF)-driven antimicrobial stewardship program (ASP) interventions on inpatient FQ use.

Methods. This is a retrospective study of all admitted patients who received a FQ for greater than 48 hours from 01/01/2019 -12/31/2020 in an urban academic center. "Phase 1" (pre-intervention phase) covered 01/01/2019 - 03/31/2019. "Phase 2" (intervention phase) covered 03/03/2020- 12/23/2020. In "Phase 2", our ASP reviewed FQ use 2-3 days per week and an IDF provided feedback interventions that averaged 30-60 minutes of IDF time spent per day. We categorized FQ use as either: "appropriate", "appropriate but not preferred", or "inappropriate" as determined by local clinical guidelines and ASP team opinion. We compared FQ use in both phases, indications for FQ use, and new CDIs occurred vs 35.5%, p = 0.008), with decrease in mean days of FQ use (4.38 days vs 5.87 days, p =.021). Table 2 shows "appropriate" FQ use by clinical indication. New CDIs occurred vs 35.5%, p = 0.008), with decrease in mean days of FQ use (4.38 days vs 5.87 days, p =.021).

Results. A total of 386 patients are included (76 in "Phase 1" and 310 in "Phase 2"). Patient characteristics are similar (Table 1). Overall, 65% of FQ use was empiric, and 50% FQ use was deemed "appropriate", 28% "appropriate but not preferred", and 22% "inappropriate". In "Phase 2", 126 interventions were conducted, with 86% of these on inpatient FQ use, and new CDI antibiotics. Efficacy interpretation is limited by inconsistent dosing regimens and significant comorbid illness in the cohort. Future work will focus on further optimizing the BPA and standardizing the CDI regimen.

Conclusion. OVP was utilized in approximately half of patients who required non-CDI antibiotics. Efficacy interpretation is limited by inconsistent dosing regimens and significant comorbid illness in the cohort. Future work will focus on further optimizing the BPA and standardizing the CDI regimen.

Disclosures. Katie A. McCrink, PharmD; ViiV Healthcare (Employee).

64. Absolute Monocyte Count (AMC) as Early and Safe Marker for Discharge in Low-risk Pediatric Febrile Neutropenia with Cancer
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Session: P-04. Antimicrobial Stewardship: Outcomes Assessment (clinical and economic)

Background. Fever with neutropenia (FN) is common and the timing of antibiotic cessation in patients without an identified fever source is uncertain. Absolute neutrophile count (ANC) recovery has been used clinically to represent bone marrow recovery (BMR) but other options should be considered. We hypothesized that absolute monocyte count (AMC), and absolute phagocyte count (APC) are more sensitive, and an earlier safe marker of antibiotic cessation (AC) compared with ANC.

Methods. A retrospective review was performed for FN episodes (FNEs) at UCM Comer Children's Hospital between 2009 and 2016 in pediatric oncology patients. Eligible FNEs who were a febrile for 24 hours, had no bacterial source identified at time of AC, and did not receive chemotherapy 10 days following AC. Ten-day post-AC antibiotic cessation in patients without an identified fever source is uncertain. Absolute neutrophile count (ANC) recovery has been used clinically to represent bone marrow recovery (BMR) but other options should be considered. We hypothesized that absolute monocyte count (AMC), and absolute phagocyte count (APC) are more sensitive, and an earlier safe marker of antibiotic cessation (AC) compared with ANC.

Conclusion. An IDF-driven ASP intervention has a positive impact on appropriate inpatient use of FQs in our hospital. This highlights a promising ASP model which not only improves appropriate use of FQ, but also offers an opportunity for IDF mentorship and use of available resources to promote ASPs.

Disclosures. Katie A. McCrink, PharmD; ViiV Healthcare (Employee)

A total of 386 patients are included (76 in "Phase 1" and 310 in "Phase 2"). Patient characteristics are similar (Table 1). Overall, 65% of FQ use was empiric, and 50% FQ use was deemed "appropriate", 28% "appropriate but not preferred", and 22% "inappropriate". In "Phase 2", 126 interventions were conducted, with 86% of these accepted. Appropriate FQ use increased significantly in "Phase 2" vs. "Phase 1" (53.5% vs 35.5%, p = 0.008), with decrease in mean days of FQ use (4.38 days vs 5.87 days, p =.021). Table 2 shows "appropriate" FQ use by clinical indication. New CDIs occurred more in "Phase 1" vs. "Phase 2" (6.6% vs 0.6%, p=0.001).

Table 1. Patient Characteristics and Endpoints

| No-OVP (n = 32) | OVP (n = 38) | P-value |
|----------------|-------------|---------|
| Age, Median (IQR) | 68 (50 - 78) | 54 (57 - 73) | 0.932 |
| Female sex, n (%) | 16 (44) | 20 (53) | |
| Index CDI Severity, n (%) | | | |
| Mild to moderate | 20 (63) | 17 (45) | 0.266 |
| Severe | 9 (28) | 18 (47) | |
| Index CDI treatment, n (%) | | | |
| Vancomycin | 20 (63) | 23 (61) | 0.641 |
| Fidaxomycin | 2 (6) | 2 (5) | |
| Endpoints, n (%) | | | |
| CDI recurrence | 3 (9) | 2 (5) | 0.654 |
| VRE isolation | 2 (6) | 3 (8) | 1 |

Table 2: “Appropriate” Fluoroquinolone Use by Clinical Indication

| Clinical Indication for Fluoroquinolone | Phase 1 (N=76) | Phase 2 (N=310) | Total (N=386) |
|-----------------------------------------|----------------|----------------|---------------|
| Bacteremia/intravascular infection | 2 | 14 | 16 |
| CAP | 3 | 13 | 16 |
| Endophthalmitis | 0 | 1 | 1 |
| Epididymoorchitis | 0 | 1 | 1 |
| HAP/VAP | 0 | 24 | 24 |
| Intra-abdominal infection | 2 | 12 | 14 |
| Joint infection | 0 | 2 | 2 |
| Neutropenic fever | 0 | 2 | 2 |
| Osteomyelitis | 0 | 6 | 6 |
| Otitis externa/Mastoiditis | 0 | 7 | 7 |
| Prophylaxis | 10 | 42 | 52 |
| Pulmonary tuberculosis | 0 | 3 | 3 |
| Skin/soft tissue | 0 | 20 | 20 |
| Unknown | 0 | 1 | 1 |
| UTI | 10 | 18 | 28 |
| Total | 27 | 166 | 193 |

Conclusion. An IDF-driven ASP intervention has a positive impact on appropriate inpatient use of FQs in our hospital. This highlights a promising ASP model which not only improves appropriate use of FQ, but also offers an opportunity for IDF mentorship and use of available resources to promote ASPs.

Disclosures. Katie A. McCrink, PharmD; ViiV Healthcare (Employee).