Constraints are barriers to robust AMS programs in some hospitals. Physicians are increasingly encouraged to participate in quality improvement (QI) and are a potential resource to improve AMS. We sought to determine the impact of a prospective, physician-driven stewardship intervention on DOT and clinical outcomes in hospitalized veterans with CAP, with the goal to reduce the median DOT by at least 1 day within 5 months.

**Methods:** This single center, quasi-experimental QI study evaluated two concurrent physician-driven interventions over a 5-month period in an inner-city Veterans Affairs Hospital. Using DMAIC (Define, measure, analyze, improve, and control) methodology, the Chief Resident in Quality and Safety (CRQS) provided monthly education and daily audit and feedback with patient-specific DOT recommendations. Clinical outcomes were followed until 30 days post discharge.

**Results:** A total of 123 patients with CAP were included (57 in the historic control group and 66 in the AMS intervention group). The AMS intervention significantly increased the proportion of CAP patients treated with a 5-day treatment course (56% versus 5.3%, p < 0.0001), and reduced the proportion of patients treated beyond 7 days (12.1% versus 70.2%, p < 0.0001). Median DOT per patient was reduced significantly (5 versus 8 days, p = 0.0001). Median excess antibiotic days were significantly reduced (0 versus 3, p < 0.0001) and 118 days of unnecessary antibiotics were avoided (62 versus 180). 30-day all-cause mortality, all-cause readmission, and Clostridium difficile infection were similar between groups. Median LOS was similar between groups (5.5 days).

**DOT in the Historic Control Group Versus Stewardship Intervention Group**

**Conclusion:** A physician driven QI stewardship intervention in hospitalized CAP patients significantly reduced the total antibiotic DOT and excess antibiotic days without adversely affecting patient outcomes. Providers can be educated through physician driven interventions resulting in substantial improvements in appropriate antibiotic use.

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

76. Optimizing Clinical Outcomes in Geriatric Patients through a Multidisciplinary Hospital Antimicrobial Stewardship Program

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**Session:** P-3. Antimicrobial Stewardship: Outcomes Assessment (clinical and economic)

**Background:** Antimicrobial Stewardship Programs (ASP) aim to ensure the appropriate use of antibiotics. There is limited literature evaluating ASP outcomes in hospitalized geriatric patients who are at higher risk for developing *Clostridium difficile* infection (CDI) or other adverse outcomes. The primary objective of this study was to determine if ASP efforts in this age group decreases the rate of 30-day hospital readmissions due to reinfection or development of CDI, hospital length of stay (LOS), and mortality.

**Methods:** A retrospective chart review was performed to compare the rates of 30-day hospital readmissions because of reinfection or development of CDI in patients 65 years and older who received ASP interventions between January and June 2017. A control group of patients 65 years and older who received antibiotics between January and June 2015 (pre-ASP) was analyzed for comparison. We also assessed their mortality rate and LOS. Patients were included if they received antibiotics for pneumonia (PNA), urinary tract infection (UTI), acute bacterial skin and skin structure infection (ABSSI) and complicated intra-abdominal infection (cIAI). The ASP team consisted of an infectious diseases physician and a clinical pharmacist who met daily to review patients on broad spectrum antibiotics. ASP interventions consisted of de-escalation of empiric or definitive therapy, change in duration of therapy or discontinuation of therapy.

**Results:** Overall, 834 patients (540 control; 294 intervention) were included. The 30-day hospital readmission rate for all infection types decreased during the intervention period (19.6% vs 4.8%, P = 0.0001). Both the development of CDI during hospital stay and 30-day readmission due to CDI during the intervention period decreased (2.6% vs 0.34%, P = 0.019). There was no statistically significant decrease in 30-day hospital readmissions in the PNA (38.5% vs. 35.7%, P = 0.11), UTI (18.9% vs 35.7%, P = 0.15), ABSSI (12.3% vs 21.4%, P = 0.34) or cIAI (10.4% vs 7.1%, P = 0.14) arms. There was no statically significant change in LOS (7.50 days vs 7.26 days, P = 0.48) or mortality (9.6% vs 6.5%, P = 0.12).

**Conclusion:** Multidisciplinary ASP efforts significantly reduced 30-day hospital readmission rates and development of CDI in hospitalized patients 65 years and older.

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

77. Out of Sight, Out of Mind: Impact of an Antimicrobial Stewardship Bundle on Fluoroquinolone Utilization

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**Session:** P-3. Antimicrobial Stewardship: Outcomes Assessment (clinical and economic)

**Background:** Fluoroquinolones are broad spectrum antimicrobials associated with a growing list of adverse effects, such as *Clostridium difficile* infection, arthritias, central nervous system effects, tendon rupture and aortic aneurysm. Due to increasing concerns regarding adverse events and growing resistance, the antimicrobial stewardship team at Wesley Healthcare implemented a bundle aimed at reducing fluoroquinolone usage beginning in June 2017. The components of this bundle included suppression of fluoroquinolone susceptibility in *Enterobacteriaceae* isolates, removal of fluoroquinolones as first line options on order sets, and introduction of a respiratory specific antibiotic guide.

**Methods:** The objective was to evaluate the impact of the stewardship bundle on fluoroquinolone utilization. The primary outcome was ciprofloxacin and levofloxacin usage in days of therapy per 1000 inpatient days (DOT) collected at monthly intervals for 24 months before and after intervention. Overall antimicrobial usage in DOT served as a control variable. The secondary outcomes were *E. coli* and *P. aeruginosa* susceptibility to ciprofloxacin measured at the same time points as the primary outcome. An interrupted time-series analysis using segmented regression was performed for all variables.

**Results:** The mean monthly levofloxacin usage was reduced from 14.1 (95% CI, 12.7 - 15.4) to 8.4 (95% CI, 7.6 - 9.3) DOT. The mean monthly ciprofloxacin usage was reduced from 26.9 (95% CI, 24.6 - 29.4) to 15.8 (95% CI, 14.0 - 17.5) DOT. The trend in levofloxacin usage was reduced (p = 0.035), while a pre-existing downward trend in ciprofloxacin usage was unchanged (p = NS). Overall antimicrobial usage increased, likely due to increasing hematologic/oncology populations during the study period. There were no differences in *E. coli* or *P. aeruginosa* susceptibilities observed.

**Conclusion:** This antimicrobial stewardship bundle may be a useful intervention to reduce fluoroquinolone usage. The bundle may be of particular utility in reducing levofloxacin usage, as our results demonstrated a change in both its usage and trend in usage.

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78. Outcomes and adherence to institutional empiric therapy guidelines for the treatment of cystitis in ambulatory male veterans

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**Session:** P-3. Antimicrobial Stewardship: Outcomes Assessment (clinical and economic)

**Background:** Guidelines provide primary literature demonstrating efficacy and safety of cystitis treatment in female patients, but not males. Increased antimicrobial resistance of urinary tract infection (UTI) pathogens to first line antibiotics are well-documented. In 2017, a change in institutional guidelines was made to recommend nitrofurantoin (NF) or cepodoxime (CPD) as first line antibiotics for cystitis in males. This study aims to evaluate the efficacy of NF and CPD as first line treatment options in males with cystitis.

**Methods:** Single-center, retrospective chart review of male patients prescribed NF or CPD for treatment of cystitis in the outpatient setting from August 2017 to August 2018. Patients with asymptomatic bacteriuria, prostatitis or systemic signs and symptoms of UTI were excluded. Primary outcome was treatment failure, defined as requiring new emergency department (ED) or patient aligned care team (PACT) visit within 30 days after initiation of antibiotic for unresolved symptoms. Safety outcomes were based on documented adverse effects (AE) associated with antibiotic use. Chi-square was the primary statistical test for analyzing primary outcomes and other nominal variables.

**Results:** A total of 450 charts were reviewed with 150 patients meeting inclusion criteria (NF n = 75, CPD n = 75). Baseline characteristics were equally