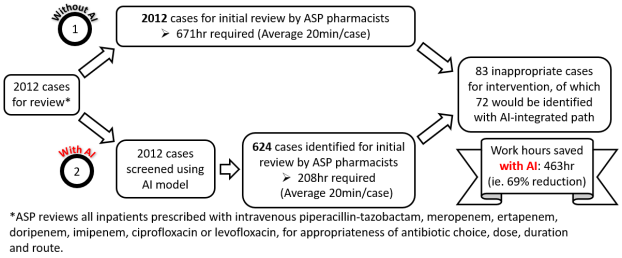
Figure 1. Illustration of AI benefits in ASP



Conclusion. ASPs can leverage on machine learning capabilities to improve audit efficiency. This can increase ASP's productivity and staff's job satisfaction as they are freed up to perform other work.

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

105. Fluoroquinolone Stewardship at a Community Health-System: A Decade in Review

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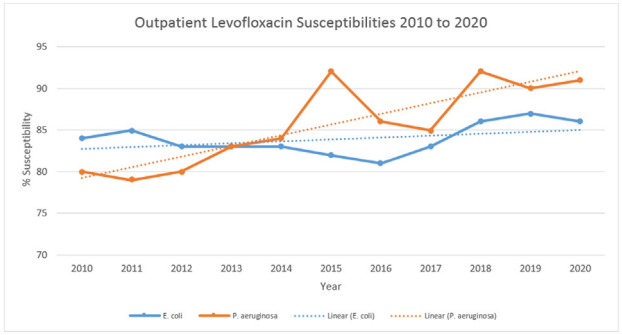
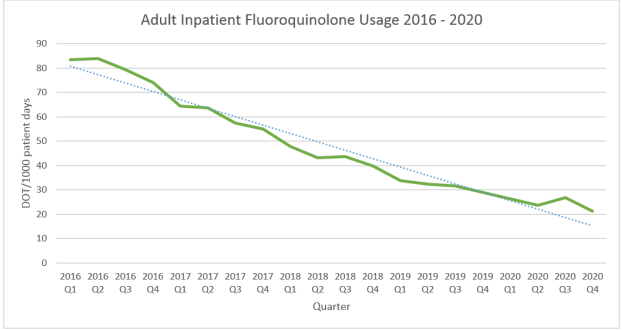
Session: P-07. Antimicrobial Stewardship: Program Development and Implementation

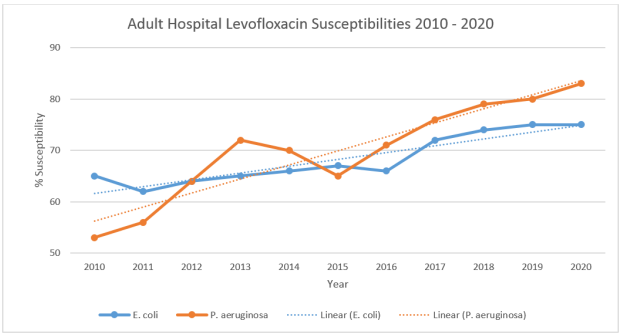
Background. Fluoroquinolone stewardship is a common target for antimicrobial stewardship programs seeking to maintain or improve fluoroquinolone susceptibility rates. Additional benefits include reducing *C. difficile* infection rates, drug toxicities, and resistance to other antimicrobials as fluoroquinolones can co-select for resistance. The Norton Healthcare antimicrobial stewardship program was founded in 2011 and provides services at 4 adult hospitals with ~1600 beds. Main fluoroquinolone stewardship activities have included provider education, prospective audit and feedback, and guideline and order-set development. The purpose of this study was to describe the resistance and usage rates of fluoroquinolones over time.

Methods. This was a descriptive study examining individual adult hospital antibiograms from 2010 to 2020. Levofloxacin susceptibility rates to *E. coli* and *P. aeruginosa* were collated from annual antibiograms between 2010 and 2020 for outpatients and each adult hospital. Adult hospital resistance rates were aggregated and weighted accordingly to number of isolates per hospital per year. Additionally, levofloxacin and ciprofloxacin inpatient days of therapy (DOT) was collected since 2016 when DOT was first readily retrievable and was normalized per 1000 patient days to compare between different time points.

Results. Outpatient levofloxacin likelihood of activity against *P. aeruginosa* improved from 81% to 91%. Outpatient levofloxacin likelihood of activity against *E. coli* remained stable between 84 – 86% (Figure 1). Adult inpatient fluoroquinolone usage decreased by approximately 75% from 83.5 to 21.37 DOT/1000 patient days since 2016 (Figure 2). Adult inpatient levofloxacin likelihood of activity against *P. aeruginosa* improved from 53% to 83%. Adult inpatient levofloxacin likelihood of activity against *E. coli* improved from 65% to 75% (Figure 3).







Conclusion. The Norton Healthcare antimicrobial stewardship program has been effective in reducing unnecessary fluoroquinolone usage and improving inpatient fluoroquinolone susceptibility rates. Future studies should examine opportunities to translate successes to the outpatient phase of care.

Disclosures. **Ashley Wilde, PharmD, BCPS-AQ ID**, Nothing to disclose **Paul S. Schulz, MD**, **Gilead** (Consultant, Speaker's Bureau)**Merck** (Consultant, Speaker's Bureau)

106. Pandemic Pinch: The Impact of COVID Response on Antimicrobial Stewardship Program (ASP) Resource Allocation

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Session: P-07. Antimicrobial Stewardship: Program Development and Implementation

Background. The COVID-19 pandemic placed a strain on inpatient clinical and hospital programs due to increased patient volume and rapidly evolving data on best COVID-19 management strategies. However, the impact of the pandemic on ASPs has not been well described.

Methods. We performed a cross-sectional electronic survey of stewardship pharmacy and physician leaders in 37 hospitals within the Duke Antimicrobial Stewardship Outreach Network (DASON) (community) and Duke/UNC Health systems (academic) in April-May 2021. The survey included 60 questions related to staffing changes, use of COVID-targeted therapies, related restrictions, and medication shortages.

Results. Twenty-seven facilities responded (response rate of 73%). Pharmacy personnel was reduced in 17 (63%) facilities by an average of 16%. Impacted pharmacy personnel included the stewardship lead in 15/17 (88.2%) hospitals. Converting to remote work was rare and only reported in academic institutions (n=2, 7.4%). ASP personnel were reassigned to non-stewardship duties in 12 (44%) hospitals with only half returning to routine ASP work as of May 2021. Respondents estimated that 62% of routine ASP activities were diverted during the time of the pandemic. Non-traditional, pandemic-related ASP activities included managing multiple drug shortages, of which ventilator support medications (91%) were most common affecting patient care at 52% of facilities. Steroid and hydroxychloroquine shortages were less frequent (44% and 22%, respectively). Despite staff reductions, pharmacists often served as primary contact for remdesivir approvals either using a criteria-based checklist at dispensing or as part of a dedicated phone approval team (Figure). Most (77%) hospitals used a criteria-based pharmacist review strategy after remdesivir FDA approval. Restriction processes for other COVID-19 therapies such as tocilizumab, hydroxychloroquine, and ivermectin were reported in 64% of hospitals.

Remdesivir Allocation Strategy