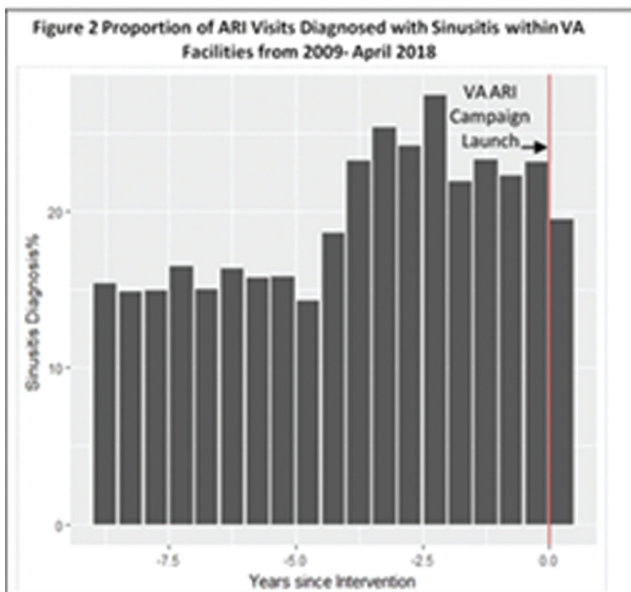
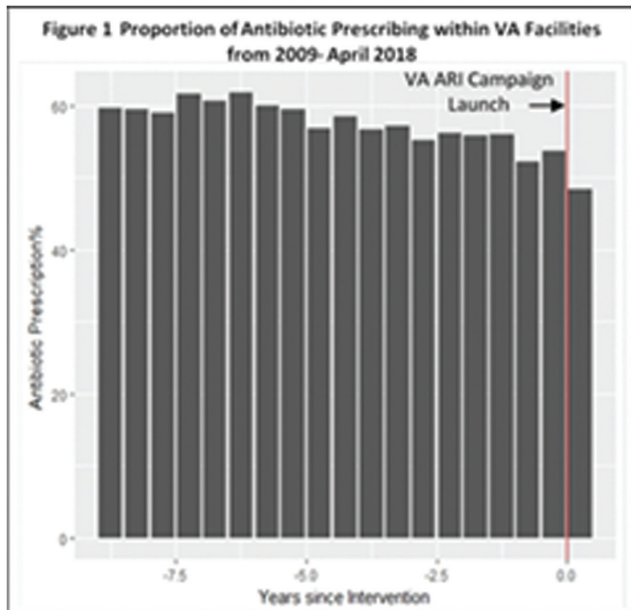


[OR 0.88, (0.84, 0.88),  $P < 0.001$ ]. Bronchitis/URI-NOS prescribing rates decreased from 2009 [annual OR 0.94 (CI 0.93, 0.95),  $P < 0.001$ ]. Additional effect was observed postintervention [OR 0.86, (0.81, 0.91),  $P < 0.001$ ]. Overall, the proportion of ARI visits diagnosed with sinusitis increased [annual OR 1.09 (1.08, 1.10),  $P < 0.01$ ], but the proportion of sinusitis diagnoses decreased [OR 0.72 (0.69, 0.75),  $P < 0.001$ ] postintervention. Guideline-concordant antibiotic selection was 61.5% vs. 71.2% for sinusitis and 63.3% vs. 67.8% for pharyngitis pre-/postintervention, respectively (both  $P < 0.001$ ).

**Conclusion.** Antibiotic prescribing rates for ARIs within the VA have steadily declined since 2010. Additional decline in antibiotic prescribing was associated with the launch of a national campaign to improve ARI management.



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

### 209. Impact of a Risk-based CAP Prescribing Guideline Paired with Antimicrobial Stewardship to Improve Antibiotic Prescribing for Patients at Low Risk for Drug-Resistant Pathogens

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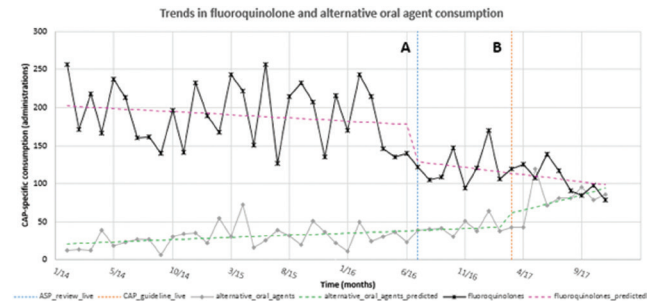
**Session:** 51. Antimicrobial Stewardship: Interventions to Improve Outcomes  
Thursday, October 4, 2018: 12:30 PM

**Background.** Antimicrobial stewardship programs (ASPs) reduce the burden of multidrug-resistant organisms and improve antibiotic prescribing. Concerns about drug-resistant pathogens (DRPs) in community-acquired pneumonia (CAP) lead to over-prescribing of broad-spectrum antibiotics, and ASP interventions to improve CAP prescribing are not well defined. In 2017, our hospital implemented a CAP guideline for patients at low risk for DRPs with ASP support. The purpose of this study was to evaluate the impact of the guideline with ASP support on CAP-specific antibiotic prescribing.

**Methods.** This was a pragmatic two-phase quasi-experimental analysis of CAP-specific antibiotic consumption before and after implementation of a CAP guideline evaluated according to each phase of implementation. The guideline provided Gram-positive and Gram-negative risk factors and guidance on oral fluoroquinolone (FQ) alternatives. ASP interventions were implemented in two phases: (A) prospective audit and feedback in July 2016 and (B) publication of guideline with education in March 2017. Impact of each intervention was evaluated by interrupted time series segmented-regression analysis. Univariate statistics were calculated using EpiInfo 7. Least-squares segmented regressions were completed in Microsoft Excel.

**Results.** CAP-specific antibiotic administrations were 782 over the entire study period, with 764, 771, and 928 administrations observed before phase A, after A, and after B, respectively. Macrolide consumption increased after the guideline ( $P = 0.029$ ). We observed a significant step change decrease in FQ consumption was observed after phase A ( $P = 0.039$ ) and a positive upward trend in oral alternative agents after phase B ( $P = 0.090$ ), as shown in the figure. Consumption of broad Gram-negative agents and vancomycin/linezolid were not significantly different after the guideline.

**Conclusion.** Implementation of a CAP guideline with patient-specific and DRP risk factors was associated with significant changes in CAP-specific prescribing. Changes in prescribing were temporally associated with ASP interventions. Additional studies into the impact of this guideline on correct classification of Gram-negative resistance and clinical outcomes are needed.



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Syneos Health: Employee, Salary. R. G. Wunderink, Achaogen: Consultant, Consulting fee. Arsanis: Consultant, Consulting fee. Bayer: Consultant, Consulting fee. GlaxoSmithKline: Consultant, Consulting fee. KBP Biosciences: Consultant, Consulting fee. Meiji-Seiko: Consultant, Consulting fee. Merck: Consultant, Consulting fee. Nabriva: Consultant, Consulting fee. Polyphor: Consultant, Consulting fee. Roche/Genentech: Consultant, Consulting fee. Shionogi: Consultant, Consulting fee. The Medicines Company: Consultant, Consulting fee. Accelerate Diagnostics: Consultant, Consulting fee. Curetis: Consultant, Consulting fee. bioMerieux: Consultant, Consulting fee. M. H. Scheetz, Merck & Co., Inc.: Grant Investigator, Grant recipient. Bayer: Consultant, Consulting fee.

### 210. Improved Antimicrobial Utilization in the Emergency Department: Impact of a Point of Care Polymerase Chain Reaction Test for The Rapid Detection of Influenza

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**Session:** 51. Antimicrobial Stewardship: Interventions to Improve Outcomes  
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**Background.** Due to poor sensitivity, the FDA mandated that rapid influenza antigen (IAT) must be phased out by 2018. At our institution an on-site rapid influenza PCR (PCR) was implemented in emergency departments (ED) at the start of the 2016–2017 influenza season. The purpose of this study was to examine the impact of influenza PCR testing on antimicrobial utilization in the ED.

**Methods.** This multicenter quasiexperimental study included adults over the age of 50 who were tested for influenza, and discharged from the ED. Subjects were matched 2:1 by age, sex, month of testing, and ED site. The pre-implementation group had IAT (January–April 2016) and the post-implementation had PCR testing (January–April 2017). The primary outcome was antiviral utilization. Other outcomes included diagnostic yield, test turnaround time (TAT), receipt of antibiotics, and 30-day revisit.