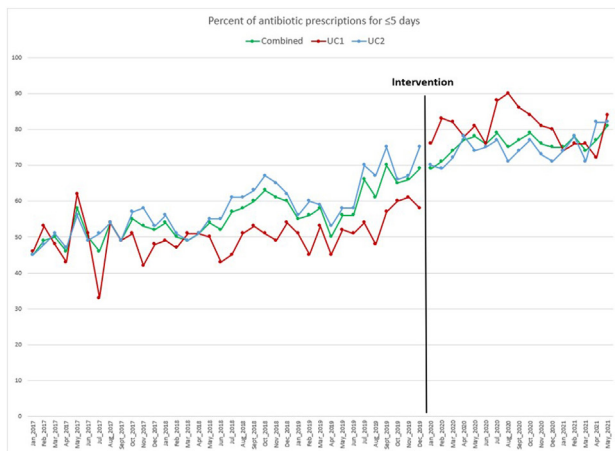


of guideline-concordant antibiotic prescriptions at the two sites by an absolute value of 20% ( $p < 0.0001$ ) (Table). By interrupted time-series, the change in slope after the intervention was not statistically significant for UC1 ( $p = 0.11$ ), UC2 ( $p = 0.73$ ), or combined ( $p = 0.61$ ); however, there was a significant increase in prescriptions for  $\leq 5$  days immediately after the intervention in UC1 ( $p < 0.001$ ) (Figure).

Percent of antibiotic prescriptions for  $\leq 5$  days before and after the intervention

	App only	App + intervention	P-value*
UC1	51	81	<0.0001
UC2	59	74	<0.0001
Combined	56	76	<0.0001

\*Chi-square



**Conclusion.** This intervention to promote institutional guideline-concordant durations of therapy resulted in a significant increase in the proportion of antibiotic prescriptions for  $\leq 5$  days. Preventing prolonged durations of therapy is a potentially effective strategy to reduce antibiotic overuse in urgent cares.

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

### 161. The Agency for Healthcare Research and Quality (AHRQ) Safety Program for Improving Antibiotic Use: Antibiotic Stewardship Intervention in 389 United States Ambulatory Practices during the COVID-19 Pandemic

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**Session:** O-32. Stewardship in Ambulatory Settings

**Background.** The AHRQ Safety Program for Improving Antibiotic Use aimed to improve antibiotic use by engaging clinicians and staff to incorporate antibiotic stewardship (AS) into practice culture, communication, and decision making. We report on changes in visits and antibiotic prescribing in AHRQ Safety Program ambulatory practices during the COVID-19 pandemic.

**Methods.** The Safety Program used webinars, audio presentations, educational tools, and office hours to engage clinician champions and staff leaders to: (a) address attitudes and culture that pose challenges to judicious antibiotic prescribing and (b) incorporate best practices for the management of common infections into their workflow using the Four Moments of Antibiotic Decision Making framework. Total visits (in-person and virtual), acute respiratory infection (ARI) visits, and antibiotic prescribing data were collected. Using linear mixed models to account for random effects of participating practices and repeated measurements of outcomes within practices over time, data from the pre-intervention period (September-November 2019) and the Ambulatory Care Safety Program (December 2019-November 2020) were compared.

**Results.** Of 467 practices enrolled, 389 (83%) completed the program, including 162 primary care practices (42%; 23 [6%] pediatric), 160 urgent care practices (41%; 40 [10%] pediatric), and 49 federally-supported practices (13%). 292 practices submitted complete data for analysis, including 6,590,485 visits. Visits/practice-month declined March-May 2020 but gradually returned to baseline by program end (Figure 1). Total antibiotic prescribing declined by 9 prescriptions/100 visits (95% CI: -10 to -8). ARI visits/practice-month declined significantly in March-May 2020, then increased but remained below baseline by program end (Figure 2). ARI-related antibiotic

prescriptions decreased by 15/100 ARI visits by program end (95% CI: -17 to -12). The greatest reduction was in penicillin class prescriptions with a reduction of 7/100 ARI visits by program end (95% CI: -9 to -6).

Figure 1: Monthly visits per practice and antibiotic prescriptions per 100 visits

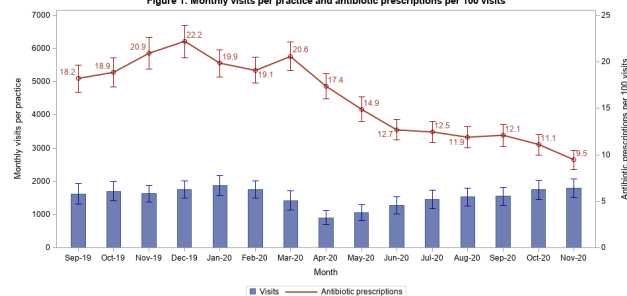
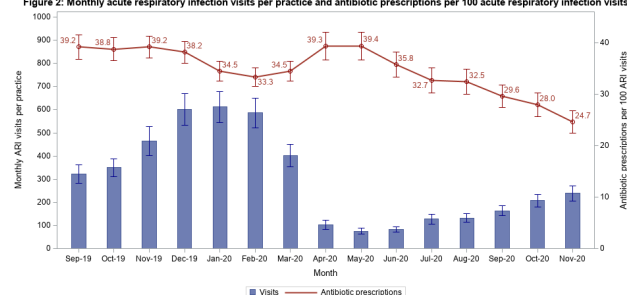


Figure 2: Monthly acute respiratory infection visits per practice and antibiotic prescriptions per 100 acute respiratory infection visits



**Conclusion.** During the COVID-19 pandemic, a national ambulatory AS program was associated with declines in overall and ARI-related antibiotic prescribing.

**Disclosures.** Pranita Tamma, MD, MHS, Nothing to disclose Sara E. Cosgrove, MD, MS, Basilea (Individual(s) Involved: Self); Consultant Jeffrey A. Linder, MD, MPH, FACP, Amgen (Shareholder)Biogen (Shareholder)Eli Lilly (Shareholder)

### 162. The Impact of the COVID-19 Pandemic on Antibiotic Prescribing in Pediatric Primary Care

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CDC Prevention Epicenters Program

**Session:** O-32. Stewardship in Ambulatory Settings

**Background.** With the onset of the coronavirus disease 2019 (COVID-19) pandemic, pediatric primary care delivery changed rapidly. Prior studies have demonstrated a reduction in ambulatory encounters and antibiotic prescriptions with the pandemic onset; however, the durability of these reductions in pediatric primary care in the United States has not been assessed.

**Methods.** We conducted a retrospective cohort study to assess the impact of the COVID-19 pandemic and associated public health measures (e.g. social distancing, masking, school closures, and increased availability of telemedicine) on antibiotic prescribing and encounter volume in 27 pediatric primary care practices, and the duration of these changes. Patients under age 19 with an encounter from January 1, 2018 through December 31, 2020 were included. The primary outcome was monthly antibiotic prescriptions per 1000 patients, in the overall population and a subset of encounters with infectious diagnoses, including respiratory tract infections (RTIs). Interrupted time series (ITS) analysis was performed.

**Results.** There were 60,562 total antibiotic prescriptions from April to December in 2019 and 14,605 antibiotic prescriptions during the same months in 2020, a 76% reduction. The reduction in RTI encounter prescriptions accounted for 91.5% of the overall reduction in prescriptions from 2019 to 2020. Using ITS analysis, there was an immediate decrease from 31.6 to 7.4 prescriptions/1000 patients (predicted means) in April 2020 (-24.2 prescriptions/1000 patients; 95% CI: -31.9, -16.4) (Figures 1 and 2). This was followed by a stable rate of antibiotic prescriptions that remained flat through December 2020. For RTI encounters, a similar pattern was seen, with decrease by 21.8 prescriptions/1000 patients; 95% CI: -29.5, -14.2) (Figures 1 and 2). Encounter volume also decreased immediately, and while overall encounter volume began returning to a pre-pandemic baseline volume toward the end of the study period, RTI encounter volume remained persistently lower through December 2020 (Figure 3).