Figure 2. Percentage of in-person (light blue) and telehealth (dark blue) primary care visits at a large VA medical center accompanied by an antibiotic prescription from March 2018 through November 2021.

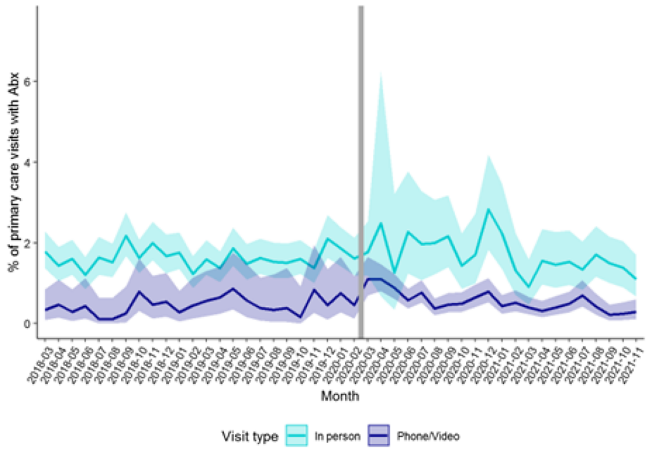
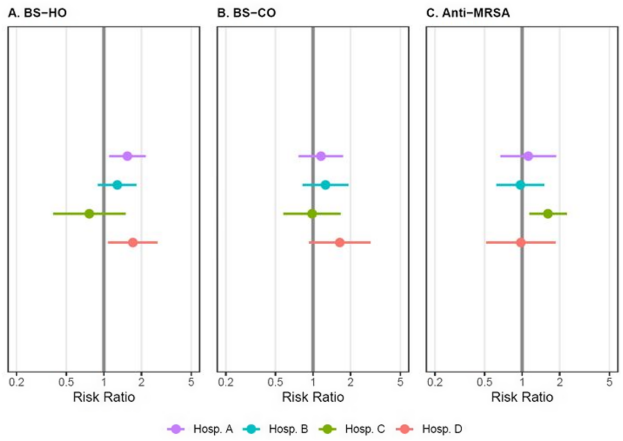


Figure: Risk Ratios (circle) and 95% confidence Intervals (line) between high initial antibiotic usage and subsequent high usage among hospitalists in four facilities in an academic healthcare system, Atlanta, Georgia. (Jan.2020-Jun 2021)



The proportions of visits with an antibiotic prescription were 1.4% (1,212 of 88,565) and 0.8% (798 of 94,396), respectively. When considered by the type of visit, the rates of antibiotics prescribed were consistent during the pre–COVID-19 and COVID-19 periods, with a lower rate for telehealth visits (Fig. 2). In both periods, >50% of antibiotic prescriptions occurred during visits without an associated infectious disease diagnosis. **Conclusions:** Compared to the pre–COVID-19 period, primary care providers at a large VA medical center prescribed fewer antibiotics during the COVID-19 period, and they saw most of their patients via telehealth. These results suggest that some aspects of telehealth may support clinical practices consistent with antibiotic stewardship. The prescription of an antibiotic without an associated diagnostic code also suggests opportunities to improve implementation of antibiotic stewardship principles in primary care settings.

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Presentation Type:
Poster Presentation - Top Poster Award
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Do hospitalists who prescribe high (risk-adjusted) rates of antibiotics do so repeatedly?

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Background: Provider-specific prescribing metrics can be used for benchmarking and feedback to reduce unnecessary antibiotic use; however, metrics must be credible. To improve credibility of a recently described risk-adjusted antibiotic prescribing metric for hospital medicine service (HMS) providers, we assessed whether providers who initially prescribed excess antibiotics continued to prescribe antibiotics excessively. **Methods:** We linked administration and billing data among patients at 4 acute-care hospitals (1,571 beds) to calculate days of therapy (DOT) ordered by individual hospitalists for each of 3 NHSN antibiotic groupings: broad-spectrum hospital onset (BS-HO), broad-spectrum community-onset (BS-CO), or anti-MRSA for each patient day billed from January 2020 to June 2021. To incorporate repeated measures by provider, mixed models adjusted for patient-mix characteristics (eg, % encounters with urinary tract infection, etc) were used to calculate serial, bimonthly, provider-specific, observed-to-expected ratios (OERs). An OER of 1.25 indicates that the prescribing rate observed was 25% higher than predicted, adjusting for patient mix. We then used log binomial generalized estimating equations to assess whether a high prescribing rate (defined as an OER ≥ 1.25) for an individual provider in an earlier bimonthly period was associated with a persistent high rate for that provider in the following period. **Results:** Overall, 975 bimonthly periods were evaluated from 136 hospitalists. Most (58%) contributed data the entire 18-month study period. Median OERs were similar between hospitals: 0.94 (IQR, 0.65–1.28) for BS-HO antibiotic use, 0.99 (IQR, 0.73–1.24) for BS-CO antibiotic use, and 0.95 (IQR, 0.65–1.28) for anti-MRSA antibiotic use. At the individual prescriber level, roughly one-quarter of bimonthly OERs (range varied by group and hospital from 21% to 31%) were categorized as high. At 3 of the 4 hospitals, a provider with a high OER for either BS-HO or BS-CO antibiotic use in any bimonthly period was more likely to have a high OER in the subsequent period (Fig. 1). These observed risk ratios were statistically significant for BS-HO antibiotic use at only 2 hospitals: hospital A risk ratio (RR) was 1.54 (95% CI, 1.10–2.16); hospital B RR was 1.28 (95% CI, 0.90–1.82); hospital C RR was 0.76 (95% CI, 0.39–1.48); and ospital D RR was 1.71 (95% CI, 1.09–2.68). **Conclusions:** Our findings suggest that hospitalists with a higher than expected 2-month period of antibiotic prescribing are likely to continue to have elevated prescribing rates in the following period, particularly for BS-HO antibiotics. These findings increase the credibility of using a 2-month prescribing metric for BS-HO antibiotic stewardship efforts; further work is needed to evaluate utility for other antibiotic groupings.

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Outpatient antibiotic prescribing during the COVID-19 pandemic—United States, January 2019–October 2021

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Background: Improving antibiotic use is a key strategy to combat antimicrobial resistance. Here, we have described national outpatient antibiotic prescribing trends during the COVID-19 pandemic. We compared the monthly numbers of prescriptions in 2020–2021 to those from 2019 to describe the impact of the pandemic and to highlight areas for improvement. **Methods:** We used the IQVIA National Prescription Audit