



# MONTHLY ANTIBIOTIC PRESCRIBING PEER COMPARISON COMBINED WITH IN-PERSON EDUCATION DECREASES ANTIBIOTIC PRESCRIBING FOR ACUTE RESPIRATORY INFECTIONS (ARIs)

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## CONCLUSION

Monthly antibiotic prescribing peer comparison emails in combination with in-person education was associated with a statistically significant 12.5% reduction in the rate of antibiotic prescribing for ARIs (p=0.0019). Education alone does not significantly reduce antibiotic prescribing for ARIs, regardless of the delivery mode.

## OBJECTIVE

The purpose of this quality improvement project was to evaluate the effect of three consecutive interventions on improving antibiotic prescribing for ARIs (i.e., pharyngitis, rhinosinusitis, bronchitis, common cold).

## METHODS

### PROJECT DESIGN

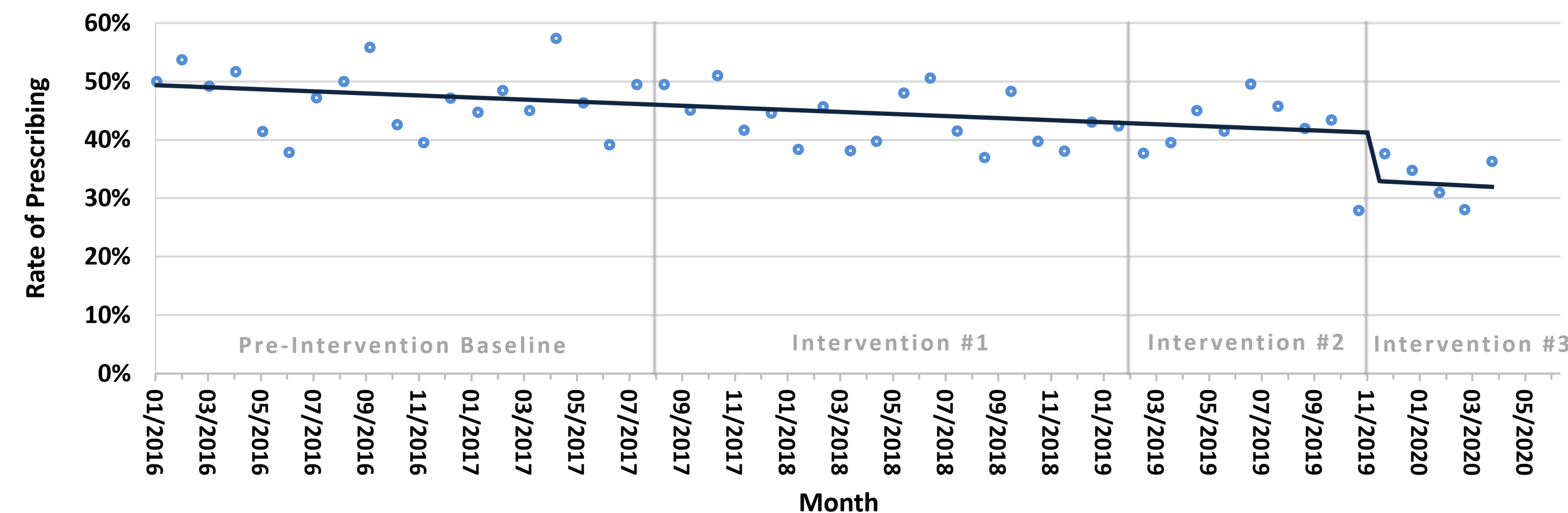
- Pre-post analysis of an antimicrobial stewardship initiative to improve antibiotic prescribing for ARIs in six Veterans Affairs primary care clinics.
- **Primary Outcome:** antibiotic prescribing rate for all classifications of ARIs
- **Secondary Outcomes:** adherence to antibiotic prescribing guidance for pharyngitis and rhinosinusitis
- Descriptive statistics & interrupted time series segmented regression were used to analyze the outcomes

### INTERVENTION PERIODS

- **Pre-Intervention Baseline Period:** January 2016-July 2017
- **Intervention Period 1 (8/2017-1/2019):** education presented once virtually to primary care providers
- **Intervention Period 2 (2/2019-10/2019):** education + prescribing feedback with peer comparison presented once in-person
- **Intervention Period 3 (11/2019-4/2020):** education + prescribing feedback with peer comparison presented once in-person followed by monthly emails of prescribing feedback with peer comparison

## RESULTS

### Rate of Antibiotic Prescribing for Acute Respiratory Infections

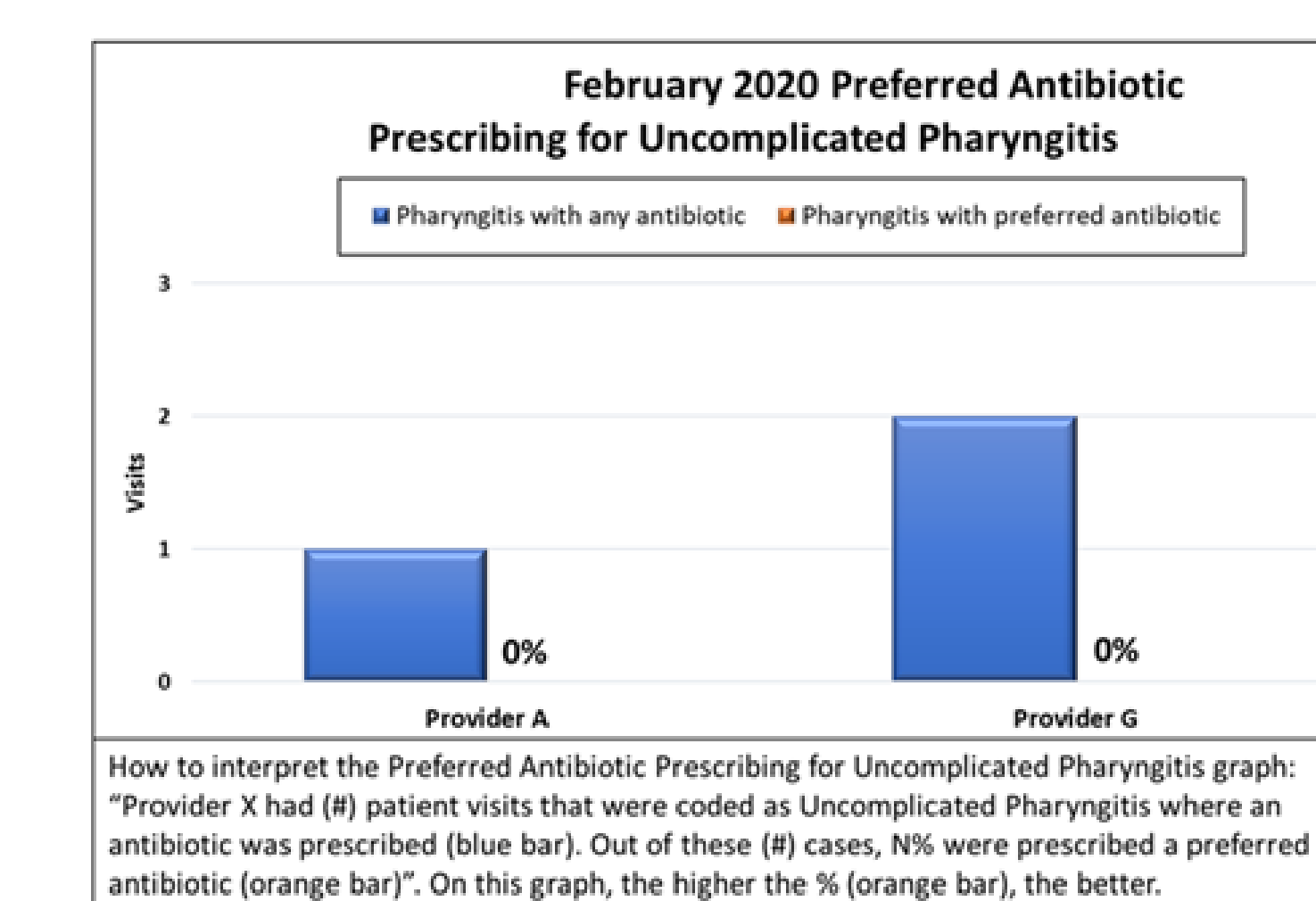
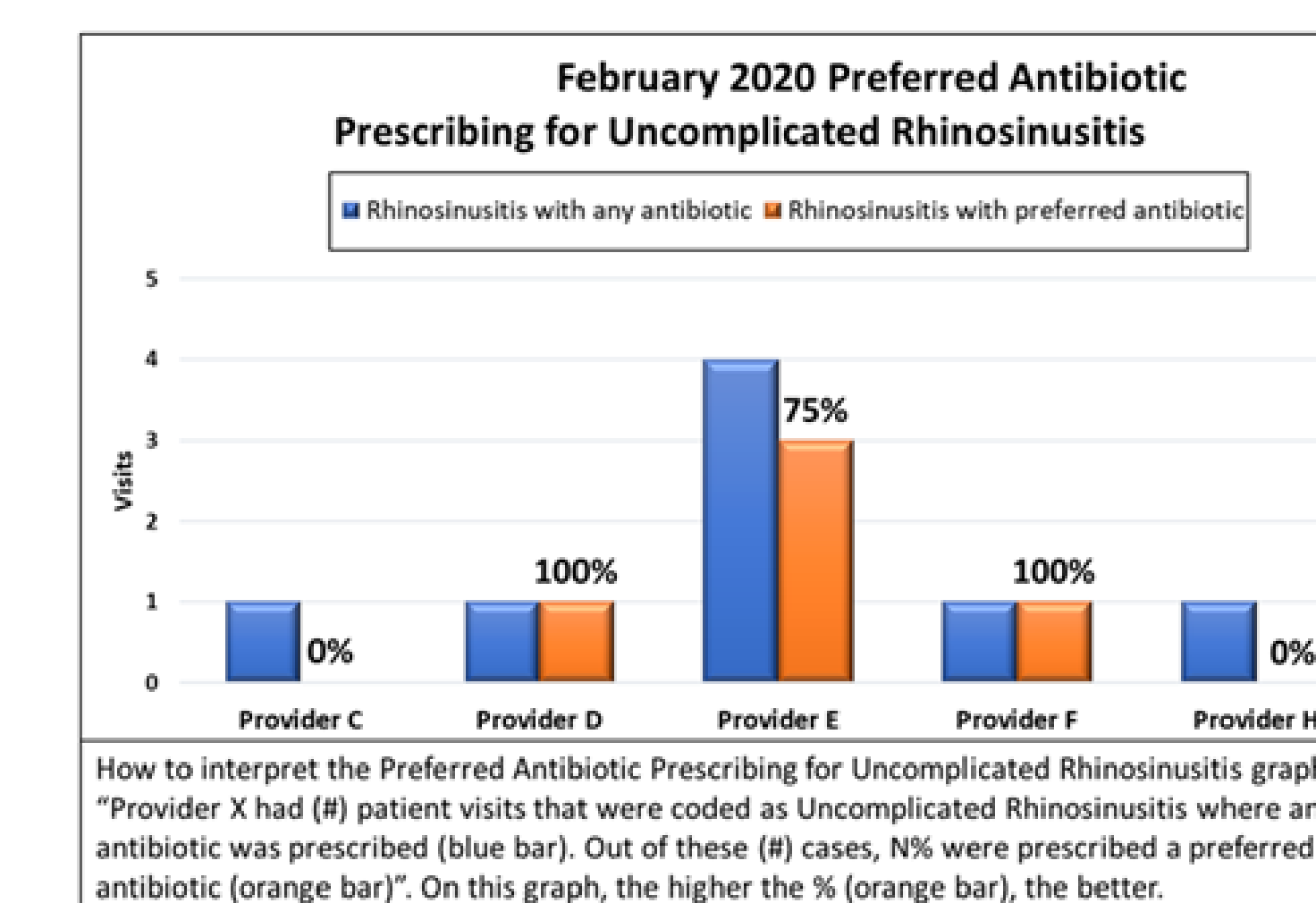
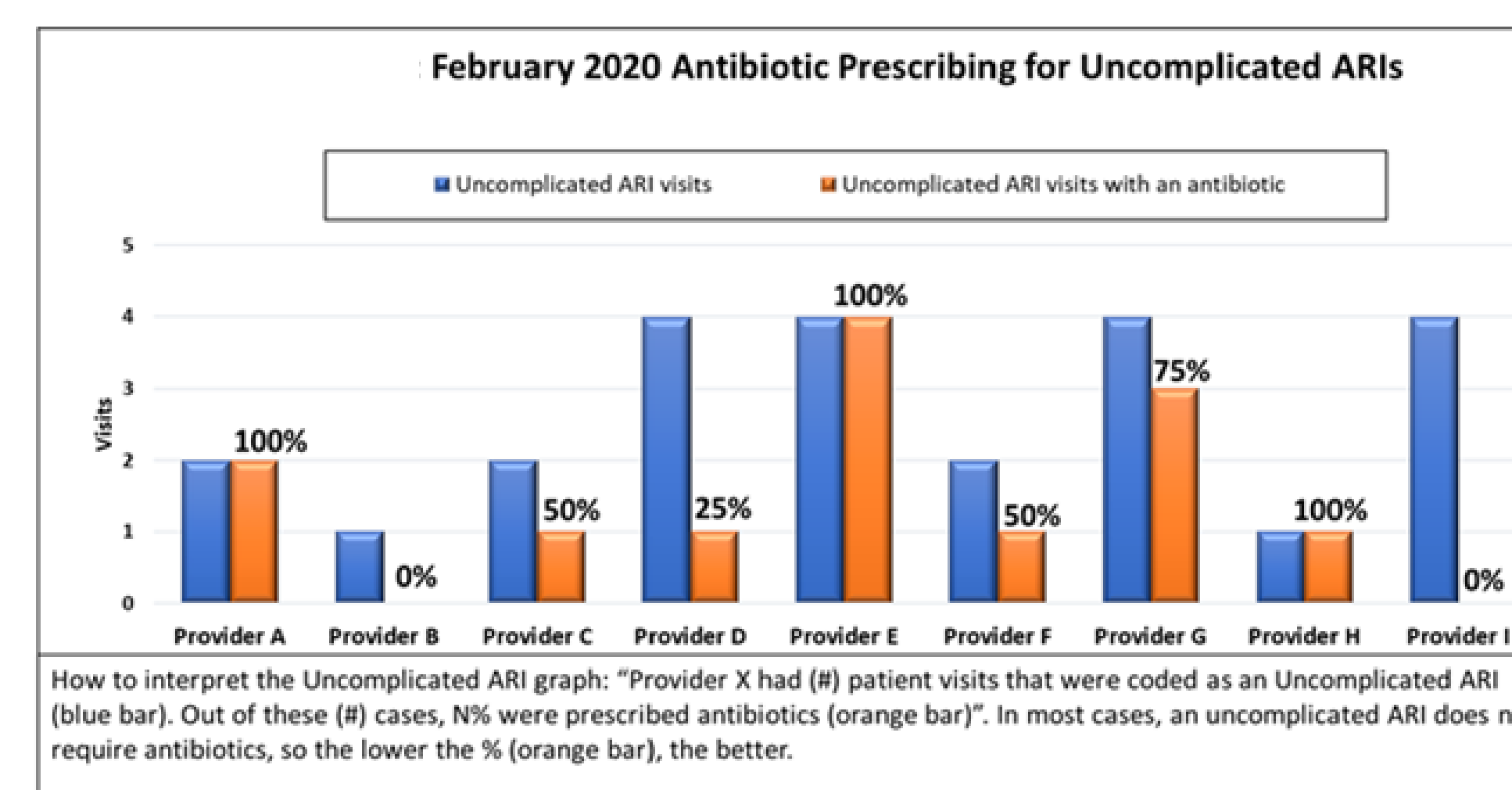


## EXAMPLE PROVIDER FEEDBACK EMAIL

Good Morning,

Antibiotic misuse leads to unnecessary adverse drug effects and antibiotic-resistant infections, which harm patients. As part of an ongoing Antibiotic Stewardship Program initiative we are sharing with you antibiotic use data for Acute Respiratory Infections (ARIs). Most ARIs are self-limited and do not require an antibiotic. **When needed, our goal is to be using a preferred antibiotic for uncomplicated rhinosinusitis and pharyngitis at 80% of visits where an antibiotic is prescribed for one of these indications.** With this said, we keep in mind the limitations/barriers to doing this at each site and appreciate any feedback so we can work on improving them.

The graphs below show data for February 2020. In these graphs you are provider D. This data is provided as a resource for self-evaluation of prescribing practices and is not a formal evaluation of providers. Please let me know if you have any questions or feedback.



## ACKNOWLEDGEMENTS & REFERENCES

Thank you to the Charleston VA Primary Care Providers for working with us to improve antibiotic prescribing practices.

Clegg, H. W., Bean, R. A., Ezzo, S. J., Hoth, A. N., Sheedy, D. J., & Anderson, W. E. (2019). Impact of Education and Peer Comparison on Antibiotic Prescribing for Pediatric Respiratory Tract Infections. *Pediatric Quality and Safety*, 4(4). doi:10.1097/pq9.0000000000000195