

Evaluating the Appropriateness of Antibiotic Prescriptions for Patients With Suspected Uncomplicated UTIs in Primary Care using EMR Data

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Background

- Inappropriate antibiotic prescriptions drive antibiotic resistance
- Most antibiotics are prescribed in primary care
- We don't know if patients are being prescribed appropriate antibiotics in primary care

Purpose

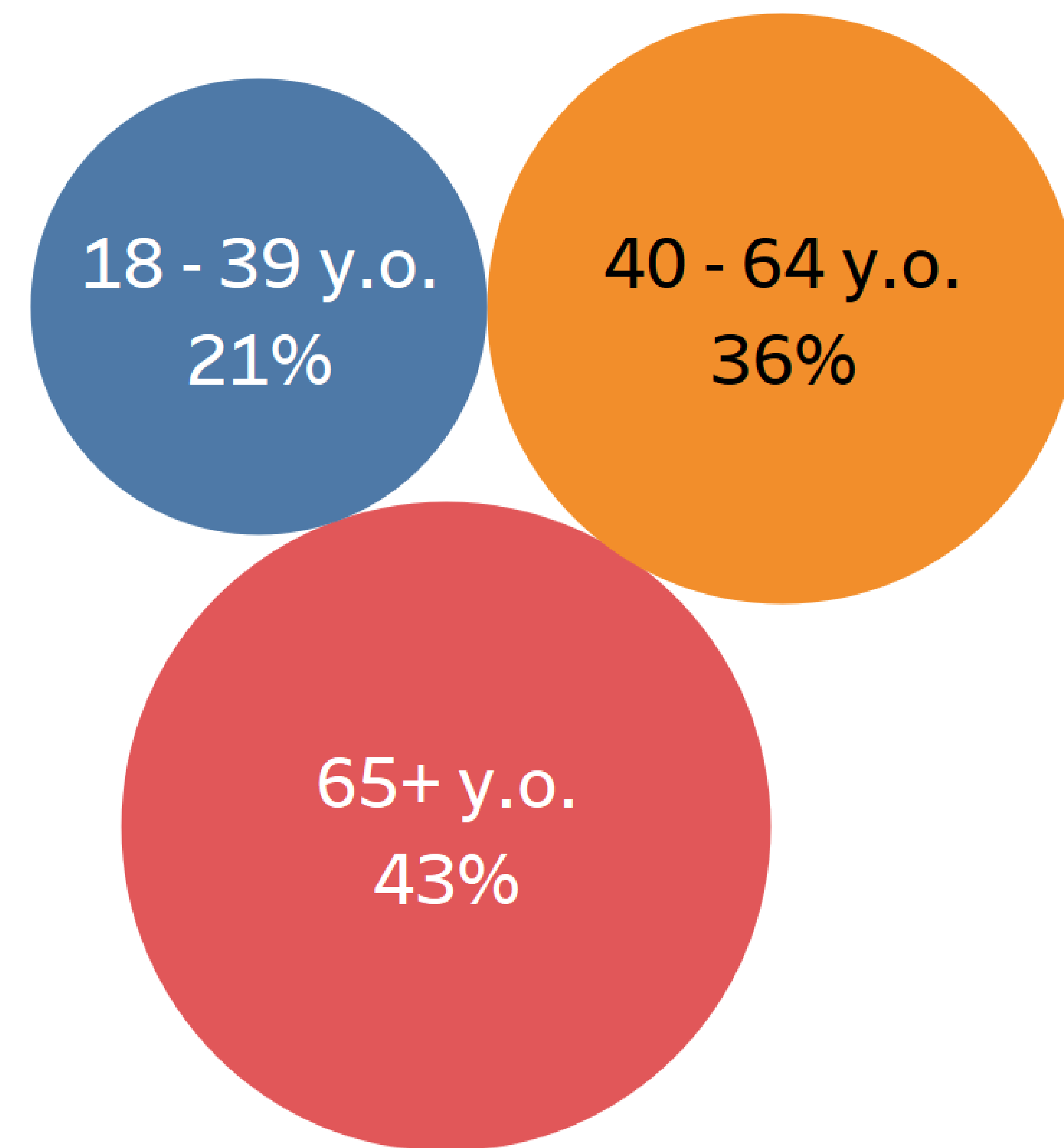
To determine if patients are being prescribed appropriate antibiotics for uncomplicated UTIs in primary care.

Methods

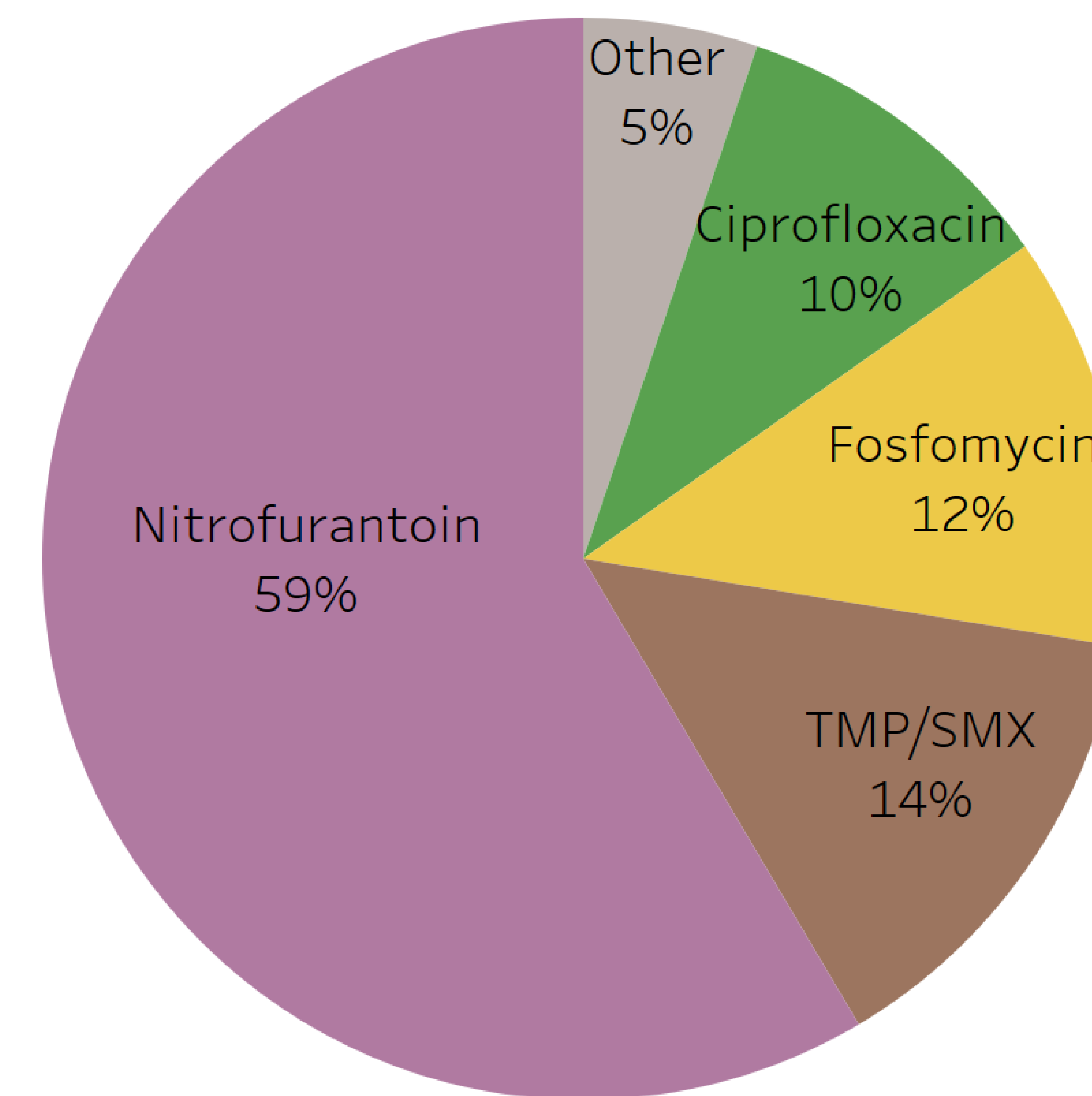
- Selected a cohort of primary care patients from the BC and Eastern Ontario CPCSSN sites with suspected UTIs between January 1, 2017 and January 31, 2019
- Calculated frequency of each antibiotic that was prescribed
- Determined percentage of these prescriptions that were in line with Bugs and Drugs guidelines

Demographics of Patient Cohort

N = 1968 patients with 2468 prescriptions



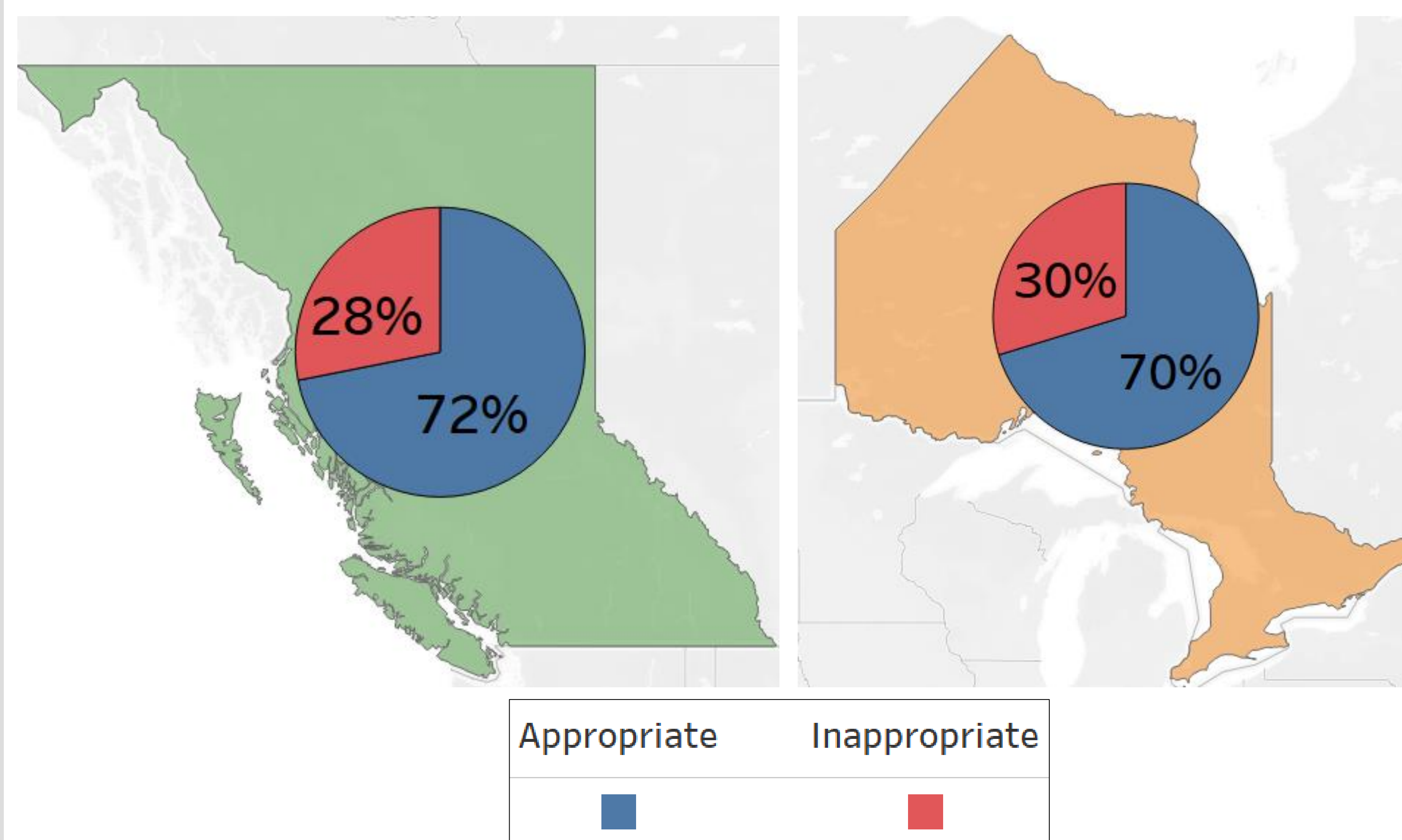
Antibiotic Prescriptions



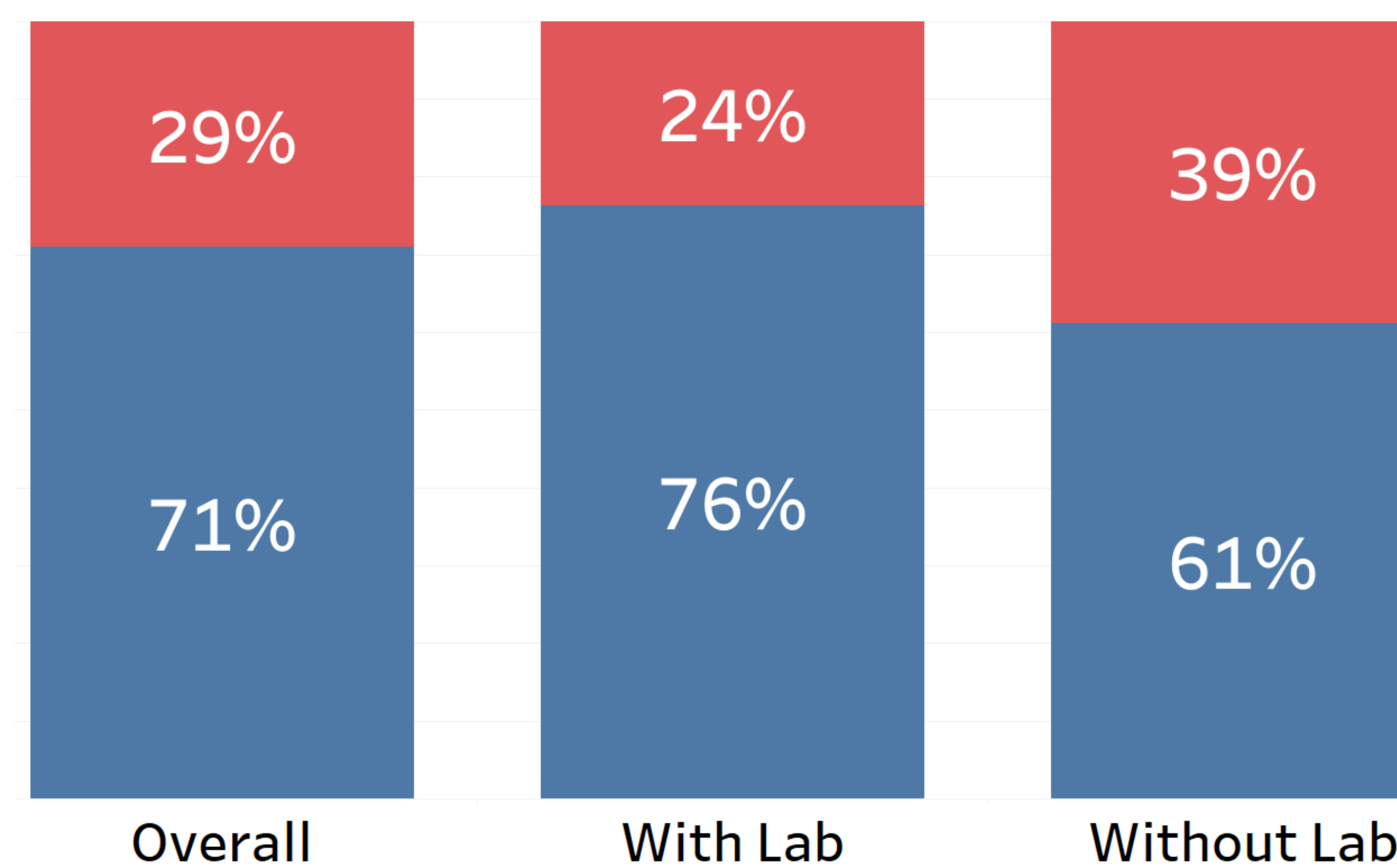
Results

- 1968 patients with 2468 prescriptions were found to have had suspected uncomplicated UTIs during the timeframe.
- Nitrofurantoin was the most prescribed antibiotic (59%)
- 29% of prescriptions did not align with Bugs and Drugs recommendations for treatment
- 39% of empiric prescriptions did not align with Bugs and Drugs recommendations compared to 24% of lab-confirmed prescriptions

Appropriateness of Antibiotics in BC & Eastern Ontario CPCSSN Sites



Appropriateness of Antibiotics by Culture & Sensitivity



Conclusion

Nearly 30% of antibiotic prescriptions for patients with suspected uncomplicated UTIs may have been inappropriate.

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