

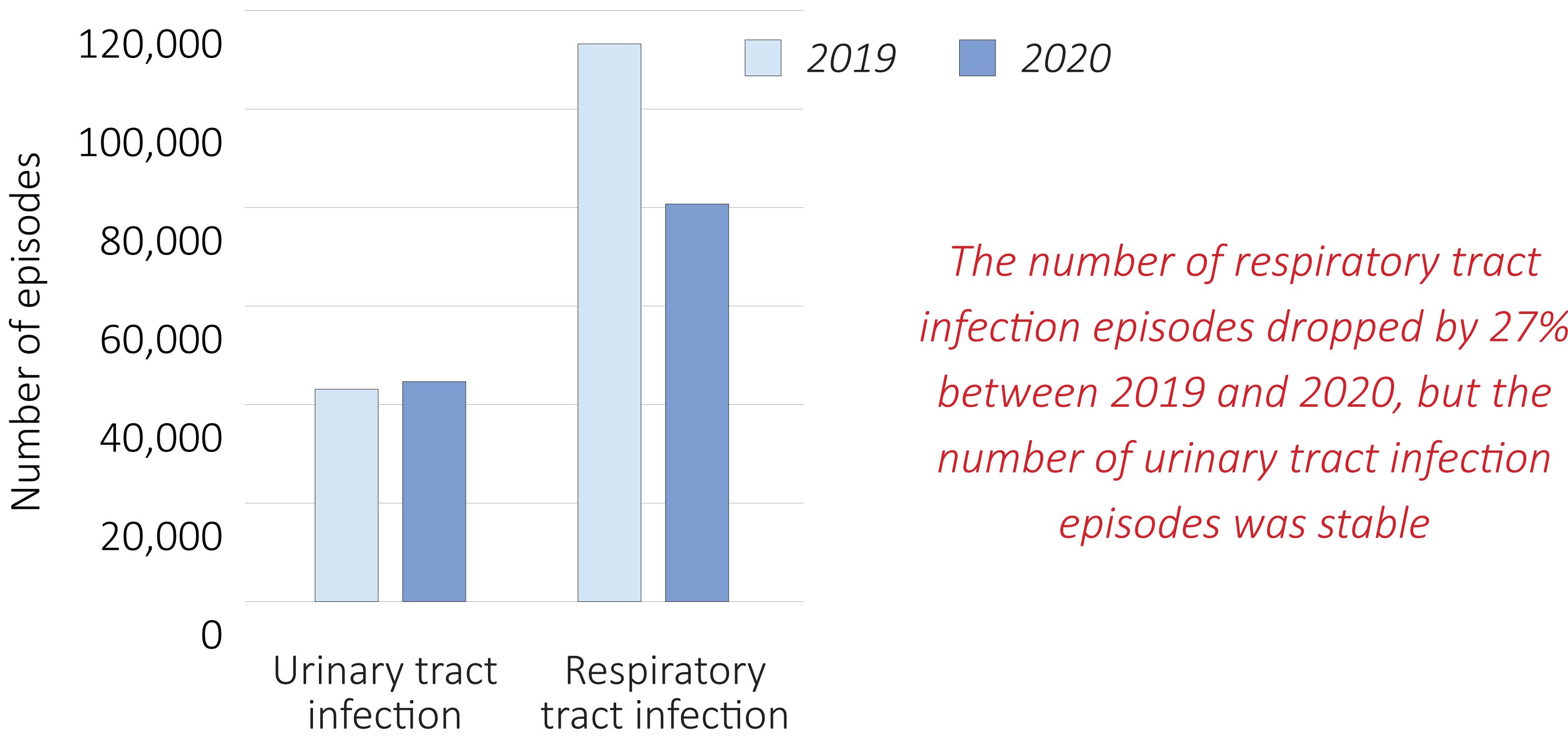
Background

- Respiratory tract infection (RTI) is the leading cause of avoidable antimicrobial use in primary care.
- The purpose of this study was to examine rates of antibiotic prescribing for RTI in primary care during the first year of the pandemic (2020), compared to baseline in 2019.
- We examined urinary tract infection (UTI) prescribing as a tracer condition.

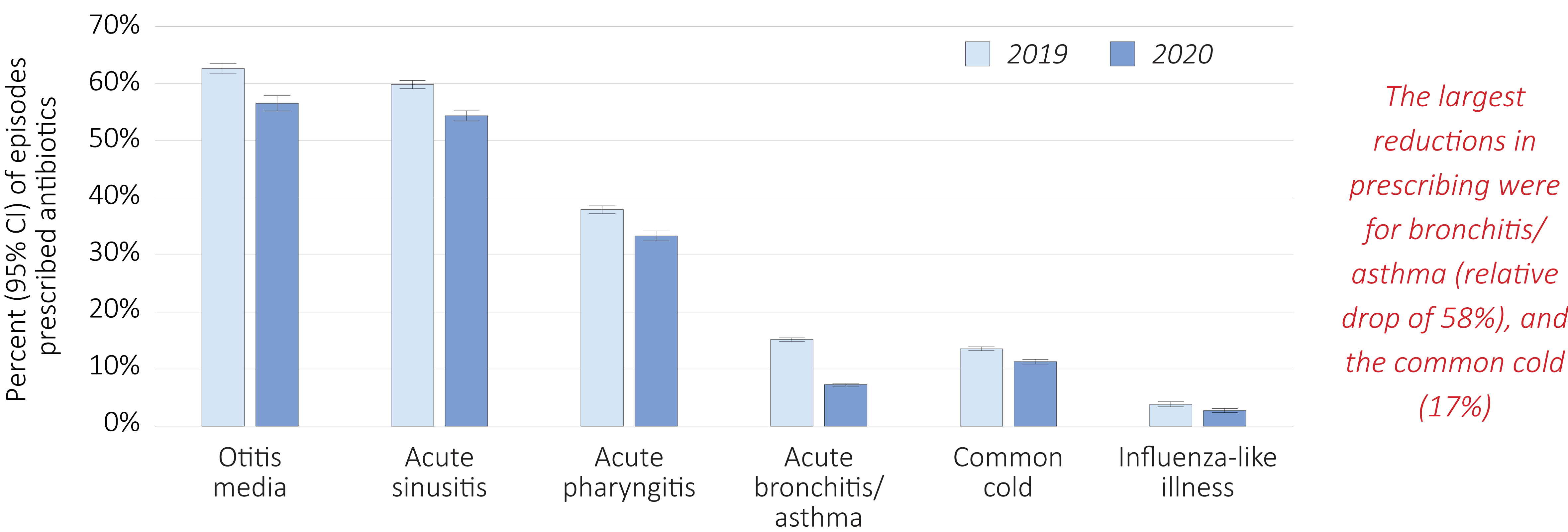
Methods

- Cross sectional design.
- Inclusion: Patients with no missing sex or birth year, with a primary care visit in 2019/2020.
- Data source: Electronic medical record data from pan-Canadian Primary Care Sentinel Surveillance Network (CPCSSN).
- We used validated case definitions to identify patients with RTI (includes: otitis media; acute sinusitis; pharyngitis; bronchitis/asthma; common cold). We also identified influenza-like illness.
- RTI episode: Any visit or series of visits within 30 days period.
- Analysis: Proportion of episodes where antibiotic was prescribed, by syndrome; median prescribing rate per provider.

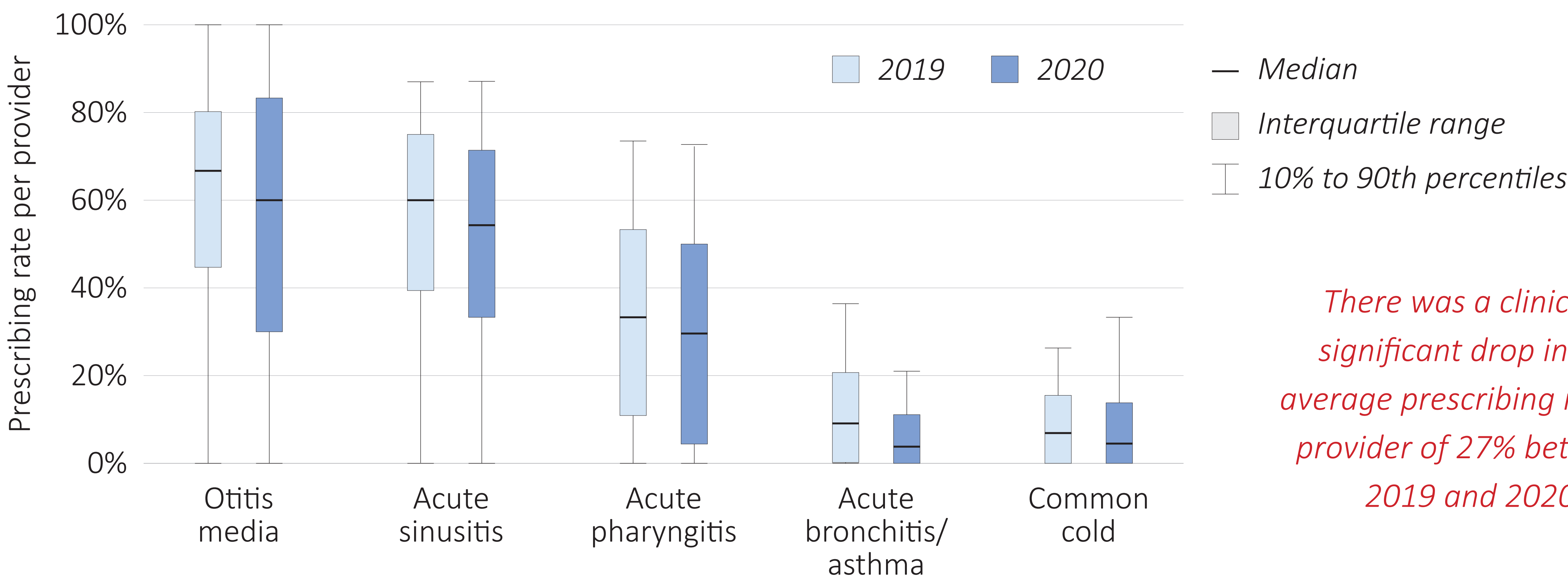
Number of respiratory tract and urinary tract infection episodes in 2019 and 2020



Proportion of respiratory tract infection episodes prescribed antibiotics, by syndrome



Average prescribing rate per provider for respiratory tract infection syndromes



- Inappropriate antibiotic prescriptions based on Choosing Wisely Canada recommendations.
- Results**
- Patients in 2019: 968,524; patients in 2020: 926,395.
 - RTI episodes decreased by 27% between 2019 and 2020.
 - There was a 28.4% reduction in prescribing of antibiotics for RTI or ILI (influenza like illness) between 2019 and 2020.
 - Primary care providers that could be considered high prescribers (top quartile) were prescribing less often in 2020 (Q3=34.9%) than in 2019 (Q3=26.8%).

Conclusions

A significant decrease in antibiotic prescribing for RTI was observed during the first year of the COVID-19 pandemic. Approximately 16,000 fewer patients received an antibiotic prescription in 2020.

CPCSSN can provide pan-Canadian surveillance of antibiotic prescribing practices in primary care that can be used for targeted interventions.

Acknowledgements

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