RESEARCH PAPER

Value in Primary Care: Evidence from the Canadian Primary Care Sentinel Surveillance Network

Valeur des soins primaires : les données probantes du Réseau canadien de surveillance sentinelle en soins primaires

SABRINA T. WONG, RACHAEL MORKEM, AYAT SALMAN, DAVID BARBER AND JEROME A. LEIS

Appendix 1.

TABLE A1. Antibiotics to treat acute respiratory tract infection

Drug name	ATC codes
Penicillin VK	J01CE02
Amoxicillin	J01CA04
Amoxicillin/Clavulanic acid	J01CR02
Cefaclor	J01DC04
Cefuroxime	J01DC02
Cefuroxime axetil	J01DC02
Cefixime	J01DD08
Clindamycin	J01FF01
Moxifloxacin	J01MA14
Levofloxacin	J01MA12
Azithromycin	J01FA10
Clarithromycin	J01FA09
Cefalexin	J01DB01
Cefadroxil	J01DB05
Cefoxitin	J01DC01
Cefotetan	J01DC05
Cefprozil	J01DC10
Trimethoprim	J01EA01
Sulfamethoxazole	J01EC01
Sulfadiazine	J01EC02
Sulfamethoxazole and Trimethoprim	J01EE01
Sulfadiazine and Trimethoprim	J01EE02

TABLE A2. Antibiotics to treat urinary tract infection

Drug name	ATC codes
Norfloxacin	J01MA06
Ciprofloxacin	J01MA02
Levofloxacin	J01MA12
Nitrofurantoin	J01XE01
Nitrofurantoin, combinations	J01XE51
Cefpodoxime	J01DD13
Cefixime	J01DD08
Cefalexin	J01DB01
Amoxicillin	J01CA04
Amoxicillin/Clavulanic acid	J01CR02
Fosfomycin	J01XX01
Sulfamethoxazole and Trimethoprim	J01EE01
Trimethoprim	J01EA01
Cefprozil	J01DC10
Cefuroxime	J01DC02

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Appendix 2.

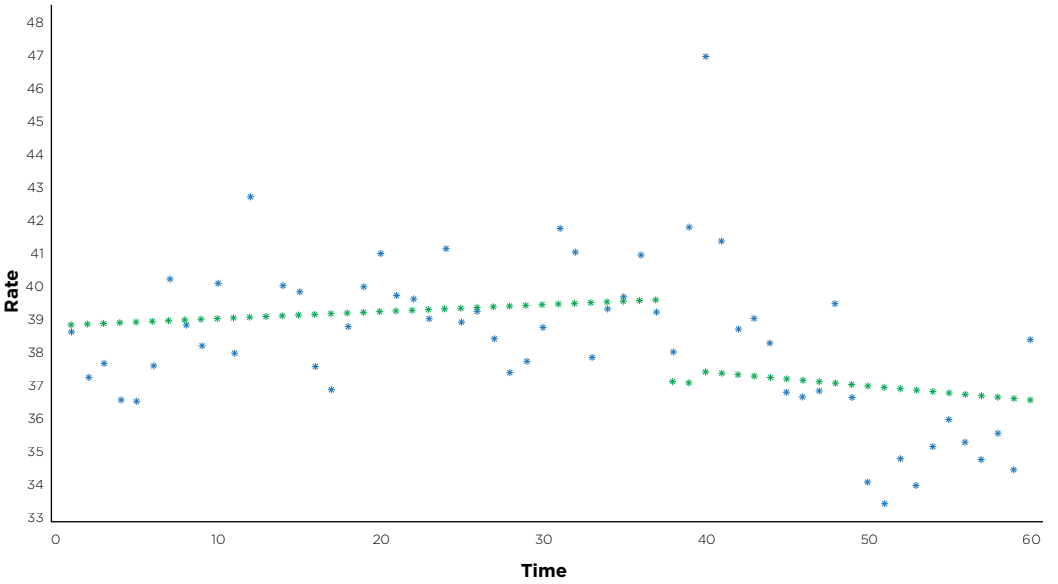
The following regression model was applied:

$$Yt = \beta o + \beta 1(\text{Time}t) + \beta 2(\text{interruption}t) + \beta 3(\text{Time after intervention}t) + et$$

- Yt is the outcome at time "t";
- "time" indicates the number of months from the start of the series;
- "intervention" is a dummy variable taking the values of 0 for pre-interruption and 1 for post-interruption segments;
- "time after interruption" is taking values 0 in the pre-interruption and counts the months in the post-interruption segment at time "t";
- βo estimates the base level of the outcome at the beginning of the series (at time "t" = 0);
- $\beta 1$ estimates the change in outcome per month in the pre-interruption segment;
- $\beta 2$ estimates the change in level in the post-interruption segment; and
- $\beta 3$ estimates the change in trend in the post-interruption segment; and
- et estimates the error.

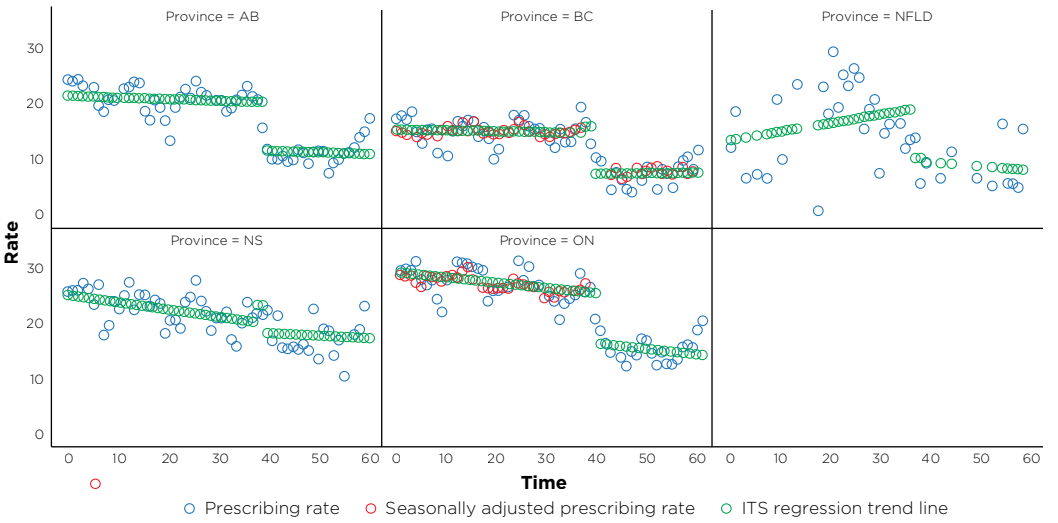
The lag was set to 5, which specifies five data points to make up four intervals or quarters in our dataset, to account for seasonality.

FIGURE A1. ITS prescribing rates for UTI



ITS = interrupted time series; UTI = urinary tract infection.
Blue circles signify the observed monthly prescribing rates over time; red circles signify the observed monthly prescribing rates with variance adjusted for seasonality; green circles signify the regression line.

FIGURE A2. ITS regression of antibiotic prescribing rates for RTI, by provincial network



AB = Alberta; BC = British Columbia; ITS = interrupted time series; NFLD = Newfoundland and Labrador; NS = Nova Scotia; ON = Ontario; RTI = respiratory tract infection.
Blue circles signify the observed monthly prescribing rates over time; red circles signify the observed monthly prescribing rates with variance adjusted for seasonality; green circles signify the regression line.

TABLE A3. Linear regression of overall RTI antibiotic prescribing post the COVID-19 pandemic, by visit type

Model 2: Multiple linear regression				
Intercept $ß_0$	7.34515	3.77648	1.94	0.0592
Time	0.15398	0.07498	2.05	0.0469
Encounter type	3.10146	5.34075	0.58	0.5649
Encounter type × time	-0.06401	0.10604	-0.60	0.5497

RTI = respiratory tract infection.