APPENDIX 1. Background information concerning nationwide trends in dispensing of sodium glucose cotransporter 2 inhibitors.

Prescription Drug Coverage in Canada

Among Canadian adults who are currently working, approximately two-thirds have private drug coverage that is either provided through employment or paid for out-of-pocket. There are also government assistance programs, which vary by province. In general, most adults over 65 years of age have essentially no out-of-pocket costs for prescription medications on the provincial formulary, apart from a small copayment. For example, in Ontario, Canada's most populous province, adults over 65 years of age pay approximately $10 to fill their prescription at each filling (typically every 3 months). Adults younger than 65 generally have to pay out-of-pocket or through private insurance, which is most often provided through the employer. For adults younger than 65 who are of low socioeconomic status or who have disabilities, there are essentially no out-of-pocket costs for prescription medications on the Ontario formulary.

Additional Details Related to Statistical Modelling

We fit an autoregressive integrated moving average (ARIMA) model to the monthly number of tablets dispensed for each sodium glucose cotransporter 2 (SGLT2) inhibitor. Model parameters were selected using the autocorrelation function (ACF), partial autocorrelation function (PACF), and inverse autocorrelation function (IACF) correlograms, and optimal model fit was confirmed by examining the ACF, PACF, and IACF plots; the white noise probability plots and Ljung-Box χ^2 test for white noise; the R^2 measure of fit; and model forecasts. We included a ramp intervention function in the model at the publication dates of interest to estimate the impact on SGLT2 dispensing patterns.

TABLE A1. Results of the ARIMA Model

Drug	ARIMA Model	R^2	September 2015 Ramp Function		June 2017 Ramp Function		November 2018 Ramp Function	
			Estimate	p Value	Estimate	p Value	Estimate	p Value
Canagliflozin (units)	(11,1,0) intercept	0.989	−113 142	< 0.001	−76 447	< 0.001	47 468	0.28
Dapagliflozin (units)	(12,1,0) intercept	0.99	−42 968	0.033	−4 853	0.71	−18 991	0.52
Empagliflozin (units)	(4,1,0) intercept	0.996	NA	NA	75 338	< 0.001	−22 344	0.41

ARIMA = autoregressive integrated moving average, NA = not applicable.

Appendix to: Fralick M, Martins D, Tadrous M, Gomes T. Nationwide trends in dispensing of sodium glucose cotransporter 2 inhibitors. *Can J Hosp Pharm*. 2022;75(2):104-7.