Appendix 3: Predictors of inappropriate antibiotic prescribing among 726 primary care physicians who wrote the Medical Council of Canada Qualifying Examination between 1990 and 1993

Predictor	Likely viral respiratory infection		Likely bacterial infection	
	No. of episodes n = 104 230	Antibiotic prescription; Adjusted* RR (95% CI)	No. of episodes n = 65 304	Second- or third-line antibiotic prescription; Adjusted* RR (95% CI)
MCCQE infectious disease subscore	104 230	1.06 (0.99-1.13)	65 304	1.00 (1.00-1.00) non-linear, non-monotonic
Undergraduate medical school				
Montréal†	36 095	1.00	30 586	1.00
Laval	29 224	1.03 (0.88-1.20)	18 964	1.12 (0.99-1.28)
McGill	4 281	1.01 (0.71-1.43)	3 089	0.74 (0.60-0.92)
Sherbrooke	21 626	1.00 (0.83-1.20)	14 021	1.06 (0.92-1.23)
Other Canadian or US school	3 135	1.12 (0.85-1.47)	3 355	0.79 (0.61-1.01)
International school	9 869	1.78 (1.30-2.44)	7 582	0.87 (0.69-1.09)
Year in practice (per year)		1.04 (1.02-1.05)		1.11 (1.09-1.13)
No. of patients per day, mean‡				
1-21.1†	25 567	1.00	19 049	1.00
21.2-27.0	26 385	1.07 (0.95-1.20)	19 284	1.07 (0.96-1.19)
27.1-33.9	25 872	1.07 (0.92-1.25)	19 515	1.17 (1.03-1.32)
34.0-77.5	26 406	1.27 (1.09-1.48)	19 749	1.20 (1.06-1.37)

Note: RR = risk ratio, CI = confidence interval.
*Adjusted for physician sex, infection diagnosis, patient sex, patient age, number of primary care physicians seen, number of visits to primary care physicians in the year before the episode, patient income, patient net educational level, patient geographic area of residence and type of primary care visit setting.
†reference group.
‡Daily practice volume is the mean number of patients seen per physician workday in the year the event occurred; categories correspond to quarters.