

**Appendix 2 (as supplied by the authors): Regression results for predictors of emergency department (ED) visits, by visit acuity\***

Covariate	High urgency ED visits					Low urgency ED visits				
	ED visits	Person-years	ED visits per 100 person-years (95% CI)		Adjusted rate ratios (95% CI)	ED visits	Person-years	ED visits per 100 person-years patients (95% CI)		Adjusted rate ratios (95% CI)
HIV status										
Non-HIV	11465	57672.8	19.9	(19.1, 20.7)	1.00	6465	57672.8	11.2	(10.5, 11.9)	1.00
HIV	6444	14370	44.8	(42.4, 47.5)	1.61 (1.53, 1.69)	3198	14370.0	22.3	(20.6, 24.0)	1.55 (1.45, 1.65)
Income quintile										
5 (highest)	2565	13224.6	19.4	(18.1, 20.7)	1.00	1409	13224.6	10.7	(9.8, 11.6)	1.00
4	2464	12101.2	20.4	(19.1, 21.7)	1.03 (0.95, 1.11)	1461	12101.2	12.1	(11.1, 13.1)	1.12 (1.01, 1.23)
3	3178	12798.6	24.8	(23.1, 26.7)	1.19 (1.11, 1.28)	1793	12798.6	14.0	(12.7, 15.4)	1.26 (1.15, 1.38)
2	3853	15274.5	25.2	(23.7, 26.8)	1.22 (1.13, 1.31)	2111	15274.5	13.8	(12.7, 15.1)	1.27 (1.16, 1.39)
1 (lowest)	5679	18015.8	31.5	(29.1, 34.1)	1.38 (1.29, 1.48)	2783	18015.8	15.4	(14, 17.1)	1.31 (1.18, 1.43)
Rural residence										
Urban residence	16924	68225.9	24.8	(23.9, 25.8)	1.00	1377	3504.2	39.3	(34.6, 44.6)	1.00
Rural residence	933	3504.15	26.6	(24.2, 29.3)	1.13 (1.01, 1.25)	40	312.8	12.8	(4.4, 37.0)	2.85 (2.54, 3.19)
Primary care visits (past year)										
0 visits	2604	18544.3	14.0	(13.0, 15.2)	1.00	1697	18544.3	9.2	(8.4, 10.0)	1.00
1 to 2 visits	3595	19538.4	18.4	(17.2, 19.7)	1.30 (1.22, 1.39)	2149	19538.4	11.0	(10.1, 11.9)	1.22 (1.12, 1.32)
3 or more visits	11710	33960.1	34.5	(33.0, 36.0)	1.51 (1.42, 1.61)	5817	33960.1	17.1	(16.0, 18.3)	1.38 (1.28, 1.49)
Aggregated diagnosis groups										
0 to 5	9973	60123.7	16.6	(16.0, 17.2)	1.00	6246	60123.7	10.4	(9.8, 11.0)	1.00
6 to 9	5145	9979.93	51.6	(48.5, 54.8)	2.54 (2.39, 2.69)	2257	9979.9	22.6	(20.6, 24.8)	1.84 (1.71, 1.99)
10 or more	2791	1939.23	144.0	(129.9, 159.4)	6.98 (6.30, 7.74)	1160	1939.2	59.8	(51.4, 69.6)	4.62 (4.06, 5.26)

\*Categorized using Canadian Triage And Acuity Scale (CTAS); low urgency were visits triaged as CTAS 4 (less urgent) or CTAS 5 (non-urgent), whereas high urgency visits were visits triaged as CTAS 1 (resuscitation required), CTAS 2 (emergent care required) or CTAS 3 (urgent care required)