

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)