

Appendix 4 (as supplied by the authors): Baseline patient and network characteristics as of April 1, 2009 stratified by rurality and primary care physician supply for subset of study population used to assess relationship between primary care physician supply and evidence-based testing (N = 610,441)

a) Network characteristics

Characteristics	URBAN Primary care physician supply			NON-URBAN Primary care physician supply		
	Low (N=184,505)	Medium (N=194,816)	High (N=146,283)	Low (N=11,840)	Medium (N=14,458)	High (N=58,539)
Network characteristics						
Primary care physician FTE per 100,000						
Median (IQR)	63.00 (3.00)	66.79 (3.12)	72.05 (4.47)	61.04 (2.82)	68.89 (3.46)	78.60 (8.36)
Range	59.0-64.0	64.2-70.3	70.4-82.4	60.0-63.9	64.6-69.3	71.5-92.5
Primary care physician loyalty						
Median (IQR)	78.02 (3.59)	81.48 (13.20)	80.56 (12.30)	86.78 (4.06)	88.42 (2.91)	91.00 (6.71)
Range	71.8-95.9	71.5-95.6	68.6-90.7	83.4-90.8	79.6-89.0	81.3-94.7
Endocrinologist FTE per 100,000						
Median (IQR)	0.93 (0.76)	1.28 (0.90)	1.92 (3.32)	0.00 (0.99)	0.00 (0.00)	0.00 (1.26)
Range	0.0-2.9	0.0-5.2	0.0-6.5	0.0-1.0	0.0-0.0	0.0-1.3
General internal medicine FTE per 100,000						
Median (IQR)	4.56 (3.82)	6.76 (5.11)	6.17 (10.48)	11.09 (3.00)	6.67 (2.86)	5.38 (2.27)
Range	2.8-25.8	2.7-18.0	2.4-24.7	8.1-12.2	4.7-11.2	3.1-7.9
Cardiologist FTE per 100,000						
Median (IQR)	3.79 (3.29)	3.07 (1.20)	4.61 (11.09)	0.00 (0.00)	2.03 (2.03)	3.31 (3.26)
Range	1.3-8.6	1.3-8.0	2.1-20.4	0.0-0.0	0.0-4.8	0.0-8.1
Average number of ophthalmologists per 100,000						
Median (IQR)	2.27 (2.39)	2.22 (4.41)	3.62 (4.13)	1.92 (1.61)	1.71 (1.82)	2.69 (1.33)
Range	0.0-5.0	0.0-9.6	1.1-13.0	1.4-3.0	0.0-3.0	0.0-8.7
Average number of						

optometrists per 100,000						
Median (IQR)	12.40 (3.59)	15.50 (2.11)	14.55 (8.46)	16.35 (2.50)	16.04 (1.11)	16.89 (7.88)
Range	7.8-21.2	2.0-27.4	2.5-20.0	13.9-17.2	14.1-25.0	9.9-21.8
Average number of hospital beds per 100,000						
Median (IQR)	0.89 (0.32)	1.10 (0.65)	1.84 (1.10)	1.46 (0.25)	1.78 (0.41)	1.39 (0.66)
Range	0.6-2.4	0.7-2.2	0.9-2.8	1.2-1.7	0.9-2.0	1.2-2.6

FTE = Full Time Equivalent; IQR=Inter-quartile range

b) Physician characteristics

Characteristics	URBAN Primary care physician supply			NON-URBAN Primary care physician supply		
	Low (N=184,505)	Medium (N=194,816)	High (N=146,283)	Low (N=11,840)	Medium (N=14,458)	High (N=58,539)
	Patient age (years)					
40-65	108,140 (58.6%)	109,080 (56.0%)	79,805 (54.6%)	6,049 (51.1%)	7,446 (51.5%)	30,700 (52.4%)
66-85	72,163 (39.1%)	80,076 (41.1%)	61,998 (42.4%)	5,417 (45.8%)	6,545 (45.3%)	26,081 (44.6%)
> 85	4,202 (2.3%)	5,660 (2.9%)	4,480 (3.1%)	374 (3.2%)	467 (3.2%)	1,758 (3.0%)
Male	96,932 (52.5%)	101,806 (52.3%)	75,918 (51.9%)	6,220 (52.5%)	7,837 (54.2%)	31,436 (53.7%)
Income quintile						
1 (lowest)	40,891 (22.2%)	41,224 (21.2%)	31,559 (21.6%)	2,689 (22.7%)	2,738 (18.9%)	11,348 (19.4%)
2	42,299 (22.9%)	41,880 (21.5%)	31,608 (21.6%)	2,363 (20.0%)	2,969 (20.5%)	12,359 (21.1%)
3	39,386 (21.3%)	40,555 (20.8%)	26,036 (17.8%)	2,401 (20.3%)	3,202 (22.1%)	11,665 (19.9%)
4	35,815 (19.4%)	37,153 (19.1%)	27,389 (18.7%)	2,543 (21.5%)	3,056 (21.1%)	12,873 (22.0%)
5 (highest)	25,675 (13.9%)	32,975 (16.9%)	28,950 (19.8%)	1,776 (15.0%)	2,458 (17.0%)	10,018 (17.1%)
Missing	439 (0.2%)	1,029 (0.5%)	741 (0.5%)	68 (0.6%)	35 (0.2%)	276 (0.5%)
Recent OHIP registrant	10,144 (5.5%)	7,622 (3.9%)	3,529 (2.4%)	91 (0.8%)	112 (0.8%)	531 (0.9%)
Diabetes duration (years)						
2-3	38,654 (21.0%)	42,389 (21.8%)	29,996 (20.5%)	2,224 (18.8%)	2,747 (19.0%)	11,660 (19.9%)
4-9	77,000 (41.7%)	80,349 (41.2%)	62,045 (42.4%)	4,767 (40.3%)	6,065 (41.9%)	24,187 (41.3%)
10-14	37,900 (20.5%)	39,855 (20.5%)	29,468 (20.1%)	2,537 (21.4%)	2,999 (20.7%)	12,369 (21.1%)
15+	30,951 (16.8%)	32,223 (16.5%)	24,774 (16.9%)	2,312 (19.5%)	2,647 (18.3%)	10,323 (17.6%)
Mental health diagnosis						
None	135,943 (73.7%)	140,048 (71.9%)	104,723 (71.6%)	9,204 (77.7%)	11,253 (77.8%)	44,924 (76.7%)

<i>Non-psychotic</i>	46,363 (25.1%)	51,935 (26.7%)	39,157 (26.8%)	2,427 (20.5%)	2,973 (20.6%)	12,695 (21.7%)
<i>Psychotic</i>	2,199 (1.2%)	2,833 (1.5%)	2,403 (1.6%)	209 (1.8%)	232 (1.6%)	920 (1.6%)
Number of ADGs ^a						
0	1,512 (0.8%)	1,578 (0.8%)	1,115 (0.8%)	75 (0.6%)	115 (0.8%)	501 (0.9%)
1	4,937 (2.7%)	6,273 (3.2%)	4,741 (3.2%)	519 (4.4%)	579 (4.0%)	2,434 (4.2%)
2-5	63,798 (34.6%)	70,424 (36.1%)	52,375 (35.8%)	4,547 (38.4%)	5,631 (38.9%)	23,282 (39.8%)
6-10	85,814 (46.5%)	86,809 (44.6%)	64,818 (44.3%)	5,102 (43.1%)	6,128 (42.4%)	24,861 (42.5%)
11+	28,444 (15.4%)	29,732 (15.3%)	23,234 (15.9%)	1,597 (13.5%)	2,005 (13.9%)	7,461 (12.7%)
Resource Utilization Band ^b						
0	1,512 (0.8%)	1,578 (0.8%)	1,115 (0.8%)	75 (0.6%)	115 (0.8%)	501 (0.9%)
1	729 (0.4%)	900 (0.5%)	624 (0.4%)	49 (0.4%)	64 (0.4%)	230 (0.4%)
2	12,349 (6.7%)	14,549 (7.5%)	10,682 (7.3%)	1,016 (8.6%)	1,250 (8.6%)	4,777 (8.2%)
3	111,823 (60.6%)	113,766 (58.4%)	84,488 (57.8%)	6,538 (55.2%)	8,067 (55.8%)	33,037 (56.4%)
4	38,521 (20.9%)	40,627 (20.9%)	31,169 (21.3%)	2,447 (20.7%)	2,975 (20.6%)	12,075 (20.6%)
5	19,571 (10.6%)	23,396 (12.0%)	18,205 (12.4%)	1,715 (14.5%)	1,987 (13.7%)	7,919 (13.5%)

OHIP = Ontario Health Insurance Plan; ADGs = Adjusted Diagnosis Groups; RUB = Resources Utilization Band

a – Number of Adjusted Diagnosis Groups (ADGs) are a general measure of comorbidity generated by the Johns Hopkins ACG Case-Mix System. A higher number of ADG's represents higher comorbidity.

b – The Resource Utilization Band is a measure of health care use generate by the Johns Hopkins Adjusted Clinical Group Case-Mix System. A higher number represents greater health care use.