

**Table S1.** Covariates obtained through data linkage, their descriptions, and sources

Variable	Description	Scale	Source
<i>Income quintile</i>	A measure of socio-economic status (SES)	1 = least affluent 5 = most affluent	Statistics Canada Postal Code Conversion File <sup>1</sup>
<i>Resource Utilization Band (RUB) score</i>	A ranking system of a person's overall morbidity, taking into account all diagnoses ascribed to them during medical visits and hospitalizations in the year before their index event	0=non-user 1=healthy user 2=low morbidity 3=moderate morbidity 4=high morbidity 5=very high morbidity	Johns Hopkins Adjusted Clinical Group® Case Mix System, Version 9.0
<i>Rurality Index for Ontario (RIO) score</i>	Classifies the degree of rurality of each patient's community taking into account community population, population density, and time to travel to basic and advanced health care referral centres	0=most urban 100=most rural	Ontario Medical Association and Ministry of Health and Long Term Care <sup>2</sup>
<i>History of acute myocardial infarction (AMI)</i>	Whether or not the patient had ever been admitted to hospital for ICD-9 code '410' or ICD-10 codes 'I21' or 'I22'	n/a	Canadian Institutes of Health Information Discharge Abstract Database (CIHI-DAD) <sup>3</sup>
<i>History of asthma</i>	Whether or not the patient had been registered as a prevalent case	n/a	ICES-derived ASTHMA database <sup>4</sup>
<i>History of recent cancer</i>	Whether or not the patient had been registered as an incident case in the 10 years prior to their index hospitalization	n/a	Ontario Cancer Registry (OCR) <sup>5</sup>
<i>Diagnosis of chronic obstructive pulmonary</i>	Whether or not the patient had been registered as a prevalent case	n/a	ICES-derived COPD database <sup>4</sup>

<i>disease (COPD)</i>			
<i>Diagnosis of congestive heart failure (CHF)</i>	Whether or not the patient had been registered as a prevalent case	n/a	ICES-derived CHF database <sup>4</sup>
<i>Diagnosis of diabetes</i>	Whether or not the patient had been registered as a prevalent case	n/a	ICES-derived Ontario Diabetes Database <sup>4</sup>
<i>Diagnosis of hypertension</i>	Whether or not the patient had been entered as a diagnosed case	n/a	Ontario Hypertension Database <sup>4</sup>
<i>History of mental illness</i>	Whether or not the patient had ever been admitted to hospital for ICD-9 codes 295-297, 300-302, 306-311 or ICD-10 codes F20-F49 or F60-F69	n/a	CIHI-DAD <sup>3</sup>
<i>History of stroke or transient ischemic attack (TIA)</i>	Whether or not the patient had been registered as an incident case	n/a	Registry of Canadian Stroke Network <sup>4</sup>

## TABLE S2 REFERENCES

- 1 The Postal Code Conversion File (PCCF) Reference Guide. Ottawa: Statistics Canada, Minister of Industry, 2011. [www.statcan.gc.ca/pub/92-153-g/92-153-g2011002-eng.pdf](http://www.statcan.gc.ca/pub/92-153-g/92-153-g2011002-eng.pdf) (accessed August 2014).
- 2 Kralj B. Measuring Rurality - RIO2008\_Basic: Methodology and Results. Ontario Medical Association and the Ontario Ministry of Health and Long Term Care, 2009. [www.oma.org/Resources/Documents/2008RIO-FullTechnicalPaper.pdf](http://www.oma.org/Resources/Documents/2008RIO-FullTechnicalPaper.pdf) (accessed July, 2012).
- 3 DAD Abstracting Manual. Ottawa: Canadian Institute for Health Information, 2009. [www.cihi.ca/CIHI-ext-portal/pdf/internet/dad\\_data\\_elements\\_2009\\_2010\\_en](http://www.cihi.ca/CIHI-ext-portal/pdf/internet/dad_data_elements_2009_2010_en) (accessed July, 2012).
- 4 ICES Data Dictionary: Data Repository. Toronto: Institute for Clinical Evaluative Sciences, 2014. [datadictionary.ices.on.ca/Applications/DataDictionary/Default.aspx](http://datadictionary.ices.on.ca/Applications/DataDictionary/Default.aspx) (accessed November, 2014).
- 5 Ontario Cancer Registry. Toronto, ON: Cancer Care Ontario,, 2012. [www.cancercare.on.ca/ocr/](http://www.cancercare.on.ca/ocr/) (accessed July, 2012).