Appendix 1 (as supplied by the authors): Description of independent predictors

Key variables	Type of variable	Description	Data source
Demographics (baseline year, FY2012)			
Age	Continuous	Age in years	RPDB
Sex	Categorical (binary)	Sex; female or male	RPDB
Rio2008	Continuous	Rurality Index for Ontario; on a scale of 0 to 100 with 100 being most rural	RPDB
Lowinc	Categorical (binary)	Subjects with low income status were identified based upon net household income reported to receive public drug benefit subsidy in FY2012 which relies on actual net income. For a small proportion of HCU (3%) and non-HCU (13%) who did not fill a prescription in FY2012, low-income status was defined as census neighborhood income quintile	ODB
Recent_immigration	Categorical (binary)	Whether immigrated in 15 years prior to FY2012 (based on landing records for permanent legal immigrants in Ontario)	CIC
Health status/comorbidity (baseline year, FY2012)			
# of ADGs	Continuous	Aggregated Diagnosis Groups (ADGs) are derived from Johns Hopkins Adjusted Clinical Groups (ACGs, the Johns Hopkins ACG® System Version 10): a person-focused, diagnosis-based way to measure patients' illness	DAD, NACRS, OHIP
Hypertension, Malignancy, Mental health condition	Categorical (binary)	For each condition, whether the patient was diagnosed with the condition in the past 3 years prior to FY2013; computed using John Hopkins Expanded Diagnosis Clusters (EDCs)	DAD, NACRS, OHIP
Congestive heart failure, History of myocardial infarction, Chronic Obstructive Pulmonary Disease, Diabetes, Rheumatoid arthritis	Categorical (binary)	Whether the patient is listed in a corresponding ICES-derived cohort for each condition	CHF, COPD, ODD, OMID, ORAD
Healthcare characteristics (baseline year, FY2012)			
# of drugnames	Continuous	Number of prescription drugs the patient was dispensed	ODB
# of physician visits	Continuous	Number of physician visits; reported by categories (family practitioner and specialist)	OHIP
# of home care visits	Continuous	Number of home care visists; reported as total and by categories (nursing, personal support, allied health and other)	HCD
Geriatrician	Categorical (binary)	Whether visited a geriatrician	OHIP
Primarycare group	Categorical	Primary care payment models: Fee for Service (FFS), Enhanced FFS, Family Health Team (FHT), Capitation, Other and None. The Enhanced FFS category included patients enrolled with Comprehensive Care Model (CCM) or Family Health Group (FHG), whereas the Other category included those who were enrolled in primary care models other than CCM or FHG or patients not enrolled with any primary care group but who had at least one OHIP claim	CAPE
Long-term care (LTC)	Categorical (binary)	Whether was placed in a LTC facility	ODB
Features of Index hospitalizations (incident year, FY2013)			

LOS	Continuous	Length of stay, days	DAD
instftyp_	Categorical	Institution from where admitted	DAD
instlhin_	Categorical	LHIN where admitted	DAD
dx10code1-25	Character	Diagnosis ICD10 codes for each admission	DAD
dischdisp	Categorical	Institution where discharged to	DAD
inpatient_costs_	Continuous	Inpatient hospitalization Costs	DAD

CAPE - Client Agency Program Enrolment, ICES-derived (Congestive Heart Failure (CHF) database; Chronic Obstructive Pulmonary Disease (COPD) database; Ontario Diabetes Database (ODD); Ontario Myocardial Infarction Database (OMID); and the Ontario Rheumatoid Arthritis Database (ORAD)); CIC - Citizenship and Immigration Canada; DAD – Discharge Abstract Database; NACRS - National Ambulatory Care Reporting System; HCD - Ontario Home Care Database; ODB – Ontario Drug Benefit; OHIP - Ontario Health Insurance Plan; RPDB - Ontario Registered Persons Database