Appendix 1 (as supplied by the authors): Supplemental tables

Supplemental Table S1: Variables and definitions				
Variable	Data	Definition Description and/or Dx/fee Codes		
	Source			
Age	RPDB	Age of the individual at the index date		
	PCPOP			
Sex	RPDB	Sex of individual		
History of substance use	DAD	1 hospitalization or 2 claims in 2 years or less of any code in		
related care	NACRS	variable "Substance use disorder"		
	OMHRS			
	OHIP			
History of mental health	DAD	1 hospitalization OR 2 claims in 2 years or less of any code in		
related care	NACRS	variable "Psychotic disorder" or "Non-psychotic" or "Other		
	OMHRS	mental health"		
	OHIP			
Priority Population CHC	CHC	Presented to a CHC, between 1 April 2014 and 31 March		
(PPCHC) and Non-priority		2015; two subgroups, PPCHC and NPPCHC, developed with		
Population CHC (NPPCHC)	DCDOD	CHCV geographic identifier variable.		
Ontario	PCPOP	In ICES-derived Primary Care Population dataset, alive as of		
T	DDDD	1 April 2014		
Income quintile	RPDB PCPOP	Neighbourhood income quintile		
Residential Instability	ONMarg	Area-level concentrations of people who experience high		
Residential Histability	Olymaig	rates of family or housing instability		
Material Deprivation	ONMarg	A combined measure of income, quality of housing,		
Waterial Deprivation	Orthiarg	educational attainment, and family structure characteristics		
Dependency	ONMarg	Area-level concentrations of people who do not have income		
Dependency	Ortivials	from employment		
Ethnic Concentration	ONMarg	Concentrations of recent immigrants and people belonging to		
		a 'visible minority' group		
Recent Immigrant Status	IRCC (CIC)	Presence in IRCC database with landing date less than 10		
		years before index date		
Rural status	RPDB	Resides in a rural area as defined as a settlement of <10,000		
		individuals		
Rostered to a Family	CAPE	Rostering to a family physician practice		
Physician at index				
Psychotic disorder	DAD	ICD-10: F20, F22, F23, F24, F25, F28, F29, F323, F333;		
	NACRS	OHIP: 295, 297, 298, 295, 296, 297, 298		
	OMHRS			
	OHIP	VGD 40 704 700 704 7004 7000 7000 7000		
Non-psychotic disorder	DAD	ICD-10: F21, F30, F31, F321, F322, F328, F330, F331, F332,		
	NACRS	F334, F338, F339, F348, F349, F380, F381, F388, F39, F40,		
	OMHRS	F41, F42, F43, F48, F60, F93; OHIP: 296, 300, 301, 302,		
	OHIP	306, 309, 311		

Supplemental Table S1: Variables and definitions				
Variable	Data Definition Description and/or Dx/fee Codes			
	Source			
Substance use disorder	DAD	ICD-10: F10, F11, F12, F13, F14, F15, F16, F17, F18, F19,		
	NACRS	F55, E244, G312, G620, G621, G720, G721, I426, I427,		
	OMHRS	K292, K70, K852, K853, K860, T51, X45, Z502, Z503;		
	OHIP	OHIP: 291, 292, 303, 304, 305, A680, C680, K680, K682,		
		K683, K684, K701		
Other mental health	DAD	ICD-10: F44, F45, F50, F5, F52, F53, F54, F55, F59, F61,		
	NACRS	F62, F63, F64, F65, F66, F68, F69, F70, F71, F72, F73, F78,		
	OMHRS	F79, F80, F81, F82, F83, F84, F88, F89, F90, F91, F92, F94,		
	OHIP	F95, F98, F99, X60, X61, X62, X63, X64, X65, X66, X67,		
		X68, X69, X70, X71, X72, X73, X74, X75, X76, X77,		
		X78,X79, X80, X81, X82, X83, X84		
Asthma	PCPOP	Presence in the database indicates the individual has a history		
	ASTHMA	of asthma		
COPD	PCPOP	Presence in the database indicates the individual has a history		
	COPD	of COPD		
Diabetes	PCPOP	Presence in the database indicates the individual has a history		
	ODD	of diabetes		
Hypertension	PCPOP	Presence in the database indicates the individual has a history		
	HYPER	of hypertension		
Infective Endocarditis	DAD	ICD-10: I330, I339		
Rheumatoid Arthritis	ORAD	Presence in the database indicates the individual has a history		
		of rheumatoid arthritis		
Congestive heart failure	CHF	Presence in the database indicates the individual has a history		
G		of congestive heart failure		
Chronic Liver Disease	DAD	ICD-10: B16, B17, B18, B19, I85, R17, R18, R160, R162,		
	NACRS	B942, Z225, E831, E830, K70, K713, K714, K715, K717,		
		K721, K729, K73, K74, K753, K754, K758, K759, K76,		
		K77; OHIP: 571, 573, 070, Z551, Z554		
Chronic Kidney Disease	DAD	ICD-10: E102, E112, E132, E142, I12, I13, N00, N01, N02,		
•	NACRS	N03, N04, N05, N06, N07, N08, N10, N11, N12, N13, N14,		
		N15, N16, N17, N18, N19, N20, N21, N22, N23; OHIP: 403,		
		585		
Crohn's Ulcerative Colitis	OCCC	Presence in the database indicates the individual has a history		
		of Crohn's / Ulcerative Colitis		
HIV	HIV	Presence in the database indicates the individual has a history		
		of HIV		
Skin and Soft Tissue	DAD	ICD-10: A46, B86, H00, H031, H600, H601, H602, H603,		
Infection	SDS	H620, H622, H623, H66, J340, J340, K122, K61, L00, L01,		
	NACRS	L02, L03, L04, L05, L08; OHIP: 035, 680, 682, 683, 684,		
	OHIP	685, 686		
Chronic Pain	DAD	ICD-10: F454, M081, M2550, M2551, M2555, M2556,		
	SDS	M2557, M432, M433, M434, M435, M436, M45, M461,		
	NACRS	M463, M464, M469, M47, M480, M481, M488, M489,		
	OHIP	M508, M509, M51, M531, M532, M533, M538, M539, M54,		
		M608, M609, M633, M790, M791, M792, M796, M797,		
		M961; OHIP: 720, 721, 722, 724, 729		

C da POP Nu CRS	imber of physician visits within 1 year after to the index te, defined as one visit per day per physician imber of ED visits within 1 year after to the index date
C da POP Nu CRS	te, defined as one visit per day per physician amber of ED visits within 1 year after to the index date
POP Nu	imber of ED visits within 1 year after to the index date
CRS	·
D Ni	
	imber of admissions to acute care hospitals within 1 year
aft	er to the index date
POP Nu	imber of specialist visits within 1 year prior to the index
IP da	te, defined as one visit per day per physician; PCPOP:
SV	_CARDIO = cardiologist, SV_ENDO = endocrinologist
SV	Z_RESP=respirologist, SV_PSYCH=psychiatrist; OHIP:
21	13 (Psychiatrist), 260 (Respirologist), 187
(E	ndocrinologist), 606 (Cardiologist)
	POP Nu IP dat SV SV 21

Supplemental Table S2: Adjusted odds ratio of all covariates during follow-up period				
	Adjusted odds ratio of psychiatric care during follow-up (1 year) ¹	Adjusted odds ratio of emergency department visit during follow-up (1 year) ²		
Age at cohort entry, per year increase	0.99 (0.99-0.99)	1.00 (0.99-1.00)		
Sex (reference=female)	1.03 (1.02-1.04)	0.92 (0.92-0.92)		
Income Quintile (reference=Quintile 1)				
Quintile 2	0.97 (0.96-0.98)	1.01 (1.00-1.02)		
Quintile 3	0.99 (0.98-1.00)	1.00 (1.00-1.01)		
Quintile 4	0.99 (0.98-1.00)	0.99 (0.98-1.00)		
Quintile 5 (highest)	1.07 (1.06-1.09)	0.95 (0.94-0.96)		
Residential Instability (reference=Quintile 1)				
Quintile 2	0.96 (0.95-0.97)	0.99 (0.98-1.00)		
Quintile 3	0.99 (0.98-1.00)	1.00 (0.99-1.01)		
Quintile 4	1.03 (1.02-1.04)	1.01 (1.01-1.02)		
Quintile 5 (most)	1.09 (1.08-1.10)	1.03 (1.03-1.04)		
Material Deprivation (reference=Quintile 1)				
Quintile 2	0.98 (0.97-0.99)	0.96 (0.95-0.97)		
Quintile 3	1.00 (0.99-1.01)	0.99 (0.99-1.00)		
Quintile 4	1.00 (0.99-1.01)	1.04 (1.03-1.05)		
Quintile 5 (most)	1.03 (1.02-1.04)	1.11 (1.10-1.12)		
Dependency (reference=Quintile 1)				
Quintile 2	1.00 (0.97-0.99)	0.97 (0.97-0.98)		
Quintile 3	1.02 (0.99-1.01)	1.00 (0.99-1.01)		
Quintile 4	1.01 (1.00-1.02)	1.02 (1.01-1.03)		

Quintile 5 (most)	0.99 (0.98-1.00)	1.03 (1.03-1.04)
Ethnic Concentration (reference=Quintile 1)		
Quintile 2	0.96 (0.95-0.97)	1.05 (1.04-1.06)
Quintile 3	1.01 (1.00-1.01)	1.01 (1.00-1.01)
Quintile 4	1.06 (1.05-1.07)	0.96 (0.95-0.97)
Quintile 5 (most)	1.05 (1.03-1.06)	0.93 (0.92-0.93)
Recent Immigrant Status (reference='no')	0.88 (0.86-0.89)	0.95 (0.94-0.96)
Rural (reference='urban')	0.93 (0.92-0.94)	1.08 (1.07-1.09)
Healthcare related to:		
Non-Psychotic Disorder (reference= no)	1.88 (1.87-1.89)	1.12 (1.12-1.13)
Psychotic Disorder (reference= no)	2.49 (2.48-2.51)	1.11 (1.10-1.11)
Substance use Disorder (reference= no)	0.98 (0.97-0.99)	1.28 (1.28-1.29)
Co-morbidities (reference= no)		
Asthma		1.15 (1.14-1.15)
COPD		1.12 (1.11-1.13)
Diabetes		1.10 (1.10-1.11)
Hypertension		1.11 (1.10-1.11)
Rheumatoid Arthritis		1.01 (0.99-1.04)
Congestive Heart Failure		1.31 (1.30-1.33)
Chronic Liver Disease		1.11 (1.10-1.12)
Chronic Kidney Disease		1.34 (1.33-1.35)
Crohn's/Ulcerative Colitis		1.15 (1.13-1.17)
HIV		0.68 (0.65-0.72)
Skin/Soft Tissue Infections (within 1 year)		1.27 (1.26-1.28)
Chronic Pain (within 1 year)		1.23 (1.22-1.24)

CHC: Community Health Centre; No.: number; Residential Instability, Material Deprivation, Dependency, Ethnic Concentration drawn from ONMarg; Recent Immigrant Status: Presence in IRCC database with landing date less than 10 years before index date; Rural: resides in a rural area as defined as a settlement of <10,000 individuals; Psychotic Disorder, Non-psychotic disorder, Substance use Disorder includes any hospitalization or 2 claims in 2 years or less of any related diagnostic or fee code; COPD: chronic obstructive pulmonary disease; HIV: human immunodeficiency virus.

¹Variables adjusted for in psychiatric care model: age, sex, income quintile, resident instability, material deprivation, dependency, ethnic concentration, recent immigrant status, rural, mental health-related healthcare, CHC usage in 3 years, rostered to family physician at index (clustering of family physician at index was accounted for).

²Variables adjusted for in emergency department visit model: age, sex, income quintile, resident instability, material deprivation, dependency, ethnic concentration, recent immigrant status, rural, mental health-related healthcare, CHC usage in 3 years, rostered to family physician at index (clustering of family physician at index was accounted for), comorbidities in last 3 years prior to the index date (ie, Chronic Liver Disease, Chronic Kidney Disease, Crohn's/Ulcerative Colitis, Rheumatoid Arthritis, Infective Endocarditis,) any diagnosis of comorbidity that prior to index date (ie, Asthma, COPD, Diabetes, Hypertension, Congestive heart failure, HIV), comorbidities in last 1 year prior to the index date (ie, Skin and Soft Tissue Infections, Chronic Pain).