Appendix 1. Supplementary tables

Table S1. Eligible conditions and codes for targeted enrolment programs

Program	Elligible conditions and codes	Description
Quebec Vulnerable Enrolment	Diabetes ICD-9: 250 excluding: 650-659 (pregnancy) ICD-10: E10-E14	Binary indicator: 1 if 1 hospitalization or 2 outpatient visits within 2 years; otherwise 0
	Cancer ICD-9: 140-172; 174-208 ICD-10: C00-C43; C45-C97	Binary indicator: Has cancer if 1 hospitalization or 2 outpatient visits within 2 years; otherwise 0
	COPD ICD-9: 491- 492; 496 ICD-10: J41-J44	Binary indicator: 1 if 1 hospitalization or 1 outpatient visits; otherwise 0
	Asthma ICD-9: 493 ICD-10: J45-J46	Binary indicator: 1 if hospitalization or 2 outpatient visits within 2 years AND a oral steroid prescription; otherwise 0
	Chronic Inflammation ICD-9: 555-556; 558; 136.1; 710; 712 -714; 716; 719; 720; 725; 728; 729; 695.4; 696.0 ICD-10: K50-K52; M05-M06; M13; M32-M36; L40.50	Binary indicator: 1 if 1 hospitalization or 2 outpatient visits within 2 years; otherwise 0
	Central Nervous System disease (CNS) ICD-9: 330-335; 290; 136.9 ICD-10: G10; G12-G14; G20-G23; G25-G26; G30-G32; G35-G37; F01-F03: G903	Binary indicator: 1 if 1 hospitalization or 2 outpatient visits within 2 years; otherwise 0
	Occupational Lung disease ICD-9: 117.3; 495; 500-508; 511.0 ICD-10: J60-J70; J92.0	Binary indicator: 1 if 1 hospitalization or 1 outpatient visits within 2 year; otherwise 0
	Coronary Artery Disease (CAD) ICD-9: 410-414 ICD-10: I20-I25	Binary indicator: 1 if hospitalization or 2 outpatient visits within 2 years; otherwise 0
	Heart Failure (HF) ICD-9: 428 ICD-10: I50	Binary indicator: 1 if 1 hospitalization or 2 outpatient visits within1 rolling year; otherwise 0
	Atrial Fibrillation (AF) ICD-9: 427; 785.0 ICD-10: I48	Binary indicator: 1 if 1 hospitalization or 1 outpatient visit within 1 year; otherwise 0
	Mental Health Conditions (e.g., depression/ anxiety, psychosis etc.) ICD-9: 295- 302; 306-319 ICD-10: F20-F54; F56-F99	Binary indicator: 1 if 1 hospitalization or 2 ambulatory visits within 1 year; otherwise 0
	HIV ICD-9: 042 ICD-10: B20-B24	Binary indicator: 1 if 1 hospitalization or 2 outpatient visits within 2 years; otherwise 0
	Renal Failure ICD-9: 582-587; 589 ICD-10: N01-N07; N17-N19; N26-N27	Binary indicator: 1 if 1 hospitalization or 2 outpatient visits within 2 years; otherwise 0
	Thrombolytic Event ICD-9: 415; 434.01; 434.11; 434.91 ICD-10: I26; I63	Binary indicator: 1 if 1 hospitalization or 2 outpatient visits within 2 years; otherwise 0
	Substance Abuse ICD-9: 291-292; 303-305; 980 ICD-10: F10-F16; F18-F19; T51	Binary indicator: 1 if 1 hospitalization or 1 outpatient visits within 1 year; otherwise 0

BC Chronic Disease Incentive	Diabetes ICD-9: 250 excluding: ICD9: 641-676, V27; ICD-10-CA: O1, O29-O95, O98, O99, Z37 (pregnancy) BC-specific complex care codes: N250, R250, I250, H250, D430, D585, D573 ICD-10: E10-E14	Binary indicator: 1 if 1 hospitalization or 2 outpatient visits within 2 years; otherwise 0
	Heart Failure (HF) ICD-9: 428 BC-specific complex care codes: N428, R428, I428, H250, H430, H585, H573 ICD-10: I50	Binary indicator: 1 if 1 hospitalization or 2 outpatient visits within 1 rolling year; otherwise 0
BC Complex Care Incentive	2 or more of diabetes, CHD, CKD/renal failure, cerebrovascular disease, coronary artery disease, asthma, COPD, as above with the inclusion of BC complex care codes: N519, N414, N428, N250, N430, N585, N573, R414, R428, R250, R430, R585, R573, I428, I250, I430, I585, I573, H250, H430, H585, H573, D430, D585, D573, C585, C573, K573 Note, codes for cerebrovascular disease as follow: ICD-9: 362.3, 430, 431, 433.x1, 434-436 ICD-10-CA: I60, I61, I63, I64, G45.0-G45.3, G45.8, G45.9, H34.1 excluding: ICD-9: 800, 801, 802, 803, 804, 850, 851, 852, 853, 854, V57, ICD-10-CA: S02.0-S02.4, S02.6, S02.8, S02.9, S06, Z50 (traumatic injury on the same day)	Binary indicator: 1 if two or more eligible conditions; otherwise

Table S2. Databases accessed in British Columbia (BC) and Quebec (QC)

Database	Description	Variables
Client registry	Central demographics files maintained by provincial insurers	Age, sex/gender, neighbourhood income quintile, urban/rural residence
Physician payments	Data on medically necessary services provided by fee-for-service practitioners to individuals covered by the provincial insurance plan	Ambulatory physician visits, longitudinal continuity of care, Elixhauser index, treatment for mental health or substance use
Hospitalizations	Data on discharges, transfers and deaths of in-patients and day surgery patients from acute care hospitals	Elixhauser index, treatment for mental health or substance use
PharmaNet (BC only)	All prescriptions for drugs and medical supplies dispensed from community pharmacies in BC, including source of coverage	Prescription drug coverage indicates income assistance
National Ambulatory Reporting Care System	Information about ED visits	Emergency department visits
Vital statistics	Information on all deaths registered	Used to construct cohorts