

Appendix A: List of diagnostic information for defining the 17 selected chronic conditions under investigation in this study.

These conditions represent a subset of all possible chronic conditions that may be experienced by individuals over a lifetime but represent the most substantial conditions from a population perspective.

Condition [reference for validated algorithm]	ICD 9 / OHIP	ICD 10	ODB*
Acute Myocardial Infarction (AMI) [1]	410	I21, I22	
Osteo- and other Arthritis:			
(A) Osteoarthritis	715	M15-M19	
(B) Other Arthritis (includes Synovitis, Fibrositis, Connective tissue disorders, Ankylosing spondylitis, Gout Traumatic arthritis, pyogenic arthritis, Joint derangement, Dupuytren's contracture, Other MSK disorders)	727, 729, 710, 720, 274, 716, 711, 718, 728, 739	M00-M03, M07, M10, M11-M14, M20-M25, M30-M36, M65-M79	
Arthritis - Rheumatoid arthritis [2]	714	M05-M06	
Asthma [3]	493	J45	
(all) Cancers	140-239	C00-C26, C30-C44, C45-C97	
Cardiac Arrhythmia	427 (OHIP) / 427.3 (DAD)	I48.0, I48.1	
Congestive Heart Failure [4]	428	I500, I501, I509	
Chronic Obstructive Pulmonary Disease [5]	491, 492, 496	J41, J43, J44	
Coronary syndrome (excluding AMI)	411-414	I20, I22-I25	
Dementia [6]	290, 331 (OHIP) / 046.1, 290.0, 290.1, 290.2, 290.3, 290.4, 294, 331.0, 331.1, 331.5, F331.82 (DAD)	F00, F01, F02, F03, G30	Cholinesterase Inhibitors
Diabetes [7]	250	E08 - E13	
Hypertension [8]	401, 402, 403, 404, 405	I10, I11, I12, I13, I15	

Inflammatory Bowel Disease (IBD) [9]	555, 556	K50, k51
(Other) Mental Illnesses	291, 292, 295, 297, 298, 299, 301, 302, 303, 304, 305, 306, 307, 313, 314, 315, 319	F04, F050, F058, F059, F060, F061, F062, F063, F064, F07, F08, F10, F11, F12, F13, F14, F15, F16, F17, F18, F19, F20, F21, F22, F23, F24, F25, F26, F27, F28, F29, F340, F35, F36, F37, F430, F439, F453, F454, F458, F46, F47, F49, F50, F51, F52, F531, F538, F539, F54, F55, F56, F57, F58, F59, F60, F61, F62, F63, F64, F65, F66, F67, F681, F688, F69, F70, F71, F72, F73, F74, F75, F76, F77, F78, F79, F80, F81, F82, F83, F84, F85, F86, F87, F88, F89, F90, F91, F92, F931, F932, F933, F938, F939, F94, F95, F96, F97, F98
Mood, anxiety, depression and other nonpsychotic disorders	296, 300, 309, 311	F30, F31, F32, F33, F34 (excl. F34.0), F38, F39, F40, F41, F42, F43.1, F43.2, F43.8, F44, F45.0, F45.1, F45.2, F48, F53.0, F68.0, F93.0, F99
Osteoporosis	733	M81, M82
Renal failure	403, 404, 584, 585, 586, v451	N17, N18, N19, T82.4, Z49.2, Z99.2
Stroke (excluding transient ischemic attack)	430, 431, 432, 434, 436	I60-I64

NOTES:

Abbreviations: ICD = International Classification of Disease; ODB = Ontario Drug Benefit program database; OHIP = Ontario Health Insurance Plan, physician billings database;

All case definitions look back to 2001 to ascertain disease status, with the exception of AMI (1 year prior to index), Cancer (2 years), Mood Disorder (2 years) and Other Mental Illnesses (2 years)

AMI, Asthma, COPD, CHF, Dementia, Diabetes Hypertension and Rheumatoid Arthritis are based on validated case algorithms (see Sources 1-8 below, respectively). All other conditions required at least one diagnosis recorded in acute care (CIHI) or two diagnoses recorded in physician billings within a two-year period.

*ODB prescription drug records are not available for the majority of persons under the age of 65

Appendix B: List of Eligible CMGs for hospital readmission

List of Eligible Conditions (CMGs)		
CMG+	CMG+ description	
Stroke (Age ≥ 45)		
CMG 2008	25	Hemorrhagic Event of Central Nervous System
	26	Ischemic Event of Central Nervous System
	28	Unspecified Stroke
CMG 2009	25	Hemorrhagic Event of Central Nervous System
	26	Ischemic Event of Central Nervous System
	28	Unspecified Stroke
COPD (Age ≥ 45)		
CMG 2008	139	Chronic Obstructive Pulmonary Disease
CMG 2009	139	Chronic Obstructive Pulmonary Disease
Pneumonia (All ages)		
CMG 2008	136	Bacterial Pneumonia
	138	Viral/Unspecified Pneumonia
	143	Disease of Pleura
CMG 2009	136	Bacterial Pneumonia
	138	Viral/Unspecified Pneumonia
	143	Disease of Pleura
Congestive Heart Failure (Age ≥ 45)		
CMG 2008	196	Heart Failure without Cardiac Catheter
CMG 2009	196	Heart Failure without Cardiac Catheter
Diabetes (All ages)		
CMG 2008	437	Diabetes
CMG 2009	437	Diabetes
Cardiac CMGs (Age ≥ 40)		
CMG 2008	202	Arrhythmia without Cardiac Catheter
	204	Unstable Angina/Atherosclerotic Heart Disease without Cardiac Cath
	208	Angina (except Unstable)/Chest Pain without Cardiac Catheter
CMG 2009	202	Arrhythmia without Cardiac Catheter
	204	Unstable Angina/Atherosclerotic Heart Disease without Cardiac Cath
	208	Angina (except Unstable)/Chest Pain without Cardiac Catheter
Gastrointestinal CMGs (All ages)		
CMG 2008	231	Minor Upper Gastrointestinal Intervention
	248	Severe Enteritis
	251	Complicated Ulcer
	253	Inflammatory Bowel Disease
	254	Gastrointestinal Hemorrhage
	255	C
	256	Esophagitis/Gastritis/Miscellaneous Digestive Disease
	257	Symptom/Sign of Digestive System