

ACSC Hospitalizations (administrative health data algorithm)

Included Diagnoses (ICD-10; International Classification of Diseases, 10 th Edition)	Excluded cases based on discharge setting, record admission type, specific cardiac interventions (CCI: Canadian Classification of Health Interventions) and Case Mix Group intervention status.
<p>Asthma: J45;</p> <p>Congestive heart failure and pulmonary edema: I50, J81; excluding cases with CCI codes for cardiac surgical procedures (adjacent column)</p> <p>Diabetes: E10.0, E10.1, E10.63, E10.64, E10.9, E11.0, E11.1, E11.63, E11.9, E13.0, E13.1, E13.63, E13.9, E14.0, E14.1, E14.63, E14.9, E11.64, E13.64, E14.64</p> <p>COPD: J41 to J44, J47 or J10.0, J11.0, J12-J16, J18, J20, J21, J22 when J44 is also present as a secondary (i.e., non-MRD) diagnosis</p> <p>Grand mal status and other epileptic convulsions: G40, G41</p> <p>Hypertension: I10.0, I10.1, I11; excluding cases with CCI codes for cardiac surgical procedures (adjacent column)</p> <p>Angina: I20, I23.82, I24.0, I24.8, I24.9, excluding cases with CCI codes for cardiac surgical procedures (adjacent column)</p>	<p>discharge records where death occurs:</p> <p>discharge_disposition= "07" or "71" or "72", "73", "74"</p> <p>exclude records where adtype ="N" or "R" or "S"</p> <p>Cardiac interventions (CCI) for exclusion: 1HA58, 1HA80, 1HA87, 1HB53, 1HB54, 1HB55, 1HB87, 1HD53, 1HD54, 1HD55, 1HH59, 1HH71, 1HJ76, 1HJ82, 1HM57, 1HM78, 1HM80, 1HN71, 1HN80, 1HN87, 1HP76, 1HP78, 1HP80, 1HP82, 1HP83, 1HP87, 1HR71, 1HR80, 1HR84, 1HR87, 1HS80, 1HS90, 1HT80, 1HT89, 1HT90, 1HU80, 1HU90, 1HV80, 1HV90, 1HW78, 1HW79, 1HX71, 1HX78, 1HX79, 1HX80, 1HX83, 1HX86, 1HX87, 1HY85, 1HZ53 rubric (except 1HZ53LAKP), 1HZ55 rubric (except 1HZ55LAKP), 1HZ56, 1HZ57, 1HZ59, 1HZ80, 1HZ85, 1HZ87, 1IF83, 1IJ50, 1IJ55, 1IJ57, 1IJ76, 1IJ86, 1IJ80, 1IK57, 1IK80, 1IK87, 1IN84, 1LA84, 1LC84, 1LD84, 1YY54LANJ, 1YY54LAFS, 1YY54LANM, 1YY54LAFR, 1YY54LAFU</p> <p>Do not apply cardiac procedure code exclusions for records where CMGIntervStatus ="A"</p>

Summary of Data Sources

Database	Variable	Use
IPR	<p>1. Age</p> <p>2. Sex</p> <p>3. Postal code</p>	<p>Exclusion criteria/ descriptive demographics/ multivariable analyses</p> <p>Descriptive demographics/ multivariable analyses</p> <p>Linkage to census geography for PCCF+/CIMD</p>

Physician Billings	<p>1. Dxdate (date of billed service)</p> <p>2. hospital unit (hospital unit of billed service)</p> <p>3. Dxcode1-3 (International Classification of Diseases, 9th edition, diagnostic codes)</p>	<p>Emergency department contact/ Charlson index derivation</p> <p>Identification of emergency department contact.</p> <p>Charlson Index derivation</p>
CIHI DAD	<p>1. Admit date (date of hospital admission)</p> <p>2. Diagnosis code1-25 (International Classification of Diseases, 10th edition, diagnostic codes)</p> <p>3. Diagnosis code type1-25 (indicates category of diagnostic code1-25)</p> <p>4. Intervention code1-20 (CCI: Canadian Classification of Health Interventions)</p> <p>5. adtype (type of hospital admission)</p> <p>6. discharge disposition (discharge setting)</p> <p>7. CMGIntervStatus (Case mix group intervention status)</p>	<p>Identification of ACSC hospitalization/ Charlson index derivation, indexed at date of admission</p> <p>Identification of ACSC hospitalization/ Charlson index derivation</p> <p>Identification of ACSC hospitalization/ Charlson index derivation</p>
PCCF+	<p>1. CSize (categorical variable determining community population size)</p> <p>2. QAATIPPE (After tax household income quintile)</p>	<p>Deriving rurality variable</p> <p>Deriving household income variable</p>
CIMD	<p>1. Residential instability quintile</p> <p>2. Economic dependency quintile</p>	<p>Deriving CIMD summary score</p> <p>Deriving CIMD summary score</p> <p>Deriving CIMD summary score</p>

	<p>3. Ethno-cultural composition quintile</p> <p>4. Situational vulnerability quintile</p>	Deriving CIMD summary score
NaFPR Database	<p>1. Registration date (date of start of “on-waitlist” status)</p> <p>2. Current status (Coded variable indicating status at “current status date”)</p> <p>3. Current status date (date of most recent status ascertainment in database)</p> <p>4. Cancellation reason (coded variable indicating reason for withdrawing from waitlist)</p>	<p>Determination of “on-“/”off-waitlist” status</p> <p>Determination of “on-“/”off-waitlist” status</p> <p>Determination of “on-“/”off-waitlist” status</p> <p>Determination of record eligibility</p>

IPR: Health Data Nova Scotia Insured Patient Registry
 CIHI DAD: Canadian Institute for Health Information Discharge Abstract Database
 PCCF+: Statistics Canada/Canada Post Postal Code Conversion File Plus
 CIMD : Canadian Index of Multiple Deprivation (geographically-weighted scores)