



Canadian Primary Care Sentinel Surveillance Network
Réseau canadien de surveillance sentinelle en soins primaires

CPCSSN Case Definitions

Version 2

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Reviewed & approved by:

CPCSSN Case Definition Working Group: 2019-05-09

CPCSSN Dev Team: 2019-05-09

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Purpose

This document is intended to be the simplest unambiguous representation of CPCSSN's current case definitions, consistent with the original documented intent. It defines the criteria, in terms of CPCSSN data, that CPCSSN's case detection algorithms use to classify a patient as being a case.

This document is intended for use by:

- researchers needing to understand or use CPCSSN's case definitions,
- those wanting to propose modifications or create new case definitions,
- CPCSSN's developers to implement CPCSSN's case definitions

This document is not intended to include suggested changes or improvements to the case definitions. Proposed changes to existing case definitions or new case definitions should be submitted to CPCSSN's Case Definition Working Group, where they will be reviewed, possibly approved, and prioritised for implementation by CPCSSN's development team.

Interpretation

For each disease Case Definition, any single **Scenario** is sufficient to warrant classification as a case. Within a **Scenario**, all the criteria joined by "AND" must be satisfied to warrant classification as a case. Conditions followed by "EXCEPT" define exceptions to the disease case definitions. That is, these conditions negate other criteria within the **Scenario**, so any other criteria in the **Scenario** alone are insufficient to define a disease case. The text 'including [all] sub-codes' indicates a wildcard match is to be applied to the listed codes.

List of Implemented Case Definitions

Case Definition	Released				Page
	2010-Q1	2012-Q1	2018-Q2	2018-Q4	
CKD				√	4
COPD	√				5
Dementia		√			6
Depression	√				7
Diabetes Mellitus	√				8
Diabetes Mellitus (ml)			√		9
Epilepsy		√			10
Herpes Zoster			√		11
Hypertension	√				12
Hypertension (ml)				√	14
Osteoarthritis	√				15
Osteoarthritis (ml)				√	16
Parkinsons Disease		√			17
Pediatic Asthma			√		18

CKD

Scenario 1

Two **eGFR/GFR** tests (LOINC = 12195-4) in the **Lab** table having results less than 60 ml/min/1.73 m² separated by between 3 months and 18 months, inclusive.

COPD

Note: For all scenarios, patient age must be greater than or equal to 35 years.

Scenario 1

Any of the following ICD-9 codes (including all sub-codes) in the **Billing** or **Health Condition** table:

491.2: OBSTRUCTIVE CHRONIC BRONCHITIS
492: EMPHYSEMA
496: CHRONIC AIRWAY OBSTRUCTION, NOT ELSEWHERE CLASSIFIED

Scenario 2

Any of the following ATC codes (including all sub-codes) in the **Medication** table:

R03BB: ANTICHOLINERGICS
R03AK04: SALBUTAMOL AND SODIUM CROMOGLICATE
R03AL: ADRENERGICS IN COMBINATION WITH ANTICHOLINERGICS INCLUDING TRIPLE COMBINATIONS WITH CORTICOSTEROIDS

EXCEPT

The following ICD-9 code (including all sub-codes) in the **Billing** or **Health Condition** table makes this scenario alone insufficient for defining a disease case:

493: ASTHMA

Dementia

Scenario 1

Any of the following ICD-9 codes (including sub-codes) in the **Billing, Encounter Diagnosis, or Health Condition** table:

290: DEMENTIAS
294.1: DEMENTIA IN CONDITIONS CLASSIFIED ELSEWHERE
294.8: OTHER PERSISTENT MENTAL DISORDERS DUE TO
CONDITIONS CLASSIFIED ELSEWHERE
331: OTHER CEREBRAL DEGENERATIONS

excluding sub-codes:

290.8: OTHER SPECIFIED SENILE PSYCHOTIC CONDITIONS
290.9: UNSPECIFIED SENILE PSYCHOTIC CONDITION
331.3: COMMUNICATING HYDROCEPHALUS
331.4: OBSTRUCTIVE HYDROCEPHALUS
331.5: IDIOPATHIC NORMAL PRESSURE HYDROCEPHALUS (INPH)
331.81: REYE'S SYNDROME

Scenario 2

Any of the following ATC codes (including all sub-codes) in the **Medication** table:

N06DA: ANTICHOLINESTERASES
N06DX01: MEMANTINE

Depression

Scenario 1

Any of the following ICD-9 codes (including all sub-codes) in the **Billing** or **Health Condition** table:

296: EPISODIC MOOD DISORDERS
311: DEPRESSIVE DISORDER, NOT ELSEWHERE CLASSIFIED

Scenario 2

Any of the following ATC codes (including all sub-codes) in the **Medication** table:

N06AB: SELECTIVE SEROTONIN REUPTAKE
INHIBITORS
N06AF04: TRANYLCYPROINE
N06AG02: MOCLOBEMIDE
N06AX11: MIRTAZAPINE
N06CA01: AMITRIPTYLINE AND PSYCHOLEPTICS

EXCEPT

The following ICD-9 code (including all sub-codes) in the **Billing** or **Health Condition** table makes this scenario alone insufficient for defining a disease case:

300: ANXIETY DISORDER

Diabetes Mellitus

Scenario 1

The following ICD-9 code (including all sub-codes) in the **Health Condition** table
OR
at least two (identical or different) of the following ICD-9 code (including all sub-codes) in any two year period in the **Billing** table:
250: DIABETES MELLITUS

Scenario 2

The following ATC code (including all sub-codes) in the Medication table: A10: DRUGS USED IN DIABETES	EXCEPT	Any of the following ICD-9 codes (including all sub-codes) in the Billing or Health Condition table make this scenario alone <u>insufficient</u> for defining a disease case: 249: SECONDARY DIABETES MELLITUS 256.4: POLYCYSTIC OVARIES 648.8: ABNORMAL GLUCOSE TOLERANCE OF MOTHER, COMPLICATING PREGNANCY, CHILDBIRTH, OR THE PUERPERIUM 775.1: NEONATAL DIABETES MELLITUS 790.29: OTHER ABNORMAL GLUCOSE
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Scenario 3

Any **HbA1C** test (LOINC = 17856-6) in the **Lab** table with a result greater than or equal to 7
OR
at least two **Fasting Glucose** tests (LOINC = 14771-0) in the **Lab** table within any one year period having results strictly greater than 7.

Diabetes Mellitus (ml)

Scenario 1

The following ICD-9 code (including all sub-codes) in the **Health Condition** table
OR
at least two (identical or different) of the following ICD-9 code (including all sub-codes) in any two year period in the **Encounter Diagnosis** table:

250: DIABETES MELLITUS

Epilepsy

Scenario 1

The following ICD-9 code (including sub-codes) in the **Billing, Encounter Diagnosis, or Health Condition** table:

345: EPILEPSY AND RECURRENT SEIZURES

excluding sub-codes:

345.2: PETIT MAL STATUS, EPILEPTIC

345.3: GRAND MAL STATUS, EPILEPTIC

Scenario 2

Any of the following ICD-9 codes (including all sub-codes) in the **Billing, Encounter Diagnosis, or Health Condition** table:

345.2: PETIT MAL STATUS, EPILEPTIC

345.3: GRAND MAL STATUS, EPILEPTIC

780.3: CONVULSIONS

AND

Any of the following ATC codes (including sub-codes) in the **Medication** table:

N03A: ANTIEPILEPTICS

N05BA06: LORAZEPAM

N05BA09: CLOBAZAM

excluding sub-codes:

N03AE01: CLONAZEPAM

N03AX12: GABAPENTIN

Herpes Zoster

Scenario 1

The following ICD-9 code (including all sub-codes) in the **Billing, Encounter Diagnosis, or Health Condition** table:

053: HERPES ZOSTER

Hypertension

Scenario 1

Any of the following ICD-9 codes (including all sub-codes) in the **Health Condition** table
OR
at least two (identical or different) of the following ICD-9 codes (including all sub-codes) in any two year period in the **Billing** table:

- 401: ESSENTIAL HYPERTENSION
- 402: HYPERTENSIVE HEART DISEASE
- 403: HYPERTENSIVE CHRONIC KIDNEY DISEASE
- 404: HYPERTENSIVE HEART AND CHRONIC KIDNEY DISEASE
- 405: SECONDARY HYPERTENSION

Scenario 2

<p>Any of the following ATC codes (including all sub-codes) in the Medication table:</p> <p>C02: ANTIHYPERTENSIVES C03AA03: HYDROCHLOROTHIAZIDE C03BA04: CHLORTALIDONE C03BA08: METOLAZONE C03BA11: INDAPAMIDE C03DB01: AMILORIDE C03DB02: TRIAMTERENE C03EA01: HYDROCHLOROTHIAZIDE AND POTASSIUM-SPARING AGENTS C07AA06: TIMOLOL C07AB03: ATENOLOL C07AB04: ACEBUTOLOL C07AG02: CARVEDILOL C07CB03: ATENOLOL AND OTHER DIURETICS C08CA01: AMLODIPINE C08CA02: FELODIPINE C08DA01: VERAPAMIL C09AA01: CAPTOPRIL C09AA02: ENALAPRIL C09AA03: LISINOPRIL C09AA07: BENAZEPRIL C09AA08: CILAZAPRIL C09AA09: FOSINOPRIL C09AA10: TRANDOLAPRIL C09BA02: ENALAPRIL AND DIURETICS C09BA03: LISINOPRIL AND DIURETICS C09CA02: EPROSARTAN C09CA03: VALSARTAN C09CA04: IRBESARTAN C09CA07: TELMISARTAN C09DA01: LOSARTAN AND DIURETICS C09DA02: EPROSARTAN AND DIURETICS C09DA04: IRBESARTAN AND DIURETICS C09XA02: ALISKIREN</p>	<p>EXCEPT</p>	<p>Any of the following ICD-9 codes (including all sub-codes) in the Billing or Health Condition table make this scenario alone <u>insufficient</u> for defining a disease case:</p> <p>250: DIABETES MELLITUS 333.1: ESSENTIAL AND OTHER SPECIFIED FORMS OF TREMOR 346: MIGRAINE 410: ACUTE MYOCARDIAL INFARCTION 412: OLD MYOCARDIAL INFARCTION 413: ANGINA PECTORIS 427: CARDIAC DYSRHYTHMIAS 428: HEART FAILURE 456.0: ESOPHAGEAL VARICES WITH BLEEDING 456.1: ESOPHAGEAL VARICES WITHOUT MENTION OF BLEEDING 592: CALCULUS OF KIDNEY AND URETER 572.3: PORTAL HYPERTENSION</p>
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Hypertension (ml)

Scenario 1

The following ICD-9 code (including all sub-codes) in the **Encounter Diagnosis** or **Health Condition** table:

401: ESSENTIAL HYPERTENSION

Scenario 2

The following ATC code in the **Medication** table:

C08CA01: AMLODIPINE

Osteoarthritis

Scenario 1

Any of the following ICD-9 codes (including all sub-codes) in the **Billing** or **Health Condition** table:

715: OSTEOARTHROSIS AND ALLIED DISORDERS

721: SPONDYLOSIS AND ALLIED DISORDERS

Osteoarthritis (ml)

Scenario 1

The following ICD-9 code (including all sub-codes) in the **Encounter Diagnosis** or **Health Condition** table:

715: OSTEOARTHROSIS AND ALLIED DISORDERS

Parkinsons Disease

Scenario 1

The following ICD-9 code (including all sub-codes) in the **Billing, Encounter Diagnosis, or Health Condition** table:

332: PARKINSON'S DISEASE

Pediatric Asthma

Note: For all scenarios, patient age must be between 1 and 17 years, inclusive.

Scenario 1

The following ICD-9 code (including all sub-codes) in the **Billing, Encounter Diagnosis, or Health Condition** table:

493: ASTHMA

Scenario 2

At least two (identical or different) of the following ATC codes in the **Medication** table:

H02AB02: DEXAMETHASONE
H02AB06: PREDNISOLONE
H02AB07: PREDNISON
R03AC02: SALBUTAMOL
R03AC03: TERBUTALINE
R03AC04: FENOTEROL
R03AC12: SALMETEROL
R03AC13: FORMOTEROL
R03AC18: INDACATEROL
R03AK06: SALMETEROL AND FLUTICASONE
R03AK07: FORMOTEROL AND BUDESONIDE
R03AK08: FORMOTEROL AND BECLOMETASONE
R03AK09: FORMOTEROL AND MOMETASONE
R03BA01: BECLOMETHASONE
R03BA02: BUDESONIDE
R03BA05: FLUTICASONE
R03BA06: TRIAMCINOLONE
R03BA07: MOMETASONE
R03BA08: CICLESONIDE
R03BB01: IPRATROPIUM BROMIDE
R03DC01: ZAFIRLUKAST
R03DC03: MONTELUKAST