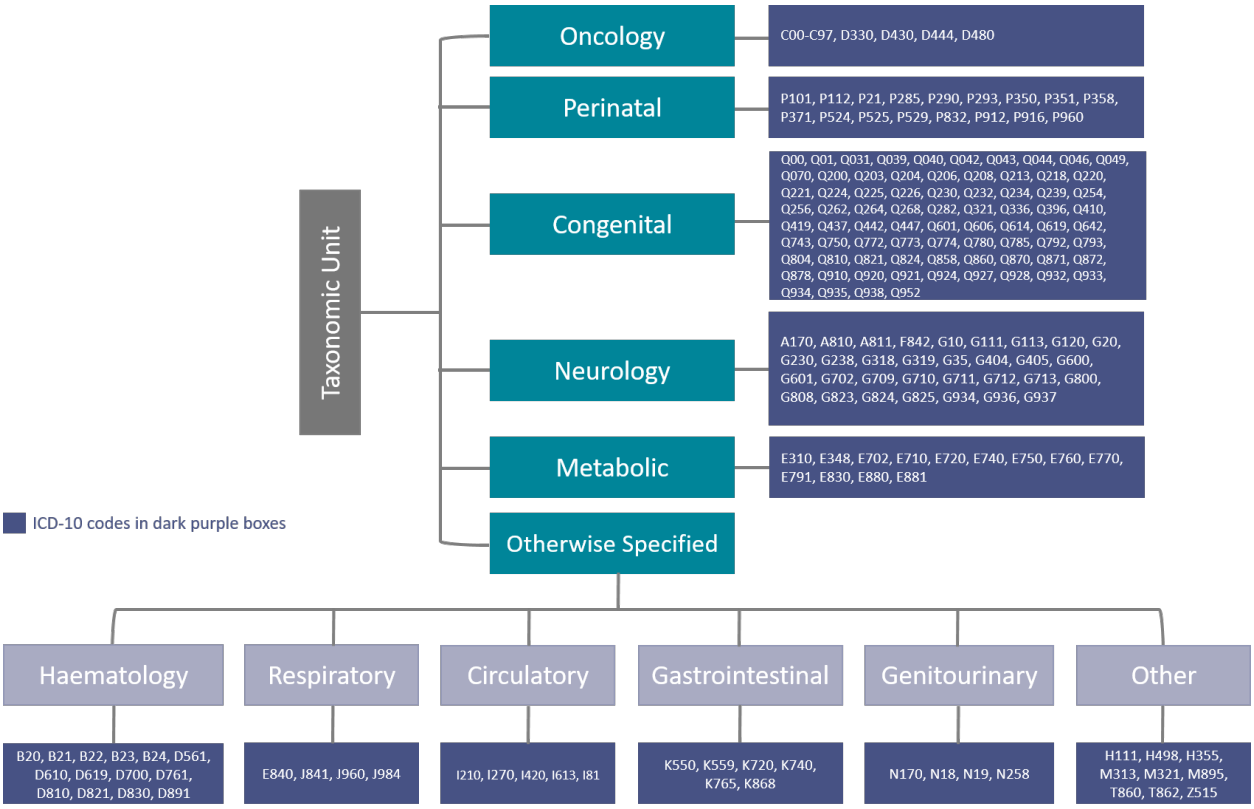
Appendix 2 – Coding framework (ICD-10 codes used to identify serious illnesses)

The original framework we are using is comprised by ICD-10 codes, and the Discharge Abstract Database (DAD) captures ICD-10-CA codes, which are developed by the World Health Organization and refined by the Canadian Institute for Health Information (CIHI) to meet Canadian needs, but the meaning of the codes remains the same.[1]



Taxonomic unit	ICD-10 Code	Description
Oncology	C00-C97	All malignancies
	D33.0	Benign neoplasm of brain, supratentorial
	D43.0	Neoplasm of uncertain behavior of brain, supratentorial
	D44.4	Neoplasm of uncertain behavior of craniopharyngeal duct
	D48.0	Neoplasm of uncertain behavior of bone and articular cartilage
Perinatal	P10.1	Cerebral hemorrhage due to birth injury
	P11.2	Unspecified brain damage due to birth injury
	P21	Birth asphyxia
	P28.5	Respiratory failure of the newborn
	P29.0	Neonatal cardiac failure

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	P29.3	Persistent fetal circulation
	P35.0	Congenital rubella syndrome
	P35.1	Congenital cytomegalovirus infection
	P35.8	Other congenital viral diseases
	P37.1	Congenital toxoplasmosis
	P52.4	Intracerebral (nontraumatic) hemorrhage of the newborn
	P52.5	Subarachnoid (nontraumatic) hemorrhage of the newborn
	P52.9	Intracranial (nontraumatic) hemorrhage of the newborn, unspecified
	P83.2	Hydrops fetalis not due to hemolytic disease
	P91.2	Neonatal cerebral leukomalacia
	P91.6	Hypoxic ischemic encephalopathy (HIE)
	P96.0	Congenital renal failure
Congenital	Q00	Anencephaly
	Q01	Frontal encephalocele
	Q03.1	Atresia of foramina of Magendie and Luschka
	Q03.9	Congenital hydrocephalus, unspecified
	Q04.0	Congenital malformations of corpus callosum
	Q04.2	Holoprosencephaly
	Q04.3	Other reduction deformities of the brain
	Q04.4	Septo-optic dysplasia of the brain
	Q04.6	Congenital cerebral cysts
	Q04.9	Congenital malformation of the brain, unspecified
	Q07.0	Arnold-Chiari syndrome
	Q20.0	Common arterial trunk
	Q20.3	Discordant ventriculoarterial connection
	Q20.4	Double inlet ventricle
	Q20.6	Isomerism of the atrial appendages
	Q20.8	Other congenital malformations cardiac chambers and connections
	Q21.3	Tetralogy of Fallot
	Q21.8	Other congenital malformations of cardiac septa
	Q22.0	Pulmonary valve atresia
	Q22.1	Congenital pulmonary valve stenosis
	Q22.4	Congenital tricuspid valve stenosis
	Q22.5	Ebstein's anomaly
	Q22.6	Hypoplastic right heart syndrome
	Q23.0	Congenital stenosis of the aortic valve
	Q23.2	Congenital mitral stenosis
	Q23.4	Hypoplastic left heart syndrome
	Q23.9	Congenital malformation of aortic and mitral valves, unspecified

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	Q25.4	Other congenital malformations of the aorta
	Q25.6	Stenosis of the pulmonary artery
	Q26.2	Total anomalous pulmonary venous connection
	Q26.4	Anomalous pulmonary venous connection, unspecified
	Q26.8	Other congenital malformations of the great veins
	Q28.2	Arteriovenous malformation of the cerebral vessels
	Q32.1	Other congenital malformations of the trachea
	Q33.6	Congenital hypoplasia and dysplasia of the lung
	Q39.6	Congenital diverticulum of the esophagus
	Q41.0	Congenital absence, atresia and stenosis of the duodenum
	Q41.9	Congenital absence, atresia and stenosis of the small intestine, part unspecified
	Q43.7	Persistent cloaca
	Q44.2	Atresia of the bile ducts
	Q44.7	Other congenital malformation of the liver
	Q60.1	Renal agenesis, bilateral
	Q60.6	Potter's syndrome
	Q61.4	Renal dysplasia
	Q61.9	Cystic kidney disease, unspecified
	Q64.2	Congenital posterior urethral valves
	Q74.3	Arthrogryposis multiplex congenital
	Q75.0	Craniosynostosis
	Q77.2	Short rib syndrome
	Q77.3	Chondrodysplasia pun
	Q77.4	Achondroplasia
	Q78.0	Osteogenesis imperfecta
	Q78.5	Metaphyseal dysplasia
	Q79.2	Exomphalos
	Q79.3	Gastroschisis
	Q80.4	Harlequin fetus
	Q81.0	Epidermolysis bullosa simplex
	Q82.1	Xeroderma pigmentosum
	Q82.4	Ectodermal dysplasia (anhidrotic)
	Q85.8	Other phakomatoses, not elsewhere classified
	Q86.0	Fetal alcohol syndrome (dysmorphic)
	Q87.0	Congenital malformation syndromes predominantly affecting facial appearance
	Q87.1	Congenital malformation syndromes predominantly associated with short stature
	Q87.2	Congenital malformation syndromes predominantly involving limbs

	Q87.8	Other specified congenital malformation syndromes, not elsewhere classified
	Q91.0	Trisomy 18, nonmosaicism (meiotic nondisjunction)
	Q92.0	Whole chromosome trisomy, nonmosaicism (meotic nondisjunction)
	Q92.1	Whole chromosome trisomy, mosaicism (mitotic nondisjunction)
	Q92.4	Duplications seen only at prometaphase
	Q92.7	Triploidy and polyploidy
	Q92.8	Other specified trisomies and partial trisomies of autosomes
	Q93.2	Chromosome replaced with ring, dicentric or isochromosome
	Q93.3	Deletion of short arm of chromosome 4
	Q93.4	Deletion of short arm of chromosome 5
	Q93.5	Other deletions of part of a chromosome
	Q93.8	Other deletions from the autosomes
	Q95.2	Balanced autosomal rearrangement in abnormal individual
Neurology	A17.0	Tuberculous meningitis
	A81.0	Creutzfeldt-Jakob disease
	A81.1	Subacute sclerosing panencephalitis
	F84.2	Rett's syndrome
	G10	Huntington's disease
	G11.1	Early-onset cerebellar ataxia
	G11.3	Cerebellar ataxia with defective DNA repair
	G12.0	Infantile spinal muscular atrophy, type I (Werdnig-Hoffman)
	G20	Parkinson disease
	G23.0	Hallervorden-Spatz disease
	G23.8	Other specified degenerative diseases of the basal ganglia
	G31.8	Other specified degenerative diseases of the nervous system
	G31.9	Degenerative disease of the nervous system, unspecified
	G35	Multiple sclerosis
	G40.4	Other generalized epilepsy and epileptic syndromes, not intractable
	G40.5	Epileptic seizures related to external causes, not intractable
	G60.0	Hereditary motor and sensory neuropathy
	G60.1	Refsum's disease
	G70.2	Congenital and developmental myasthenia
	G70.9	Myoneural disorder, unspecified
	G71.0	Muscular dystrophy
	G71.1	Myotonic disorders
	G71.2	Congenital myopathies
	G71.3	Mitochondrial myopathy, not elsewhere classified
	G80.0	Spastic quadriplegic cerebral palsy

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		G80.8	Other cerebral palsy
		G82.3	Flaccid tetraplegia
		G82.4	Spastic tetraplegia
		G82.5	Quadriplegia
		G93.4	Other and unspecified encephalopathy
		G93.6	Cerebral edema
		G93.7	Reye's syndrome
Metabolic		E31.0	Autoimmune polyglandular failure
		E34.8	Other specified endocrine disorders
		E70.2	Disorder of tyrosine metabolism, unspecified
		E71.0	Maple-syrup-urine disease
		E72.0	Diseases of amino acide transport
		E74.0	Glycogen storage disease
		E75.0	GM2 gangliosidosis
		E76.0	Mucopolysaccharidosis, type I
		E77.0	Defects in post-translational modification of lysosomal enzymes
		E79.1	Lesch-Nyhan syndrome
		E83.0	Disorders of copper metabolism
		E88.0	Disorders of plasma-protein metabolism, not elsewhere classified
		E88.1	Lipodystrophy, not elsewhere classified
Otherwise Specified	**Haematology**	B20	HIV resulting in infectious and parasitic diseases
		B21	HIV resulting in malignant neoplasms
		B22	HIV resulting in other specified diseases
		B23	HIV resulting in other conditions
		B24	Unspecified HIV disease
		D56.1	Beta thalassemia
		D61.0	Constitutional aplastic anemia
		D61.9	Aplastic anemia, unspecified
		D70.0	Congenital agranulocytosis
		D76.1	Hemophagocytic lymphohistiocytosis
		D81.0	Severe combined immunodeficiency (SCID) with reticular dysgenesis
		D82.1	Di George's syndrome
		D83.0	Common variable immunodeficiency with predominant abnormalities of B-cells
		D89.1	Cryoglobulinemia
	Respiratory	E84.0	Cystic fibrosis with pulmonary manifestations
		J84.1	Other interstitial pulmonary diseases with fibrosis
		J96.0	Acute respiratory failure
		J98.4	Other disorders of lung

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Circulatory	I21.0	ST elevation (STEMI) myocardial infarction of anterior wall
	I27.0	Primary pulmonary hypertension
	I42.0	Dilated cardiomyopathy
	I61.3	Nontraumatic intracerebral hemorrhage in the brain stem
	I81	Portal vein thrombosis
Gastrointestinal	K55.0	Acute vascular disorders of the intestine
	K55.9	Vascular disorder of the intestine, unspecified
	K72.0	Acute and subacute hepatic failure
	K74.0	Hepatic fibrosis
	K76.5	Hepatic veno-occlusive disease
	K86.8	Other specified diseases of the pancreas
Genitourinary	N17.0	Acute kidney failure with tubular necrosis
	N18	Chronic kidney disease
	N19	Unspecified kidney failure
	N25.8	Other disorders resulting from impaired renal tubular function
Other	H11.1	Conjunctival degenerations and deposits
	H49.8	Other paralytic strabismus
	H35.5	Hereditary retinal dystrophy
	M31.3	Wegener's granulomatosis
	M32.1	Systemic lupus erythematosus with organ or system involvement
	M89.5	Osteolysis
	T86.0	Complications of bone marrow transplant
	T86.2	Complications of heart transplant
	Z51.5	Encounter for palliative care

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