ED Administration

Revision of the Canadian Emergency Department Information System (CEDIS) Presenting Complaint List Version 1.1

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Introduction

The original Canadian Emergency Department Information System (CEDIS) Presenting Complaint List was published in 2003. It has 161 complaints and is divided into 18 major categories.[1] At the time of its development, there were a number of Canadian emergency departments (EDs) that had implemented partial emergency department information system (EDIS) solutions. Many departments were at the nascent stages of EDIS development. Since then, there has been a proliferation of ED information technology initiatives spearheaded by a national movement to address ED patient flow and efficiency issues. The 9/11 attack, bioterrorism threats, pandemic influenza concerns, and SARS have provided the impetus to develop syndromic surveillance systems that use a presenting complaint list, often derived electronically from a free-text complaint field.[2–5] The adoption of the CEDIS Presenting Complaint List in various regions and provinces across the country underscores the utility and acceptance of a coded presenting complaint list.

As the trend toward the implementation of EDIS progresses, the development of performance indicators has also occurred. This allows the measurement of various aspects of ED care. There is a strong reliance on the Canadian Emergency Department Triage and Acuity Scale (CTAS) in Canadian EDs to help identify the sickest patients in situations of overcrowding and limited manpower. As well, CTAS has become a measurement tool for identifying casemix groups for funding models and for comparing performance across different institutions. There has been a recent trend to marry the presenting complaint with the CTAS levels in order to increase the reliability of triage measurement across sites.[6] The increase in use of the ED presenting complaint for ancillary reporting reflects the importance of having an accurate complaint list that is reliable, easy to use, understandable and still clinically useful for emergency care providers.

The paediatric emergency medicine community has evaluated and adopted the idea of using a paediatric version of CTAS.[7] There has also been work done on improving the interrater reliability of triage by introducing a

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computerized version.[8] Although, the initial version of the CEDIS Presenting Complaint List had paediatric input, the need for refinement of the coded CEDIS list was recognized by the paediatric community. There has been a significant amount of work done to bring to close scrutiny the needs of the Canadian paediatric emergency medicine community. The ultimate goal is to modify the current complaint list to meet the needs of the paediatric community and to allow linkage of the presenting complaint to CTAS to increase the reliability of triage.[9]

As well, feedback from other ED presenting complaint users identified potential omissions in the first version. There is also a major need to understand and deal with the needs of the mental health population. This group tends to be underresourced in many institutions, especially in EDs that service inner-city communities.

Methods

The CEDIS Working Group and the CTAS National Working Group are composed of nurses, physicians, administrators and researchers who are active in the field of patient care and ED informatics. This group, sanctioned by the Canadian Association of Emergency Physicians (CAEP), the National Emergency Nurses Affiliation (NENA) and l'Associations des médecins d'urgence du Québec (AMUQ), has broad national representation from large and small hospitals in all regions of the country. This group met to review the current Presenting Complaint List and identify omissions and items that required clarification. These changes were based on feedback from constituents and, in some cases (mental health complaints), there was additional feedback provided by an interdisciplinary expert panel.

The paediatric CTAS subgroup is composed of physicians representing major national paediatric EDs and the Canadian Paediatric Society (CPS). Through a series of meetings they reviewed the current Presenting Complaint List in order to identify the complaints that represent the majority of the population in their communities. The following hierarchical considerations were used in deciding to include or exclude potential presenting complaints:

1. Is there a potential protocol or pathway that could be initiated based on a given complaint?
2. Would an appropriate discharge diagnosis more accurately capture the patient's problem?
3. Would an appropriate mechanism of injury code more accurately capture the patient's problem?
4. Does the potential complaint describe an otherwise unidentified important cohort of patients?
5. Is the potential complaint too rare to be useful?
6. Would the presenting complaint create more than 1 possible choice for coding a complaint thereby increasing complexity and decreasing reliability?

Results

Appendix 1 summarizes Version 1.1 of the updated CEDIS Presenting Complaint List. Overall, there were a total of 22 changes, including 6 additions and 2 deletions for a total of 165 presenting complaints. These changes appear in italicized, bolded text in Appendix 1. There were 16 complaints for which the descriptor was modified to provide clarity around the complaint. There were significant changes to the mental health complaints where some of the definitions were made more succinct. These included "Depression/suicidal/deliberate self-harm" and "Violence/homicidal behaviour."

In Appendix 1 there are corresponding ICD-10 codes (International Classification of Diseases and Related Health Problems, 10th revision) and ICD-10 descriptors for each presenting complaint. New to this version is an additional 3-number code for each presenting complaint to more easily identify these complaints. The reason for the inclusion of this new coding structure is the inability of the ICD-10 codes alone to adequately describe these presenting complaints. Despite the National Ambulatory Care Reporting System (NACRS) requirement to include an ICD-10 code with the submission of data to the Canadian Institute for Health Information (CIHI), the codes often do not match the complaint, especially when complaints are too specific. For example, there is no differentiation between traumatic and atraumatic cardiac arrest, so a code was created. Likewise, there is no obvious ICD-10 code to choose when the "Minor complaint not otherwise specified" code is used. If one peruses the various complaints, one can see other examples where the ICD-10 codes do not give the intended meaning of the descriptor. The 3-character coding structure presented in the CEDIS list is currently being used in an NACRS trial project. The goal of the coding structure is to be able to create a simple search strategy. For example, if one wants to review all cardiac complaints, one would search for all complaint codes between 000 and 050. In the future, the need to submit an ICD-10 code to describe a presenting complaint may be replaced by these 3-character codes. In addition, there is a 2-character identifier at the top of the group that can be used as a prefix to help search functionality if an EDIS lacks appropriate search functionality (e.g., "CV" for Cardiovascular complaints). This 2-character header is not part of the complaint code but represents another option for individual EDs to improve search functionality. Appendix 2

has some relevant definitions for certain complaints that might require clarification for the user.

Paediatric complaints

The original CEDIS Presenting Complaint List had 7 items that were specific to the paediatric population. The new version has an additional 5 items. These include: "Concern for patient's welfare," "Stridor," "Congenital problem in children" and "Floppy child."

The "Concern for patient's welfare" is meant to include potential cases of suspected child abuse or neglect, although a less threatening descriptor has been adopted. This complaint can also be applied to potential elder abuse or neglect. There was discussion over the potential inclusion of complaints to deal with specific paediatric medical devices such as ventriculoperitoneal (VP) shunts, and feeding tubes; however, the decision was to group those problems under the existing "Medical device problem" complaint unless an alternate complaint is more appropriate. "Paediatric gait disorder/painful walk" replaces the "Limp" complaint in the older version. "Limp" is a confusing term that can either relate to a gait problem or a problem of overall flaccidity. This second condition is now captured under the complaint "Floppy child." The "Congenital problem in children" complaint is meant to deal with patients who have congenital heart disease, inborn errors of metabolism or other congenital paediatric problems not presenting with a clear alternate complaint.

Discussion

There are a growing number of presenting complaint classification schemes that have been developed in the last several years. The US Department of Health, Education and Welfare originally developed the Reason for Visit Classification in 1979. Its 400-plus complaint list is more suited to family practice and is not entirely relevant to emergency medicine. Newer complaint lists have fairly small clusters or complaint groupings.[10,11] Some groupings, constructed for syndromic surveillance are as small as 7.[12] There is a trade-off in the decision to create a small or large list of presenting complaints. The fewer the number of codes from which to choose, the higher the likelihood of having increased coding reliability. On the other hand, with decreased granularity, there is greater potential to understand and study more specific cohorts of patients. For example, in trying to understand what happens to a population of patients with suicidal ideation, it becomes difficult if the complaint category is "Psychiatric/behavioural." Having fewer clusters or complaint groups leads to lower specificity around choosing a complaint and greater sensitivity. Nevertheless, we have been very cognizant of the potential for a triage nurse to ascribe a patient's complaints to more than 1 category. To help the triage nurse, we have added a list of definitions in Appendix 2 to avoid some potential confusion. This underscores the need for a significant educational program for nurses who will be triaging patients using CTAS. NENA and CAEP, through the CTAS National Working Group, have developed a triage education course that helps address these and other potential issues around ascribing a presenting complaint.

Other presenting complaint lists have been developed. They employ strategies to convert free text presenting complaints, using novel and complex algorithms, into a structured classification system.[13,14] If one has historical free text data, there is an obvious advantage in using this strategy, in that it allows one to categorize unstructured data. However, the perceived need to document a patient's complaint in their own words often drives the decision to use this type of coding system. The provision of a free text field to add additional information or clinical nuance from the patient's own words to the structured presenting complaint diminishes the need to use a strategy of free text conversion.

NACRS supports a burgeoning national ED registry.[15] The submission of emergency medicine data is currently mandated in all Ontario hospitals and emergency data are also submitted from a small number of other EDs from around the country. The NACRS group has been supportive in this initiative and is currently undertaking a pilot project using the CEDIS Presenting Complaint List.

One of the more important changes to the CEDIS Presenting Complaint List has been the incorporation of the Paediatric Presenting Complaint List. There are other paediatric emergency presenting complaint lists,[11] but the CEDIS list represents one of the few that can accommodate both adult and paediatric populations. In truth, many of the paediatric complaints are similar to those experienced in the adult population. Despite our attempt to have input from the paediatric community in our first version, it became clear that there were some missing elements. As well, the paediatric community wanted to have all complaints incorporated within the specific major categories. For example, "apneic spells" represents a respiratory complaint, not a paediatric one. Specific paediatric centres may wish to use a truncated version of CEDIS within their own EDIS system for ease of operation, but have the full list available. The hope is that this will improve acceptability of the presenting complaint list in both large urban paediatric centres and in community hospitals that have significant paediatric volumes.

Technical considerations

Incorporation of the Presenting Complaint List into the existing EDIS may present a challenge with a list of this size. One of the important attributes that an EDIS requires is the facility to rapidly search through lists. This is important to increase acceptability and improve coding reliability. Using a system that allows aggregating the list by major category, either through a graphic user interface or through alphabetized sorting functionality, is important.

The number of fields ideally required to create a robust system for capturing presenting complaint would be at least 2. There should be at least 1 field for individual presenting complaints, since patients often have more than 1 complaint at presentation to the ED. This does not run cross purpose to the idea that the complaint with the highest triage acuity level should drive ED process. It merely allows for more clinical information to be gathered with the use of the presenting complaint. There should also be 1 free text field with sufficient character length to allow enough additional patient information to be useful to the clinician.

Conclusion

The CEDIS Presenting Complaint List Version 1.1 represents an important improvement from the previous list. We strive to strike a balance between the clinical needs of the emergency physician and the need to collect reliable ED data. The trend toward linking the presenting complaint to a specific acuity level based on a group of modifiers such as vital signs will help improve the reliability of the CTAS triage tool and will allow more meaningful data capture and analysis. A revision of the adult CTAS guidelines is published in this issue of *CJEM*.[16] The ultimate goal is to improve the comparability of EDs so that the quality of care delivery can be accurately measured and meaningfully improved.

Competing interests: None declared.

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Appendix 1. CEDIS Version 1.1 Presenting Complaint List

No.	Code	Presenting complaint list	ICD-10 code	ICD-10 definition
	CV	Cardiovascular (000–050)		
1	001	Cardiac arrest (nontraumatic)	I46.9	Cardiac arrest, unspecified
2	002	Cardiac arrest (traumatic)	I46.9	Cardiac arrest, unspecified
3	003	Chest pain (cardiac features)	R07.2	Precordial pain
4	004	Chest pain (noncardiac features)	R07.4	Chest pain, unspecified
5	005	Palpitations/irregular heart beat	R00.2	Palpitations
6	006	Hypertension	I10.0	Benign hypertension
7	007	General weakness	R53	Malaise and fatigue
8	008	Syncope/presyncope	R55	Syncope and collapse
9	009	Edema, generalized	R60.1	Generalized edema
10	010	Bilateral leg swelling/edema	R60.0	Localized edema
11	011	Cool pulseless limb	I99	Other and unspecified disorders of circulatory system
12	012	***Unilateral reddened hot limb***	M79.89	Other specified soft tissue disorders, unspecified
	HN	ENT — Ears (051–100)		
13	051	Earache	H92.0	Otalgia
14	052	Foreign body ear	T16	Foreign body in ear
15	053	Loss of hearing	H91.9	Hearing loss, unspecified
16	054	***Tinnitus***	H93.1	Tinnitus
17	055	Discharge, ear	H92.1	Otorrhea
18	056	Ear injury	S00.4	Superficial injury of the ear
	HN	ENT — Mouth, throat, neck (101–150)		
19	101	Dental/gum problems	K06.9	Disorder of gingiva and edentulous alveolar ridge, unspecified
20	102	Facial trauma	S00.8	Superficial injury of other parts of the head
21	103	Sore throat	J02.9	Acute pharyngitis, unspecified
22	104	Neck swelling/pain	R22.1	Localized swelling, mass and lump, neck
23	105	Neck trauma	S19.9	Unspecified injury of neck
24	106	Difficulty swallowing/dysphagia	R13.8	Other unspecified dysphagia
25	107	Facial pain (nontraumatic/nondental)	R52.0	Acute pain
	HN	ENT — Nose (151–200)		
26	151	Epistaxis	R04.0	Epistaxis
27	152	Nasal congestion / Hay fever	J31.0	Rhinitis
28	153	Foreign body, nose	T17.1	Foreign body in nostril
29	154	URTI complaints	J06.9	Acute upper respiratory infection, unspecified
30	155	Nasal trauma	S00.3	Superficial injury of the nose
	EV	Environmental (201–250)		
31	201	Frostbite/cold injury	T35.7	Unspecified frostbite of unspecified site
32	202	Noxious inhalation	T59.9	Toxic effects of gases, fumes and vapors, unspecified
33	203	Electrical injury	T75.4	Effects of electric current
34	204	Chemical exposure	T65.9	Toxic effect of unspecified substance
35	205	Hypothermia	T68	Hypothermia
36	206	***Near drowning***	T75.1	Drowning and nonfatal submersion
	GI	Gastrointestinal (251–300)		
37	251	Abdominal pain	R10.4	Other and unspecified abdominal pain
38	252	Anorexia	R63.0	Anorexia
39	253	Constipation	K59.0	Constipation

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No.	Code	Presenting complaint list	ICD-10 code	ICD-10 definition
40	254	Diarrhea	K52.9	Noninfective gastroenteritis and colitis, unspecified
41	255	Foreign body in rectum	T18.5	Foreign body in anus and rectum
42	256	Groin pain/mass	R190	Intra-abdominal and pelvic swelling, mass and lump
43	257	Vomiting and/or nausea	R11.8	Other and unspecified nausea and vomiting
44	258	Rectal/perineal pain	K62.8	Other specified diseases of anus and rectum
45	259	Vomiting blood	K92.0	Hematemesis
46	260	Blood in stool/melena	K92.1	Melena
47	261	Jaundice	R17	Unspecified jaundice
48	262	Hiccoughs	R06.6	Hiccoughs
49	263	Abdominal mass/distention	R19.0	Intra-abdominal and pelvis swelling, mass and lump
50	264	Anal/rectal trauma	S36690	Injury NOS of rectum, without open wound into cavity
51	265	***Oral/esophageal foreign body***	T18.1	Foreign body in esophagus
52	601	Feeding difficulties in newborn	F98.2	Feeding disorder of infancy and childhood
53	602	Neonatal jaundice	P59.9	Neonatal jaundice, unspecified
	GU	Genitourinary (301–350)		
54	301	Flank pain	R10.3	Pain localized to other parts of the lower abdomen
55	302	Hematuria	R31.8	Other and unspecified hematuria
56	303	Genital discharge/lesion	R36	Penile discharge, urethral
57	304	Penile swelling	N488	Other specified disorders of penis
58	305	***Scrotal pain and/or swelling***	N50.8	Other specified disorders of male genital organs
59	306	Urinary retention	R33	Retention of urine
60	307	UTI complaints	R39.8	Other unspecified symptoms and signs involving the urinary system
61	308	Oliguria	R34	Anuria and oliguria
62	309	Polyuria	R35.8	Other and unspecified polyuria
63	310	Genital trauma	S30.2	Contusion of external genital organs
	MH	Mental health and psychological issues (351–400)		
64	351	***Depression/suicidal/deliberate self harm***	F32.9	Depressive episode, unspecified
65	352	Anxiety/situational crisis	F41.9	Anxiety disorder, unspecified
66	353	Hallucinations/delusions	R44.3	Hallucinations, unspecified
67	354	Insomnia	G47.0	Disorders of initiating and maintaining sleep
68	355	***Violent/homicidal behaviour***	R45.6	Physical violence
69	356	Social problem	Z60.9	Problems related to social environment, unspecified
70	357	***Bizarre behaviour***	R46.2	Strange and inexplicable behaviour
71	608	***Concern for patient's welfare***	T74.1	Physical abuse
72	607	***Paediatric disruptive behaviour***	F91.9	Conduct disorder
	NC	Neurologic (401–450)		
73	401	Altered level of consciousness	R41.88	Other and unspecified symptoms and signs involving cognitive function and awareness
74	402	Confusion	R41.0	Disorientation
75	403	***Vertigo***	R42	Dizziness and giddiness
76	404	Headache	R51	Headache
77	405	Seizure	R56.8	Other and unspecified convulsions
78	406	Gait disturbance/ataxia	R26.88	Other and unspecified abnormalities of gait and mobility
79	407	Head injury	S09.9	Unspecified injury of head
80	408	Tremor	R25.1	Tremor, unspecified

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No.	Code	Presenting complaint list	ICD-10 code	ICD-10 definition
81	409	Extremity weakness/symptoms of CVA	I64	Stroke, not specified as hemorrhage or infarction
82	410	Sensory loss/parasthesias	R44.8	Other and unspecified symptoms and signs involving general sensations and perceptions
83	609	***Floppy child***	P94.8	Other disorders of muscle tone of newborn
	GU	Obstetrical–Gynecological (451–500)		
84	451	Menstrual problems	N92.6	Irregular menstruation, unspecified
85	452	Foreign body, vagina	T19.2	Foreign body in vulva and vagina
86	453	Vaginal discharge	N89.8	Other specified noninflammatory disorders of vagina
87	454	Sexual assault	T74.2	Sexual abuse
88	455	Vaginal bleed	N93.9	Abnormal uterine and vaginal bleeding, unspecified
89	456	Labial swelling	R22.9	Localized swelling, mass and lump, unspecified
90	457	Pregnancy issues < 20 wk	O28.80	Other abnormal findings in antenatal screening of mother
91	458	***Pregnancy issues > 20 wk***	026.903	Pregnancy-related condition, unspecified
92	460	***Vaginal pain/itch***	N94.8	Other specified conditions associated with female genital organs and menstrual cycle
	EC	Ophthalmology (501–550)		
93	502	Chemical exposure, eye	T26.4	Burn of eye and adnexa
94	503	Foreign body, eye	T15.9	Foreign body on external eye, part unspecified
95	504	Visual disturbance	H53.9	Visual disturbance, unspecified
96	505	Eye pain	H57.1	Ocular pain
97	506	***Red eye, discharge***	H57.9	Disorders of the eye and adnexa, unspecified
98	507	Photophobia	H53.1	Subjective visual disturbances
99	508	Diplopia	H53.2	Diplopia
100	509	***Periorbital swelling***	H05.0	Acute inflammation of the orbit
101	510	Eye trauma	S05.9	Injury of eye and orbit, part unspecified
102	511	Recheck eye	Z09.9	Follow-up examination after unspecified treatment for other conditions
	OC	Orthopedic (551–600)		
103	551	Back pain	M54.9	Dorsalgia, unspecified
104	552	Traumatic back/spine injury	S39.9	Unspecified injury of abdomen, lower back and pelvis
105	553	Amputation	T14.7	Crushing injury and traumatic amputation of unspecified body region
106	554	Upper extremity pain	M79.60	Pain in limb, upper limb
107	555	Lower extremity pain	M79.61	Pain in limb, lower limb
108	556	Upper extremity injury	T11.9	Unspecified injury of upper limb, level unspecified
109	557	Lower extremity injury	T13.9	Unspecified injury of lower limb, level unspecified
110	558	Joint(s) swelling	M25.49	Effusion of joint, site unspecified
111	605	***Paediatric gait disorder/painful walk***	R26.88	Other and unspecified abnormalities of gait and mobility
	RC	Respiratory (651–700)		
112	651	Shortness of breath	R06.0	Dyspnea
113	652	Respiratory arrest	R09.2	Respiratory arrest
114	653	***Cough/congestion***	R05	Cough
115	654	Hyperventilation	R06.2	Hyperventilation
116	655	Hemoptysis	R04.2	Hemoptysis
117	656	Respiratory foreign body	T17.9	Foreign body in respiratory tract, part unspecified

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No.	Code	Presenting complaint list	ICD-10 code	ICD-10 definition
118	657	Allergic reaction	T78.4	Allergy, unspecified
119	610	***Stridor***	R061	Stridor
120	604	Wheezing — no other complaints	R06.2	Wheezing
121	606	***Apneic spells in infants***	R06.8	Other and unspecified abnormalities of breathing
	SK	Skin (701–750)		
122	701	Bite	T14.0	Superficial injury of unspecified body region
123	702	Sting	T63.9	Toxic effect of contact with unspecified venomous animal
124	703	Abrasion	T00.9	Multiple superficial injuries, unspecified
125	704	Laceration/puncture	T14.1	Open wound of unspecified body region
126	705	Burn	T30.0	Burn of unspecified body region, unspecified degree
127	706	Blood and body fluid exposure	Z20.9	Contact with and exposure to unspecified communicable disease
128	707	Pruritus	L29.9	Pruritus
129	708	Rash	R21	Rash and other nonspecific skin eruption
130	709	Localized swelling/redness	L03.9	Cellulitis, unspecified
131	710	Wound check	Z09.8	Follow-up examination after treatment for other conditions
132	711	Other skin conditions	L98.9	Disorder of skin and subcutaneous tissue, unspecified
133	712	Lumps, bumps, calluses	L98.8	Other specified disorders of skin and subcutaneous tissue
134	713	Redness/tenderness, breast	N61	Inflammatory disorders of breast
135	714	Rule out infestation	B88.9	Infestation, unspecified
136	715	Cyanosis	R23.0	Cyanosis
137	716	***Spontaneous bruising***	R23.3	Spontaneous ecchymosis
138	717	Foreign body, skin	M79.59	Residual foreign body in soft tissue, unspecified site
	SA	Substance misuse (751–800)		
139	751	Substance misuse/intoxication	F19	Mental/behavioural disorders due to use of drugs or psychoactive substances
140	752	Overdose ingestion	T50.9	Poisoning by other and unspecified drugs, medicaments and biological substance
141	753	Substance withdrawal	F19.3	Mental/behavioural disorders due to use of drugs or psychoactive substances: withdrawal state
	TR	Trauma (801–850)		
142	801	Major trauma — penetrating	T01.9	Multiple open wounds, unspecified
143	802	Major trauma — blunt	T14.8	Other injuries of unspecified body region
144	803	Isolated chest trauma — penetrating	S21	Open wound of thorax (trauma)
145	804	Isolated chest trauma — blunt	S20.8	Superficial injury of other and unspecified parts of thorax
146	805	Isolated abdominal trauma penetrating	S31.8	Open wound of other and unspecified parts of abdomen
147	806	Isolated abdominal trauma — blunt	S39	Other and unspecified injuries of abdomen, low back and pelvis
	MC	General and minor (851–900)		
148	851	Exposure to communicable disease	Z20.9	Contact with and exposure to unspecified communicable disease
149	852	Fever	A50.9	Fever, unspecified
150	853	Hyperglycemia	R73.9	Hyperglycemia, unspecified
151	854	Hypoglycemia	E16.2	Hypoglycemia, unspecified

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No.	Code	Presenting complaint list	ICD-10 code	ICD-10 definition
152	855	Direct referral for consultation	Z71.9	Counselling, unspecified
153	856	Dressing change	Z46.8	Other specified surgical follow-up care
154	857	Removal staples/sutures	Z48.0	Attention to surgical dressings and sutures
155	858	Cast check	Z47.8	Other specified orthopedic follow-up care
156	859	Imaging tests	Z01.6	Radiological examination, not elsewhere classified
157	860	Medical device problem	T85.9	Unspecified complication of internal prosthetic device, implant and graft
158	861	Prescription/medication request	Z76.0	Issue of repeat prescription
159	862	Ring removal	Z48.9	Surgical follow-up care, unspecified
160	863	Abnormal lab values	R79	Abnormal findings of blood chemistry
161	864	Pallor/anemia	R23.1	Pallor
162	865	Postoperative complications	T88.9	Complication of surgical and medical care, unspecified
163	603	***Inconsolable crying in infants***	R68.1	Nonspecific symptoms of infancy (excessive infant crying)
164	611	***Congenital problem in children***	Q24.9	Congenital malformation of the heart, unspecified
165	866	Minor complaints NOS	—	Minor complaints, unspecified

CEDIS = Canadian Emergency Department Information System; ICD-10 = International Classification of Diseases and Related Health Problems, 10th revision; ENT = ear, nose and throat; URTI = upper respiratory tract infection; NOS = not otherwise specified; UTI = urinary tract infection; CVA = congenital ventricular aneurysm.
Note: Bold italicized complaints are either new or edited from the previous version.

Appendix 2. Definitions and comments for specific complaints

Code	Presenting complaint list	Additional comments and definitions
CV	Cardiovascular (000–050)	
005	Palpitations/irregular heart beat	Includes heavy or pounding heart, irregularly beating heart or racing heart
008	Syncope/presyncope	This complaint also includes unsteadiness or feeling of light-headedness; does not include vertigo
011	Cool pulseless limb	This complaint identifies potential acute vascular injuries
012	***Unilateral reddened hot limb***	This complaint is meant to identify patients with a potential DVT, either upper or lower extremity
HN	ENT — Ears (051–100)	
054	***Tinnitus***	This complaint that includes ringing or noises heard in ear formerly included dysacusis — painful hearing
HN	ENT — Mouth, throat, neck (101–150)	
101	Dental/gum problems	Includes dental trauma, gingival problems, caries, dental pain and dental abscesses
103	Sore throat	Should be used if major or only symptoms as opposed to the constellation of symptoms associated with URTI that may include a minor sore throat
HN	ENT — Nose (151–200)	
154	URTI complaints	Includes runny or stuffy nose, nonproductive cough, achiness, fever < 38°C
EV	Environmental (201–250)	
202	Noxious inhalation	Includes but not limited to carbon monoxide exposure, natural gas exposure, unknown fume exposure
204	Chemical exposure	Topical exposure to nonmedicinal agents
206	***Near drowning***	New complaint
GI	Gastrointestinal (251–300)	
252	Anorexia	Also includes patients with eating disorder as well as loss of appetite
256	Groin pain/mass	Includes patients with suspected inguinal hernia

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Appendix 2. continued

Code	Presenting complaint list	Additional comments and definitions
263	Abdominal mass/distention	Includes but not limited to patients with suspected ascites
265	***Oral/esophageal foreign body***	Includes but not limited to food boluses lodged in the esophagus that do not otherwise affect breathing
GU	Genitourinary (301–350)	
303	Genital discharge/lesion	Includes suspected sexually transmitted diseases
305	***Scrotal pain and/or swelling***	Includes testicular complaints as well as scrotal problems
307	UTI complaints	Includes dysuria, urgency, frequency and/or hematuria if it is associated with these other UTI symptoms
308	Oliguria	Not able to make urine
309	Polyuria	Voiding too much urine
310	Genital trauma	Also includes urethral foreign bodies
MH	Mental health and psychosocial issues (351–400)	
351	***Depression/suicidal/deliberate self harm***	
352	Anxiety/situational crisis	Includes patients with extreme unease or apprehension with clear lack of medical cause
353	Hallucinations/delusions	Includes but is not limited to paranoid delusions, persecutory delusions, delusions of grandeur
355	***Violent/homicidal behaviour***	Combined two previous complaints into one since, by definition, homicidal patients are violent
356	Social problem	May include housing issues or inability for self-care
357	***Bizarre behaviour***	Disoriented or irrational behaviour that includes extreme self-neglect, disordered or racing thoughts or both, speech pattern impairments, impaired reality testing with "lack of insight"
608	***Concern for patient's welfare***	New complaint; may also apply to adult or elderly populations; where significant high acuity injuries occur, those complaints should be listed first and/or take precedence; care should be taken in displaying this complaint to the patient or family
607	***Paediatric disruptive behaviour***	Excludes suicidal ideation or attempt or acute drug related issues
NC	Neurologic (401–450)	
403	***Vertigo***	Refers primarily to patients with a sensation of movement of oneself or external objects as opposed to unsteadiness
609	***Floppy child***	New complaint; includes infants with hypotonia and decreased resistance to passive movement
GU	Obstetrical–Gynecological (451–500)	
458	*Pregnancy issues > 20 wk*	Includes patients in labour and with imminent delivery, late-term bleeding and abruption
460	***Vaginal pain/itch***	Also includes dyspareunia
EC	Ophthalmology (501–550)	
504	Visual disturbance	Includes loss of vision, flashing lights, sensation of a curtain coming down over the field of vision
506	***Red eye, discharge***	Combines previous categories of red eye and discharge eye
509	***Periorbital swelling***	This category previously included fever as a descriptor; fever now represents a CTAS modifier; this complaint is meant to identify patients with potential periorbital cellulitis

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Appendix 2. continued

Code	Presenting complaint list	Additional comments and definitions
OC	Orthopedic (551–600)	
605	***Paediatric gait disorder/ painful walk***	Previously identified as "limp" which is too ambiguous. Includes children with new onset of painful gait
RC	Respiratory (651–700)	
610	***Stridor***	New complaint
SK	Skin (701–750)	
704	Laceration/puncture	Also includes fingertip avulsions
716	***Spontaneous bruising***	Includes patients with either previous known bleeding disorders such as hemophilia and new/undiagnosed problems such as ITP or excess anticoagulation
TR	Trauma (801–850)	
801	Major trauma — penetrating	Includes multiple penetrating injuries that include the torso or with significant mechanism
802	Major trauma — blunt	Includes multiple injuries as a result of trauma (as opposed to single system orthopedic injury) or single system injuries that occur as a result of significant mechanism of injury
MC	General and minor (851–900)	
851	Exposure to communicable disease	Includes mainly respiratory exposure to infectious diseases such as TB, SARS or meningitis; not to be used for exposure to HIV through needle stick or splash
852	Fever	Would include patients with suspected heat related injury or fever with no obvious source
855	Direct referral for consultation	For patients whose primary reason for coming to hospital is to see a specialist; these should be stable patients; if patients are unstable a more suitable complaint should be used
859	Imaging tests	Patients arriving for radiographs, CT scan, MRI or ultrasound tests
860	Medical device problem	Includes indwelling catheters or intravenous lines (i.e., PICC lines) or defibrillators; in the paediatric population it includes medical devices like feeding tubes and VP shunts or pacemakers
861	Prescription/medication request	Where the primary complaint relates to the need for a medication; to use this complaint for narcotic requests, patients should have a chronic condition; acute or subacute conditions should be coded under the specific complaint system that is causing pain
865	Postoperative complications	Includes postoperative pain, bleeding, or suspected infection; not to be used for simple postop dressing changes or wound checks
611	***Congenital problem in children***	New complaint that includes but is not limited to congenital heart and inborn errors of metabolism patients
866	Minor complaints NOS	For those complaints not found in the remainder of the CEDIS complaint list; in most cases > 99% of cases have a complaint that can be categorized in the above list

DVT = deep vein thrombosis; ENT = ear nose and throat; URTI = upper respiratory tract infection; UTI = urinary tract infection; CTAS = Canadian Emergency Department Triage and Acuity Scale; ITP = idiopathic thrombocytopenic purpura; TB = tuberculosis; SARS = severe acute respiratory syndrome; MRI = magnetic resonance imaging; PICC = peripherally inserted central catheter; VP = ventriculoperitoneal; NOS = not otherwise specified; CEDIS = Canadian Emergency Department Information System.