Emergency Department ICD-10-AM (Tenth Edition) Principal Diagnosis Short List

User guide

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IHPA

Emergency Department ICD-10-AM Principal Diagnosis Short List

Abbreviations

CCF	Congestive cardiac failure
ED	Emergency Department
ED-ID	Emergency Department (short list) Identifier
IHPA	Independent Hospital Pricing Authority
ICD-9-CM	International Classification of Diseases – Ninth Revision – Clinical Modification
ICD-10-AM	International Statistical Classification of Diseases and Related Health Problems – Tenth Revision – Australian Modification
NAPEDC NMDS	Non Admitted Patient Emergency Department Care National Minimum Data Set
NNDSS	National notifiable disease surveillance system
NSTEMI	Non-ST elevation myocardial infarction
SNOMED CT	Systematized Nomenclature of Medicine – Clinical Terms
STEMI	ST elevation myocardial infarction
TBI	Traumatic brain injury
UDGs	Urgency Disposition Groups
URGs	Urgency Related Groups

Contents

1. Purpose

The Emergency Department (ED) International Statistical Classification of Diseases and Related Health Problems - Tenth Revision - Australian Modification (ICD-10-AM) Principal Diagnosis Short List (the short list) is a list of codes and medical terms based on ICD-10-AM Tenth Edition that aims to provide a nationally consistent approach to principal diagnosis reporting in the ED.

A 'principal diagnosis' is reported for ED attendances within the Non Admitted Patient Emergency Department Care National Minimum Data Set (NAPEDC NMDS). The NAPEDC NMDS is a minimum set of data elements agreed for mandatory collection by all states and territories for ED reporting at a national level.

The ED principal diagnosis is currently defined as the diagnosis established at the conclusion of the patient's attendance in an ED to be mainly responsible for occasioning the attendance following consideration of clinical assessment, as represented by a code.[1] Comorbidities and causes of injuries are not intended to be captured as the principal diagnosis, and can be captured as secondary data items in other ED collections.

1.1 Background

In 2013 the Independent Hospital Pricing Authority (IHPA) initiated a review to assess long term options for classification of emergency care services for activity based funding in Australia. A major objective of the approach to classifying emergency care services in Australia was to drive efficiency and effectiveness of these services through pricing and funding in conjunction with the collection of underlying data that supports clinical care and other uses such as quality improvement, epidemiological monitoring and health services research.

The review recommended development of a new emergency care classification to replace the Urgency Related Groups (URGs) and Urgency Disposition Groups (UDGs) classifications, given the lack of support for the ongoing use of triage and a strong interest in moving to a more diagnosis based classification.

The short list is a key component of the new emergency care classification, replacing inconsistencies whereby states and territories have developed localised short lists and variously report principal diagnosis using Systematized Nomenclature of Medicine – Clinical Terms (SNOMED CT) and various editions of ICD-10-AM or the International Classification of Diseases – Ninth Revision – Clinical Modification (ICD-9-CM).

1.2 Development

The short list was developed in consultation with ED clinicians and jurisdictions and was subject to a public consultation.

The guiding principles in developing the short list of codes were:

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1 Australian Institute of Health and Welfare, METeOR metadata online registry (2014). Emergency department stay, principal diagnosis, code X[X(8)].
Retrieved 6 March 2017 from http://meteor.aihw.gov.au/content/index.phtml/itemId/497490

- sufficient volume of attendances reported for a diagnosis to support the inclusion of a code
- consistent use of the diagnosis codes between jurisdictions
- comparability with ICD-10-AM diagnosis codes reported in the admitted setting
- exhaustive nature of the short list, with appropriate inclusion of residual diagnosis categories for conditions which do not have a specific code in the short list
- captures a clinical diagnosis rather than the cause of injury or a comorbidity, with external causes of morbidity and mortality codes (chapter 20) excluded from the short list.

The final short list comprises 1134 codes ensuring a sufficient number of codes to be clinically comprehensive and meaningful, but practical for clinicians to manage and use effectively.

This document is for use primarily by jurisdictions and data managers and details the components of the short list, conventions used and specific guidelines for use. In addition to this document an abridged Quick reference guide for principal diagnosis reporting has been developed for use by clinicians responsible for selecting the principal diagnosis codes.

1.3 Updating the short list

The short list was developed using ICD-10-AM Ninth Edition and has now been updated for compatibility with ICD-10-AM Tenth Edition.

Further updates to the short list will be made in conjunction with new editions of ICD-10-AM where there will also be an opportunity for jurisdictions and other stakeholders to provide feedback and input into subsequent versions.

Any enquiries related to the short list should be directed to (enquiries.ihpa@health.gov.au).

2. Components

2.1 ED ICD-10-AM principal diagnosis short list file

The short list file contains the following columns (in Excel) as per **Table 1.**

Table 1 – ED ICD-10-AM principal diagnosis short list file

Column	Column Headings	Definition
A	ED-ID	Unique identifier for each short list code
B	Disease/body system group	Disease/body system group for aggregation of main disease groups regardless of where they are categorised in ICD-10-AM
C	ICD-10-AM chapter	ICD-10-AM chapter number where the code resides e.g. '6' indicates the code is found in Chapter 6 Diseases of the nervous system
D	Code level	Whether 3, 4 or 5 character ICD-10-AM code
E	ICD-10-AM code	ICD-10-AM code
F	ICD-10-AM code descriptor	ICD-10-AM full text descriptor of short list code
G	Term	Short list term for ICD-10-AM code
H	Included conditions	Terms (included conditions) classifiable to the short list code

2.2 ED ICD-10-AM principal diagnosis short list mapping file

The mapping file maps the full set of ICD-10-AM Tenth Edition codes to the subset of codes used in the short list. The mapping file was used in the development of the short list to aggregate multiple codes to a single short list code and allows data to be tracked over time. The short list mapping file contains the following columns (in Excel) as per **Table 2.**

Table 2 – ED ICD-10-AM principal diagnosis short list mapping file

Column	Column Headings	Definition
A	ICD-10-AM chapter	ICD-10-AM chapter number where the code resides e.g. '2' indicates the code resides in Chapter 2 Neoplasms
B	Code level	Whether 3, 4 or 5 character ICD-10-AM code
C	ICD-10-AM code	Full listing of ICD-10-AM codes
D	ICD-10-AM code descriptor	ICD-10-AM full text descriptor
E	Effective from	Date from which code is effective in ICD-10-AM e.g. 1/07/1998 means the code was effective from First Edition
F	Inactive from	Date from which code is inactive e.g. 1/7/2013 means the code was inactive from Eighth Edition
G	Reactivated from	Date from which the code is reactivated. Indicates codes which were inactivated in a previous edition but reactivated in a later edition
H	ICD-10-AM maps	The ICD-10-AM short list code to which the ICD-10-AM code from column C maps e.g. A69.2 Lyme disease maps to B99 Other and unspecified infectious diseases in the short list
I	ICD-10-AM code descriptor	ICD-10-AM full text descriptor

As the mappings contain the full ICD-10-AM code set, which is licensed material, they are not available on IHPA's website but have been distributed to jurisdictions separately.

2.3 ED ICD-10-AM principal diagnosis short list hierarchies file

The hierarchies file contain the structural hierarchies for codes in each chapter (anatomical/body system or disease). The hierarchies are a visual representation of the hierarchical structure of the short list displaying how codes are aggregated in each ICD-10-AM chapter.

3. Specific guidelines

3.1 Conventions for terms in the short list

Where possible, natural language is used for the terms in the short list (e.g. fracture of femur). Many of the short list terms remain as they are in ICD-10-AM for compatibility. However, some terms were modified for practicality and usability.

3.1.1 Currency

Where the language of a term was considered out of date in ICD-10-AM it was either updated in the short list or the legacy terminology was included as a synonym in parentheses or within the 'included conditions' (see 3.2) of the codes.

Example

The term for A08.1 *Acute gastroenteropathy due to Norwalk agent* has been modified to **Noroviral enteritis** in keeping with updated terminology

The term for E05.9 *Thyrotoxicosis unspecified* has been modified to **Thyrotoxicosis (hyperthyroidism)**.

3.1.2 Context

Where the ICD-10-AM code descriptor did not provide sufficient context on its own the term was modified.

Example

T41.22 *Ketamine* has been modified to *Poisoning or exposure to ketamine*.

NB: Poisoning is the terminology used in ICD-10-AM and 'exposure' is more recent terminology.

If the existing ICD-10-AM code descriptor was sufficiently descriptive without the addition of qualifying context it was retained (usually where there are single concepts).

Example

G20 *Parkinson's disease* is unchanged in the short list term.

3.1.3 Exclusivity/comprehensiveness

Throughout the short list, concepts usually categorised to 'other specified' (.8) and 'unspecified' (.9) categories in ICD-10-AM, were combined to represent residual categories in the short list.

The qualifier 'other' has been added to some terms using commas for comprehensiveness and to provide exclusivity.

> **Example**
>
> The residual code B37.9 *Candidiasis unspecified* has been modified in the short list to *Candidiasis, other* to allow other and unspecified types of candidiasis to be captured and to indicate that more specified forms of candidiasis exist in the short list i.e. *Candidiasis of vulva or vagina* (B37.3) or *Candidal stomatitis* (B37.0).

However, in general if the .9 (unspecified) code (from ICD-10-AM) was included in the short list the term 'other' was not used. Therefore, terms without 'other' as a qualifier, generally reflect the single term for that condition or injury.

> **Example**
>
> The term for E03.9 *Hypothyroidism, unspecified* has been modified to *Hypothyroidism* in the short list.

Or they reflect where an unspecified (catch all) ICD-10-AM code has been used in the short list.

> **Example**
>
> H43.9 *Disorder of vitreous body, unspecified* has been modified to *Vitreous body disorder*.

The qualifier 'except' is used in some instances to indicate a code is incorrect in certain contexts.

> **Example**
>
> The correct selection for neonatal jaundice is P59.9 *Jaundice in newborn* not R17 *Jaundice (except in newborn)* as indicated by the exception.

In some instances the qualifier 'includes' is used in the term to indicate that the term is inclusive of a particular condition.

> **Example**
>
> B89 Parasitic disease other (includes head lice).

3.1.4 Aggregation

In some instances where multiple concepts have been combined (aggregated) to one code in the short list (or where ICD-10-AM already classifies multiple concepts to one code) the term has been modified to reflect common aggregated conditions.

> **Example**
>
> The term for I38 *Endocarditis, valve unspecified* has been modified in the short list to *Endocarditis, valve insufficiency, or stenosis*
>
> The term for A09.9 *Gastroenteritis and colitis of unspecified origin* has been modified in the short list to *Colitis, gastroenteritis, diarrhoea not known if bacterial, protozoal or viral*.

Notably the aggregation of concepts in some instances has resulted in a change of term meaning, compared to the mapped ICD-10-AM category.

> **Example**
>
> In ICD-10-AM *hyphaema* is categorised to a single code 'H20.1' but in the short list the term was included with other disorders of the iris and ciliary body (i.e. H21.9 *Hyphaema and other disorders of iris and ciliary body*).

3.1.5 ICD-10-AM convention

Where an ICD-10-AM convention was not intuitive it was modified, for example, the ICD-10-AM uses the preposition 'and' to indicate an 'and/or' relationship between medical concepts, meaning that both concepts are not required to meet the inclusion criteria for that category. In the short list 'and' was usually replaced with 'or' if both concepts were not required to meet the scope of the term.

3.1.6 General arrangement of terms in the ED short list

Generally terms are arranged as per **Table 3**.

Table 3 – Arrangement of terms in the short list

Arrangement of terms	Examples
Disease, severity	*Gastritis, acute*
Disease, severity, synonyms or exclusions	*Cholelithiasis, acute (without calculus)*
Disease site, type, severity	*Liver failure, acute*
Disease, type, qualifier	*Cyst, pilonidal with abscess*

If it was not logical to follow the above arrangement, terms were listed using the known disease or condition group (including known abbreviations).

Example

Carpel tunnel syndrome was used instead of *Syndrome, carpel tunnel*

Crohn's disease was used instead of *Disease, Crohn's*

3.1.7 Neoplasms

Neoplasms are another example where multiple concepts have been aggregated and consequently the short list terms were combined using a standard order of 'neoplasm, behaviours, morphology and site.'

Example

Neoplasm, benign, of … site

Neoplasm, malignant, primary site of …

Neoplasm, malignant, secondary site of …

Neoplasm, unknown whether malignant or benign of …

3.1.8 Injuries

Type of injury (e.g. fracture, dislocation) has been used as the 'lead' or 'first' word in the terms for injuries, followed by site and severity (if included), which is consistent with the general arrangement of terms in the short list.

Prepositions link the injury type and site (e.g. fracture of femur), with commas separating additional qualifying information where it exists.

The residual (unspecified) block code in each anatomical section of the injuries section begins with 'Injury of…'.

Multiple injuries and suspected injuries are dealt with within the terminology for the code or added to the 'included conditions' for particular codes as per the examples in **Table 4**.

Table 4 – Examples of suspected and multiple injuries in the short list

Short list code and term	Included Conditions
S00.00 Superficial injury of scalp	Abrasion, blister, insect bite, superficial foreign body (splinter), contusion or soft tissue injury to scalp; **multiple superficial injuries of scalp**
S09.9 Injury, unspecified or suspected of head	Injury of head with unspecified or undifferentiated diagnosis; **suspected** injury to the head or clinical diagnosis only (includes suspected TBI)
S99.9 Injury, unspecified or suspected of ankle or foot	Injury of ankle or foot with unspecified or undifferentiated diagnosis; **suspected** injury to the ankle or foot or clinical diagnosis only
T07 Injury, **multiple in significant multi-trauma**	**Multiple**, major trauma involving several anatomical regions and injury, where the severity is not captured by using a single principal diagnosis

3.2 Included conditions

Included conditions are terms classifiable to the short list code. They detail other diseases/conditions or synonymous terms that are categorised to a single short list code. This is because multiple conditions are often classified to a single code in ICD-10-AM and further aggregation of codes and concepts was required to create the short list subset of ICD-10-AM.

Included conditions predominantly follow the ICD-10-AM named categories for consistency with the mapping to ICD-10-AM.

Two primary conventions are used:

- If a four character ICD-10-AM code was included in the short list, the remaining four character codes (within the same 3 character category in ICD-10-AM) were named in the included terms in the residual category.
- If only three character categories were named in the term set, (predominantly the .9 categories), the three character categories in ICD-10-AM were included in the block residual codes.

Included conditions are listed using initial upper case and semicolons unless listing a similar group where commas are used.

Example

Phlebitis and thrombophlebitis of femoral vein; phlebitis and thrombophlebitis of lower extremities not specified as superficial or deep.

Irritant contact dermatitis due to detergents, oils and greases, solvents, cosmetics, drugs in contact with skin.

Semicolons are used to distinguish the main condition groups included from ICD-10-AM categories and blocks.

Table 5 – Example of the use of semicolons in the short list

Short list code and term	Included Conditions
E14.11 Diabetes mellitus, type not specified, with ketoacidosis, with or without coma	Diabetes mellitus, type not specified, with ketoacidosis, without coma; diabetes mellitus, type not specified, with ketoacidosis, with coma

Lower case is used to present all included terms except pronouns and proper names of infectious agents (which are italicised in lower case).

Table 6 – Example of the use of italics for infectious agents in the short list

Short list code and term	Included Conditions
B95.3 Pneumococcal disease[NNDSS] (*Streptococcus pneumoniae*)	Notifiable from laboratory definitive evidence of *Streptococcus pneumoniae*

Several inclusions have been added to the injury terms in the short list to provide detail about trauma in scope of each term (see **3.1.8 Injuries**).

3.3 Dagger and asterisk codes

Mapping of the aetiology and manifestation (dagger and asterisk) codes in ICD-10-AM was undertaken with preference given to the manifestation of a disease, if that disease was the principal reason for the attendance.

Example

 K77* *Liver disorders in diseases classified elsewhere* is represented as *Disorders of the liver caused by other diseases* where the liver disorder is the principal reason for the attendance.

3.4 General formatting

3.4.1 Abbreviations

Abbreviations have been included in the short list where these are common.

National notifiable disease surveillance system (NNDSS) reportable conditions are flagged with NNDSS in superscript next to the disease.

Table 7 – Example of the use of superscript to denote NNDSS reportable conditions in the short list

Short list code and term	Included Conditions
A83.4 Encephalitis, Australian (Murray Valley)[NNDSS]	Notifiable from laboratory definitive evidence of Murray Valley encephalitis virus and clinical evidence of non-encephalitic disease, encephalitic disease or asymptomatic disease

3.4.2 Parentheses

Parentheses were used to incorporate synonyms, included conditions and excluded conditions as noted above.

3.4.3 Commas

Commas were used to separate qualifying information where the use of natural language (preposition) was not logical.

4. Utility

The tables below display a subset of the short list, to demonstrate its utility, both as a short list that maintains the clinical comprehensiveness as per ICD-10-AM and a short list of ED activity that may be used as a standalone terminology.

Table 8 demonstrates how the terminology will display for cardiovascular diseases grouped by body system alphabetically. **Table 9** demonstrates the same terms grouped by the short list ICD-10-AM code.

Table 8 - Cardiovascular diseases in the short list sorted alphabetically

Diseases/body system group	Short list term
Cardiovascular	Angina pectoris, stable or unspecified
Cardiovascular	Angina pectoris, unstable
Cardiovascular	Atrial fibrillation or atrial flutter
Cardiovascular	Atrioventricular block, complete
Cardiovascular	Bradycardia
Cardiovascular	Cardiac arrest
Cardiovascular	Cardiac arrhythmia, other
Cardiovascular	Cardiomyopathy
Cardiovascular	Conduction disorder (except complete atrioventricular block)
Cardiovascular	Congestive cardiac failure (CCF)
Cardiovascular	Embolism, pulmonary
Cardiovascular	Endocarditis, acute (except valve disorders)
Cardiovascular	Endocarditis, valve insufficiency, or stenosis
Cardiovascular	Hypertension, essential, primary (high blood pressure
Cardiovascular	Hypertension, secondary
Cardiovascular	Hypertensive heart or kidney disease
Cardiovascular	Ischaemic heart disease, acute
Cardiovascular	Ischaemic heart disease, chronic (atherosclerotic)
Cardiovascular	Myocardial infarction, acute, other
Cardiovascular	Myocardial infarction, subendocardial, acute (NSTEMI)
Cardiovascular	Pain in chest on breathing

Diseases/body system group	Short list term
Cardiovascular	Pain in chest, other
Cardiovascular	Palpitations
Cardiovascular	Pericardial disease, other
Cardiovascular	Pericardial effusion, noninflammatory
Cardiovascular	Pericarditis, acute
Cardiovascular	Pulmonary vessel disease, other
Cardiovascular	Rheumatic fever, acute, without heart involvement
Cardiovascular	Rheumatic heart disease
Cardiovascular	Sick sinus syndrome
Cardiovascular	Tachycardia
Cardiovascular	Tachycardia, paroxysmal other
Cardiovascular	Tachycardia, supraventricular
Cardiovascular	Tachycardia, ventricular
Cardiovascular	Ventricular fibrillation or flutter

Table 9 - Cardiovascular diseases in the short list sorted by ICD-10-AM code

Short list code	Short list term
I00	Rheumatic fever, acute, without heart involvement
I09.9	Rheumatic heart disease
I10	Hypertension, essential, primary (high blood pressure)
I13.9	Hypertensive heart or kidney disease
I15.9	Hypertension, secondary
I20.0	Angina pectoris, unstable
I20.9	Angina pectoris, stable or unspecified
I21.3	Myocardial infarction, transmural, acute (STEMI)
I21.4	Myocardial infarction, subendocardial, acute (NSTEMI)
I21.9	Myocardial infarction, acute, other
I24.9	Ischaemic heart disease, acute
I25.9	Ischaemic heart disease, chronic (atherosclerotic)
I26.9	Embolism, pulmonary
I28.9	Pulmonary vessel disease, other
I30.9	Pericarditis, acute

Short list code	Short list term
I31.3	Pericardial effusion, noninflammatory
I31.9	Pericardial disease, other
I33.9	Endocarditis, acute (except valve disorders)
I38	Endocarditis, valve insufficiency, or stenosis
I40.9	Myocarditis, acute
I42.9	Cardiomyopathy
I44.2	Atrioventricular block, complete
I45.9	Conduction disorder (except complete atrioventricular block)
I46.9	Cardiac arrest
I47.1	Tachycardia, supraventricular
I47.2	Tachycardia, ventricular
I47.9	Tachycardia, paroxysmal other
I48.9	Atrial fibrillation or atrial flutter
I49.0	Ventricular fibrillation or flutter
I49.5	Sick sinus syndrome
I49.9	Cardiac arrhythmia, other
I50.0	Congestive cardiac failure (CCF)
R00.0	Tachycardia
R00.1	Bradycardia
R00.2	Palpitations
R07.1	Pain in chest on breathing
R07.4	Pain in chest, other

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