ICD Coding Newsletter

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The ICD Coding Newsletter supports the clinical coding function performed in Victoria by providing relevant information to Health Information Managers, Clinical Coders, and their associates.

The newsletter, prepared by the Victorian ICD Coding Committee in conjunction with the Department of Human Services, seeks to:
- Ensure the standardisation of coding practice across the State
- Provide a forum for resolution of coding queries
- Address topical coding education issues, and
- Inform on national and state coding issues from the Victorian perspective.

The scope of the newsletter includes coding feature articles, selected coding queries and responses, and various information updates including feedback on the quality and uses of coded data (as reported to the Victorian Admitted Episodes Dataset).

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Coding features

MBS Codes, ICD-10-AM Procedure Codes and the DHS Hospital Admission Policy

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Introduction

The release of the *DHS Hospital Admission Policy 2003-04* has generated much discussion. In relation to this, the Health Data Standards and Systems (HDSS) Unit has received a number of queries regarding the link between Medicare Benefits Schedule (MBS) item numbers, ICD-10-AM procedure codes, and the Criterion For Admission (particularly for Type B and C procedures). This article has been prepared in response to these questions, and specifically to address the inappropriate practice of determining Criterion for Admission for day procedures by looking up the first five digits of an ICD-10-AM code in the *Day Only Procedures Manual Supplement Type B and C Lists*.

Criterion for Admission for day procedures must be based on the MBS item numbers and the *Day Only Procedures Manual Supplement Type B and C Lists*.

What are MBS Item Numbers?

Medical Benefits Schedule (MBS) item numbers need to be considered in the context of the *Medicare Benefits Schedule (MBS) Book*, which '… provides information on the arrangements for the payment of Medicare benefits for professional services rendered by registered medical practitioners and approved dental practitioners (oral surgeons). These arrangements operate under the Health Insurance Act 1973 …'[1].

The *MBS Book* describes each professional service that is within scope of the MBS and its accompanying unique MBS Item Number (up to five digits in length), assigned Schedule fee and Medicare benefit. In describing the professional procedures there can be considerable 'bundling' of concepts (for payment purposes), such as the non-procedural concepts of diagnosis, severity, location, profession, time, and equipment.

Examples of MBS Item Numbers that incorporate many of these non-procedural concepts are listed below:

45506 Scar, of face or neck, not more than 3 cm in length, revision of, where undertaken in the operating theatre of a hospital or approved day-hospital facility, or where performed by a specialist in the practice of his or her specialty (Anaes.)

45625 Ptosis of eyelid, correction of eyelid height by revision of levator sutures within 1 week of primary repair by levator resection or advancement, performed in the operating theatre of a hospital or approved day-hospital facility

Also there are many instances of bundling of procedural concepts, as listed below:

30055 Wounds, dressing of, under general anaesthesia, with or without removal of sutures, not being a service associated with a service to which another item in this Group applies

35623 Hysteroscopic resection of myoma, or myoma and uterine septum resection (where both are performed), followed by endometrial ablation by laser or diathermy

What is the link between MBS Codes and the DHS Hospital Admission Policy?

The *DHS Hospital Admission Policy* is based in part on the Commonwealth *Day Only Procedures Manual*, that refers to the Default Table Benefits, which '...identify three categories of professional attention. Basically, these types are:

- Type A: professional attention normally requiring overnight hospital stays;
- Type B: professional attention normally requiring hospital treatment, but does not include part of an overnight stay;
- Type C: professional attention that does not normally require admitted hospital treatment'[2].

The *Day Only Procedures Manual* also refers to the *Day Only Procedures Manual Supplement: Type B and C Lists*. Procedures are listed in this supplement by MBS Item Number. (Note that the Type C part of this supplement is often referred to as the 'Type C exclusion List'.)

The *DHS Hospital Admission Policy* and the current *VAED Manual* reinforce the Commonwealth guidelines by stating that:

- 'Type B procedures must occur in an admitted patient setting and be reported to the VAED accordingly', and
- 'The exclusion list of procedures (the 'Type C Exclusion List') identifies services that *would normally be undertaken on a non-admitted basis* (including Outpatient and Emergency Department attendances) and not normally accepted as same day admissions'[3].

Where a MBS Item Number for a particular procedure is not on either the Type B or C list, then by default this is a Type A procedure. *DHS Hospital Admission Policy* requires that all Type A procedures are admitted, even when the procedure is performed as a day procedure. Examples of Type A procedures that are performed as same day episodes include abdominal paracentesis, arthroscopic meniscectomy, cardiac angiography with or without insertion of stent(s), extracorporeal shockwave lithotripsy [ESWL] of urinary tract and hyperbaric oxygen therapy.

The type of procedure that is planned for a patient will influence which Criterion for Admission is reported for their admission. Below is the codeset for the Criterion for Admission (which is heirarchial):

B   Day Only Bands 1A, 1B, 2, 3 and 4
N   Qualified newborn

U	Unqualified newborn
O	Patient expected to require hospitalisation for minimum of one night
E	Extended Medical Treatment
C	Type C Professional Attention Procedures
S	Secondary family member

Note that Criterion for Admission:

- Includes options that are unrelated to MBS item numbers
- Is based on planned treatment at admission, even where a patient's condition requires a different course than that planned at admission. For example, a patient coming in for a Type B procedure will have a Criterion for Admission of B, which is not altered if the patient ends up having a Type A procedure and stays the night[4].

How do ICD-10-AM Procedure Codes relate to MBS Codes?

As coders will be aware, the ICD-10-AM procedure codes (Australian Classification of Health Interventions (ACHI)), are seven digit codes generally based on MBS Item Numbers (five digit), with a two digit extension added to represent individual procedural concepts.

Some codes in the procedure classification are not based on MBS item numbers, including:

- Dental Services
- Most obstetric procedures
- Many radiation oncology procedures
- Noninvasive, cognitive and other interventions, not elsewhere classified
- Some imaging services

The ICD-10-AM codes for these procedures have a first character of 9 (there are no five digit codes beginning with 9 in the MBS). These ICD-10-AM procedure codes fall into three broad groups:

- Procedures that have a MBS code(s) but the ICD-10-AM codes are based on another classification. For example, dental codes are based on *An Australian Schedule of Dental Services and Glossary, Seventh Edition* published by the Australian Dental Association (ADA) Incorporated.
- Procedures that have a MBS code(s) but the ICD-10-AM codes are based on a different axis. For example, the first axis for obstetric procedures relates to the pregnancy cycle, and the secondary axes relate to procedure type.
- Specific procedures not encompassed by a MBS code. Reasons for this include that the procedure may be outside the scope of MBS, or that the procedure is relatively new and has not yet had a MBS item number created for it. For example, allied health codes are not listed in MBS.

When creating or amending ICD-10-AM procedure codes from MBS item numbers, there are several business rules that take into account differences between the classifications. ICD-10-AM rules include:

- No distinction based on person performing the procedure (exceptions are generic allied health procedures and dental services)

- No distinction on the basis of place procedure performed (such as operating theatre)
- Removal of most of the diagnostic information, except where the diagnosis is integral to the procedure. For example, 39706-01 *Decompression of intracranial tumour via osteoplastic craniotomy* includes the diagnosis of intrecranial.
- Removal of data items that are routinely collected (or can be calculated) through other data items, such as age.
- Using the MBS item number that is more clinically common when there is more than one item number that could be used as the ICD-10-AM code base[5].

In summary, there is not a 'matching' ICD-10-AM procedure code for each MBS item number, and this is true in reverse. Appendix A in the *ICD-10-AM Tabular List of Procedures* (third volume) provides additional information on the MBS item numbers that have been mapped to another MBS item number that forms part of ICD-10-AM.

Why shouldn't ICD-10-AM procedure codes be used to determine Criterion for Admission?

When considering the *DHS Hospital Admission Policy*, HDSS in consultation with the Victorian ICD Coding Committee, attempted to align the MBS item numbers listed in the Type B and C lists with the ICD-10-AM procedure codes, to help hospitals determine which procedures met admission criterion. The logic for this exercise was that ICD-10-AM procedure codes are based on MBS item numbers, which are used in the Type B and C lists, yet many coders, are not familiar with MBS item numbers and their use.

The public and private sectors have a different emphasis and use of the MBS item numbers.
In the public sector:
- There is a much greater proportion of non-elective episodes when compared to the private sector, for which there will be no provisional MBS item number to determine admission criterion.
- A provisional MBS item number is not commonly provided to Admissions staff at time of admission (and may only be recorded on theatre registers or financial documents after admission, which may not be accessible to coders).

In the private sector:
- Admission staff would usually have access to a provisional MBS item number, and this should be used to determine Criterion for Admission.
- The MBS item number can be important for billing purposes.

Once the work began to relate admission criterion to ICD-10-AM procedure codes, it was found to be much more difficult to automate or derive than we had hoped.

Below are some of the reasons why it is unreliable to derive the Criterion for Admission from ICD-10-AM codes, by looking up the first 5 digits of the ICD-10-AM procedure code in the Type B and C lists.

- Unlike MBS, ICD-10-AM contains 'other' and 'unspecified' procedures as residual categories, such as 90011-01 [59] *Other procedures on spinal canal or spinal cord structures*. Where these ICD-10-AM procedures are listed in blocks of codes with the same Admission Criterion category, such as Type A, then it may be appropriate to assume that 'other and unspecified' procedures falling under this code will also be Type A. However this is not always the case.

- Through this analysis, we have found what we perceive to be inconsistencies in the categorisation of similar procedures as Type B or C procedures. Some of these issues have been forwarded to the Commonwealth for consideration.

- Compared to ICD-10-AM, MBS item numbers:
    - Bundle procedures together to a much larger degree, for example, often bundling in an anaesthetic with another procedure. This can result in a MBS item number being categorised as Type B, however when this MBS item number has been used as the basis for an ICD-10-AM code which then does not include the anaesthetic, the ICD-10-AM procedure code may not represent a Type B procedure.

        An example of this is the code in ICD-10-AM relating to a gynaecological examination (35500-00 *Gynaecological examination*), which does not confine itself to those completed under anaesthetic. The corresponding MBS code (35500 *Gynaecological examination under anaesthesia, not being a service associated with a service to which another item in this Group applies*) is listed in the *Day Only Procedure Manual Supplement* as a Type B procedure, however the ICD-10-AM procedure code would only be considered a Type B procedure if followed by an anaesthetic code.

    - Include more diagnostic attributes in the definition of the codes than ICD-10-AM. This can affect whether the procedure is considered Type B or C. For example, the following MBS code, which is a Type B procedure, provides detailed clinical information indicating the severity of the condition:

        45019 *Full face chemical peel for severely sun-damaged skin, where it can be demonstrated that the damage affects 75% of the facial skin surface area involving photodamage (dermatoheliosis) typically consisting of solar keratoses, solar lentigines, freckling, yellowing and leathering of the skin, where at least medium depth peeling agents are used, performed in the operating theatre of a hospital or approved day-hospital facility by a specialist in the practice of his or her specialty.*

        However the ICD-10-AM code (45019-00 *Full face chemical peel*) may be used for less severe clinical cases, and therefore it is not possible to assume that every time the ICD-10-AM code is assigned that the clinical criteria are also met, therefore a particular episode may not meet the Admission Criterion.

o   Include other non-procedural, non-diagnostic information that affects the placement of the procedure within the Type B and C lists.

For example MBS code 41647 *Ear toilet requiring use of operating microscope and microinspection of tympanic membrane with or without general anaesthesia* is considered to be a Type B procedure, presumably because of the use of the equipment and the visualisation of the tympanic membrane. However this code was used as the basis of the ICD-10-AM code 41647-00 *Ear toilet, unilateral*, which will not always meet Criterion for Admission.

- The absence of an ICD-10-AM procedure code does not necessarily mean that a Type B procedure has not been performed. Australian Coding Standard 0042 *Procedures normally not coded* lists a number of Type A and B procedures that should not normally be coded for admitted episodes, such as application of plaster. Therefore the absence of a procedure code does not necessarily preclude admission.

- Lastly, there are differences in timing the updates for each classification. ICD-10-AM is updated every two years, while MBS is updated six monthly. Therefore new or deleted MBS codes may be added or removed from the Type B and C lists every six months. Outcomes of this may include:
  o   MBS codes removed from the Type B and/or C lists because they no longer exist in MBS, which still have a 'matching' ICD-10-AM procedure code.
  o   New procedures may be classified to an 'other or unspecified' ICD-10-AM procedure code, but have a specific code created in MBS (that may be used for the next version of ICD-10-AM).

Note that the Commonwealth do not re-release the *Day Only Procedure Manual Supplement* on their website with the *Day Only Procedure Manual* documentation. However they do release a circular listing the additions, amendments and deletions to the Type B and C lists, and at the end reproduce the lists in total. The website for the Australian Government circulars is:
http://www.health.gov.au/internet/wcms/Publishing.nsf/Content/Circulars%20and%20Reports-1

To subscribe to the circulars, email your subscription details to Private Health Insurance Branch at privatehealth@health.gov.au. Please include: nature of business, company name, contact name, position, postal address, phone, fax and email address[6].

The above discussion also provides insight as to why coders should not use MBS item numbers written in medical records to determine the ICD-10-AM procedure code without supporting documentation.

Summary
The practice of determining Criterion For Admission by using the first five characters of the ICD-10-AM procedure code to find a match on the Type B and C lists is strongly discouraged.

At best this practice can only provide a guide to the categorisation of the procedure for admission criterion purposes.

If sites wish to use ICD-10-AM codes to confirm criterion for admission, they need to manually confirm that the descriptor/concepts of the MBS item numbers and ICD-10-AM procedure codes match. If they do not match, it is the MBS item numbers that determine Admission Criterion rather than the ICD-10-AM procedure codes, as it is the MBS item numbers that are listed in the *Day Only Procedure Manual Supplement* Type B and C lists.

A subcommittee of the Victorian Coding Committee began completing the assignment of a Criterion for Admission category to each ICD-10-AM procedure code. However the preliminary work undertaken indicates that this tool would not be useful, as described by this article, so will not be finalised or released. In April 2004 HDSS began forwarding the issues relating to hospital admission policy and the Type B and C lists to the Commonwealth to promote national resolution of these issues. We await their response!

References

Australian Government Department of Health and Ageing (2004), *Medicare Benefits Schedule Book*, Commonwealth of Australia, Canberra, ACT (http://www7.health.gov.au/pubs/mbs/mbsnov04/index.html)

Commonwealth Department of Health and Ageing (1999), *Day Only Procedures Manual September 1999*, Commonwealth of Australia, Canberra, ACT (http://www.health.gov.au/internet/wcms/Publishing.nsf/Content/health-privatehealth-providers-dayonly-dayonly_1999.htm)

Commonwealth Department of Health and Ageing (2003), *Day Only Procedures Manual Supplement Type B and C Lists*, Commonwealth of Australia, Canberra, ACT (http://www.health.gov.au/internet/wcms/Publishing.nsf/Content/health-privatehealth-providers-dayonly-dopsupp_may2003.htm)

Department of Human Services (2003), *DHS Hospital Admission Policy 2003-04*, Victorian Government Department of Human Services, Melbourne, Victoria (http://www.health.vic.gov.au/hdss/vaed/admpol0304.pdf)

Department of Human Services (2004), *Victorian Admitted Episodes Dataset (VAED), 1 July 2004, Fourteenth edition*, Victorian Government Department of Human Services, Melbourne, Victoria (http://www.health.vic.gov.au/hdss/vaed/2004-05/manual/index.htm)

Innes K, Hooper J, Bramley M & DahDah P (1997), 'Creation of a clinical classification: International statistical classification of diseases and related health problems – 10th revision, Australian Modification (ICD-10-AM)', *Health Information Management*, Vol27 No1 pp31-38

National Centre for Classification in Health (2004), *The International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (ICD-10-AM), Fourth Edition*, The University of Sydney, Australia

[1] Australian Government Department of Health and Ageing, pIII

[2] Commonwealth Department of Health and Ageing (1999), p2

[3] Department of Human Services (2004), pp2-11&12

[4] Department of Human Services (2004), pp3-64

[5] Innes K, et al, pp34-35

[6] http://www.health.gov.au/internet/wcms/publishing.nsf/Content/health-privatehealth-providers-circulars.htm

On DRGs and Casemix Funding

Author: Steve Gillett, Senior Policy Analyst, Department of Human Services
(First published in April 1997-reproduced here with permission and with upgrades to current AR-DRG version)

Abstract

A casino analogy is used to describe some of the underlying issues and problems in implementing a fair casemix funding policy. The Victorian policy is outlined in the way it helps address cost variations between patients and limit the financial risk to hospitals. Although the funding formula may be complex, its underlying concepts are simple. If the underlying assumptions about probability are accepted, casemix funding provides a fair method for funding hospitals.

The Average Patient

At a recent conference I was talking to a well known health services academic who said that he had found one of the most difficult aspects of casemix for clinicians was to change their focus from the individual patient to the mythical 'average' patient. He argued that once we understand the nature of the 'average' patient, we see that differences in the costs of providing care to individual patients do not affect our ability to understand a hospital's financial situation or to determine its level of funding.

To illustrate his argument, he used an analogy between hospitals and casinos. While it might seem trite to compare an organisation such as a hospital and the activity of health care employees with a casino and casino staff, the analogy has some merit if it helps us understand how and why a casemix payment system, based upon the 'average' patient, works. In this paper I will examine this analogy.

The first observation we need for this analogy is that casinos make money! Unlike most businesses, very few casino operators go bankrupt. How do they achieve this? How much do gamblers lose on each bet? What happens if some gamblers win? Casinos make money by knowing the different types of bets gamblers make and understanding the average or expected result for each bet. By understanding the average results, they can arrange the odds paid so that the house usually wins, while knowing fully well that some gamblers will win.

Hospitals, like casinos, have relatively little control over who 'walks' through their door. Like casinos, hospital staff have no way of predicting exactly how much any individual patient will cost ('winning bets'), or how much funding they will receive for that patient ('losing bets'). But as in a casino, you can confidently predict a hospital's overall financial situation provided:

- You can accurately describe the types of patients who are treated in terms of their condition and therapies.
- You understand the average 'result' of each type of patient in terms of costs and funding.
- The hospital treats enough patients so that 'runs' of more expensive and 'less' expensive patients even out.

This is the underlying concept behind casemix funding. Hospitals are paid a 'fair' average price for each different type of patient, regardless of the costs of treating any individual patient. Of course, the difficulty is accurately describing the different types of patients and determining a fair 'average' price.

The need to describe accurately the different types of patients and the corresponding need to determine a fair price represent one of the dilemmas in casemix funding. The more different patient categories we use, the more accurately we can define the types of patients a hospital treats. Unfortunately, the more patient categories we use, the harder it is to determine a fair average price.

At one extreme, if we treat all patients as belonging to a single category called 'separations', we can very accurately define the average price, but cannot describe the patients treated in individual hospitals. At the other extreme, if we treat each patient as a separate category, we would describe the patients in each hospital perfectly, but would be unable to define a fair average price. To paraphrase John Maynard Keynes, it is no better to be precisely wrong than to be vaguely correct.

Describing a Hospital's Patients

The Victorian hospital funding policy for 2004-05 classifies admitted patients using the Victorian version of Australian DRGs (Version 5.0). While the intent was to use Australian DRGs (AR-DRG5s), changes in national coding rules and local clinical advice have resulted in a small number of modifications to AR-DRG5s.

Figure 1 describes the logic typical in allocating a patient to a DRG[1]. First, patient records are examined for demographic and clinical edits. Once the record has passed these edits it is allocated to an MDC (Major Diagnostic Category) The pre-MDC allocation then takes place before the remaining patients are allocated to an adjacent DRG. Final DRG allocation depends on the presence or otherwise of complication and/or comorbidity codes or other variables such as age – the DRG descriptors provide details regarding the split indicator.

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[1] This diagram provides the typical structure. The reader is referred to the AR-DRG definitions manual for the details relating to specific DRGs.

Perhaps a casino equivalent might be to classify bets according to the type of game played. While this might be useful for some purposes (for example, determining staffing levels), it is does not describe the bets adequately for determining odds. Casinos need to describe the odds for different types of bets in each game.

Similarly, hospitals need to describe the different type of patients in each MDC. Once allocated to an MDC, patients are classified as surgical, medical or 'other', based on whether or not there are procedure codes.

Surgical patients are allocated into surgical DRGs based upon the operating room procedures (OR) performed. The AR-DRG grouper software effectively prioritises procedures and allocates the case accordingly. This is done sequentially, according to the surgical hierarchy. The grouper software first checks to see if the record contains the most significant procedure for the MDC. If the procedure is present, the record is allocated to the relevant adjacent or associated DRG (adjDRG); if not, the grouper checks for the next most significant procedure, and so on. Finally, if after testing against all significant procedures for the MDC the record has still not been allocated to an adjDRG, it is allocated to an error DRG. In version 5 AR-DRGs, the order of DRGs does not necessarily reflect the surgical hierarchy.

'Other' patients are allocated to 'other' DRGs based on the presence of a non-operating room (NonOR) procedure. These procedures are active in certain MDCs but not in others. A NonOR procedure will be involved in ADRG allocation only if there are no OR procedures in the string of codes.
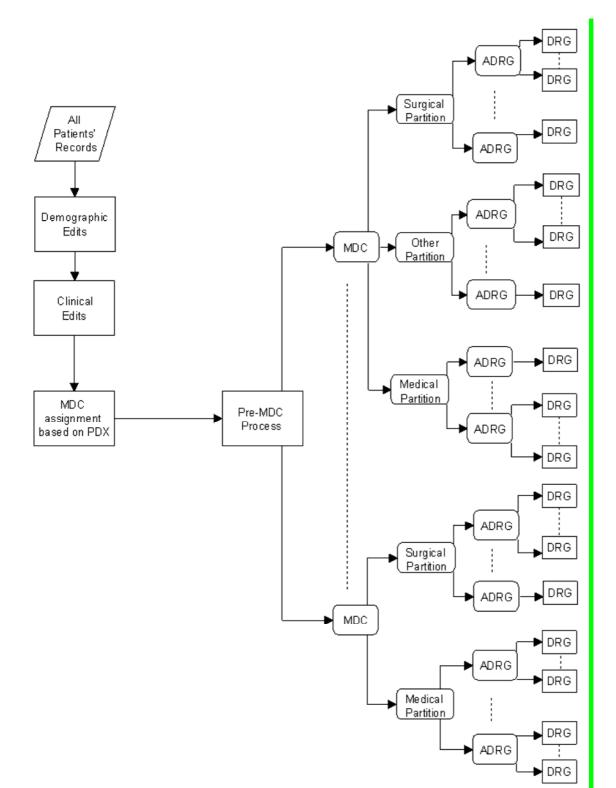
Figure 1 Overview of AR-DRG classification structure

Medical patients are grouped similarly, except that they are allocated to adjDRGs based upon their Principal Diagnosis rather than an operating room procedure.

In most cases, patients allocated into adjDRGs are not sufficiently alike for adjDRGs to be used to describe a hospital's workload. For example, 'Coronary Artery Bypass' does not provide sufficient information to estimate the level of care required by the patient. Consequently, the grouper software further categorises patient records into DRGs based upon variables such as patient clinical complexity levels, age and discharge/transfer status.

The grouping structure for MDC 15 *Newborns and other Neonates* differs from the structure outlined above. Age in days, birth weight and died/transferred within five days are used as the main grouping variables. Some groups are then further subdivided based upon the presence of an Operating Room procedure, and the existence of 'major' and/or 'minor' problems[2].

How Many Groups?

In casinos, the number of different types of bets is easily determined; unfortunately, this is not the case for hospitals. There is no 'correct' number of DRGs. As discussed previously, the number of DRGs is a balance between clinical homogeneity and the numbers of patients who are likely to be allocated to the DRG. The Commonwealth has developed a process for determining where further DRGs should be defined. Before an existing DRG (or adjDRG) is split into smaller categories, the categories must be clinically meaningful. They must also satisfy a number of statistical criteria which have been developed to help make certain there are still sufficient cases to allow us to determine the 'fair' average price. They include:

- The two groups must have a clinically significant difference in their average lengths of stay (at least two days or a multiple of two times).
- A minimum increase in the amount of the variation in length of stay that can be explained by the groups (>5 per cent).
- These differences must be statistically significant; that is, not due to chance.
- There must be sufficient numbers of cases in each group (each new DRG must have at least 200 cases and at least 10 per cent of the cases of the original group).
- Reduction in the numbers of patients in each group should not greatly reduce our ability to predict length of stay or cost.

The Commonwealth has instigated a review process to ensure that AR-DRGs reflect current medical practice. DRGs are joined or split in each new version of DRGs to ensure their clinical relevance.

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[2] The reader should refer to the AR-DRG Definitions Manual Volume 3 Appendix C, and Volume 1 4.4 Pre-MDC processing, for a full description.

Determining a fair price

The second problem in devising a casemix funding policy is determining a 'fair' average price for each group of patients. In Victoria this is done by setting a benchmark price and describing each patient relative to it. The benchmark price can be based on any group of patients, including all patients, patients in a specific group of hospitals or patients in a specific DRG. In previous years, the benchmark price has been based upon patients in the Victorian Cost Weights Studies.

The benchmark price need not represent the 'average' production cost for the patients used to determine the benchmark price, and will almost certainly not equal the cost for an individual hospital. In Victoria, the benchmark price (price per WIES) is set at a level that should cover the costs in the most efficient hospitals. In setting this price, the Victorian Department of Human Services is acting like any purchaser of any commodity. Most people when buying a product shop around and, while they might not buy at the lowest price, they often buy at below the average price. This process helps keep prices low and helps ensure consumers get value for money. By purchasing WIES at a benchmark price, the Department encourages hospitals to provide the best quality care possible for our health dollar in exactly the same way as consumers maximise their purchasing power when shopping.

Obviously hospitals, like any other producer of goods and services,[3] need to look carefully into their processes and costs if they are unable to provide care at a cost equivalent to other hospitals. Paying a benchmark price encourages hospitals to do this.

'Fair' average prices are determined for each DRG by multiplying the benchmark price (price per WIES) by a relative value score (the cost weight). Cost weights are determined annually using clinical costing information from the larger Victorian public hospitals. Data from about half of all Victorian public hospital inpatients are used to determine the cost weight.

Traditionally, the cost weight for DRGs is calculated by dividing the average cost for patients in the DRG by the average cost for patients in the reference group (typically the average cost for all patients). In Victoria, a number of technical adjustments are made. These include:

- Adjustments for outliers. Data for patients who stay longer or shorter than expected for their DRG are excluded from the calculations.
- Technical adjustments required because of the costing systems in hospitals (for example, prostheses costs are included in the theatre costs and are allocated to patients according to time in theatre).

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[3] The concept of a hospital product being a 'bundle' of care for specific types of patients underlies casemix funding models.

Setting the 'Table Limits'

While casinos rarely exclude individuals, they do control the level of financial risk associated with individual bets. They do this by setting table limits. The rules of each game set minimum and maximum limits associated with each type of bet. For example, suppose on a particular roulette table over a day there were 100,000 bets and the majority of players bet between $2 and $10 (say the average was $4). On average, for every dollar bet the casino returns about 97.5 cents as 'winnings'. This means that the table should return about $10,800 during the day. However, without table limits, a single bet of say $5,000 by one gambler on a single winning number would result in a payout of $175,000. This is equivalent to the expected return from the table over four months. Not surprisingly, this is not looked on favourably by casino owners so table limits are applied.

Unlike casinos, hospitals are unable to set 'table limits'. They can't set an upper limit on the amount of care they provide to extremely sick patients and thereby cap the maximum 'payout'. This presents a potential problem. A single expensive patient can result in a greater 'loss' than the potential 'profit' associated with many of the less costly patients.

The Victorian casemix funding policy recognises this problem in two ways. First, it sets an upper boundary on the time patients stay in hospital beyond which additional per diem payments are made. The per diem payment is designed to model the likely costs of providing care at the end of a patient's stay. Hence, this approach attempts to limit the extent of financial disadvantage hospitals experience. Second, many patients who undergo mechanical ventilation in hospitals with designated intensive care units receive additional payments based upon the amount of time they spend on mechanical ventilation. As time on mechanical ventilation is closely correlated to time in intensive care, this additional payment helps reduce the financial disadvantage of treating some of the most severely ill patients.

Excluding People Who Always Win

On rare occasions casinos will refuse to admit individual gamblers. These are usually people who have a record of winning 'big' or who have an exceptionally good memory and can remember the cards that have previously been dealt.

Unlike casinos, public hospitals can't turn away patients, or types of patients, who are known to cost more than the hospital will receive under their funding policy. This is recognised by the Department. Hospitals can apply for a special purpose grant where the higher costs of treating groups of patients can be clearly related to differences in patient characteristics or in the care required by patients. The teaching and research grant is one such example. Part of this grant is to provide hospitals with additional funds to cover the increased costs associated with patients admitted to referral hospitals.

Of course, all hospitals would like to be paid the 'average' price for all patients that cost less than the 'average', and receive additional funding for patients who are more expensive than the 'average'. However, by the nature of an 'average' price, some patients will cost more to treat than funding provides. Therefore, before a special purpose grant will be considered by the Department, a hospital needs to demonstrate that it has a higher proportion of costly patients than could be reasonable expected given its DRG mix.

Predicting the Number of Patients Treated

Unlike a casino, a large part of a hospital's costs are fixed. Further, it is often difficult to predict the exact level of demand for different types of care, so many of a hospital's costs occur regardless of the number of patients treated. In addition, different types of hospitals have different levels of fixed costs.

The Victorian funding policy recognises this difficulty, and separates funding into 'fixed' and 'variable' funding. Each hospital contracts with the Department to provide care for a set number of WIES. The total funding is calculated as though this amount of care is provided. About 36 per cent (depending upon the type of hospital) of these funds are paid regardless of the actual amount of care provided. The remaining 74 per cent of funds are paid only if the contracted number of WIES are achieved. A leeway of 2 per cent (or 4 per cent for small hospitals) is allowed.

'Manipulating the Odds'

While it is relatively difficult for gamblers to cheat in the casino, it is relatively easy for hospitals to maximise their WIES by manipulating their DRGs. DRG allocation relies on accurate reporting of the clinical characteristics of patients. If hospitals manipulate their admission practices and/or coding practices to maximise their DRG allocation, the integrity of the DRG classification is reduced. Cheating reduces our ability to pay hospitals appropriately.

In many cases, cheating only provides a one off benefit. If patients are inappropriately allocated to more expensive DRGs this year, the average cost for the DRG will fall and next year's cost weight will reduce.

Further, as coding audits become more extensive, the chance of being caught increases.

Summary

In this paper, I have used the casino analogy to describe some of the underlying issues and problems in implementing a fair casemix funding policy. I have briefly described how the Victorian policy helps to address the issues of cost variations between patients and limit the financial risk to hospitals.

Although protagonists of casemix funding argue about the 'complexity' of the funding formula, the underlying concepts are simple. Provided we accept the underlying assumptions about probability, casemix funding provides a fair method for funding hospitals which ensures that the Victorian public gets value for its health dollar. The lesson from the casino is simple. Probability works!

Note: The views expressed in this article are completely personal and do not necessarily reflect the views of the Department of Human Services or the Government of Victoria.

Selection ICD-10-AM coding queries

#1929 Falls for investigation

Patient admitted with principal diagnosis of Falls for investigation. History reveals patient has had several falls in the last month, the last fall resulting in a very painful hip and difficulty ambulating, so patient brought to the emergency department (ED) to exclude fracture.

X-ray showed no fracture, the ED notes state to admit patient for CT head and other tests to investigate reason for falls. No cause was identified during the admission for the falls.

ACS 1806 *Falls* states not to use R29.81 *Falls* in cases of known trauma. Some coders are interpreting this to mean if any trauma results from a fall, no matter what the reason for admission, do not use R29.81. Others feel it means you can use R29.81 with an injury, so long as the injury was not the reason for admission, but investigation of the falls was the reason.

Also, what if the patient had physiotherapy during the above admission, should this change the principal diagnosis even though this was clearly not the reason for admission?

The Victorian ICD Coding Committee notes that **ACS 1806 *Falls*** has caused confusion amongst coders. Therefore the following is the Committee's interpretation of the standard to provide guidance to Victorian coders:

> If the reason for admission is falls for investigation and the patient also has minor injuries, assign **R29.81 *Falls*** as principal diagnosis. Assign codes for minor injuries if they meet **ACS 0002 *Additional Diagnoses***. If the underlying condition for the falls is found, assign the code for the underlying condition as the principal diagnosis.

> If the reason for admission is an injury such as a fracture and falls for investigation is also documented, assign the fracture as the principal diagnosis and assign **R29.81 *Falls*** as an additional diagnosis if the falls are investigated.

> This may be a change of coding practice for some coders.

#1962 Threatened premature labour without delivery

> 30 year old female admitted at 34/40 in Threatened premature labour. Patient treated with Bricanyl to halt contractions. Patient stayed in hospital until 38/40 when an elective caesarean section was performed (patient had previous caesarean section at 29/40). What would the Principal Diagnosis be?
>
> Is there documentation saying that O47.x *False labour* is not to be used in a delivery episode?

Thank you for your query. This was referred to the NCCH for advice.

The criteria for coding 'false labour' is that the patient is not in true labour and has not delivered on that admission. Therefore it is not appropriate to use a code from **O47.x *False labour*** for the case cited. The NCCH suggests the following diagnosis codes for the case cited:

O60   *Preterm delivery*
O09.5   **(Duration of pregnancy)** *34-36 completed weeks*
O34.2   *Maternal care due to uterine scar from previous surgery*
Z37.x   *Outcome of delivery*

O60   *Preterm delivery* should be assigned by following the index pathway:

Labour
-early onset (before 37 completed weeks of gestation) O60

Also, **ACS 1515 *Antepartum condition with delivery*** advises that an antepartum condition (in this case the premature labour) requiring treatment for more than 7 days before delivery of a baby should be sequenced as the principal diagnosis.

O09.5 *(Duration of pregnancy) 34-36 completed weeks* is assigned to indicate the duration of pregnancy at admission on the mother's record in accordance with **ACS 1518 *Duration Of Pregnancy*.**

The WHO Update Reference Committee agreed to change the title of O60 Preterm delivery to 'Preterm labour'. The change will be made for ICD-10-AM fifth edition.

The Victorian ICD Coding Committee also note the O60 *Preterm delivery* can be assigned following index pathway:

Contractions
-preterm without delivery O60

#1963 Use of Z53 Persons encountering health services for specific reasons not carried out

Patient admitted for endoscopic retrograde cholangiopancreatography (ERCP) for bile duct calculus. The ERCP could not be completed due to inability to cannulate the duct.

When a procedure has been abandoned, in addition to coding the extent of the procedure (in line with ACS 0019 *Procedure not completed or interrupted*) can you also add Z53.x *Persons encountering health services for specific procedures, not carried out*?

ACS 0011 *Admission for surgery* not does not cover this scenario. The addition of this code would indicate that the actual procedure the patient was in theatre for did not occur.

Codes assigned:

K80.50   *Calculus of Bile duct*

Z53.8   *Procedure not carried out for other reasons*

30473-00 [1005]   *Gastroscopy*

92515-99 [1910]   *Sedation (ASA unknown)*

This query was referred to the NCCH for advice.

> The NCCH does not support the assignment of a code from **Z53 *Persons encountering health services for specific procedures, not carried out*** for the scenario cited. Codes from this block should not be assigned for procedures that are performed, but are not completed or are unsuccessful.

> The NCCH will consider the creation of a code to capture the concept of procedures 'abandoned' for a future edition of ICD-10-AM.

The Victorian ICD Coding Committee agreed that if a procedure is commenced but not followed through to the expected procedure, to code the extent of the procedure performed as per **ACS 0019 *Procedure not completed or interrupted*.**

#1973 Assignment of principal diagnosis epididymo-orchitis or sepsis

It is often documented in the admission notes that patients who are diagnosed with a localised infection such as pneumonia are also Septic or have Sepsis.

Following the index in ICD-10-AM Volume Two and providing the criteria in NCCH Query Q1719 are met, I believe it is correct to assign A41.9 *Sepsis, unspecified* when either of these terms is documented.

In the absence of the terms Sepsis or Septic on the Discharge Summary or when these terms are documented on the Discharge Summary but are listed after the localised infection, I would like to know if I can apply a similar logic to that used in ACS *0108 Sepsis secondary to Urinary Tract Infection/Urosepsis* to other localised infections, and sequence the code A41.9 *Sepsis, unspecified* before the localised infection code, because presumably it would be the more clinically significant condition?

In this scenario, the appropriate standard to apply is **ACS 0001 *Principal diagnosis*** to determine the principal diagnosis. **ACS 0110 *Septicaemia*** provides guidance for coding of sepsis versus local infection.

The VICC has forwarded the following proposal to the NCCH.

> The Victorian ICD Coding Committee would like to suggest that the NCCH incorporate the content of **ACS 0108 *Sepsis secondary to urinary tract infection/urosepsis*** into **ACS 0110 *Septicaemia*** if the intention is that sepsis should always be the principal diagnosis in these cases.

> Then (in light of the redeveloped **ACS 0110 *Septicaemia***), **ACS 0108 *Sepsis secondary to urinary tract infection/urosepsis*** would be redundant, as it addresses a unique situation, and can cause confusion, as it has in this scenario. The Committee suggests that consideration be given to the removal of **ACS 0108 *Sepsis secondary to urinary tract infection/urosepsis*** from the standards.

The NCCH has advised that they will consider amendments to **ACS 0110 *Septicaemia*** and **ACS 0108 *Sepsis Secondary to Urinary Tract Infection/Urosepsis*** for a future edition of ICD-10-AM.

#1981 CT Colonography

76 year old male patient, admitted with iron deficiency anaemia. Patient had a CT Colonography and I am unsure of how this should be coded.

The only appropriate code I can find is 56401-00 [1962] *Computerised tomography of abdomen*.

Clinical research revealed the following information about CT colonography:

> http://www.radiologyinfo.org/content/news/nd050703%2D2.htm
> CT (computed tomography) colonography is a new type of x-ray exam that applies the well-known CT technique to examining the interior of the colon, or large intestine. CT itself is a noninvasive type of radiography that uses a rotating beam of x-rays and detectors placed at varying angles to obtain cross-sectional images, or "slices," of a particular part of the body. Special computerized analysis converts the images into detailed three-dimensional pictures of the inside of the colon. In this way it is possible to accurately demonstrate a wide range of abnormal changes including tumor masses. Another name for CT colonography is "virtual colonoscopy," meaning that it enables the radiologist to "see" inside the colon without having to insert a viewing instrument—the colonoscope—into the bowel.

The Victorian ICD Coding Committee agrees with the inquirer's suggested code.

#1992 Deep Vein Thromboses (DVTs) of the lower limb

Please provide advice on coding deep vein thromboses (DVTs) of the lower limb.

Question 1

Are DVTs of all femoral veins coded to:

I80.1   *Phlebitis and thrombophlebitis of femoral vein*

as indicated in the index, or is this code only used for DVTs of deep femoral veins? If so, would

I80.0   *Phlebitis and thrombophlebitis of superficial vessels of lower extremities*

be the correct code for a DVT of the superficial femoral vein?

'DVT' is usually the documented diagnosis/terminology used, even though the vein may not be deep, and may in fact be superficial.

Question 2

When coding a DVT that involves multiple veins of the lower limb, is it appropriate to provide a code for each type of vein involved (i.e. superficial, femoral, other deep)? For example, how would you code thrombosis involving the left distal external iliac, common femoral, superficial femoral, deep femoral, popliteal, and posterior tibial veins?

I80.0   *Phlebitis and thrombophlebitis of superficial vessels of lower extremities*

I80.1   *Phlebitis and thrombophlebitis of femoral vein*

I80.2   *Phlebitis and thrombophlebitis of other deep vessels of lower extremities*

I80.3   *Phlebitis and thrombophlebitis of lower extremities, unspecified*

Answer 1

All DVTs of the femoral vein should be coded to **I80.1 *Phlebitis and thrombophlebitis of femoral vein*** as all femoral veins are deep vessels.

Deep veins are much larger vessels than superficial veins, and lie deep within the muscle compartments, carrying most of the blood out of the leg. Reference to a 'superficial femoral vein' is a description of its relative position, however, it is still classified as a deep vein.

Answer 2

When coding DVT follow the index according to documentation. Thrombosis of the lower limb (DVT) documented as deep, should be assigned **I80.2 *Phlebitis and thrombophlebitis of other deep vessels of lower extremities*** except for DVT of femoral vein which is assigned **I80.1 *Pheblitis and thrombophebitis of femoral vein*** as it has a specific index entry

Index entry:
Thrombosis
- femoral I80.1

#2001 Diabetes with conditions documented in previous admissions

During a recent coding audit we were advised that it is allowable when coding Diabetes Mellitus (DM) to refer back to the documentation in previous admissions and assign any appropriate DM related codes, even if the conditions are not documented in the admission we are coding.

In some circumstances I believe it is correct to refer back to previous admissions, for example to gain further specificity of the type of DM because I only have unspecified DM documented in the admission I am coding. However, I believe the practice of looking back for DM related conditions when there is no indication of these conditions in the current admission I am coding is questionable.

My concerns are (these questions don't have to be answered individually):
- Would this apply to conditions such as hypercholesterolaemia and obesity or only conditions which are found under 'Diabetes, with'?
- If it does apply to obesity, can patients lose weight between admissions and therefore not be classified as obese in the most current admission?
- Would it matter if the patient had past documentation of hypercholesterolaemia and obesity but had not yet been diagnosed with DM?
- When documenting past history, conditions can be copied down incorrectly such as PVD can become PUD and vice versa. Only one person would need to do have done this in a previous admission for the Coder to pick up PVD when the patient actually has a past history of PUD?
- Should this only apply where the conditions are documented in more than one past admission?
- Would this create confusion about eradicated conditions if the conditions are documented in past admissions and not in the current admission but there is no evidence that the condition has been eradicated?
- Are there conditions that can be eradicated before a diagnosis of DM is made?
- Do Coders have the time to look back through past admissions in such detail?
- If we decide to follow this practice how far do we go back? What if we don't have access to all volumes of the medical record, for example, there are closed volumes in storage, do we need to retrieve all past volumes to complete this process thoroughly?
- Should hospitals be instructed to educate clinicians about documenting all conditions relating to DM within each admission rather than expecting Coders to look back through past admissions?
- What impact does applying this practice have on conditions other than DM?

On the other hand, it does seem incorrect to code DM without complications based on current documentation when there has been documentation of complications, for example, PVD or Retinopathy in the past admissions.

Presuming DM meets the criteria to be coded in the current admission, are coders

expected/required to look back through documentation in past admissions for DM related conditions and assign the appropriate codes, even though these conditions are not documented in anyway in the current admission (this includes implying that a condition existed, for example, Past history of eye surgery)?

In accordance with **ACS 0010** *General abstraction guidelines* and once it has been established that diabetes meets **ACS 0002** *Additional diagnoses* in the current episode, then it is correct coding practice to review previous episodes in order to identify and assign codes for conditions related to diabetes.

#2003 Same day admission for insertion of peritoneal dialysis catheter

If a patient has a same day admission for insertion of a peritoneal dialysis catheter, what code should be assigned as the principal diagnosis? If the index is followed, it seems that either of two codes are appropriate:

Admission
- dialysis
- - catheter
- - - peritoneal
- - - - fitting and adjustment Z45.8

Z45.8   *Adjustment and management of other implanted devices*

Admission
- dialysis
- - peritoneal
- - - preparatory care only (without treatment) Z49.0

Z49.0   *Preparatory care for dialysis*

Admission
- fitting (of)
- - catheter
- - - dialysis
- - - - peritoneal Z45.8

Z45.8   *Adjustment and management of other implanted devices*

What is the difference between admission for fitting of a peritoneal dialysis catheter (Z45.8) and admission for peritoneal dialysis preparatory care (which usually involves fitting of a PD catheter)?

Block Z45 is titled *Adjustment and management of implanted device*. Codes from this block are usually assigned for checking and testing of previously inserted devices. Therefore it would seem inappropriate to assign a code from this block as principal diagnosis, for an initial insertion. Maybe the index needs to be improved?

Selection of principal diagnosis affects DRG assignment, as shown below:
   Principal diagnosis Z45.8 *Adjustment and management of other implanted devices*
   Principal Procedure 13109-00 [1062] *Insertion and fixation of indwelling peritoneal catheter for long term peritoneal dialysis*
   DRG Z01B   *ORPs W Diags Oth Contacts W/O Cat/Sev CC* (WIES 0.415)
or
   Principal diagnosis Z49.0 Preparatory care for dialysis
   Principal Procedure 13109-00 [1062] Insertion and fixation of indwelling peritoneal catheter for long term peritoneal dialysis
   DRG L02Z   *Op'tive Insert Periton Catheter-Dialysis* (WIES 0.8513)

What code should be assigned as principal diagnosis?

This query was referred to the NCCH for advice who advised:

For the case cited: 'same day admission for insertion of peritoneal dialysis catheter', assign: **Z49.0 *Preparatory care for dialysis***

The NCCH will consider amendments to the Alphabetic Index of Diseases relating to this topic to correct anomalies.

#2016 Bladder washout

Should a procedure code for bladder washout be assigned when it is performed in the emergency department or on the ward (without any type anaesthesia)?

For example, patient attends emergency department, diagnosed with haematuria and clot retention. Indwelling catheter (IDC) inserted and bladder washout performed for clot retention.

Index:
Lavage
- bladder (diagnostic) 11921-00 [1862]
- - for removal of blood clot(s) (closed) (endoscopic) 36842-00 [1092]
- - therapeutic, endoscopically controlled (hydrodilation) 36827-00 [1108]

Tabular List:
36842-00 [1092] *Endoscopic lavage of blood clots from bladder*

In the index, the term 'endoscopic' is a non-essential modifier, yet in the tabular list it's in the title, which is a little off-putting, as the procedure was not performed endoscopically. But the issue is, should this procedure be coded? It is not included in ACS 0042 *Procedures normally not coded*.

If coded without the procedure code:
R31   *Haematuria*
N39.88   *Clot retention*
DRG L65B   *Kidney + urinary tract signs and symptoms without catastrophic or severe CC* (medical DRG)(V4.2)(WIES = .4986)

If coded with the procedure code:
R31   *Haematuria*
N39.88   *Clot retention*
36842-00 [1092] *Endoscopic lavage of blood clots from bladder*
DRG L06B   *Minor bladder procedures without catastrophic or severe CC* (surgical DRG)(V4.2)(WIES = .7034)

The assignment of this procedure code does have an impact on DRG assignment. Should it be coded if it is not performed in theatre?

Bladder washout should be coded although not performed in theatre.

NCCH advises that within the classification there are some defaults and therefore some of the terms appearing in code titles will appear as nonessential modifiers in the index.

Follow the index pathway:

Lavage
- bladder
- - for removal of blood clot(s) (closed) (endoscopic) 36842-00 [1092]

Assign **36842-00 [1092]** *Endoscopic lavage of blood clots from bladder*

The Victorian ICD Coding Committee will follow up with NCCH in an attempt to amend the classification.

#2018 Sequelae of adverse effects of drugs

I am seeking some advice regarding the coding of sequelae of the adverse effects of drugs. In the ICD Coding Newsletter dated August 2000 there is an article dealing with poisoning and the adverse effects of drugs and in particular how to code sequelae of poisoning. My query is how to code a sequelae of the adverse effects of drugs.

Patient admitted with principal diagnosis of Viral Illness also has ESRF secondary to analgesic nephropathy. Has been having continuous ambulatory peritoneal dialysis for 3 years, receives peritoneal dialysis whilst admitted. As there is no indication that the nephropathy resulted from an improper use of drugs I decided to code this as an adverse effect.

Coding Option 1:
Principal diagnosis: Viral Illness
N18.0   *End Stage Renal Failure*
N14.0   *Analgesic nephropathy* (coding instruction 'use additional external cause code to identify toxic agent')
Y45.8   *Other analgesics and antipyretics*
Y92.22   *Health Service Area*

However, this patient had the analgesic nephropathy more than three years prior to this admission. I considered that the codes from coding option 1 indicated that the nephropathy was recent or current. I then considered coding the ESRF as a sequelae of the analgesic nephropathy

Coding Option 2:
N18.0   *End Stage Renal Failure*
T96   *Sequelae of poisoning by drug, medicaments and biological substances*
Y86   *Sequelae of other accidents*
Y92.22   *Health Service Area*

However, I am not comfortable with T96 as there is no indication of poisoning.
ACS 1901 also states 'Poisoning involves improper use'. There is no indication in this record of improper use.

If it is not appropriate to code this as a sequelae in this instance, I would appreciate the committee's advice and some examples as to how to code the sequelae of the adverse effects of drugs.

The end stage renal failure is not a sequelae of the adverse effect of drugs, it is secondary to the analgesic nephropathy which the patient still has. A sequelae is a current condition that was caused by a previously occurring condition (or injury, poisoning, toxic effect or other external cause). Sequelae applies when the underlying cause is no longer present (ACS 0008 *Sequelae*).

Therefore the correct codes to assign in this scenario are:

B34.9   *Viral infection, unspecified*
N18.0   *End-stage renal disease*
N14.0   *Analgesic nephropathy*
Y45.8   *Other analgesics and antipyretics*
Y92.22   *Health service area*

#2020 ACS 0401 Diabetes mellitus and impaired glucose regulation 4th edition

In 4th edition of ICD-10-AM 'diabetes with multiple microvascular complications' (page 101 ACS 0401) does not contain the errata from the previous edition in the classification box. Is this to be amended via upcoming errata or are the categories to remain as stated?

If the categories are to remain as stated am I correct in understanding that a patient with a diabetic cataract (E1-.36) and acute renal failure (E1-.29) would not be classifiable to multiple microvascular complications but a patient with diabetes, a cataract and acute renal failure (E1-.39, H26.9, E1-.29) would?

This query was referred to NCCH who advise:

1. The code categories in **ACS 0401 _Diabetes Mellitus And Impaired Glucose Regulation_**, 'Diabetes with multiple microvascular complications, Classification' section were reviewed by clinicians for ICD-10-AM Fourth Edition. 'E1-.36' has been excluded. Therefore, the code categories are correct as they currently appear in ICD-10-AM 4th Edition.

2. Your assumption regarding the scenarios described is correct. 'E1.-.39' and 'E1-.49' had to be included in the code ranges to capture eradicated conditions. This will result in what appears to be inconsistencies. However, the NCCH supports these current classification guidelines.

#2024 Albumex infusion

I have two questions from two records, which I coded on the same day for which I would need clarification please.

1. A baby admitted at birth had several problems, and received a transfusion of Albumex. MIMS lists Albumex as a 'plasma volume expander'. I followed the index entry in Volume 4 Transfusion, blood, expander 92063-00 [1893] *Transfusion of blood expander*. However ACS 1615 *Specific interventions for the Sick Neonate* states to code this when performed for the neonate to 92062-00 *Transfusion of other serum*. Please advise which would be the correct code. The fact that the index and the standards are different is very confusing.

2. An adult admitted with multiple problems and receives a transfusion of Albumex. Does the fact that Albumex contains human albumin (together with other substances used to treat hypovolaemic shock) classify it as a blood product? ACS 0302 *Blood Transfusions* states 'Blood transfusions and infusions of blood products should be coded whenever performed'. I am unsure whether I need to follow ACS 0302 and assign a code for Albumex infusions in patients other than neonates.

This query was referred to NCCH who advise:

1. MIMS often classifies drugs according to their therapeutic purpose (indication) whilst ICD-10-AM usually classifies drugs according to class. Although the purpose of transfusing Albumex may be to expand the blood volume (it is often used in the treatment of shock due to blood loss), it is a natural plasma component, prepared from pooled human plasma.

   Transfusion of Albumex (or any albumin product) should be classified as per transfusion of plasma, **92062-00 [1893] *Transfusion of other serum***. This is consistent with the advice in **ACS 1615 *Specific Interventions For The Sick Neonate***.

2. Blood expander is classified as a type of blood product in ICD-10-AM; therefore 'transfusion of blood expander' should be classified according to the guidelines in **ACS 0302 *Blood Transfusions***.

   Transfusion of all blood products classifiable to block **[1893] *Transfusion of blood and gamma globulin*** (including extracts, synthetic/manufactured substances) should be assigned according to the guidelines in **ACS 0302 *Blood Transfusions***.

#2025 Fracture of distal radius and ulnar shaft

Fracture distal radius and ulnar shaft. X-ray reports, progress notes and operation report give no further information. Codes obtained depend upon whether you follow the index for 'distal' or for 'shaft' that is, fracture radius, with ulna, lower ends (distal) S52.6 fracture radius, with ulna, shafts S52.4.

1. What is the correct code for this diagnostic statement? Does 'distal' or 'shaft' take precedence?

2. The procedure notes say 'the grossly deformed distal radius and ulna were manipulated gently'. How should this be coded? Should codes be 47363-00 [1427] and 47363-01 [1428] that is, code according to the 'distal' sites of radius and ulna, or 47390-00 [1431] reduction of fracture of shaft of radius and ulna?

Neither distal nor shaft takes precedence. The Victorian ICD Coding Committee is unable to provide a definitive response to this type of query. Coders are advised to seek further information where possible. If no further advice or information is available make a logical decision based on the relevant documentation and apply the Clinical Coders Creed.

#2027 Posterior fossa craniotomy

We have had some patients admitted with brain tumours (both primary and metastatic) having these lesions resected using posterior fossa craniotomy for excision approach.

The problem is the skull base surgery codes are all very specific. Block [17] *Skull base surgery for lesion*. None of the codes specify posterior fossa approach.

We cannot use a code from block [15] *Removal of intracranial lesion* because this block excludes that by skull base surgery.

We believe that a code from block [17] would be most appropriate.
Our head of neurosurgery confirms that this is skull base surgery and that none of the codes from block [17] are appropriate.

ACS 0612 *Skull base surgery* states that the posterior fossa is included in the skull base.

This query was referred to the NCCH who advise:

> Thank you for the documentation supplied with this query. The case cited describes 'Posterior fossa craniotomy with excision of right cerebellar metastasis'.

> As the 'posterior fossa craniotomy' cannot be classified to any of the specific codes in block **[17] *Skull base surgery for lesion***, the NCCH suggests coding the case cited to 'Excision, lesion, cerebellum' **39709- 02 [15] *Removal of lesion of cerebellum***.

#2028 Administration of surfactant to newborn

I wish to seek clarification as to whether administration of surfactant to premature babies should be coded, and if so, what code should be used in 4th edition?

The NCCH supports the Victorian ICD Coding Committee's assertion that 'administration of surfactant' should not be coded, as it is routine treatment for premature babies.

NCCH Query Q444 will be updated to incorporate this current decision.

The NCCH will consider the addition of this information to the relevant Australian Coding Standards for a future edition of ICD-10-AM.

#2029 Premature rupture of membranes followed by LUSCS

When a patient is scheduled for an elective CS and her membranes rupture prior to the booked procedure, the patient goes on to have the CS. We use:

O42.0 *Premature rupture of membranes, onset of labour within 24 hours*

The premature rupture of membranes must be coded, but this code description does not meet this scenario, as the patient did not do into labour. Can we please have the code description changed to reflect that this may be used in the case of a CS?

That is, O42.0 *Premature rupture of membranes, onset of labour within 24 hours (or CS)*

This query was referred to NCCH who advise:

> For the case cited, 'premature rupture of membranes, delivery by caesarean section without any commencement of labour', assign:
> **O42.9 *Premature rupture of membranes, unspecified***
>
> The advice in **ACS 1531 *Premature Rupture Of Membranes*** regarding discharge/transfer of patients following premature rupture of membranes is not applicable to the above scenario or NCCH query Q975. The NCCH supports the decision for query Q975.

#2030 Nosocomial (hospital acquired) infections

Patient admitted from a nursing home with a diagnosis of pneumonia, hospital acquired. Codes assigned J18.9 *Pneumonia*, Y95 *Nosocomial condition*.

Is it correct to follow the information contained in ACS 0111 *Bacteraemia*, which instructs coders to add an external cause code Y95 *Nosocomial condition* for hospital acquired bacteraemia, for other scenarios?

The index entry for Y95 *Nosocomial condition* is found by looking up Factors, supplemental. If I had not known about the entry in ACS 0111 I do not think I would ever have been able to find it in either the Index or Tabular, as I had to know the title of the block in the Tabular before I could find the Index entry, a backwards approach to coding!

Would it be possible to have improved Index entries for this code?

This query was referred to the NCCH who advise:

> The use of **Y95 *Nosocomial condition*** was discussed previously at the Classification Update Forum on Adverse Events. Members of the forum did not support widespread use of this code as the term 'nosocomial' means 'pertaining to or originating in a hospital' and is therefore too vague to provide much detail on the circumstances of the adverse event.

> The NCCH advocates the use of **Y95 *Nosocomial condition*** only when 'hospital acquired' is documented and no other reason for the infection/complication/adverse event can be determined.

The Victorian ICD Coding Committee has provided the NCCH with some suggested index enhancements for this condition. The NCCH has advised that these will be considered for a future edition of ICD-10-AM.

The application of Y95 as explained above can also be applied to infections, complications and adverse events.

#2033 Decompression laminectomy with nerve decompression

Diagnosis: Lumbar stenosis

Operation: Decompression laminectomy (one level) with nerve decompression

Problem: Two different interpretations of the 'with'; convention.

Interpretation 1:

Laminectomy
- with
--rhyizolysis 40330-01[54]

and then

Laminectomy
-with
--decompression of spinal cord, see laminectomy, decompressive
-decompressive
--lumbar spinal canal
---1 level 90024-00[48]
Note, in tabular it says code also when performed spinal rhizolysis. Therefore two codes 90024-00[48] and 40330-01[54]

Interpretation 2:

Laminectomy with rhizolysis code only because it is under 'with'; and therefore takes precedence over the alphabetical decompressive entry.

Please advise as to what codes should be used.

Where both decompression of spinal cord and nerve root are performed, a code is applied for both procedures. As coding attempts to translate medical statements into code, it is sometimes necessary to code one concept twice in order to show all procedures. It is acceptable to represent the laminectomy twice in two separate codes in order to represent all procedures performed if this is the only option available.

From the operation report, the Victorian ICD Coding Committee was able to determine that two codes, one for decompression of the spinal cord and one for decompression of the nerve roots, are appropriate in this case.

90024-00 [48]   *Decompression of lumbar spinal canal, 1 level*
40330-01 [54]   *Spinal rhizolysis with laminectomy*

There is a 'Code also rhizolysis' note at Block 48 *Decompression of lumbar spinal canal*.

#2037 Use of instructional notes

Our query relates to the use of the instructional notes in the tabular list of Diseases, (Volume 1) of ICD-10-AM.

This issue was raised during discussion regarding the assignment of additional codes 'to identify the specific condition' when assigning codes from O98 *Maternal infectious and parasitic diseases classifiable elsewhere but complicating pregnancy, childbirth and the puerperium,* and O99 *Other maternal disease classifiable elsewhere but complicating pregnancy, childbirth and the puerperium.* Our discussion centred around whether an additional code should be assigned if that code was a non specific code. For example, the addition D64.9 *Anaemia, unspecified* does not add further specificity to O99.0 *Anaemia complicating pregnancy, childbirth and the puerperium.*

It became apparent that there were significant inconsistencies in the way in which these instructional notes are generally applied. The following examples illustrate our concerns:

Example one:
The instructional note: Use additional code (B95–B97) to identify infectious agent appears under several codes in the tabular. In practice our coders apply this convention only when the infectious agent is known. They do not assign B96.88 *Other and unspecified bacterial agents as the cause of diseases classified to other chapters* when they do not know the infectious agent.

Example two:
The instructional note: Use additional external cause code (Chapter XX) to identify cause. Appears at J69.0 *Pneumonitis due to food and vomit.* In this instance our coders are applying the convention routinely and assigning W84 *Unspecified threat to breathing* as an additional code. This is the default code supplied by the index to external causes when you look up aspiration and is not adding specificity about the pneumonitis (although data users would not know this).

There are numerous instructional notes instructing the coder to 'add additional code to identify…'

Some of these are easily identified as instructions that are applied only when certain conditions exist (identify all manifestation of HIV), (identify presence of hypertension). Others however imply that a code should be added even if no specific information is available ('add additional external cause code to identify the drug' appears at L27.0 *generalised skin eruption due to drugs and medicaments*)

The following list provides some examples of the variety of instructional notes that appear in Volume one.

'Add additional code to identify…'

· the underlying disease
· infectious agent (B95-B97)
· infectious agent (B95-B97) if desired (at J32)
· bacterial agent (B95-B96) (at M00.8, M65.0)
· the drug (external cause code)
· the cause (external cause code)
· if drug-induced or chemical-induced
· underlying condition or associated genetic syndrome
· external agent
· toxic agent
· presence of hypertension
· all manifestations of HIV infection
· any administered anticoagulant
· the type of thyrotoxicosis
· Use additional code to identify previous physical illness (at F48.0)
· Associated physical disorder (at F54)
· Associated conditions, such as autism, other developmental disorders etc (at F70-F79)
· If applicable, to identify mental retardation (at F84.1)
· any associated failure to thrive or growth retardation (at F94.1)
· the cause of any coexisting constipation
· cause, if known (at O21.8)
· obstetric cause of death
· Indicate resultant condition in fetus or newborn (if known) (at P02.3)
· associated malformations of nose
· External cause code for detail regarding alcohol level
· Indicate open wound with complication of foreign body, infection and delayed healing/treatment
· Open wound code to identify an open/compound fracture….
· Open wound code to identify an open dislocation….
· Dislocation with cervical vertebral fractures….
· Identify any cervical spinal cord injury
· Describe fractures associated with cervical dislocations….
· If mention of ventilator dependence
· Use additional external cause code to identify devices involved and details of circumstances (at T80-T88)

In addition to the instructional notes in the tabular, several standards either repeat the instructional note or direct coders to follow instructional notes.

ACS 0002 *Additional diagnoses*:
Multiple Coding
As explained in ACS 0027 *Multiple Coding*, there are situations which require the assignment of additional codes which may themselves not meet the above criteria of

an additional diagnosis. The ICD-10-AM coding conventions referred to in that standard must be followed. For example, when using a code from category I60–I69 Cerebrovascular diseases, hypertension will also be coded if present as there is an instruction at this category to "Use additional code to identify presence of hypertension".

ACS 0027 *Multiple coding*
2.   Instructional terms
There are situations, other than in the dagger and asterisk system, that permit two ICD-10-AM codes to be used to describe fully a person's condition. Instructional terms such as 'Code also…', 'Use additional code for any…', 'Note…', identify many of these situations.
'Code also underlying disease' – Assign the codes for both the manifestation and underlying cause with the underlying cause being sequenced first.

'Use additional code to identify manifestation, as…' – Assign also the code that identifies the manifestation, such as, but not limited to, the examples listed.

Apply multiple coding instructions as directed in either the Alphabetic Index or the Tabular List.

ACS 1915 *Spinal (cord) injury*
For open/compound fractures of the vertebral column, use additional open wound code (see also ACS 1917 *Open wounds*). Where several vertebrae are stated as compound, only apply one open wound code.

ACS 1521 *Conditions complicating pregnancy*:
To code other conditions complicating pregnancy (or being aggravated by the pregnancy or that are the main reason for obstetric care), a code from O98 *Maternal infectious and parasitic diseases classifiable elsewhere but complicating pregnancy, childbirth and the puerperium* or O99 *Other maternal diseases classifiable elsewhere but complicating pregnancy, childbirth and the puerperium* is assigned together with an additional code from the other chapters of ICD-10-AM to identify the specific condition.

Our question is: Should the instructional notes be followed in every case, or should the coder make a decision regarding whether or not the additional code adds further information and only assign an additional code when this is the case?

This query was referred to NCCH who advise:

> Coders should decide on an individual case basis if the assignment of an additional code is necessary to translate the medical statement into code.
>
> See **ACS 0027 *Multiple Coding***.

#2041 GEM coding

In relation to the coding of GEM cases. Patients transferred for aftercare following a procedure who are admitted as a GEM care type. Do you code the condition or aftercare code as the principal diagnosis?

These episodes should be coded according to the documentation and **ACS 0001 *Principal Diagnosis***.

If the patient is transferred for aftercare, apply **ACS 2103 *Admission for Convalescence/Aftercare***.

If the patient is admitted for evaluation and management, apply **ACS 2108 *Assessment***.

With the exception of rehabilitation, care type should not influence code assignment. Victorian requirements specify that patients admitted under a rehabilitation care type must be coded with a rehabilitation principal diagnosis.

#2058 Drug, alcohol and tobacco use disorders

This query has arisen from the PICQ fatal error message sent by the DHS. The error states '101393 Harmful use of alcohol code with specific related disorder code'. While trying to correct this error we are finding that there is a conflict in the ACS.

The ACS 0503 *Drug, Alcohol And Tobacco Use Disorders* 3rd/4th edition states 'Note from the above definition that the fourth character of '1' cannot be assigned if a specific drug/ alcohol related disorder is present, specifically, dependence syndrome or a psychotic disorder'.

The General classification rules (2nd dot point) also state 'When more than one of 'acute toxication', 'dependence' or 'harmful use' are documented, assign the appropriate codes for those descriptions.

Which one of these rules do we apply? Do we delete F10.1 *Mental and behavioural disorders due to use of alcohol, harmful use* if a specific drug alcohol related disorder is present or do we assign the appropriate codes for those descriptions?

Acute intoxication can be used with any of the codes from that section (eg .1, .2 or .3) whereas Codes for 'Harmful Use' of a specific drug/alcohol (.1) can only be used with 'Acute intoxication' (.0) for the same drug/alcohol.

#2059 Post procedural fat necrosis

In a previous admission patient with breast carcinoma had Patey mastectomy with clear excision lines. Represents six months later with a lump under the mastectomy scar, which was removed. Histopathology revealed no evidence of breast tissue. 'Fat necrosis...a right chest wall lump...a soft, predominantly fatty tissue mass 60x40x27mm'.

Volume 2 index:
Necrosis, necrotic (ischaemic) (see also Gangrene)
-fat (generalised) M79.8-
--breast (aseptic) N64.1
--postprocedural M96.8

Can you please advise correct diagnosis code?

We feel that 90575-00 [1566] *Excision of soft tissue, NEC* is the most appropriate procedure code. Please advise.

There is no documentation that this is due to the procedure; therefore this cannot be coded as post-procedural per **ACS 1904 *Procedural complications***.

Follow the index entry:
Necrosis, necrotic
-fat M79.8-

M79.88   *Other specified soft tissue disorders, other site*

Do not use 'breast' as there is no breast tissue in the sample.

Based on the information you have provided, your procedure code is acceptable.

#2061 Corynebacterium pseudodiphtheriticum

Elderly male admitted with infective exacerbation of COAD. Infections being a chronic problem and were extensively investigated Cultures identified 3 organisms. In particular a heavy growth of 'Corynebacterium Pseudodiphtheriticum'

ICD-10-AM index under Infection there is an entry for 'corynebacterium diphtheriae', see diphtheria (A36.x)

The patient does not have diphtheria (confirmed with doctor).

Should I code to A36 or take note of the key word 'pseudo' and code to other bacterial organism A48.8 *other specified bacterial organism*.

To follow an index entry you must find the exact description of the organism. In this case there is no index entry for Corynebacterium pseudodiphtheriticum. Therefore in the absence of an exact description of the organism in the alphabetic index, you should follow the index entry:

Infection
-bacterial NEC
--agent NEC
---as cause of disease classified elsewhere B96.88

Your codes will be:

J44.0 *Chronic obstructive pulmonary disease with acute lower respiratory tract infection*

B96.88 *Other and unspecified bacterial agents as the cause of diseases classified to other chapters*

Refer to the Coding Newsletter article compiled by Irene Kearsey titled 'Bring out your dead! Has the Black Death returned?' published in the August 2002 Coding Newsletter for further information.

#2064 Giant cell reparative granuloma

24 year old female with total ostectomy of 8th rib for a ?maligant tumour. Histopathology indicates 'giant cell reparative granuloma with early aneurysmal bone cyst formation, rib, benign.

Aneurysmal bone cyst of the rib is coded to M85.58 *Aneurysmal bone cyst.*

The index look up for granuloma is:
Granuloma L92.9
-bone M86.8-
↓
-giant cell (central) (jaw) (reparative) K10.1

M86.8 is *Other osteomyelitis*
while
K10.1 is *Giant cell granuloma, central of jaw*

Can you please advise the most accurate code to assign? I would like to suggest that this be forwarded to the NCCH for a possible amendment to the classification.

The Victorian ICD Coding Committee recommends coding both the bone granuloma and the aneurysmal bone cyst. Codes to assign are:

M86.88   *Other osteomyelitis, other site*
M85.58   *Aneurysmal bone cyst, other site*

This is will be referred to the NCCH for review of the indexing of giant cell granuloma.

#2066 Ca

Does Ca mean cancer or carcinoma? Unfortunately both have different M codes and so would be coded differently.

In the index under cancer there is a note that says, "The term 'cancer' when modified by an adjective or adjectival phrase indicating a morphological type, should be coded in the same manner as 'carcinoma' with that adjective or phrase. Thus, 'squamous cell cancer' should be coded in the same manner as 'squamous cell carcinoma', which appears in the list under 'carcinoma'.

Our hospital would like to be consistent between coders. So when ca is written and no descriptive word as detailed above, we all know whether to code as cancer or carcinoma.

The Victorian ICD Coding Committee prefers to use carcinoma for the abbreviation 'ca'. This also seems to be the preference of the NCCH, as demonstrated in ICD-10-AM Volume 5. **ACS 0044** example 1 prostate cancer is coded as M8010/3, example 2 metastatic bone cancer from breast is coded as M8010/6 and M8010/3.

Cancer is M8000 while carcinoma is M8010, providing greater specificity.

Coding Corkboard

Victorian ICD Coding Committee activities

The contents of this page provide a brief overview of the current activities undertaken by the Victorian ICD Coding Committee (VICC). Victorian coders are welcome to contribute to any discussion highlighted here. Please contact Sara Harrison, Secretary Victorian ICD Coding Committee (Sara.Harrison@dhs.vic.gov.au) if you would like to have your views considered.

Coding queries

Coding Committee's core duties are to answer Victorian coders' queries. Many of the queries we receive address complex coding issues and the task of answering these queries is consequently very challenging. The number of new queries received so far this calendar year is as follows:

February meeting   21 new queries
March meeting   11 new queries
April meeting   17 new queries

As the responses to queries from the previous meeting have to be confirmed as minutes at each subsequent meeting, the process of getting an answer to the enquirer can be quite drawn out. The high number of queries received this year has also added some time delay to the process as some new queries have to be deferred to the following meeting before they are given due consideration.

We ask for coders' patience in respect to receiving a response to their queries. We would prefer to spend a little more time discussing the answer rather than rush a query through.

Vic Additions to the standards

The Victorian ICD Coding Committee members were very involved last year in reviewing the Vic Prefix document that forms part of the Vic Additions to the standards. The document was extensively amended with more definitions and examples being included to help coders be consistent about the assignment of prefixes. In view of the fact that several Commonwealth and State entities are currently discussing the use of prefixes to make the coded data more useful, especially in the area of identifying adverse events occurring in hospital, it is important that we understand how we use our prefixes in Victoria. Members will be reviewing this document again this year to determine whether any further amendments are necessary.

Victorian ICD Coding Committee members as at 1 March 2005

Jennie Shepheard   Human Services (Chair, Acting La Trobe University representative)
Carla Read   Human Services (Convener, Secretary)
Sara Harrison   Human Services (Victorian CSAC representative)
Melinda Avram   Epworth Hospital
Rhonda Carroll   The Alfred Hospital (VACCDI representative)
Annette Gilchrist   Royal Melbourne Hospital
Andrea Groom   Southern Health
Sonia Grundy   St Vincent's Hospital
Lauren Morrison   The Royal Women's Hospital
Megan Morrison   St John of God Health Care Geelong
Susan Peel   Southern Health
Leanne Stokes   Beachplace Pty Ltd
Maree Thorp   Peninsula Health
Kathy Wilton   3M

Victorian ICD Coding Committee meeting dates

Tuesday May 17th   DHS, 10:00am, 16th floor 555 Collins Street, Melbourne

Tuesday June 21st   DHS, 10:00am, 16th floor 555 Collins Street, Melbourne

Tuesday July 19th   DHS, 10:00am, 16th floor 555 Collins Street, Melbourne

Abbreviations

ACBA	Australian Coding Benchmark Audit
ACS	Australian Coding Standard
ADx	Additional Diagnosis
AIHW	Australian Institute of Health and Welfare
AN-DRG	Australian National Diagnosis Related Groups
AR-DRG	Australian Refined Diagnosis Related Groups
CC	Complication or Comorbidity
CCCG	Clinical Classification and Coding Groups
CCL	Complication or Comorbidity Level
CSAC	Coding Standards Advisory Committee
DHS	Department of Human Services
DRG	Diagnosis Related Group
ESIS	Elective Surgery Information System
HDSS	Health Data Standards and Systems
HIMAA	Health Information Management Association of Australia
ICD-10-AM	Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification
LOS	Length Of Stay
MDC	Major Diagnostic Category
NCCH	National Centre for Classification in Health
PDx	Principal Diagnosis
PICQ	Performance Indicators for Coding Quality
PCCL	Patient Clinical Complexity Level
VACCDI	Victorian Advisory Committee on Casemix Data Integrity
VAED	Victorian Admitted Episodes Dataset
VEMD	Victorian Emergency Minimum Dataset
VICC	Victorian ICD Coding Committee
WHO	World Health Organisation