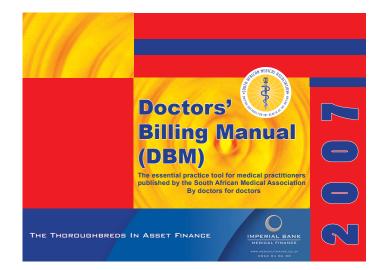
International Classification of Diseases 10th edition (ICD-10)

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ICD-10 coding was introduced in South Africa in June 2005. This system is now law and it is illegal not to code a diagnosis.

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The ICD-10 coding is now a necessary part of a patient's record and is vital for receiving payment from medical aids. There are a few rules which, if applied correctly, greatly simplify the process of selecting the correct code. The importance of this must not be underestimated. At the time of writing, if a code is 'valid', then payment will follow. However, imminent new checks will ensure that the code matches the medications prescribed and the procedures done, for each line item. If the code is deemed inappropriate, that is the medical aid decides that the treatment is not appropriate to the disease or condition, then there will be no payment.

Many of the practitioners I have spoken to seem to believe that this is something that the medical aids have concocted as an excuse for non-payment. However, contrary to popular belief (and disbelief), the coding system is law and it is illegal not to code your diagnosis or diagnoses for a particular patient.

The purpose of the coding system is mainly data collection for the government and, of course, the health care funders. It can be used to manage the health care of the country and also for epidemiological research, and hopefully will lead to a better-planned and ultimately a better health care system. The funders also use it for fraud detection and profiling practitioners.

ICD-10 books

The ICD-10 coding system comprises three volumes. The first volume is a tabular list of the conditions, the second volume is a book that

outlines the rules for the application of the codes and explanations of the codes, and the third is an index where one can look up the diagnosis – this will guide one to the correct place in the first volume (the tabular list). These books are available from the South African Medical Association.

The first volume is divided into chapters. Each chapter is devoted to a particular system, to a range of symptoms or a group of special groups (e.g. pregnancy, childbirth and the puerperium). It is important to familiarise oneself with these (not necessarily commit them to memory). It is almost like a map, the more familiar one is with it, the easier it is to navigate it.

Valid code

The code is alphanumeric – it consists of a letter and variable number of digits. One can usually tell where the code belongs by the leading letter – e.g. A and B is an infection. Valid codes range from three-character to five-character codes.

How does one know which codes are valid and which ones are not? One way is to use software which has these rules embedded to help one along the way, or one can simply remember a few rules – e.g. a heading is usually not a valid code, it is just that, a heading.

Three-character code

If the diagnosis is a symptom, for example a cough, a three-digit code usually suffices. If the patient is having a procedure, for example a visit for immunisation, a three-digit code also suffices (codes beginning with R and Z respectively).

Four-character code

Some diagnoses require a four-digit code. These include ulcers – describing its location (e.g. prepyloric) and special features (e.g. haemorrhagic or perforated). These codes are clearly indicated in the relevant sections.

Five-character code

If the diagnosis is a musculoskeletal problem, the code usually needs a five-digit code, which usually indicates the location of the problem – e.g. osteoarthritis of the hip. If one is coding for a fracture, one needs to qualify whether it is open or closed (this is the last character of the code and is either a 0 or 1).

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The application of these codes is very clear in volume 1 of the ICD-10 coding system.

When choosing a code it is important to read the inclusions and the exclusions for the particular section that one is dealing with. These are clearly shown at the top of the section: an inclusion is obviously all the diagnoses that one can include for that particular code and an exclusion is what the code does not cover.

Combination codes

Dagger and asterisk codes

If the code in the book is marked with a dagger, it means that there is another code that needs to go with it, and is usually the causative agent for the disease or condition. For example, Candida vaginitis:

Vaginitis: B37.3⁺.....candidiasis of vulva and vagina

N77.1*....vaginitis, vulvitis and vulvovaginitis in infections classified elsewhere.

Therefore the complete and valid code is: B37.3⁺N77.1^{*}

Causative codes

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If the cause of a specific condition is known, a combination code may be used to indicate the cause. For example, puerperal infection due to *Escherichia coli*:

O85 is the code for puerperal infection – see the index in volume 3). There is a section that indicates that one may add the additional code (B95 - B97) to identify the infectious agent. In this case it is *E. coli*.

The code for *E. coli* (as the cause of disease classified in other chapters) is B96.2. Therefore the complete code is: O85/B96.2.

Note that 085 on its own is a valid code.

Combination codes for external causes

Whenever there is an external agent causing the condition, more specifically a condition caused by trauma or a drug or chemical agent, the external agent has to be identified in the form of a combination code. Further, the cause is classified as accidental, intentional, undetermined intent, self-inflicted or iatrogenic.

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This is particularly important when there is a physical injury of any sort. This code will be used by the funders to determine whether the injury will be covered by them or if it is an injury-on-duty claim.

These codes tend to be more complex because they require not only the cause of the injury, but also what the patient was actually doing when the injury occurred. Therefore *any* injury has to have a combination code to be valid.

For example: While crossing the street to deliver a newspaper to a customer a newspaperman is hit by a car and sustains an open fracture of the upper end of the radius.

If we break the problem down:

- The patient is a pedestrian.
- He sustained a fracture of the upper end of the radius.
- The fracture is an open fracture.
- The patient was working for an income.
- The episode was accidental.

Firstly we look up fracture of the radius:

- Fracture of upper end of the radius: S52.1
- This is an open fracture (closed 0, open 1): S52.11.

Then look up pedestrian.

- There is a useful table on p. 576, volume 3 injured in collision with car, pick-up truck or van, traffic accident: V03.1.
- The patient was working for an income: V03.12.

• The full combination code (i.e. the complete valid coding) is therefore: S52.11/V03.12.

Other combination codes

There are more combination codes which cater for *sequelae* and chronic conditions (*comorbid*) conditions. Below are some examples that should clarify their use.

Example 1: A diabetic man has acute bronchitis.

- Acute bronchitis, unspecified (the actual bacterial/viral cause is not known): J20.9.
- Non-insulin-dependent diabetes mellitus without complications: E11.9.
- The full code: J20.9/E11.9. Note that the comorbid condition appears at the end.

Example 2: A patient presents with a lung abscess; he previously had pulmonary tuberculosis.

- Abscess of lung without pneumonia: J85.2.
- Sequelae of tuberculosis of other organs: B90.8.
- The full code: J85.2/B90.8. Note that the sequelae appear at the end, but if the patient has a comorbid condition such as hypertension, this would appear after the sequelae code.

Example 3: A lady presents with hypothyroidism after a thyroidectomy.

This sequel is what is termed postprocedural. In this case it is specific to a chapter or system, i.e. endocrine. This would be looked up in the endocrine-specific chapter. Postprocedural hypothyroidism: E89.0.

Note: For nonspecific post-procedural complication one would use the generic codes, such as haemorrhage and haematoma complicating a procedure not elsewhere classified (T81.0). This is found on the injury code section (Chapter XIX).

Multiple codes

If a patient presents with multiple unrelated conditions then one simply codes for each condition and puts them together, as illustrated in the following example:

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Whenever there is an external agent causing the condition, more specifically a condition caused by trauma or a drug or chemical agent, the external agent has to be identified in the form of a combination code.

A lady presents with vaginal thrush and bronchitis.

- Code for vaginal thrush: B37.3+N77.1* (see above for dagger and asterisk).
- Acute bronchitis: J20.9.
- The full code for the consultation is: B37.3+N77.1/ J20.9.

The issue here would be the treatment and the line item code. The code needs to be split up for each treatment required. The vaginal cream would be accompanied by the vaginal candidiasis code and the cough mixture by the acute bronchitis code. The consultation should be accompanied by the full code.

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Coding and software

This short article should help you at least to get your bearings regarding ICD-10 codes and to make informed decisions about the software choices you make for your practice. It is not enough just to have a listing of ICD-10 codes, but rules and the capability of putting everything together and, when necessary, splitting the code for line items should be available. This is not only a smart feature, but also a necessary one. Imagine having to code for each item or procedure each time. This is laborious and time consuming unless addressed correctly by your practice management software.

I hope that throughout this I have convinced you that the doctor him/herself should do the coding, not only for the sake of payment, completeness and accuracy but also for the patient. The correct code will ensure that patients receive the correct benefit, especially with regard to prescribed minimum benefits (PMBs).

In a nutshell

ICD-10 coding software must:

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- be fully integrated with the practice management system
- allow the user to combine codes
- check for the validity of all codes used
- allow the user to split the combination code when necessary
- have the capability of assigning the combination code or parts thereof to the treatment or procedure in the account by line item without having to repeatedly type them
- guide the user as to whether a code has to be combined or not
- allow the user to find the appropriate code easily
- allow the user to view inclusions and/or exclusions for the particular code
- allow the correlation between prescribed minimum benefits and the respective ICD-10 code
- be efficient in the actual user's hands (i.e. try it out using the examples given).

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