Read Codes

Read Codes are a coded thesaurus of clinical terms which enable clinicians to make effective use of computer systems. The codes facilitate the access of information within patient records to enable reporting, auditing, research, automation of repetitive tasks, electronic communication and decision support. The smaller effort required for these tasks, brought about by coding information, means codes are here to stay and most computerised practices use Read Codes. The Read code is named after James Read who used to be a GP. The Read Clinical Codes were sold to the Crown for £1.25 million and just part of the development costs for Version 3 were £3.7 million. The EC has adopted another coding system, ICD-10 (International Classification of Disease, version 10), so possibly the UK will change to this in due course. Read coding though contains all the ICD-10 terms and lots more besides and whichever system is used the principles are the same.

Why do we need a thesaurus of codes?
Competent computer programs can search for anything which has been typed into it, but typing mistakes, different words for the same thing and other human foibles mean that a system is required to minimise these errors. Such a system is coding of terms. Searches of the database for all patients with a particular code or group of codes is much quicker than looking in the written notes. Ideally codes should be added to freely typed (free-text) entries but many clinical computer systems require the selection of a code that has an accompanying string of text known as the "rubric" before they will allow any note to be made. Usually the rubric will be the phrase you would use yourself in which case it doesn't take much longer.

It is important to try to conform to any coding practices in a particular practice. At least try to code any new significant diagnoses, or if practical, ask someone permanent to enter an appropriate code. For instance diabetes and asthma codes are important because they are used to recruit for the relevant clinics, and to collect figures for the practice report, and contraception codes might be used for item of service claims. Anything which would be written on the summary card in the paper record should be recorded in the computerised medical record as a Read Code. Some systems have the ability to create new 'practice' codes for use when you can't find a suitable one within Read. These codes cannot be communicated outside the practice, (if you ever wanted to) because they are unique to that site.

Confused? You soon will be!
The idea is relatively simple but the reality is not. There are several versions of the Read codes out there in General Practice. Read version 3 is the successor to Read version 2 which comes in two versions, either 4-byte Read 4, or it's successor 5-byte Read 5. Pay attention! Read version 3.0 has been abandoned and the version released is V3.1 If you think that is bad you should try Exeter street numbering. Read version 1? Don't ask! Read 3.1 has not been taken up by any GP suppliers to date - just hospitals, so the idea of anyone being able to talk to anyone else is still a pipe dream!

Version 2 of the Codes is an enigma in itself. It is based on a hierarchy of codes which in itself causes problems - for example there are different codes for Pneumoccal Meningitis depending on whether it is considered an infectious or neurological condition. Read 3 gets round this problem by losing the hierarchical coding structure. Take it from us that is a good move. There are other inconsistencies, the absence of, for instance, a code for "unemployed" in chapter 0 "occupations", perhaps reflecting political influence on the NHS funded institution. 'Unemployed' is found in chapter 1 "History/symptoms" as is university student. "University teacher" being an occupation is in chapter 0. *Of course*. Despite our sarcasm these problems are not too apparent during consultations. Difficulties with coding sometimes are. In Versions 2 (Read 4 and 5) there are too many codes for depression, none of which appropriately code mild depression but Read V3.1 does deal with this.

When you have time to do so and a system which allows it, you should explore the Read code. Do this by selecting a dummy patient, most systems have one[1], and going up to the top level or chapter headings of the code (see chapter headings list below). From here you can choose a branch and follow it down. Like browsing through a textbook or the yellow pages of the telephone directory, you may find something of interest.

The chapter headings in Version 2 are

0. Occupations
1. History / symptoms
2. Examination/Signs
3. Diagnostic procedures
4. Laboratory procedures
5. Radiology/physics in medicine
6. Preventative Procedures
7. Operaitons, procedures, sites
8. Other therapeutic procedures
9. Administration

A. Infectious/parasitic diseases
B. Neoplasms
C. Endocr/nutr/metab/immun. Diseas
D. Blood/blood forming organs dis
E. Mental disorders
F. Nervous system/sense organ dis
G. Circulatory system disease
H. Respiratory system disease
J. Digestive system disease
K. Genitourinary system disease
L. Pregnancy/childbirth/puerperium
M. Skin/subcutaneous tissue disease
N. Musculoskeletal/connective tissue
P. Congenital anomalies
Q. Perinatal conditions
R. Symptoms, signs, ill defined cond
S. Injury and poisoning
T. Causes of Injury and poisoning
U. Extern caus morbid/mortal
Z. Unspecified conditions

Coding purists feel that data entered should, whenever possible, include a diagnosis. For example if you want to record a cough, you should only do it as a symptom if you can't put in a diagnosis code too. For example 171.. is the symptom code for cough (from chapter 1). The diagnosis code for this patient could be H060. for acute bronchitis (from chapter H for respiratory diseases) or B221 Malignant neoplasm of the main bronchus (from chapter B for neoplasms). The problem with just coding coughs is one would rarely do a search for coughs (because of the number of different causes of a cough). It doesn't record enough detail. It is acceptable in the individual patient's record but less useful when auditing, researching or reporting which is one reason you are bothering to put the codes in at all. Read 2 does not help with this purist approach. Finding an appropriate diagnosis code for mild depression is not easy. All the diagnosis codes are a bit nebulous and all the useful codes are in the symptom or history chapters. These latter codes do not give much idea about how bad the patient is. (See below). Version 3 promises to improve this but it probably serves to remind us that recording information in this rigid way reduces the ability to communicate the individual's problem and free text is essential.

Diagnostic Terms	Symptom and History Terms
Brief depressive reaction	depressed
Prolonged depressive reaction	stress related problem
Acute reaction to stress	agitated
Grief reaction	H/O anxiety state
Neurotic depression reactive type	family bereavement

There is an arrangement for each computer system supplier to pass requests for any particular codes up to the company who run the Read Code distribution, Computer Aided Medical Systems (CAMS), who will often implement them six months or so later.

[1] Do not of course ask a GP "Which of your patients is a dummy?" because the answer may be less than helpful. But Mr M Mouse, J Bloggs, Mr Test and Mr Dummy are worth trying to avoid asking in the first place.

The most frustrating thing about GP computers for many new users is the time they spend searching through a long list of confusing possibilities for the code that describes what they want. Usually it is not necessary or useful to type the whole of a word you want to search for. For instance typing Kellers will draw a blank, whereas Keller will find Keller's osteotomy, synonym KELLER. Never type more than 10 letters, because the abbreviated forms are only 10 letters long.

Here are some diagnosis codes in Version 2for common, important (and one bizarre) events. At the bottom are some useful codes for when you can't find a really descriptive one:

Abbreviation - not guaranteed!		5-byte	4-byte
Esse	for essential hypertension	G20	G31.
Hyperten	for all hypertensive disease	G2…	G3.
Asthma	for all asthma	H33..	H43.
Diabet	for all diabetes	C10..	C2..
ante or pregnan	for ante-natal care	62...	62..
urti		H05z.	H1..
MED3	for the sick certificates	9D11.	9D11
MED5		9D21.	9D21
check	a list of lots of checks	very useful	less useful
DNA	did not attend	9N42.	9N42.
Smoking	health ed - smoking (ie advised to stop)	6791..	6791
BP	O/E BP reading (enables you to enter it)	246..	246.
repeat	Repeated Prescription	8B41.	84B1
spacec	Spacecraft accident NOS, member of ground crew injured	T55z1	less specific!
Locum	Seen by locum doctor	9N2D.	9N2D
GP su	Seen in GP's surgery	9N11.	9N11
home v	Home Visit	9N1C.	9N1C
chat	had a chat to patient	8CB..	8CB.
Advice g	advice about treatment given	677B.	67BB
Usual	usual warning given	8CD..	8CD
	Drug therapy NOS[2]	8B3Z.	8B3Z

Some practices have their own abbreviations that limit the disgnosis codes that are initially given. Eg LBP for low back pain may give the just the five most common causes of pain rather than everyone. This makes selection of codes within a practice more consistent and subsequent reporting more accurate.

Abbreviations and other cryptic notes in the Read Code.

NOS stands for not otherwise specified
NEC not elsewhere classified
EC elsewhere classified (as in "other event EC")

A user guide for GPs on Read Codes is available from CAMS (Computer Aided Medical Systems), Tannery Building, Woodgate, Loughborough, Leicestershire LE11 2TQ 01509 611006 http://www.cams.co.uk

[D] means a "vague" symptom used as a working diagnosis (i.e. half of GP consultations, headache, abdominal pain, etc.)
[SO] means site of intended for operations but is often used as symptom(s) (of)
[V] means it is one of the terms the UK added to the ICD-9 classification (yes of course we adopted the international standard...with just a few changes. They are revealingly called "The V terms".
[M] terms are Morphology terms, mainly of cancer. Don't use them unless you have a Pathology report and have noted where the tumour is.