



SNOMED CT Implementation Primary Care

From 1st April 2018, all primary care clinical systems, (in Nottingham, this is EMIS WEB and SystemONE), will be transitioning from their current coding system, (READ Codes V2 or CTV3) to SNOMED CT (Systematised Nomenclature of Medicine Clinical Terms). EMIS Web uses READ Codes/Clinical Terms V2; TPP SystemONE uses Clinical Terms V3. The rollout of SNOMED CT will be deployed in phases, the first phase being pilot sites only.

SNOMED CT is a national vocabulary of clinical phrases for use within health and care systems and has been chosen as the single terminology for use across the NHS in England.

Systematised means it is organised in a structured and logically consistent manner
Nomenclature means a collection of names and words
Medicine (clinical terms) means it is relevant to the field of medicine

When used in patient health records it provides consistent data recording across all healthcare areas. Data captured using SNOMED CT also allows data to be transferred seamlessly between systems and enables features such as decision support and clinical alerts. It covers diseases, symptoms, operations, observations, treatments, devices and drugs.

Timelines

April 2016 last release of updates to READ V2

April 2018 last release of updates to CTV3

April 2018 – Deployment rollout of SNOMED CT in GP Clinical systems, (starting with pilot sites only)

April 2020 – SNOMED CT adopted by the entire health systems

The Future

All clinical system suppliers are working, in the background, at mapping READ codes to SNOMED CT and will be providing users with a test environment to enable viewing of the terms. Users will still be able to view both the READ code and SNOMED CT equivalent terms for a 2-year period, please refer to the “[Dual Coding FACT Sheet V1.0](#)”.

As part of the transition and implementation, there are several webinars and documents that users can access through the DELEN website, (links available below)

[SNOMED CT Implementation in Primary Care](#)



In Summary

SNOMED CT will impact everyone involved with recording clinical information, reporting on patient data and the retrieval and analysis of patient records.

The documents explain **that there should be little disruption to the end user**. The way data is entered into the clinically system may look slightly different and the system suppliers will provide an environment for practices to view. To date EMIS has created its own browser which users can, if so wished, view how clinical terms will look in SNOMED CT. Alternatively, there is an online browser available on the DELEN website.

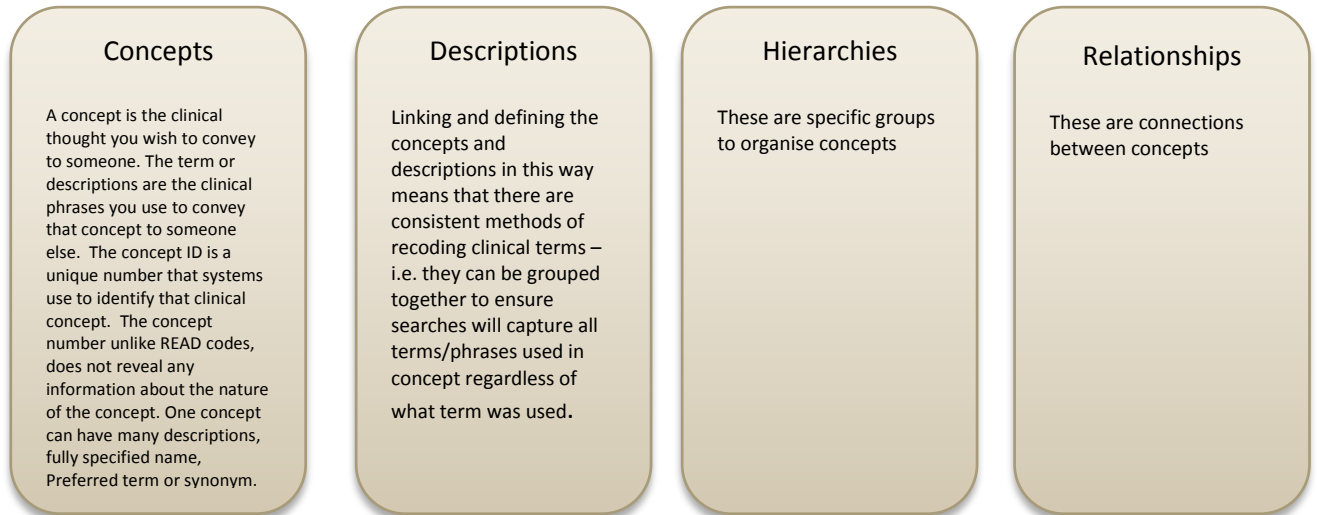
The SNOMED terminology is based on using the terms/concepts in context. There are approx. 600,000 plus medical concepts with about 1,750,000 plus descriptions (known as terms in READ codes) and related to each other in a hierarchy approx. 2,600,000 plus relationships.

It will mean that there will be no longer the worry about whether the right code has been used to enter information into the patient record as the code will mean nothing to the general user. The codes that exist in SNOMED CT are between 6 -18 characters in length.

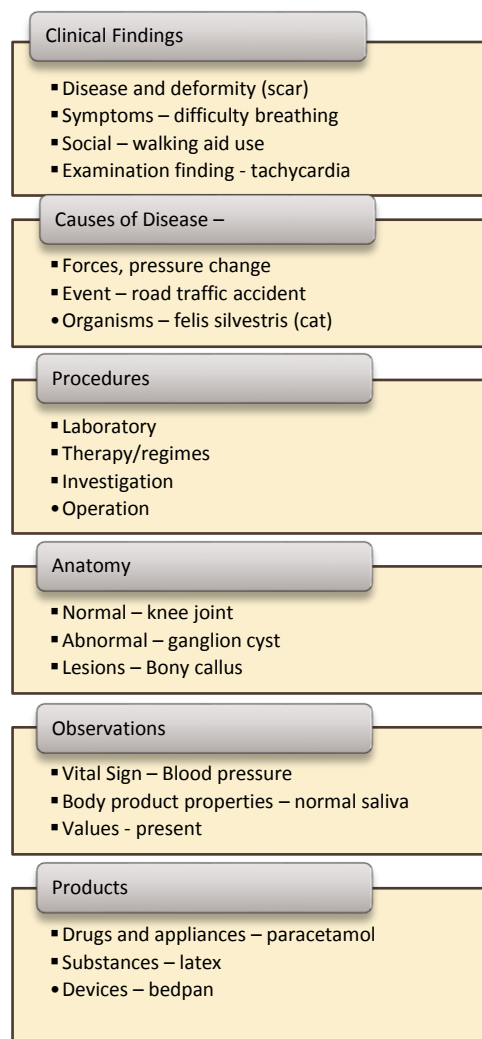


SNOMED CT Structure – “SNOMED CT HIERARCHY FACT SHEET”

There are 4 basic elements of SNOMED CT (Systematised Nomenclature of Medicine Clinical Terms)



There are 6 main headings (there are in-fact 19 top level hierarchies)





The 19 top level hierarchies are

1. **Clinical Findings** – Contains sub hierarchies for examination findings (swelling of arms) and clinical disorders/diseases (Phlebitis).
2. **Procedure** – Concepts representing activities performed in the provision of health care, such as, Invasive procedure (operation), Administration of medicine (injections), Imaging procedures (x-rays), Education procedures (Nutrition education), Administrative Procedures (Care of patient valuables).
3. **Observable entity** – Can be thought of as representing a question which has an answer, or the result of a procedure. Observable entities therefore have a value associated with them i.e. Gender = female.
4. **Body Structure** – Both normal and abnormal anatomical structures, body site involved in a disease or procedure. Abnormal structures are represented in a sub hierarchy known as morphologic abnormalities i.e. tumour morphologic abnormality.
5. **Organism** – Includes animals, fungi, bacteria, plants etc. necessary for public health reporting and used in evidence based infectious disease protocols.
6. **Substance** – Contain concepts that can be used for recoding chemical constituents of drug products, food and chemical allergens, adverse reactions, toxicity or poisoning information.
7. **Pharmaceutical/biologic product** – This is separate from the substance hierarchy to clearly distinguish drug products (products) from chemical constituents (substances) or drug products.
8. **Specimen** – Contains concepts representing entities that are obtained for examination or analysis, usually from a patient. Defined in terms of the normal or abnormal body structure from which they were obtained, the procedure used to collect the specimen, the source from which it was collected and the substance of which it is comprised, e.g. nail specimen, pus specimen, clean catch urine, specimen from patient.
9. **Physical object** - Contains concepts that are both natural and man-made objects. It focuses mainly on Prosthesis, Artificial organs, hospital bed, colostomy bag.
10. **Physical force** - Directed primarily at representing physical forces that can play a role as mechanisms of injury.
11. **Events** – Represent occurrences that result in injury excluding all procedures and interventions e.g. A trip or fall is an event and gravity is the physical force.
12. **Environment or geographical location** – All types of environments as well as named locations such as countries, counties and regions, e.g. Cornwall, NHS Day Treatment Facility, Cancer hospital.
13. **Social context** – Social Conditions and circumstances significant to healthcare. Such as family and economic status ethnic and religious heritage, life style and occupations, e.g. Asian (ethnic group), Doctor (occupation), Criminal (Life style), Donor(person).
14. **Situation with explicit context** – Represents medical information completely, it is sometimes necessary to attach additional information to a given concept. If this information changes the concept's meaning, it is known as context. This category represents concepts that carry context embedded within them. E.g., No family history of stroke, asthma not present, aspiration pneumonia resulting from a procedure.
15. **Staging and scales** – Contains naming assessment scales and tumour staging systems, e.g. Glasgow coma scale (assessment scale), Alcohol Use Inventory (assessment scale), Dukes staging system (tumour staging).
16. **Qualifier value** – Contains some of the concepts used as values for SNOMED CT attributes that are not contained elsewhere in SNOMED CT.
17. **Special concept**
18. **Linkage concept** - Contains attributes and other concepts used to link concepts with other concepts. E.g. Laterality, Method, Severity (kidney structure (body structure) – Laterality (linkage concept) – left (qualifier value).
19. **Record artefact** – This is a report and/or form associated with the delivery of healthcare e.g. Jury exemption form, post mortem report.



Information that will help with the transition

There are several useful documents and webinars that are aimed at General Practice and how to prepare for this change over.

There are many explanatory documents and Webinars available on the:
[NHS Digital website](#)

Under Education and Training

There are some General SNOMED CT information webinars:
Introduction to SNOMED CT
Finding content in SNOMED CT

There are also specific webinars aimed at users in Primary Care settings:
Introducing SNOMED CT in General Practice
Designing Queries and Searches in SNOMED CT
Exploring SNOMED CT content for General Practice

If you have any problems booking onto any of these webinars please direct your enquiries or cancellations direct to snomedtraining@nhs.net.

Alternately you can view full versions of all the previously run webinars and recordings on the website.

There are also many useful YouTube videos about SNOMED which you may find informative and useful using the links below:

[A Quick Guide to SNOMED CT](#)
[Searching in SNOMED CT](#)
[Concepts and Synonyms in SNOMED CT](#)
[Searching for Symptoms in SNOMED CT](#)
[How does dual coding fit into the implementation of SNOMED-CT in primary care?](#)

The following topic fact sheets and explanatory documents are available using the links below:

[Mapping from Read \(v2 and CTV3\) to SNOMED CT](#)
[Dual Coding Fact Sheet](#)
[SNOMED CT FAQs](#)
[SNOMED CT in Primary Care Information Leaflet](#)
[Data Quality Guidance v3.0](#)

There is also useful SNOMED CT Browser and Mapping Look up for READ V2/CTV3 using the links below:

[SNOMED Browser](#) – UK Edition
[Look up](#) – For mapping codes

Keep an eye on both the [NHS Digital website](#) and your GP Clinical System supplier websites for more information and training guides and other useful resources as they are made available to support the transition.



Preparation for Practices

It is recommended that users complete the general training on SNOMED CT and understand the changes in their clinical system once known. Other tasks that will need completing will be reviewing coding in current clinical templates and searches used by GP practices.

The meaning of the terms in SNOMED CT is represented by its hierarchy and observing its parent and child relationship.

Users are advised to look on the DELEN website and familiarise themselves with some of the information presented. This could be watching a recorded webinar, reading one of the documentations/presentation.

EMIS Web have produced a READ code usage document, which is very helpful for seeing the common codes used in a practice.

We suggest that practices read the Data Quality Guidance V3, which outlines the differences between READ codes and SNOMED CT and why the change is taking place.

There are a few things that practices need to understand and undertake to prepare themselves for this transition.

Take a note of;

- All clinical registers especially QOF disease registers
- The name of their current user defined templates and the READ codes associated with them.
- Identify all user defined reports/searches, recalls and protocols and associated READ codes.
- Check reports/templates etc. that are outdated, (i.e. have not been used for more than 5 years).
- Local codes, these are codes that usually start with the letter "Y" in SystemONE and start with the name "EMIS, EGTON, HNG", in EMIS WEB.

Observe;

- Descriptions containing any of the following; these terms will be mapped to SNOMED CT without the "EC, OS etc".
 - "EC" = elsewhere classified
 - "OS" = otherwise specified
 - "NOS" = not otherwise specified
 - "NEC" = not elsewhere classified
 - "unspecified" These are usually codes that end with the letter 'z' or 'y'

Examples





- Terms that currently start with a square bracket, i.e. [X], [SO], [M], will be mapped to SNOMED CT without the square bracket.

[SO]: “site of” codes equate to chapter "Z" in OPCS4 and provide a way of coding the site of operation as a subsidiary code. (These codes are in Version 2 only), and are mapped to the body structure hierarchy in SNOMED. Users need to be aware that some terms may have been recorded incorrectly.

Example



[M]: “morphology of neoplasms”: Codes containing this symbol are for recording the cell type of the neoplasm, and correspond to the morphology chapters in the ICD classifications.

[V]: Version 2 terms that have been derived from ICD9/10.

[X]: Version 2 terms that have been derived from ICD9/10

[D]: These codes are used when a clinician has a working diagnosis which may later be identified as a defined disease entity. For example, “chest pain” is a symptom that may become a firm diagnosis after investigation where no further cause is found; such codes are often used as a “diagnosis” when it is not possible to be more precise.

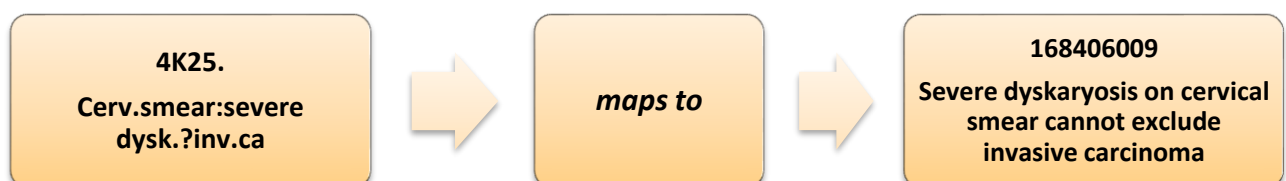
Example of [X]

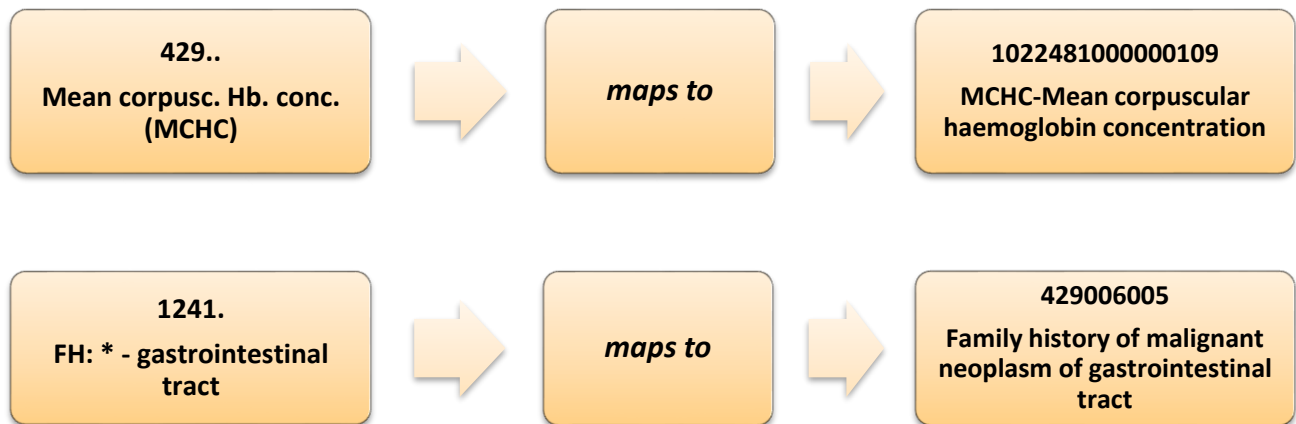


Abbreviations

Terms are no longer abbreviated in SNOMED CT. Users will still be able to use abbreviated terms for searching purposes only, the unabbreviated term will be displayed in the patient’s record. The reason for this is that an abbreviated term may have different meanings, “for example, **P.I.D.** may mean **pelvic inflammatory disease** OR **prolapsed intervertebral disc**. **R.T.A.** can be **renal tubular acidosis** OR **road traffic accident**”.

Examples





Occupation terms

Check that occupations are true occupations of the patient and not used incorrectly to record a referral. E.g. 'Nurse', recorded in the patient's record, when it should have been a referral to the nurse.

Where a READ V2 term is vague and a SNOMED CT equivalent term cannot be found, then these terms are made inactive.

All these examples and more including explanations, such as duplicate terms, plural nouns, spelling errors, F/H (Family History), H/O (History of) O/E (On examination), C/O (Complaining of), PH (Personal history), codes that start with 7Q and 7M, outdated terms etc can be found in the 'Data Quality Guidance V3' document. PLEASE READ.

Be aware that items may not appear where you think they may be. All historical data will not be deleted, so you will always be able to go back and see the READ code used with the SNOMED CT equivalent code.

REMEMBER ITS NOT WHAT YOU SAY ITS WHAT YOU MEAN. Words can mean different things in different circumstances".

REFERENCE:

Data Quality Guidance V3

"Guidance for Primary Care: Transitioning from Read to SNOMED CT - (Version 3)"
Health and Social Care Information Centre
Published October 2017