SNOMED–CT

What does SNOMED-CT stand for?

SNOMED-CT stands for the 'Systematized Nomenclature of Medicine Clinical Terms' and is a “common clinical language” consisting of sets of clinical phrases or terms, that can be grouped together with relationships between terms.

What does SNOMED-CT do?

The Department of Health has agreement that SNOMED will become the terminology adopted across the NHS in England, as it is the most comprehensive international terminology currently available and can be used across all care settings and in all clinical domains. As services implement electronic patient records (EPR) and utilise the SNOMED taxonomy, it will mean clearer and more consistent communication between hospitals, GPs and patients. It will also allow for improved ability to extract activity data that accurately reflects practice as SNOMED terms link with the codes within OPCS (Office of population censuses and surveys) classification of interventions and procedures and ICD-10 codes (International classification of diseases).

SNOMED CT is managed and maintained internationally by the International Health Terminology Standards Development Organisation (IHTSDO) and in the United Kingdom by the UK Terminology Centre (UKTC). Development and updating of SNOMED is by NHS Digital who are keen to involve clinicians to ensure that the terminology is clinically relevant and provides the granularity required in different specialties.

How does SNOMED help with improving surgical data?

- Terminology must continually develop to accommodate advances in healthcare e.g. Genomics and rare diseases. SNOMED is updated every six months and allows for regular revision and amendments. Other coding systems such as OPCS and ICD10 are updated much less regularly

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- The same diagnosis can be referred to in a very different way between different clinical specialities. SNOMED allows for a different level of granularity for the same condition between specialties
- Terms can be linked to synonyms within SNOMED. They are not used for data entry but can allow for historical reports

Are there issues with SNOMED?

- The national set of terms is a superset of what is required by the profession as a whole. Each specialty subset will not be able to represents everything that speciality will need, although there is ongoing work to ring fence certain specialty-specific codes
- Disease severity is very important to some specialties, but it is still largely unresolved as how to manage this in current EPR systems
- Clinicians require data analysis to test hypotheses, to monitor the emergence of trends and to undertake analysis for clinical audit, patient safety and quality improvement. Data must be recorded in a standardised way as provided by SNOMED CT for these analyses to take place. Currently tools to analyse data through SNOMED terminology , at a national and local level does not exist, but is in development.

Why do we need to improve our data?

In 2011 a joint report was published by the Academy of Medical Royal Colleges (AOMRC) and the NHS Information Centre entitled 'Hospital Episode Statistics (HES): Improving the quality and value of hospital data'.[1] One of its key recommendations was the need for clinician-led data recording using Systematized Nomenclature of Medicine – Clinical Terms (SNOMED-CT) and collection of clinical data in outpatients.

Following the publication of the AOMRC report a national survey of consultants was undertaken which demonstrated that clinicians viewed "extraction of data from unstructured notes and lack of clinical validation" as the two most significant issues affecting the value of

[1] Spencer, S A. Hospital Episode Statisitics (HES): Improving the quality and value of hospital data: A discussion document. 2011; http://www.aomrc.org.uk/doc_download/9379-hospital-episode-statistics-improving-the-quality-and-value-of-hospital-data-discussion-document

HES data for clinical use. [2] Lack of clinical data from outpatients was also regarded as a significant problem.

How is NHS Digital asking surgeons to be involved?

- Clinical champions are needed to advocate the use and the benefits of SNOMED CT and to start illustrating real examples of what is possible
- NHS Digital would like each surgical specialty to review diagnostic and procedural terminology that is relevant to them as clinicians
- In order to develop your subset a small expert clinical reference group (ECRG) of 2-3 clinicians should agree to carry out this work
- The ECRG must be sanctioned by the relevant professional body, so that all developments/ changes to the SNOMED CT subset represent a national standard and adherence to sound principals of data recording can be encouraged across the specialty
- The process of developing the terminology is outlined below and an example of how granularity of procedural terminology has been developed is outlined in Appendix 1

[2] Spencer SA, Davies MP. Hospital episode statistics: improving the quality and value of hospital data: a national internet e-survey of hospital consultants. *BMJ Open* 2012; 2(6).

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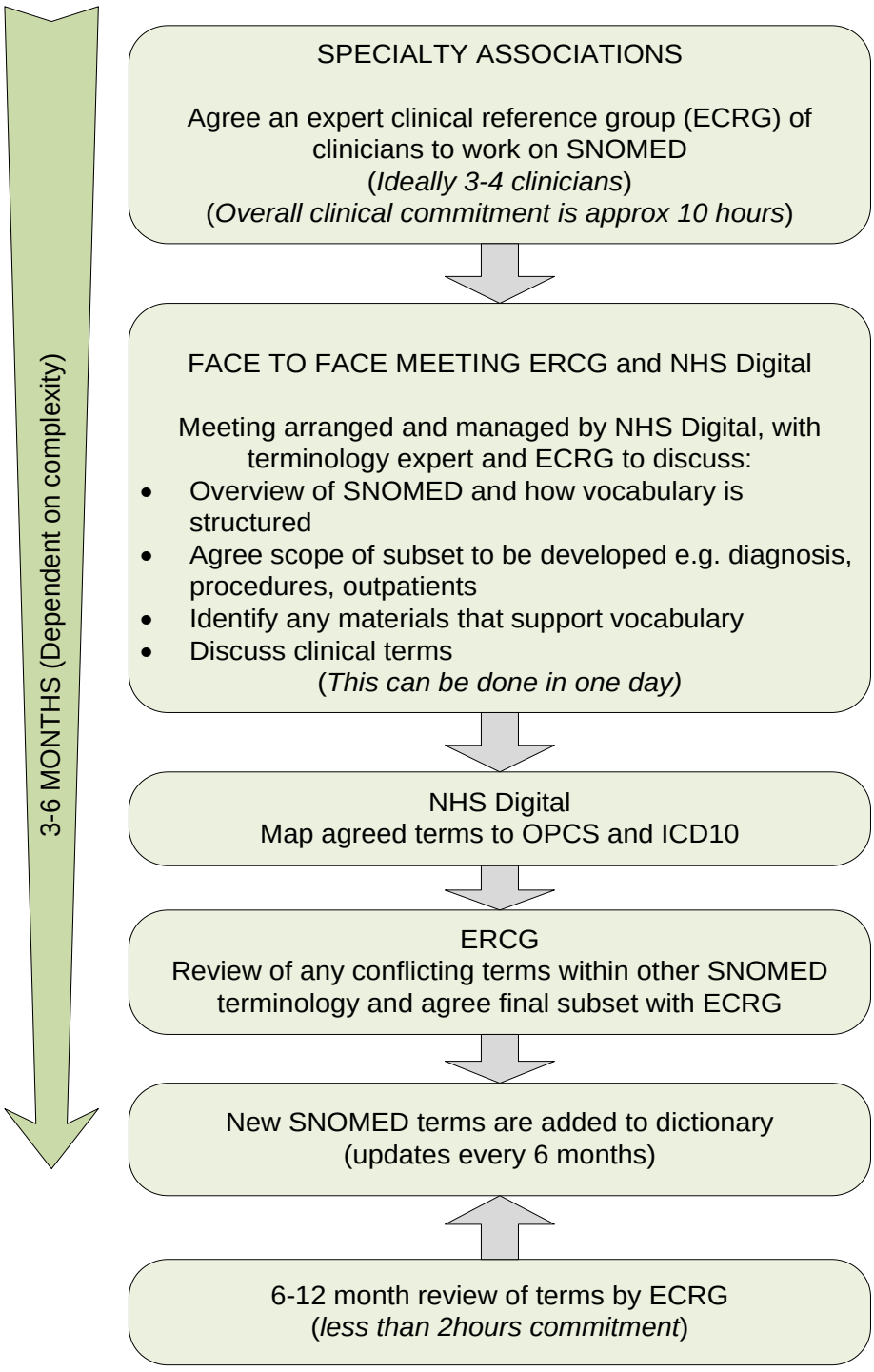

Fig 1: Flow chart showing process and timescale for developing SNOMED subset

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- Subsets should be reviewed by the ECRG from a clinical perspective on an annual basis unless there is a particular initiative or problem in a clinical area requiring urgent review. Any changes must be sanctioned by the ECRG.
- The role of a professional clinical terminologist is key in supporting the ECRG, especially with regards to the level of detail (granularity) that should be included. Too little detail will severely hamper future analysis and too much detail renders the system unwieldy and possibly unworkable at the patient interface. The terminologist is supplied by NHS Digital

Links for further information

UK Terminology centre: https://digital.nhs.uk/terminology
Distribution site for SNOMED CT: www.uktcregistration.nss.cfh.nhs.uk

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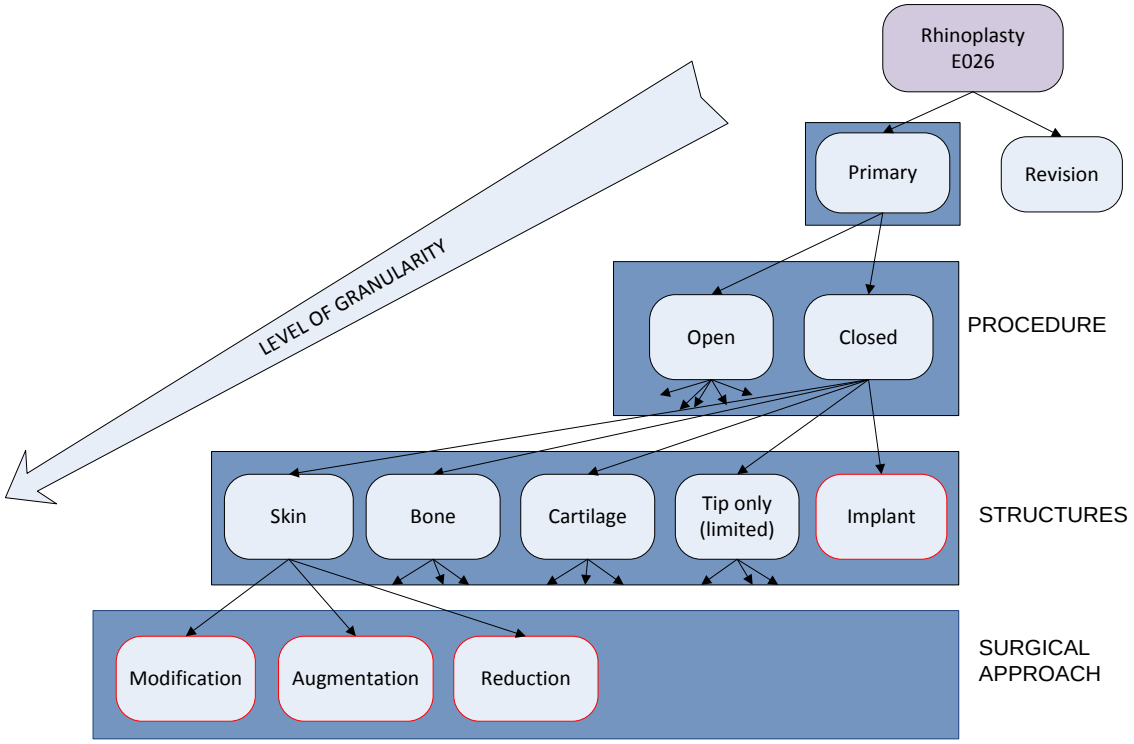
Appendix 1: Example of diagram outlining development of SNOMED terminology for a surgical procedure

Below is an example diagram of how the clinicians wanted to gather information about Primary Rhinoplasty If you follow this diagram, each possible ramification within this diagram would be a single defined term, with its own SNOMED number, that is then linked to the OPCS/ICD10 codes e.g. *Primary rhinoplasty via a closed procedure with bone augmentation* This allows you to differentiate between different patient groups, surgical techniques, implants etc. You can also use this approach for diagnosis of conditions. All the terms are then published within SNOMED and are available for use within electronic patient records.



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