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# SNOMED CT implementation in Primary Care: Phase 1

High Level Requirements

## **Document Management**

## **Revision History**

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0.3	29/09/2015	Updated following internal HSCIC SNOMED CT workshop and review
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## **Glossary of Terms**

Term / Abbreviation	What it stands for
GPSoC	GP Systems of Choice
HSCIC	Health and Social Care Information Centre
TRUD	Technology Reference Data Update Distribution
UKTC	UK Terminology Centre

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## 1 Introduction

## 1.1 Purpose

A HSCIC programme of work has been established to manage the retirement of three of its coding systems: Read 5-Byte Version 2 (Read v2), Clinical Terms Version 3 (CTV3) and the Read Drug and Appliance Dictionary (DAAD). The programme will facilitate the migration of affected GP systems within the GPSoC framework to SNOMED CT. This action is within the National Information Board (NIB) 'Personalised health and care 2020: a framework for action'.

## 1.2 Background and Rationale

GPSoC primary care systems all currently utilise Read v2 or CTV3 directly as their terminology for clinical recording; a number of other subsidiary and secondary uses programmes and activities utilise that coded data for the processes and/or the analysis they undertake. Read v2 and CTV3 are deprecated products (notified by the Standardisation Committee for Care Information (SCCI<sup>1</sup>) through their communications in December 2014). The last release of Read v2 will be April 2016, the last release of CTV3 will be April 2018 (there will be no release of CTV3 in October 2016 to facilitate primary care moving to SNOMED CT). Further Information can be found on the HSCIC Information Standards Board at the link below:

#### http://systems.hscic.gov.uk/data/uktc/readcodes

As a result there is a requirement to move to SNOMED CT so that clinical recording in Primary Care uses a current clinical terminology.

## 1.3 Scope of Implementation Requirements

When referring to SNOMED CT in these requirements it is the suite of products that constitute the UK terminology and includes the UK Edition of SNOMED CT (consisting of the International Edition, the UK Clinical Extension and the UK drug extension). It is recommended that Release Format 2<sup>2</sup> is utilised.

These requirements currently cover the adoption of SNOMED CT within systems that sit under the GPSoC Lot 1 framework only, and are limited to those suppliers that store, output or receive data recorded using clinical terminologies.

Separate requirements sit within the GPSoC Requirements that determine how clinical terminologies should be used in these systems. These requirements will be updated as necessary where the introduction of SNOMED CT has an impact. These updated requirements will then be re-issued through GPSoC commercial channels.

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<sup>1</sup> http://www.hscic.gov.uk/isce

<sup>&</sup>lt;sup>2</sup> The last release of the UK Edition of SNOMED CT in Release Format 1 is April 2018

Assurance will be required for both the implementation of SNOMED CT requirements and the systems compliance against the GPSoC requirements that have been updated.

Assurance will also be required against any HSCIC national systems that will use SNOMED CT as their primary coding scheme, for example Pathology Messaging Implementation Project (PMIP). The HSCIC will provide further guidance as and when these systems move to SNOMED CT.

HSCIC UK Terminology Centre is updating full guidance on the implementation of SNOMED CT. These will not be contractual requirements but will document best practice in implementing SNOMED CT.

## 1.4 Scope of SNOMED CT Phase 1

This implementation is based on the UK Edition of SNOMED CT only.

The HSCIC Phase 1 implementation of SNOMED CT concerns the initial implementation across systems in a mixed economy whilst Read v2 and CTV3 are still in use elsewhere across GPSoC systems. The key principles are:

- Remove dependency on the Read/CTv3 code releases and utilise the SNOMED CT coding scheme instead
- Enable the end user to use SNOMED CT in all aspects of the system where the user currently interacts using Read/CTv3
- Enable all functionality that previously used Read/CTv3, to now be encoded in SNOMED CT and to operate correctly across all data including historical data
- Provide an efficient and effective user interface to select SNOMED CT terms, the term selected being viewable to everyone who inspects that record
- Data extractions, interactions and messages have to provide and accept data in SNOMED CT for interoperability and national processing.

Following successful completion of implementation and adoption of SNOMED CT in GPSoC Lot 1 systems, work will commence with stakeholders to look at delivering value added benefits of SNOMED CT (Phase 2). We anticipate some of the value added benefits will come from using defined forms of post coordination using qualifiers and attributes. This will be done in a controlled manner through GPSoC requirements so that interoperability is retained whilst the benefits of SNOMED CT are delivered.

## 2 Requirements

## 2.1 SNOMED CT Implementation

Documented below are the requirements that must be followed when implementing SNOMED CT.

- 2.1.1 The supplier MUST use SNOMED CT as its primary coding scheme which MUST have, where appropriate, primacy over any other coding terminology
- 2.1.2 The supplier **MUST** map the legacy terminology to SNOMED CT using the UKTC mapping tables.
- 2.1.3 Mapping implementations **MUST** comply with relevant rules concerning the mandatory degrade to text only for any unassured maps within those mapping tables.
- 2.1.4 All previously coded data currently stored within the system in either Read v2 or CTV3 MUST be translated into SNOMED CT but the original Read v2 and CTV3 code, term code and term text MUST always be preserved
- 2.1.5 User interaction previously driven with the legacy terminology within the system MUST now be driven by the use of SNOMED CT (For example, report writing, data entry forms)
- 2.1.6 The system **MUST** continue to support the receipt of data in the legacy terminology and map appropriately
- 2.1.7 When exporting coded data that has been mapped to SNOMED CT the system **SHOULD** also send the legacy term code and term text as a translation
- 2.1.8 Where a historical coded data item could not be mapped to SNOMED CT using an assured map, and so was degraded to text, the translation set MUST include the legacy coded data

#### 2.2 Audit Trail

At such point that the supplier maps its data from the legacy terminology to SNOMED CT an audit of the recoding activity undertaken within a system must be maintained.

- 2.2.1 For each data item that has been mapped the following data **MUST** be stored for audit purposes
  - a) The coding scheme in which the information was originally captured
  - b) The original concept code, term code (where available) and rubric originally selected and/or stored before the mapping was applied
  - c) The date on which the original legacy clinical code was recorded
  - d) The date on which the mapping to SNOMED CT was applied
  - e) The filename of the mapping table used in the mapping
- 2.2.2 Any audit information from previous data migrations prior to the mapping to SNOMED CT **MUST** be retained in full
- 2.2.3 A system **MUST** provide users with the functionality to generate, export and interpret a range of audit reports that cover the mapping to SNOMED CT.

This report set **MUST** include the following:

- a) The filename of the mapping table used
- b) The date and time of the mapping
- c) A list of the source/mapped pairs where the mapped display term is identical to the original display term
- d) A list of source/mapped pairs where the mapped display term is different from the original display term
- e) A list of source codes that could not be mapped because no assured mapping exists in the mapping table
- A list of source codes that could not be mapped because of an error, including details of the error encountered

## 2.3 Amendments to Crossmaps

A system should ensure it is able to re-map data that has already been mapped to SNOMED CT. This is to accommodate a change to the mapping tables should an error be identified in the previous table. Full guidance will be made available via the UK Terminology Centre and a link provided here when available.

## 3 GPSoC Existing Requirements

The requirements below are an extract from the existing GPSoC Requirements where they are impacted by the migration to a SNOMED CT system. They have been extracted and placed in this document for clarity. At this time the amendments are not final but offer further information on how suppliers should implement SNOMED CT.

Other GPSoC Requirements may be updated as necessary once a full impact has been completed.

When referring to Clinical Term in the requirements below it should be interpreted as the SNOMED CT Description text associated with a Concept. The description may be a fully specified name, a preferred term or a synonym.

## 3.1 GPSoC GP Principal System Requirements V2 1.1 (HSCIC-FNT-TO-TAR-0107 01)

Req ID	Requirement Text
GP-03.2-01	Use the UK Edition of SNOMED CT (consisting of the International Edition, the UK Clinical Extension and the UK drug extension) as published by the UK Terminology Centre (UKTC), as the primary source of a coding scheme when recording or accessing information.
	Integration with National Services mandates certain terminologies be supported e.g. Summary Care Record service requires SNOMED CT – the relevant UKTC published mapping tables must be used when translating between coding schemes to ensure appropriate and safe mapping of Clinical Terms.
	Suppliers SHOULD use the files provided in Release Format 2.

Req ID	Requirement Text
GP-03.2-02	Support all UKTC published variations/types of Clinical Term within a SNOMED CT Concept, including Fully Specified, Preferred and Synonymous
	<ul> <li>Where a User is searching for a term, all terms to be made available during the process</li> <li>Where a User has 'found' or selected a term, any Preferred Term to be default display term offered/highlighted to the User</li> <li>The selected Clinical Term must always be displayed irrespective of method to select a term e.g. if a User searched for Term A and found and selected a Preferred Term i.e. Term B, Term B to be stored in the Patient Record</li> <li>The Clinical Term must be displayed in full</li> </ul>
GP-03.2-05	Systems that provide for codes local to the practice or the Principal Clinical System SHOULD utilise the SNOMED CT namespace feature; registering a namespace to their organisation.
	Define, use and manage local codes within their appropriate local namespace i.e. non-national codes that are expected to be superseded, whether these are local to a practice or to the Principal Clinical System e.g. for specific local purposes or as a 'placeholder' while a new Description Type is being requested/added to the SNOMED CT coding scheme by the relevant authorities. Functionality to include:
	<ul> <li>Must always export local Namespace codes with the appropriate HL7 message identifier (OID) that distinguishes them clearly from National SNOMED CT</li> <li>Replacement of such temporary local Namespace codes across the system e.g. upon release of appropriate SNOMED CT code with the appropriate audit trail</li> <li>Notify / inform Users each time they opt to use a local Namespace code that the Concept will not be recognised outside of the organisation/system</li> <li>Removal of Local Namespace codes to prevent further usage i.e. make such a local Namespace concept inactive</li> </ul>
	All management of Local Namespace codes must be conducted in a safe way that enables any records to be retrieved that may have been stored using a local Namespace code.

Req ID	Requirement Text
GP-03.2-06	Search for and select any Clinical Term to support data entry, in each of the following ways:
	<ul> <li>Predictive text i.e. suggesting applicable terms based on entry of full or partial term and description, with the ability for a User to select not to encounter this functionality in their use of the system</li> <li>Selecting a term from a full list or subset of terms e.g. scrolling through a dropdown list</li> <li>Finding a term from a hierarchical and/or structured folder display i.e. 'drill down' levels of detail to find the appropriate term. User to have ability to view all levels of granularity and to select any level of parent or child term</li> </ul>
	Data entry search for Clinical Terms to be case independent and the full SNOMED CT Clinical Term description to always be displayed irrespective of whether the User enters:
	<ul> <li>full / part description</li> <li>upper or lower case – if different terms are identified for upper or lower case use of the same characters, both Clinical Terms to display to allow the User to select the relevant term i.e. search must be case insensitive – but results must reflect the user case preference in its priority listing of the search results</li> </ul>

## 3.2 Technical Standards v0.8

HSCIC-FNT-TO-TAR-0127 01

Req ID	Requirement Text	
SCT3	Use the UK Edition of SNOMED CT (consisting of the International Edition, the UK Clinical Extension and the UK drug extension) as published by the UK Terminology Centre (UKTC), as the primary source of a coding scheme when recording or accessing information.	MUST
SCT3.1	The most up to date Edition of SNOMED CT must be implemented within the system within the agreed update period (see Authority Contract Maintenance Schedules)	MUST

Req ID	Requirement Text	
SCT3.4.	When using SNOMED CT the system <b>MUST</b> :	MUST
1	NOT present for entry into the patient record any of the following concepts or their children:	
	<ul> <li>410663007 Concept history attribute (attribute) </li> <li>408739003 Unapproved attribute (attribute) </li> <li>900000000000441003 SNOMED CT Model Component (metadata) </li> </ul>	



Req ID	Requirement Text	
SCT5	Information Standards	MUST
	The Supplier <b>MUST</b> develop, document, operate and maintain standards and procedures for ensuring the quality and integrity of all key data. The Standardisation Committee for Care Information oversees the development, assurance and approval of information standards, data collections, and data extractions, and publishes the relevant standards notices on its website. The NHS Data Model and Dictionary provides a reference point for approved Information Standards and Collections (including Extractions) (ISCEs) to support health care activities within the NHS in England.	
	Note: The NHS Data Model and Dictionary gives common definitions and guidance to support the sharing, exchange and comparison of information across the NHS. The common definitions make up the base currency of Commissioning Data Sets (CDS), and on the monitoring side, they support comparative data analysis, preparation of performance tables, and data returned to the Department of Health (http://www.dh.gov.uk). NHS information standards also support clinical messages, such as those used for pathology and radiology.	
	NHS information standards also have an important role in supporting the flow and quality of information used in different parts of the NHS so that health care professionals are presented with the relevant information where and when it is required. An example of this is the linking of all records about a patient collected in different parts of the NHS, to be available to a care professional wherever the patient attends to be seen for treatment. NHS information standards are presented as a logical data model, ensuring that the standards are consistent and integrated across all NHS business areas, and changes to the contents of the NHS Data Model & Dictionary are published as appropriate.	
	Information standards may refer to the use of terminology and may restrict content based on subsets of SNOMED CT. Any such requirement will be documented within the NHS Data Model and Dictionary	
	http://www.datadictionary.nhs.uk	
	http://www.hscic.gov.uk/isce	