

SNOMED CT-AU Reference Set Implementation Process and Guidance for Vendors v1.0

Purpose

This document provides an overview for vendors and SNOMED CT¹ implementers of the steps required to integrate SNOMED CT-AU reference sets within their products and clinical systems.

Scope

This guidance is applicable to the following types of implementations:

- Greenfields CIS implementations
- Existing CIS implementations
- State-wide catalogues
- Local catalogues
- Data management and mapping ownership

Acronyms

Acronym	Meaning
CDA	Clinical Document Architecture
CIS	Clinical Information System
IHTSDO	International Health Terminology Standards Development Organisation
NCTIS	National Clinical Terminology and Information Service
PCEHR	Personally Controlled Electronic Health Record
SNOMED CT	Systematized Nomenclature of Medicine, Clinical Terms
SNOMED CT-AU	SNOMED CT, Australian release

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Implementation process overview

1. Understand the business driver	2. Obtain a licence & SNOMED CT-AU data	3. Determine product requirements
<p>The decision to implement SNOMED CT-AU will be influenced by an understanding of relevant business drivers.</p> <p>These may include external factors such as interoperability to support sending and receiving clinical information for national e-health programmes or internal factors relating to product development to support the required CIS functionality.</p> <p>If needed, specific information and education sessions can be arranged with a representative from the NCTIS.</p>	<p>Access to SNOMED CT-AU data requires a current SNOMED CT Affiliate License [1] and Australian National Terminology Release Licence [2].</p> <p>Vendors with SNOMED CT-AU integrated products must comply with the obligations stated within these licence agreements.</p> <p>CIS vendors that do not release SNOMED CT-AU as part of their CISs, but allow their customers to maintain and upgrade to new terminology releases, will deliver the documentation outlining their obligations to obtain and comply with these licence agreements.</p> <p>SNOMED CT-AU data is structured according to the IHTSDO Release Format 2 specification. It is provided to users within the following text files:</p> <ul style="list-style-type: none"> • Concepts • Identifiers • Descriptions • Relationships • Reference sets 	<p>A decision to implement SNOMED CT-AU requires an understanding of SNOMED CT and its role within existing data structures and CIS application functionality.</p> <p>There is also a need to understand SNOMED CT-AU's product coverage to support system interoperability, including CDA and non-CDA information exchanges within clinical messaging.</p> <p>By defining your business drivers you can develop specific requirements for:</p> <ul style="list-style-type: none"> • Interoperability with SNOMED CT-AU and non-SNOMED CT-AU content within clinical solutions. • Exchanging SNOMED CT-AU coded information within CDA documents and the PCEHR. • Change management. • Reporting and statistical data requirements.
<p>Resources</p> <p>SNOMED CT Starter Guide [3]</p> <p>IHTSDO Frequently Asked Questions [4]</p>	<p>Resources</p> <p>SNOMED CT-AU Australian Implementation Guidance [5]</p> <p>Registering for a License [6]</p>	<p>Resources</p> <p>SNOMED CT Editorial Guide [7]</p> <p>SNOMED CT Technical Implementation Guide [8]</p> <p>NCTIS Reference Set Library [9]</p>

4. Assessment against requirements	5. Implementation planning	6. Data maintenance requirements
<p>Review the SNOMED CT documentation produced by IHTSDO and NEHTA to help you determine how SNOMED CT can meet defined requirements:</p> <ul style="list-style-type: none"> • What concepts are required? • Are descriptions required for display as well as creation of messages? • Are relationships between concepts required to support use of the terminology within an application? <p>An assessment of the scope of product coverage within SNOMED CT-AU and possible gaps with local requirements will be required, as well as consideration of the need for the addition of local content.</p> <p>If needed, specific information sessions can be arranged with an NCTIS representative.</p>	<p>When designing your applications to use SNOMED CT-AU and implement relevant SNOMED CT-AU reference set data fields the following should be undertaken:</p> <ul style="list-style-type: none"> • Analysis to identify gaps between required terminology functionality and what SNOMED CT-AU can provide. • Development of local extensions of SNOMED CT-AU to support identified gaps. • Use of NEHTA-developed guidelines and NCTIS guidance to assist in identifying local clinical data dictionary items in SNOMED CT-AU. • Identifying local clinical data dictionary items in SNOMED CT-AU (in consultation with guidelines developed by IHTSDO and NEHTA). NCTIS guidance is also available, if needed. 	<p>SNOMED CT-AU data is released bi-annually. Licence holders are notified at the time of a new release.</p> <p>Release documentation includes information on relevant issues and key changes to SNOMED CT-AU.</p> <p>Ideally, application data should be updated as soon as possible after a SNOMED CT-AU release to ensure information is current.</p> <p>If a mapping is to be undertaken:</p> <ul style="list-style-type: none"> • The initial cost and effort will be influenced by the number of entries to be mapped and the complexity of the dataset. • Maintenance may be required each time the source or target systems are updated. <p>Viewers are available for browsing SNOMED CT-AU content. See the SNOMED CT-AU Release Note [10] for details.</p>
<p>Resources SNOMED CT Editorial Guide [7]</p>	<p>Resources SNOMED CT-AU Implementation Guidance [5] SNOMED CT-AU Reference Set Implementation Toolkit [11] SNOMED CT Technical Implementation Guide [8] NEHTA Clinical Documents [12] ISO: Principles of mapping between terminological systems [13]</p>	<p>Resources SNOMED CT-AU Release File Bundle [14] SNOMED CT-AU Implementation Guidance [5] SNOMED CT Technical Implementation Guide [8]</p>

7. SNOMED CT-AU implementation

8. Terminology requirements

This step covers design of the application to include SNOMED CT-AU and implementation of relevant SNOMED CT-AU reference set data. Considerations include:

- Display of the SNOMED CT-AU Preferred Terms and/or Synonyms.
- Term length implications.
- Alignment of the SNOMED CT-AU concepts with existing local database structures.
- Functionality testing.
- Validation SNOMED CT-AU content display.
- Validation of key SNOMED CT-AU relationships.
- Validation that appropriate concept IDs are associated with the SNOMED CT-AU term and general content validation.
- Appropriate display of SNOMED CT-AU within selection lists.
- Appropriate search strategies.
- Appropriate data storage to facilitate interoperability requirements

The NCTIS can provide specific implementation guidance as required.

NEHTA has developed software requirements for healthcare software systems implementing SNOMED CT-AU in the form of guidance documentation.

These requirements deal with healthcare software system behaviour. Implementations that have adopted this guidance give users confidence that an implementation will behave as expected, perform functions in a known manner, has interfaces or formats that adhere to agreed specifications and is likely to operate with other implementations following this guidance.

Requirements have also been developed in relation to SNOMED CT-AU data maintenance.

Resources

[SNOMED CT-AU Implementation Guidance](#) [5]
[SNOMED CT-AU Reference Set Implementation Toolkit](#) [11]
[SNOMED CT Technical Implementation Guide](#) [8]
[NEHTA Clinical Documents](#) [12]
[Clinical Terminology - Test Cases for Software and Messaging](#) [15]

Resources

[Clinical Terminology - Guidance for People and Processes](#) [16]
[Clinical Terminology - Guidance for Use in Healthcare Software](#) [17]
[Clinical Terminology - Test Cases for Software and Messaging](#) [15]
[Clinical Terminology - Use of Medical Nomenclatures in Information Exchange](#) [18]

9. SNOMED CT-AU content support

Content support for SNOMED CT-AU reference set implementers is available through the NEHTA Help Centre, via email (help@nehta.gov.au) or telephone (1300 901 001).

Issues with data content can also be logged through the Help Centre. Issues are prioritised for resolution by the SNOMED CT-AU team.

FAQs covering SNOMED CT-AU are available on the NEHTA website.

Additional content can be requested via a submission process accessed on the NEHTA website.

If required, specific information and education sessions can be arranged with an NCTIS representative.

Resources

[SNOMED CT FAQs](#) [19]

[SNOMED CT Content Release Notes](#) [20]

[SNOMED CT Editorial Guide](#) [7]

10. SNOMED CT-AU technical support

For technical issues, please refer to the [SNOMED CT Technical Implementation Guide](#) [8].

For technical support for SNOMED CT-AU reference sets, please contact an NCTIS representative through the NEHTA Help Centre, via email (help@nehta.gov.au) or telephone (1300 901 001).

Contact

Email help@nehta.gov.au for further information, or to arrange a session with an NCTIS representative to discuss your organisation's requirements.

References

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4. IHTSDO. *Frequently Asked Questions*. [Internet]. 2014 Available from: http://ihtsdo.org/fileadmin/user_upload/doc/.
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13. ISO. *ISO/TR 12300:2014 Health informatics -- Principles of mapping between terminological systems*. ISO; 2014. Edition 1 (Monolingual). Available from: http://www.iso.org/iso/home/store/catalogue_ics.htm.
14. NEHTA. *SNOMED CT-AU Release File Bundle* [Internet]. Available from: <https://www.nehta.gov.au/implementation-resources/ehealth-foundations/snomed-ct-au>.
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- <http://www.nehta.gov.au/implementation-resources/ehealth-foundations/australian-medicines-terminology-common>.
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 19. NEHTA. *SNOMED CT FAQs*. [Internet]. Available from: <http://www.nehta.gov.au/our-work/clinical-terminology/snomed-clinical-terms/snomed-faqs>.
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<http://www.ihtsdo.org/snomed-ct/get-snomed-ct>.

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Contact for enquiries

Telephone: 1300 901 001 or email: help@nehta.gov.au

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