

Australian Medicines Terminology v3 Model Implementation Process and Guidance for Healthcare Organisations v1.0

Purpose

The purpose of this document is to provide an overview for healthcare organisations and AMT implementers of the steps required to integrate AMT v3 within their products and clinical systems.

Scope

This guidance is applicable to the following types of implementations:

- Greenfields CIS implementations
- Existing CIS implementations
- Single vendor environments
- Multiple vendor environments
- State-wide catalogues
- Local catalogues
- Data management and mapping ownership:
 - Localisation by vendor
 - Localisation by healthcare organisation
 - Localisation by agency

Acronyms

Acronym	Meaning
CDA	Clinical Document Architecture
CIS	Clinical information system
IHTSDO ¹	International Health Terminology Standards Development Organisation
NCTIS	National Clinical Terminology and Information Service
PBS	Pharmaceutical Benefits Scheme
PCEHR	Personally controlled electronic health record

¹ IHTSDO®, SNOMED® and SNOMED CT® are registered trademarks of the International Health Terminology Standards Development Organisation.

Implementation process overview

1. Understand the business driver	2. Obtain a licence & AMT data	3. Determine requirements	4. Implementation planning
<p>The decision to implement AMT 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 medicines 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 AMT data requires a current <i>SNOMED CT Affiliate Licence</i> [1] and an <i>Australian National Terminology Release Licence</i> [2].</p> <p>If an organisation develops AMT-integrated products, the organisation must comply with the obligations stated within these licence agreements.</p> <p>AMT v3 data is structured according to the AMT v3 model and 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 the AMT requires an understanding of the AMT and its role within existing data structures and CIS application functionality.</p> <p>There is also a need to understand AMT's product coverage to support system interoperability, including CDA and non-CDA information exchanges within medications management.</p> <p>By defining your business drivers you can develop specific requirements for:</p> <ul style="list-style-type: none"> • Interoperability with AMT and non-AMT content within vendor solutions. • Exchanging AMT coded information within CDA documents and the PCEHR. • Change management. 	<p>When designing your applications to utilise the AMT and enable the transfer of AMT coded messages, the following items should be considered:</p> <ul style="list-style-type: none"> • Analysis to identify gaps between required terminology functionality and what the AMT can provide. • Development of local extensions of the AMT to support identified gaps. • Utilise NEHTA-developed guidelines and seek guidance to assist in mapping local medicine data dictionaries to the AMT, undertake ongoing quality reviews and issue management as part of AMT maintenance.
	<p>Resources <i>AMT v3 Model Diagram</i> [3]</p>	<p>Resources <i>AMT v3 Overview and Detailed Business Use Cases</i> [4] <i>AMT v3 Editorial Rules</i> [5]</p>	<p>Resources <i>AMT v3 Technical Implementation Guide</i> [6] <i>AMT v3 Mapping Guidelines</i> [7] <i>AMT v3 Development Approach for Reference Sets</i> [8] <i>AMT PBS FAQs</i> [9]</p>

5. Implementation & vendor considerations	6. Guidance available	7. Deployment & change management
<p>Options for AMT implementers include:</p> <ul style="list-style-type: none"> • Mapping local medicines dictionary to AMT • Direct (native) implementation of AMT • Hybrid (mapped and native) implementation of AMT <p>System requirements will determine the most appropriate option. The advantages and disadvantages of how a vendor has implemented AMT will need to be considered and vendor capabilities understood.</p> <p>Healthcare organisations need to understand the possible types of AMT implementations within a CIS and associated implications.</p> <p>If a mapping implementation is to be undertaken, a roadmap towards a native adoption of AMT may be worth considering.</p>	<p>NEHTA has developed a range of terminology guidance documents for healthcare organisations adopting healthcare software systems integrated with the AMT.</p> <p>This guidance is aimed at the business processes, documentation and personnel needed to enable access, recording, storing and displaying terminology in healthcare software systems. The guidance also addresses use of medical nomenclature and terminology when developing vendor procurement material and for implementation considerations.</p>	<p>Implementation of the AMT via a mapped approach should have no day-to-day impact on CIS users. Users of the CIS will interact with the same local/proprietary terms used within their current system.</p> <p>Mappings to AMT will mainly support clinical messaging. Minimal training for CIS users will be required for a mapped implementation.</p> <p>A decision to separate or include legacy data is required by the implementer.</p> <p>If a mapping is done by a healthcare organisation:</p> <ul style="list-style-type: none"> • AMT concepts, terms and key editorial rules will need to be understood. • Numerous rules and exceptions may need to be developed and adhered to during maintenance. <p>If a mapping is done via a third party, implementers may need clinical resources to validate the mapping.</p>
<p>Resources <i>AMT Implementation Plan</i> [10]</p>	<p>Resources <i>Clinical Terminology – Guidance for People and Processes</i> [11] <i>Clinical Terminology – Use of Medical Nomenclatures in Information Exchange</i> [12]</p>	<p>Resources <i>AMT v3 Technical Implementation Guide</i> [6] <i>AMT Mapping Guidelines</i> [7] <i>AMT v3 Development Approach for Reference Sets</i> [8] <i>AMT v3 Editorial Rules</i> [5]</p>

8. Data maintenance	9. Technical vs content support	10. AMT capability development
<p>AMT data is released monthly. Licence holders are notified at the time of a new release.</p> <p>Release documentation includes information on relevant issues and key changes to the AMT.</p> <p>Ideally, application data should be updated as soon as possible after an AMT release to ensure information is current.</p> <p>If mapping is done by a healthcare organisation:</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. • Regular maintenance may be required each time the source or target systems are updated. <p>AMT viewers are available to users and allow AMT content to be browsed.</p> <p>NEHTA can provide guidance on what products are available.</p>	<p>Help for AMT implementers is available through the NEHTA Help Centre, via email (help@nehta.gov.au) or telephone.</p> <p>Issues with data content can also be logged through the Help Centre. Issues are prioritised for resolution by the AMT team.</p> <p>FAQs covering both general AMT data and the AMT data contained within the Pharmaceutical Benefits Schedule are available.</p> <p>Additional content not currently included in the AMT but within its scope can be requested via a submission process accessible from the NEHTA website.</p> <p>If required, specific information and education sessions can be arranged with an NCTIS representative.</p> <p>For technical issues, contact your CIS vendor, via your existing support desk procedures.</p>	<p>NEHTA has developed a roadmap for AMT development.</p> <p>Changes to the roadmap may occur as the need for additional AMT functionality is identified and scheduled for development. This information will be made available through notifications to licence holders or via the NEHTA website.</p> <p>Healthcare organisations should monitor these notifications and assess potential impact.</p> <p>Projects currently in progress include Dose-Based Prescribing and Clinical Interface Descriptions projects.</p>
<p>Resources</p> <p><i>AMT v3 Data (Monthly Release)</i> [13]</p> <p><i>AMT Monthly Release Note</i> [14]</p> <p><i>Minnow Browser</i> [15]</p>	<p>Resources</p> <p><i>AMT PBS FAQs</i> [9]</p> <p><i>NCTIS Request Submission Page</i> [16]</p>	<p>Resources</p> <p><i>AMT Survey Results and Roadmap</i> [17]</p>

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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