



Australian Government
Australian Digital Health Agency

SNOMED CT-AU and AMT Subsets

Learning outcomes

- Describe why subsets are useful when working with terminology
- Compare the features of “reference sets” and “ValueSets”
- Explain (at a high level) how subsets can be implemented
- Provide examples of subsets available from the National Clinical Terminology Service (NCTS), the use cases they support, and how to access them



What are subsets?

What are subsets and why are they useful?



A group of concept representations (usually codes) that come from one or more standard vocabularies, such as SNOMED CT, LOINC, or ICD.



Provide “value” because useful codes are bundled into the same package that represent a clinical concept or domain, e.g. codes representing days of the week.



Most often used to constrain the content of a coded data element or data type property in an information model.



May range from a simple flat list of codes from a single code system, to an unbounded hierarchical set of post-coordinated expressions drawn from multiple code systems.

Two main formats are available from the NCTS:

- **Reference sets:** subsets containing only SNOMED CT components, conforming to the SNOMED CT specification.
- **ValueSets:** conform to the FHIR® specification.



User interface example – search reference sets

Allergies and Adverse Reactions

Reaction Type

Food intolerance

Causative Agent

Agent Product Trade Product

Goat's milk

Date of Event

Clinical Manifestation









rash



- Rash
- Hives
- Bullous rash
- Macular rash
- Pruritic rash**
- Vesicular rash
- Blistering rash
- Morbilliform rash
- Maculopapular rash
- Rash of systemic lupus erythematosus



Terminology binding to My Health Record documents

- Some subsets are bound to national specifications (as value domains), e.g. Shared Health Summary.

	ADVERSE REACTION	0..*
	Substance/Agent	1..1
	Absolute Contraindication	0..0
	Adverse Reaction Comment	0..0
	REACTION EVENT	0..1
	Specific Substance/Agent	0..0
	Manifestation	1..*
	Reaction Type	0..1

	Known Medication (MEDICATION INSTRUCTION)	0..*
	Therapeutic Good Identification	1..1

	PROBLEM/DIAGNOSIS	0..*
	Problem/Diagnosis Identification	1..1

Identification

Label	Substance/Agent Values
Metadata Type	Value Domain
Identifier	VD-15521
OID	1.2.36.1.2001.1001.101.104.15521

Definition

Definition	The set of values for the agent or substance causing the adverse reaction experienced by the subject of care.
Definition Source	NEHTA

Value Domain

Source	NEHTA
Permissible Values	The permissible values are the members of the following 9 reference sets. From SNOMED CT-AU: <ul style="list-style-type: none"> 142321000036106 Adverse reaction agent reference set 32570211000036100 Substance foundation reference set From AMT: <ul style="list-style-type: none"> 929360061000036106 Medicinal product reference set 929360081000036101 Medicinal product pack reference set 929360071000036103 Medicinal product unit of use reference set 929360021000036102 Trade product reference set 929360041000036105 Trade product pack reference set 929360031000036100 Trade product unit of use reference set 929360051000036108 Containerised trade product pack reference set

Why use subsets available from the NCTS?

- Provide small, usable chunks of SNOMED CT-AU and AMT.
- Some are co-developed by collaborating with subject matter experts.
- Based on source data (e.g. TGA, jurisdictions, peak bodies/colleges).
- Contain data not held in other files, such as:
 - Language reference set
 - Association reference set
 - Strength reference set
 - ARTG Id reference set
 - Dose route and form extended association reference set
- Or is not otherwise within the scope of SNOMED CT-AU, such as:
 - Australian Immunisation Register Vaccine codes (<https://www.humanservices.gov.au/organisations/health-professionals/enablers/air-vaccine-code-formats>).
 - Common Languages in Australia (<https://healthterminologies.gov.au/fhir/ValueSet/common-languages-australia-2>).



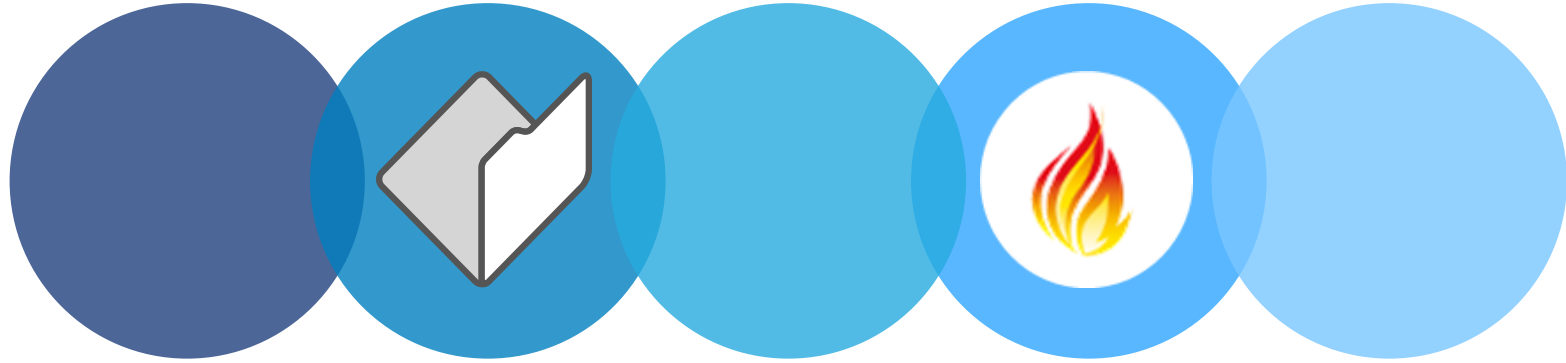
Why use subsets available from the NCTS?

- The NCTS also hosts and releases reference sets that are developed and owned by SNOMED CT-AU license holders, known as Third Party Reference Sets. These include:
 - *Tasmania reportable Schedule 4 trade medications reference set*
 - *Victoria reportable Schedule 4 trade medications reference set*
 - *Royal Australasian College of Surgeons MALT surgical procedure reference set*
 - *Royal College of Pathologists of Australasia (RCPA) - Pathology Terminology and Information Models*
- Reference sets are available in a variety of formats, along with a concise description of each.



Types of SNOMED CT-AU and AMT subsets

Which subsets to access?



The implementation type will influence subset choice.

For an RF2 implementation of SNOMED CT-AU (e.g. relational database) - reference sets are most appropriate.

Reference sets are available in a variety of formats (RF2, XML, JSON, TSV).

For a FHIR® implementation – ValueSets are most appropriate.

ValueSets are currently published on the NCTS where they directly support an Agency FHIR® profile.

In addition, consider your use case and context to determine which subset contains the relevant content.



Examples of reference sets available from the NCTS

What is SNOMED CT?

- A large 'dictionary' of clinical terms with a unique code that are machine-readable.
- Designed to capture clinical data within electronic records.
- Comprised of over 350,000 concepts, and covers content areas of:
 - Diseases, procedures, clinical findings and therapeutic products.
 - Plus additional content that helps define the meaning of these major content areas.

- SNOMED CT-AU is the Australian extension of SNOMED CT.
 - Contains SNOMED CT core files along with Australian developed content, such as:
 - Australian Medicines Terminology (AMT).
 - Australian dialect reference set.
 - Over 90 reference sets for clinical use.



What are SNOMED CT reference sets?

- Specific to SNOMED CT.
- Identify specific subsets of content and support a range of granularity and specificity.
- Some can be a mapping or association reference sets, where additional information is added to a component.
- The NCTS publishes reference sets to help with implementations.

SNOMED CT-AU			
AMT			
Examples of foundational reference sets (subsets)	Examples of broad context reference sets (subsets)	Examples of specific reference sets (subsets)	Examples of specific reference sets (non-subsets)
Clinical finding foundation reference set	Imaging procedure reference set	Adverse reaction agent reference set	Association reference set
Procedure foundation reference set	Neoplasm and/or hamartoma reference set	Clinical manifestation reference set	Australian dialect reference set
Substance foundation reference set	Microorganism reference set	Dose based prescribing route of administration reference set	Dose route and form extended association reference set
Container trade product pack reference set <small>AMT</small>	Musculoskeletal finding reference set	Laterality reference set	ARTG Id reference set <small>AMT</small>
Medicinal product reference set <small>AMT</small>	Respiratory finding reference set	Problem/Diagnosis reference set	Strength reference set <small>AMT</small>



Foundation reference sets

Provide the broadest possible terminology because they contain all concepts within a top-level hierarchy.

Examples include:

- *Clinical finding foundation reference set*
- *Observable entity foundation reference set*
- *Procedure foundation reference set*

AMT product reference sets correlate with one of the seven notable concepts defined by the AMT model, such as:

- *Medicinal product reference set*
- *Trade product unit of use reference set*
- *Containerized trade product pack reference set*

Support the following uses:



Where reference sets are yet to be developed and the required hierarchy or conceptual idea of information has been identified.



For example, the *Procedure foundation reference set* would be applicable for a data element that captures a surgical intervention.



Used as the basis from which further use-case-specific reference sets can be developed, through a process of constraint.



Broad context reference sets

Provide the broadest possible terminology considered necessary to support the clinical information requirements within **clinical groupings**.

Examples include:

- *Cardiovascular finding reference set*
- *Imaging procedure reference set*
- *Microorganism reference set*

Support the following uses:



Where reference sets represent a useful method of providing terminology for a clinical grouping.



For example, concepts from the *Mental health disorder reference set* would be applicable for a data element that captures a mental health diagnosis.



Used as the basis from which more specific reference may be developed through a process of constraint. This may be useful in constraining codes for a particular clinical setting or professional group.





Language reference sets

Most commonly used to indicate which descriptions are preferred or acceptable in a particular language, dialect or context.

- For example the *Australian dialect reference set*.

May also be used to specify description preferences within a specific context, such as a clinical specialty.

Mapping reference sets



Allow relationships to be represented between code systems.



Maps can be simple (one-to-one) or complex (e.g. many-to-many).



The correlation between codes (how equivalent or not the concepts are) is often indicated.



Currently two mapping reference sets are available from the NCTS:



Australian Register of Therapeutic Goods Identifier (ARTGID) reference set



Substance to SNOMED CT-AU mapping reference set



Adverse reaction reporting

- Supports the recording of the agent (medicinal and non-medicinal) causing an adverse reaction to a patient, as well as the type and signs/symptoms of the adverse reaction.

Adverse reaction agent reference set

Supports the recording of the most common agents that may be responsible for causing adverse reactions.

Adverse reaction type reference set

Supports the recording of the type of adverse reaction that a patient has experienced.

Clinical manifestation reference set

Supports the recording of common clinical manifestations of adverse reactions within healthcare settings within Australia.

Non-medicinal adverse reaction agent

Supports the recording of non-medicinal agents that may be responsible for causing adverse reactions.



Dose based prescribing

- Supports non-product-based prescribing or medication ordering activity typically performed within acute care settings.

Dose based prescribing dose form reference set

Supports the recording of dose forms for dose based prescribing.

Dose based prescribing dose frequency and interval reference set

Supports the recording of dose frequencies and dose intervals for dose based prescribing.

Dose based prescribing medication course type reference set

Allows identification of different medication course types in vendor systems.

Dose based prescribing route of administration reference set

Supports the recording of the route by which a medication is administered for dose based prescribing.

Dose route and form extended association reference set

Provides relationships between dose routes of administration, administered dose forms and manufactured dose forms required for the Prescribing Model described in the SNOMED CT-AU - Guide for Terminology Use in Prescribing.



AMT concrete domain reference sets

- Supports the defining of numeric medication attributes, i.e. they allow for the association of a concrete (numeric) value with a component.

Strength reference set

Provides a machine-readable strength representation of the Medicinal Product Unit of Use (MPUU) as the stated HAS AUSTRALIAN BoSS relationship to Substance.

Unit of use size reference set

Denotes the size of each unit of use of the MPUU as the stated relationship HAS UNIT OF USE relationship to Unit of Use. It also denotes the size of each unit of use of the TPUU as an inferred relationship.

Unit of use quantity reference set

Defines the quantity or number of MPUUs within a Medicinal Product Pack (MPP) as described by the MPP HAS MPUU relationship to MPUU.

Subpack quantity reference set

Defines the quantity or number of subpacks contained within a sequential multi-component item at the product pack level, for example oral contraceptive products.



Adverse reaction type reference set

RF2 structure – for implementations

id	effectivetime	active	moduleid	refsetid	referencedcomponentid
169a6008-e0b7-4a66-9339-bcf221dbb88b	2012-05-31 00:00:00	1	32506021000036107	11000036103	79899007
16f71872-86de-4067-bc8a-346f2e34a94a	2015-05-31 00:00:00	1	32506021000036107	11000036103	281647001
3286a720-2da2-43df-9de3-d5d1f99682c5	2012-05-31 00:00:00	1	32506021000036107	11000036103	28031001
37654708-91e9-4765-a106-a4f6da8683b0	2015-05-31 00:00:00	1	32506021000036107	11000036103	75478009
4a5bec60-46c2-4255-8530-6b024dad793b	2012-05-31 00:00:00	1	32506021000036107	11000036103	12263007
638488bf-d8db-48ea-b70d-b0bc2677d6a7	2012-05-31 00:00:00	1	32506021000036107	11000036103	401207004
63f57ba8-5a09-4623-9d24-4ca2c10789e8	2012-05-31 00:00:00	1	32506021000036107	11000036103	235719002

A reference to the SNOMED CT concept

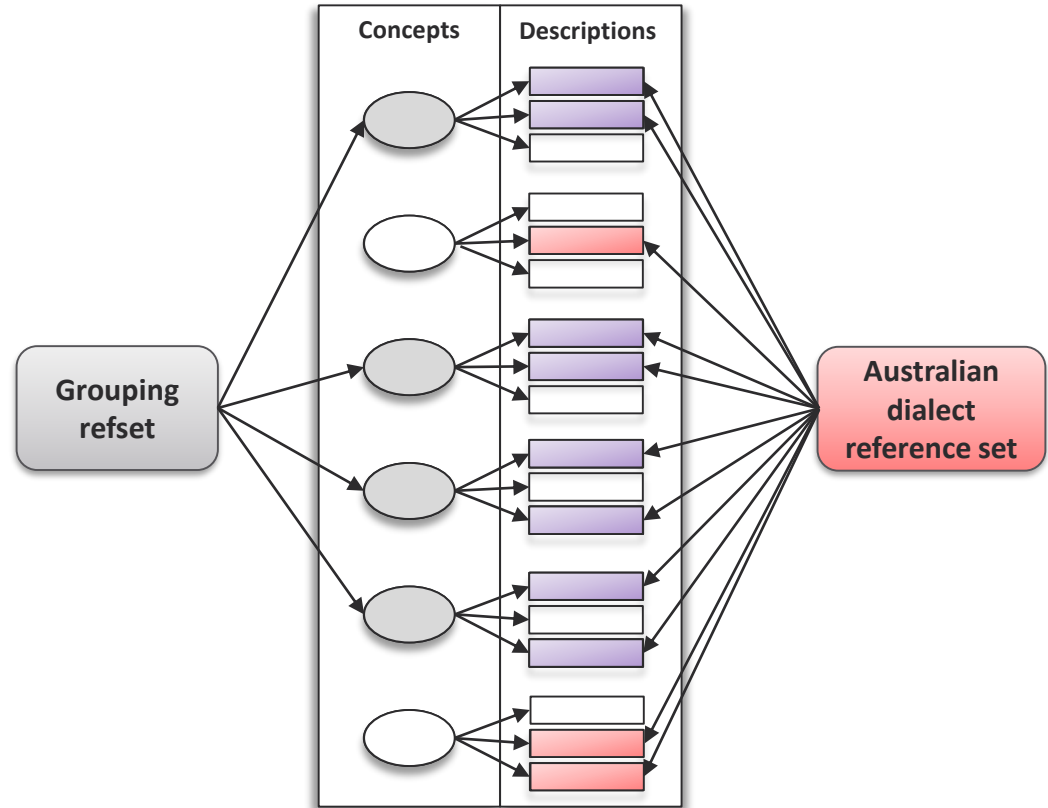
Concept ID	Fully Specified Name	Preferred Term	Acceptable Synonyms
404204005	Drug interaction with drug (finding)	Drug interaction with drug	Drug drug interaction
75478009	Poisoning (disorder)	Toxicity	Intoxication,Poisoning,Poisoning by,Poisoning syndrome,Toxic effect,Toxic effect of,Toxicosis
235719002	Intolerance to food (finding)	Food intolerance	Intolerance to food
281647001	Adverse reaction (disorder)	Adverse reaction	Adverse reactions
419076005	Allergic reaction (disorder)	Allergic reaction	
28031001	Cell-mediated immune reaction (disorder)	Hypersensitivity reaction type IV	Cell-mediated immune reaction,Delayed hypersensitivity reaction,Gell and Coombs reaction type IV
79899007	Drug interaction (finding)	Drug interaction	Medication interaction
401207004	Medication side effects present (finding)	Medication side-effect	Has shown side effects from medication,Medication side
609406000	Pseudoallergic reaction (disorder)	Non-allergic reaction	Pseudoallergic reaction
90092004	Hypersensitivity reaction mediated by antibody (disorder)	Hypersensitivity reaction type II	Gell and Coombs reaction type II,Hypersensitivity reaction mediated by antibody,Type II reaction
83699005	Hypersensitivity reaction mediated by immune complex (disorder)	Hypersensitivity reaction type III	Gell and Coombs reaction type III,Hypersensitivity reaction mediated by immune complex,Type III reaction
12263007	Type 1 hypersensitivity response (disorder)	Hypersensitivity reaction type I	Gell and Coombs reaction type I,IgE homocytotropic antibody reaction,Type 1 hypersensitivity response,Type I
95907004	Drug interaction with food (finding)	Drug interaction with food	Food interaction with drug,Medication interaction with food

TSV format – to help humans evaluate the reference set



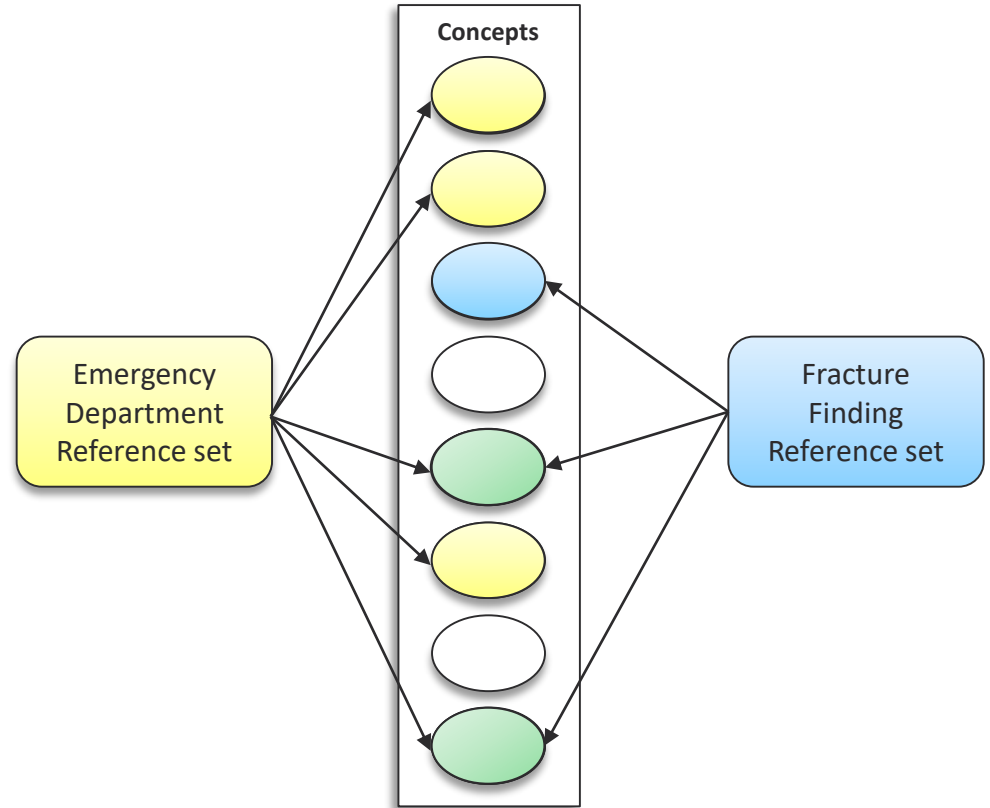
Using reference sets

- Reference sets filter the core components for the desired content, or add non-defining information to core components.
- Therefore, reference sets cannot be used in isolation.
- Several reference sets may be used at once:
 1. Start with concepts.
 2. Add on descriptions.
 3. Narrow down the concepts with a grouping reference set.
 4. Overlay the Australian dialect reference set to find the preferred terms.



Refining reference sets

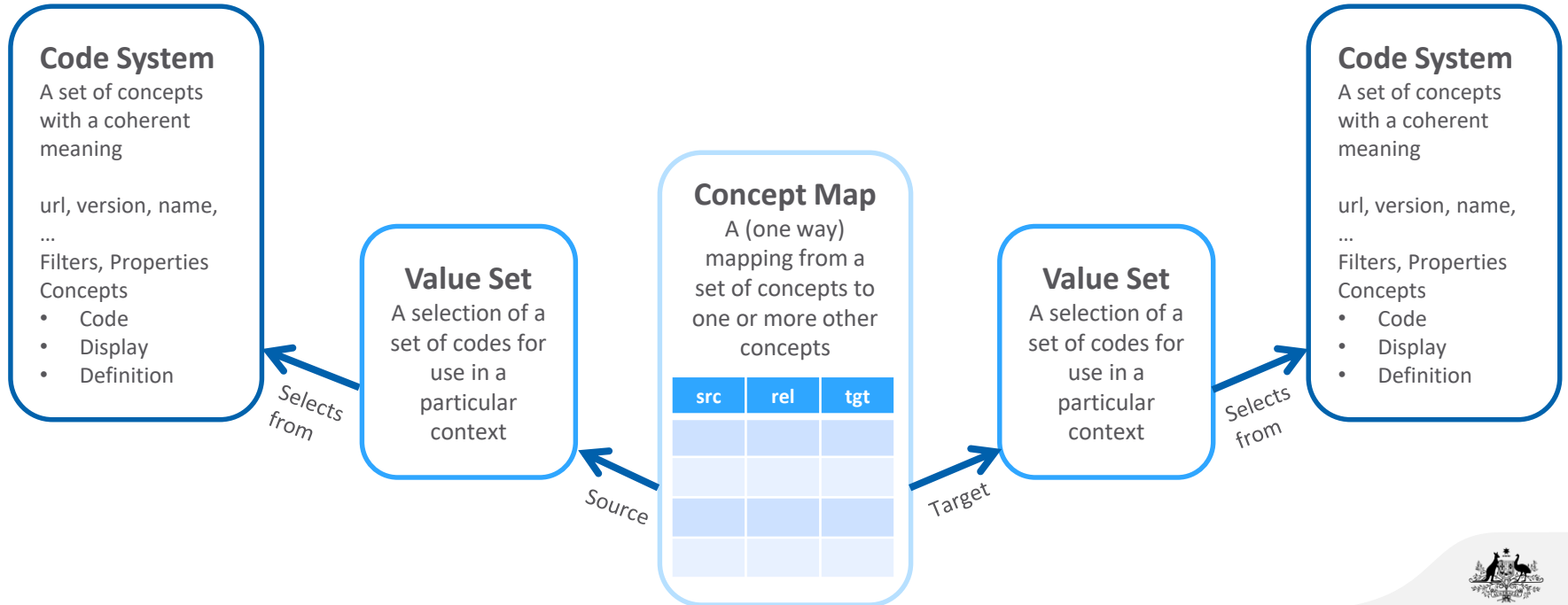
- Custom intersects can be created to filter on even more specific content.
 1. Start with concepts.
 2. Narrow down the concepts with a grouping reference set, such as the *Emergency department reference set*.
 3. Narrow down the concepts further with the Fracture finding reference set.



Examples of ValueSets available from the NCTS

FHIR® terminology – big picture

- FHIR® is the next-generation HL7 standard for electronic healthcare data exchange.
- It is also a way that terminology can be maintained and distributed.



What are FHIR® ValueSets?

The key purpose of a ValueSet is to specify the allowable content for coded elements.

The ValueSet resource can also be used to give context to a ConceptMap resource, which describes the relationship between codes in different ValueSets.

To retrieve the codes and displays included in a ValueSet, an '\$expand' operation may be performed on a FHIR® Terminology Server. This is known as 'ValueSet Expansion'.



Some NCTS ValueSets define the same content as an NCTS reference set, except it conforms to the FHIR® specification.

The NCTS also publishes ValueSets that support clinical information specifications and implementations.



Adverse reaction type reference set – FHIR® ValueSet rendering

GET [base]/ValueSet/\$expand?identifier=http://snomed.info/sct/32506021000036107?fhir_vs=refset/11000036103

```
1  {
2    "resourceType": "ValueSet",
3    "language": "en",
4    "url": "http://snomed.info/sct/32506021000036107/version/20190731?fhir_vs=refset%2F11000036103",
5    "name": "SNOMED CT Reference Set 11000036103",
6    "status": "active",
7    "experimental": false,
8    "expansion": {
9      "identifier": "44dc8854-2777-4ae6-9924-d6cb8ba2e8ed",
10     "timestamp": "2019-07-25T05:55:05+00:00",
11     "total": 13,
12     "parameter": [
13       {
14         "name": "version",
15         "valueUri": "http://snomed.info/sct?version=http%3A%2F%2Fsnomed.info%2F%2F%2F32506021000036107%2Fversion%2F20190731"
16       }
17     ],
18     "contains": [
19       {
20         "system": "http://snomed.info/sct",
21         "code": "404204005",
22         "display": "Drug interaction with drug"
23       },
24       {
25         "system": "http://snomed.info/sct",
26         "code": "401207004",
27         "display": "Medication side-effect"
28       },
29       {
30         "system": "http://snomed.info/sct",
31         "code": "95907004",
32         "display": "Drug interaction with food"
33       }
34     ]
35   }
36 }
```

The **expansion** contains references to the CodeSystem, code and preferred term



Implicit FHIR® ValueSets



- All simple type reference sets are available as a rendering of a FHIR® value set expansion.
- We also publish in JSON and XML format, again for human accessibility.

Query portion	Identifier	This returns...
?fhir_vs	http://snomed.info/sct/32506021000036107/version/20190731?fhir_vs ** Note this expansion may not work against the NTS because it is intensive to process	All codes within Australian edition, July 2019 version (includes inactives)
?fhir_vs=isa/[sctid]	http://snomed.info/sct?fhir_vs=isa/30344011000036106	Any code that is a descendant of Australian substance
?fhir_vs=refset	http://snomed.info/sct/32506021000036107?fhir_vs=refset	A list of reference sets published in SNOMED CT-AU
?fhir_vs=refset/[sctid]	http://snomed.info/sct?fhir_vs=refset/11000036103	Members of <i>Adverse reaction type reference set</i>
?fhir_vs=ecl/[ecl]	<a href="http://snomed.info/sct/32506021000036107?fhir_vs=ecl/(<! 23550011000036101 amoxicillin 250 mg capsule)">http://snomed.info/sct/32506021000036107?fhir_vs=ecl/(<! 23550011000036101 amoxicillin 250 mg capsule)	Immediate children (TPUU) of the supplied MPUU



Composed FHIR® ValueSets

- A large number of FHIR® ValueSets have been published to support HL7 AU FHIR® profiles, Agency FHIR® profiles and future Agency CDA specifications supporting My Health Record.
- Some examples include:
 - Australian States and Territories
 - Individual Healthcare Identifier Status
 - Australian Medicare Benefit and Claim Category
 - Reason Vaccine Not Administered
 - Organ Donation Body Site



National Clinical Terminology Service

Australian States and Territories

URI <https://healthterminologies.gov.au/fhir/CodeSystem/australian-states-territories-1>
Version 1.1.1
Publisher Australian Digital Health Agency
Status draft
OID 1.2.36.1.2001.1004.200.10013








Australian States and Territories

<https://healthterminologies.gov.au/fhir/CodeSystem/australian-states-territories-1>

The Australian States and Territories code system defines concepts that represent the Australian states and territories.

Composed FHIR® ValueSets

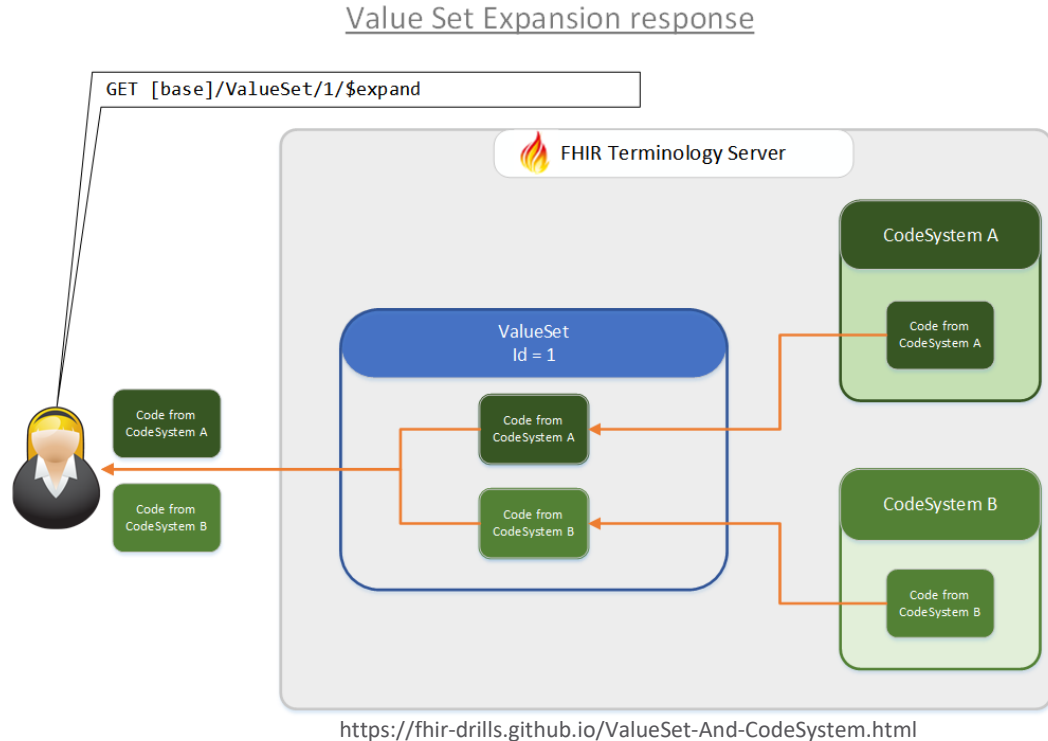
- Some additional examples are the Australian Medicines Terminology Vaccine ValueSet and the Australian Immunisation Register Vaccine ValueSet, which are bound in the Australian FHIR® Immunisation resource.

 vaccineCode	1..1	CodeableConcept	Vaccine Administered Binding: Vaccine Administered Value Set (example)
 id	0..1	string	xml:id (or equivalent in JSON)
 extension	0..*	Extension	Additional Content defined by implementations Slice: Unordered, Open by value:url
 coding	Σ	Coding	Code defined by a terminology system Slice: Unordered, Open by value:system
 coding	Σ	0..1 Coding	AMT Vaccine Binding: https://healthterminologies.gov.au/fhir/ValueSet/amt-vaccine-1 (required)
 coding	Σ	0..1 Coding	AIR Vaccine Binding: https://healthterminologies.gov.au/fhir/ValueSet/australian-immunisation-register-vaccine-1 (required)
 text	Σ	0..1 string	Plain text representation of the concept

<http://hl7.org.au/fhir/base/2018Sep/StructureDefinition-au-immunisation.html>

Using FHIR® ValueSets

- ValueSets can be interrogated using FHIR operations.
- '\$expand' allows you to retrieve the ValueSet expansion subject to a number of parameters.
 - Result is a Value Set with an 'expansion' element.
 - This method can be used to return a set of values matching the parameters supplied, so that a user can select a value for data entry in the UI.
 - Parameters include: filter, count, offset, includeDesignations, includeDefinition, activeOnly, excludeNested, excludeNotForUI, excludePostCoordinated, displayLanguage, limitedExpansion, profile.

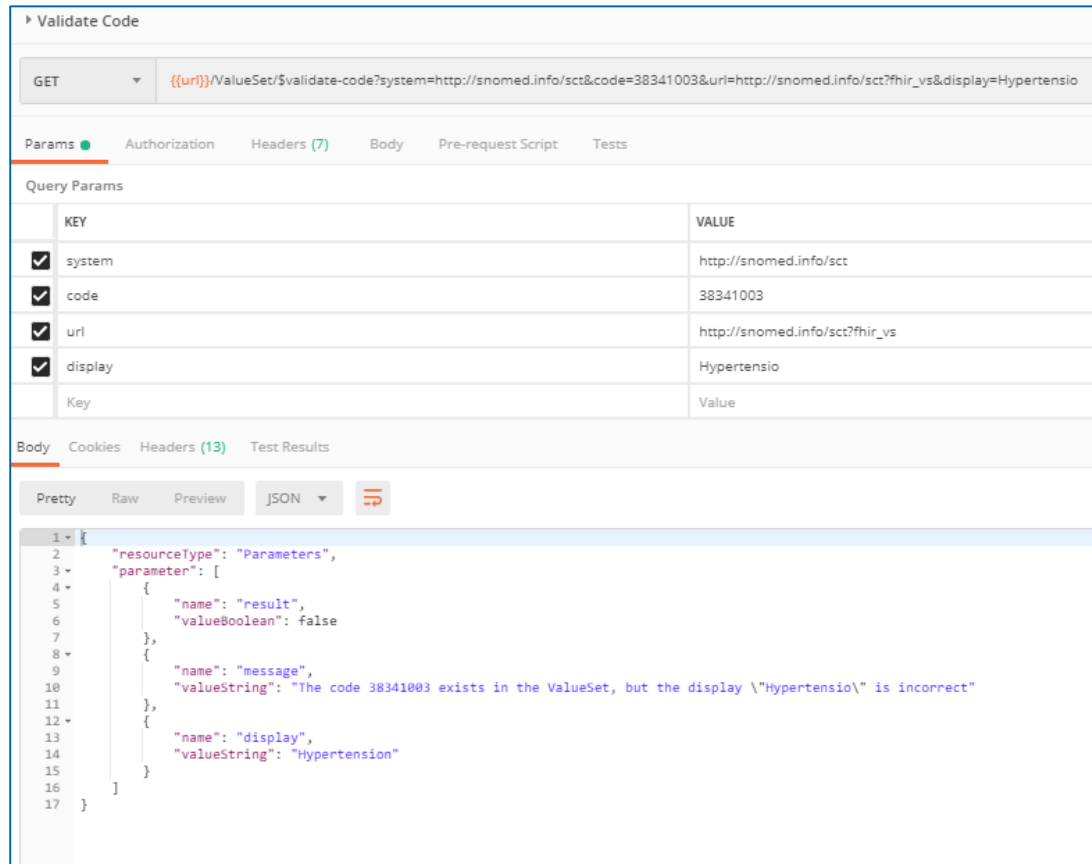


Using FHIR® ValueSets

- '\$validate-code' allows you to determine if a coded value is in the set of codes defined by a value set.
 - The code to be validated can be supplied in the parameters code, coding, or CodableConcept (multiple).
 - The operation returns a true or false result.
 - Optionally can determine whether the provided display text is the correct display text for a code.
 - This is the main method for validating coded data.

To access the NCTS Postman environment and example queries:

<https://www.healthterminologies.gov.au/tools?content=nss>



The screenshot shows a Postman interface for a REST client. The request is a GET call to a FHIR ValueSet endpoint. The URL is: `[[uri]]/ValueSet/$validate-code?system=http://snomed.info/sct&code=38341003&url=http://snomed.info/sct?fhir_vs&display=Hypertensio`. The request parameters are: `system` (http://snomed.info/sct), `code` (38341003), `url` (http://snomed.info/sct?fhir_vs), and `display` (Hypertensio). The response is a JSON object:

```
1 {
2   "resourceType": "Parameters",
3   "parameter": [
4     {
5       "name": "result",
6       "valueBoolean": false
7     },
8     {
9       "name": "message",
10      "valueString": "The code 38341003 exists in the ValueSet, but the display \"Hypertensio\" is incorrect"
11    },
12    {
13      "name": "display",
14      "valueString": "Hypertension"
15    }
16  ]
17 }
```



Accessing NCTS subsets

Different ways to access SNOMED CT-AU subsets

- Browse using the Shrimp terminology browser.
- Download from the NCTS website.
 - Reference sets
 - TSV format
 - FHIR® format
 - RF2 bundles
 - Requires an NCTS licence
- Connect to the National Terminology Server.
 - ValueSets
 - Requires an NCTS licence and a conformant terminology server (e.g. Ontoserver) or an API client (e.g. Postman)
- National Syndication Server.
 - Programmatic syndication interface which enables automation of content downloads
 - Further details available here: <https://www.healthterminologies.gov.au/tools?content=nss>



Choosing a reference set to view its content

1. Select a reference set from the dropdown to view its members.
2. Click on a member/concept to bring up the hierarchy view.
3. The concepts in green text are also members of the selected reference set.

The screenshot shows the Shrimp/Refset Viewer interface. The top navigation bar includes the CSIRO logo, the title "Shrimp/ Refset Viewer: Adverse reaction type", and the URL "https://ontoserver.csiro.au/stu3-latest". Below the navigation bar are tabs for "Terminology", "Refsets", "ValueSets", "ECL", and "Ontoserver".

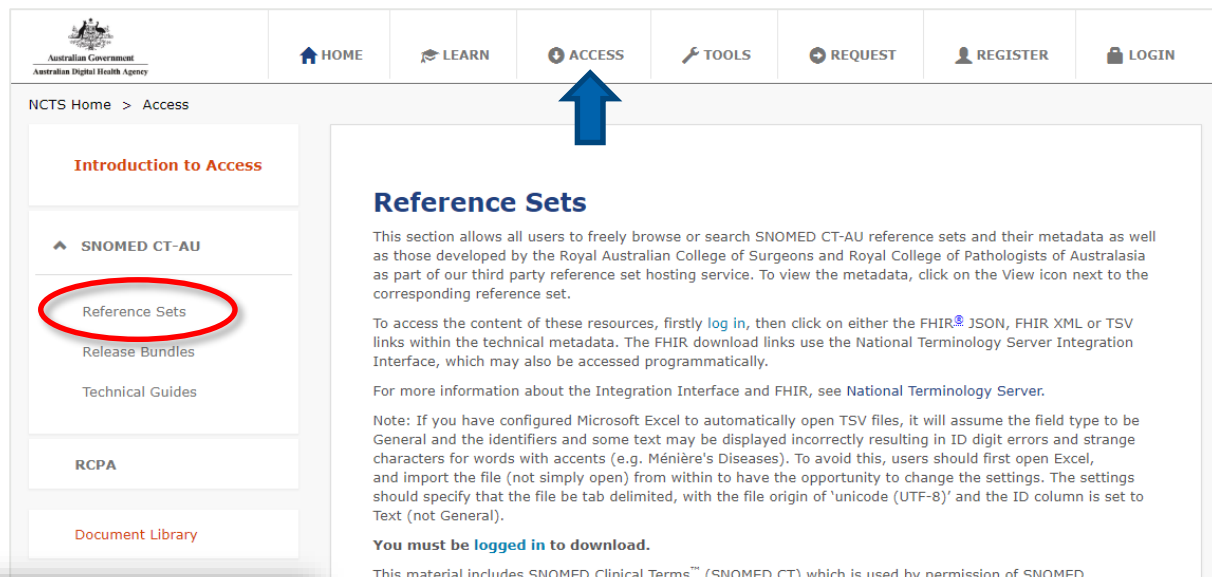
The main content area is divided into two sections. On the left is a hierarchy view showing a tree structure of concepts. The root is "Disease", which branches into "Complication". "Complication" further branches into "Adverse reaction" and "Hypersensitivity condition". "Adverse reaction" branches into "Allergic condition" and "Hypersensitivity reaction". "Allergic condition" branches into "Allergic reaction". "Hypersensitivity reaction" branches into "Allergic reaction" and "Hypersensitivity reaction type I". "Allergic reaction" branches into "Acute allergic reaction", "Allergic reaction to substance", "Allergic transfusion reaction", "Angry back syndrome", "Atopic reaction", "Hypersensitivity reaction type I", "Jarisch Herxheimer reaction", "Phacoanaphylaxis", and "Tubercuuld". The concepts "Allergic reaction", "Hypersensitivity reaction type I", "Hypersensitivity reaction", and "Allergic reaction" are highlighted in green text. A red circle with the number "3" is placed over the "Allergic reaction" node, with arrows pointing to the "Allergic reaction" and "Hypersensitivity reaction" nodes.

On the right is a table showing 1 to 13 of 13 rows. The table has columns for "SCTID" and "PREFERRED TERM". The row with SCTID "419076005" and "Allergic reaction" is highlighted in blue. A red circle with the number "2" is placed over this row. Below the table is a dropdown menu for "AU - 20181031" with a list of alternative associations. The "Adverse reaction type" is highlighted in blue. A red circle with the number "1" is placed over this item.

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Download from the NCTS website – reference sets

1. In 'Access' tab, navigate to 'Reference Sets'.
 - Note that you need to log in for access.
2. Keyword search for reference set.
3. Select item in 'View' column to read more.



Navigation: HOME | LEARN | ACCESS | TOOLS | REQUEST | REGISTER | LOGIN

NCTS Home > Access

Introduction to Access

SNOMED CT-AU

- Reference Sets
- Release Bundles
- Technical Guides

RCPA

Document Library

Technical Metadata

Reference Set SNOMED CT Identifier	955601000168105
File name and version	der2_Refset_TypeOfHearingLossSnapshot_AU1000036_20181231...
Terminology Version	http://snomed.info/sct/32506021000036107/version/20181231
Download Value Set Expansion (JSON)	Type of hearing loss reference set
Download Value Set Expansion (XML)	Type of hearing loss reference set
Download Reference Set Members (TSV)	Type of hearing loss reference set

Back To Top ↑

You must be logged in to download.

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Keyword Status

View	Name	Description
	Type of hearing loss reference set	Supports the recording of hearing loss types.
	Degree of hearing loss reference set	Supports the recording of hearing loss degrees.
	Adverse reaction agent reference set	Supports the accurate recording of the most common...

SNOMED Release Format 2 (RF2) bundles

1. In 'Access' tab, navigate to 'Release Bundles'.

- Note that you need to log in for access.

2. Expand the release you are interested in.

3. Download the file.

Refer to the [SNOMED CT release file specifications](#) for information about the file structure.

NCTS Home > Access

Introduction to Access

▲ SNOMED CT-AU

- Reference Sets
- Release Bundles**
- Technical Guides
- Quick Tips

Release Bundles

The following sections provide links to download the last six SNOMED CT-AU and AMT combined monthly release versions in their native RF2 distribution format. Linked archives contain all of the relevant terminology release data, such as the SNOMED CT core terminology files, the Australian Dialect Reference Set, and other reference sets for use in Australian healthcare including third party terminology from the Royal Australian College of Surgeons and Royal College of Pathologists of Australasia.

You must be logged in to download.

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For more information about SNOMED CT-AU and the RF2 release format, see the [Learn](#) section.

SNOMED-CT AU 30 Apr 2019 (Current)

- SNOMED CT-AU 30 April 2019 (RF2 FULL)
- SNOMED CT-AU 30 April 2019 (RF2 SNAPSHOT)
- SNOMED CT-AU 30 April 2019 (RF2 DELTA)
- SNOMED CT-AU 30 April 2019 (RF2 ALL)
- SNOMED CT-AU Release Note 30 April 2019

SNOMED-CT AU 31 Mar 2019

NCTS_SCT_RF2_DISTRIBUTION_32506021000036107-20190430-SNAPSHOT.zip

- SnomedCT_Release_AU1000036_20190430
 - RF2Release
 - Snapshot
 - Refset
 - Content
 - Language
 - Map
 - Metadata
 - Terminology

Reference sets for SNOMED CT-AU (including AMT)

- der2_cciRefset_SubpackQuantitySnapshot_AU1000036_20190430
- der2_ccRefset_DoseRouteAndFormExtendedAssociationSnapshot_AU1000036_20190430
- der2_ccsRefset_StrengthSnapshot_AU1000036_20190430
- der2_ccsRefset_UnitOfUseQuantitySnapshot_AU1000036_20190430
- der2_ccsRefset_UnitOfUseSizeSnapshot_AU1000036_20190430
- der2_cRefset_AssociationReferenceSnapshot_AU1000036_20190430
- der2_cRefset_AttributeValueSnapshot_AU1000036_20190430
- der2_Refset_AdverseReactionAgentSnapshot_AU1000036_20190430
- etc

National Terminology Server

- Click [here](#) to view FHIR® ValueSets available on the National Terminology Server.
 - The program allows a view of ValueSet summary (including URI, version, status and OID), the ValueSet FHIR® resource, and the expansion of the Value Set.
 - Please note that some ValueSets are unable to be expanded.
- National Terminology Server can also be accessed via an API client, e.g. Postman.



Australian Government
Australian Digital Health Agency



National Clinical Terminology Service

Bundle

Bundle JSON

Australian Department of Human Services Modifications of Pharmaceutical Benefits Scheme Schedule Item, Medicare Benefits Schedule Item and Department of Veterans' Affairs Fee Schedule Item

URI <https://healthterminologies.gov.au/fhir/ValueSet/australian-dhs-modifications-pbs-mbs-dva-item-1>
Version 1.0.1
Publisher Australian Digital Health Agency
Status active
OID 1.2.36.1.2001.1004.201.10009

Narrative JSON

Full Resource → Expansion →

Australian and New Zealand Standard Classification of Occupations

URI <https://healthterminologies.gov.au/fhir/ValueSet/anzsco-1>
Version 1.0.0
Publisher Australian Digital Health Agency
Status draft
OID 1.2.36.1.2001.1004.201.10019

Narrative JSON

Full Resource → Expansion →



Australian Government
Australian Digital Health Agency

Resources

- The NCTS contains a number of useful documents: (<https://www.healthterminologies.gov.au/learn?content=documentlibrary>), including:
 - SNOMED CT-AU Development Approach for Reference Sets
 - SNOMED CT-AU Australian Technical Implementation Guide
 - SNOMED CT-AU Sample scripts
- And presentations, including:
 - SNOMED CT-AU hierarchies
 - Introduction to the FHIR® specification
 - Basic FHIR® terminology services
- For more information on FHIR® ValueSets: <https://www.hl7.org/fhir/valueset.html>



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