



Australian Government
Australian Digital Health Agency

SNOMED CT-AU Content Hierarchy Overview



My Health Record

Acknowledgements

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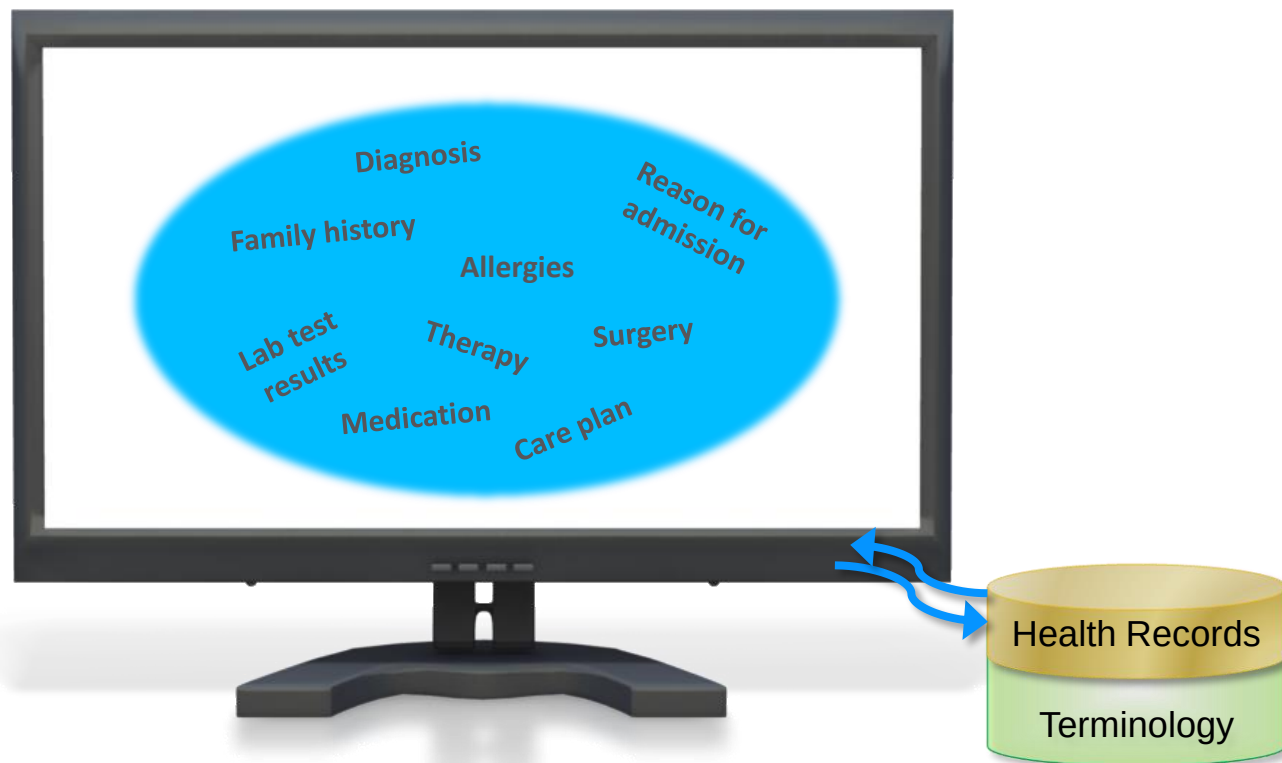


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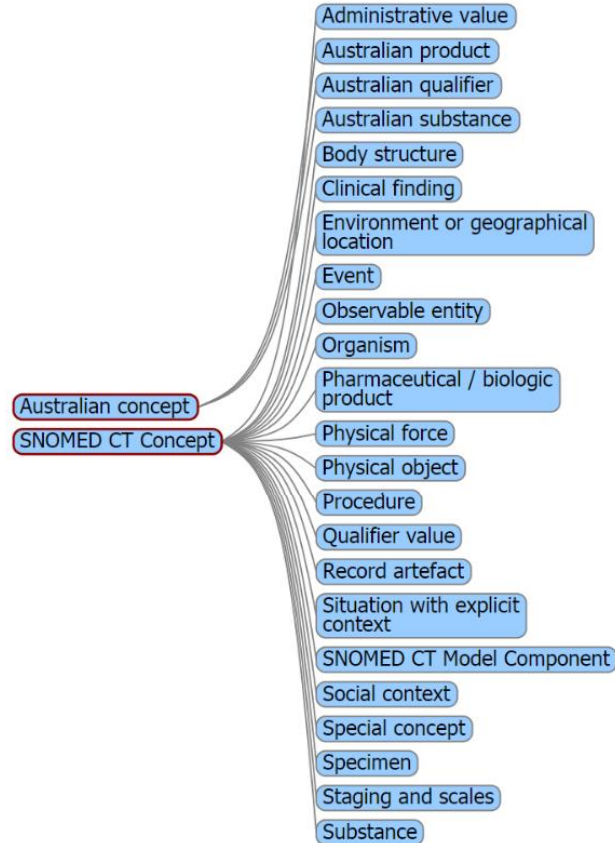


My Health Record

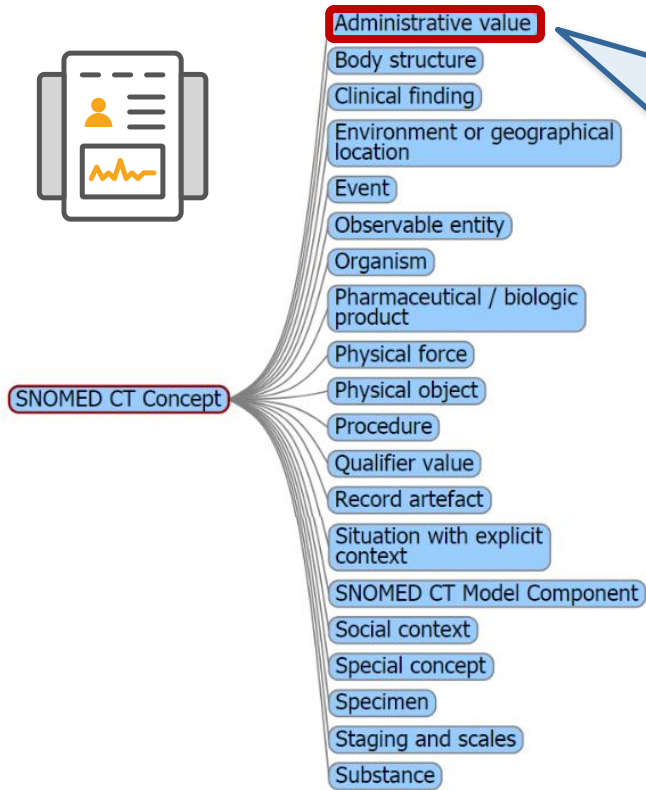
SNOMED CT in Electronic Health Records



SNOMED CT-AU content hierarchies



Administrative value



Administrative value

Supports administrative records in Australia

Examples:

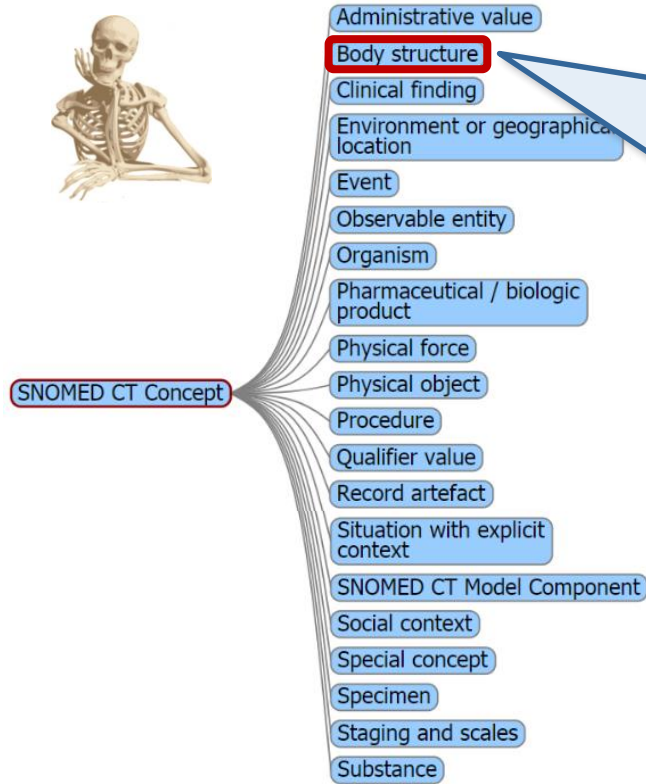
- | Advance Care Plan |
- | Child protection service involvement |
- | General PBS benefit |

Used for:

- National specifications
- Alerts



Body structure



Body structure

Normal and abnormal anatomical structures

Examples:

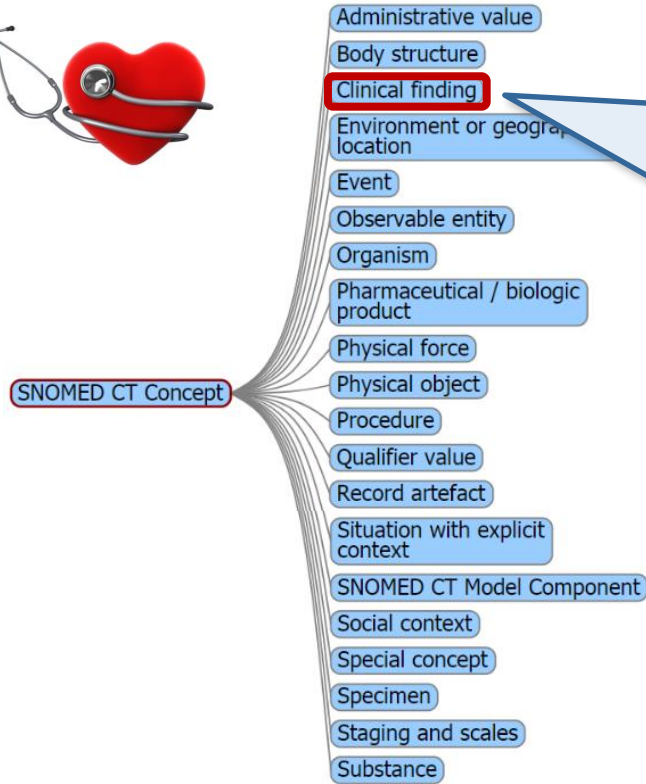
- | femur |
- | mitral valve structure |
- | adenocarcinoma |

Used for:

- Symptom location
- Disorder location
- Procedure site
- Site of administration



Clinical finding



Clinical finding

The result of a clinical observation, assessment or judgement and includes normal and abnormal clinical states.

Examples:

- | asthma |
- | headache |
- | normal breath sounds |

Used for:

- Reason for admission
- Diagnosis
- Signs and symptoms
- Laboratory test results
- Assessment results



Environment or geographical location



SNOMED CT Concept

Administrative value
Body structure
Clinical finding
Environment or geographical location
Event
Observable entity
Organism
Pharmaceutical / biologic product
Physical force
Physical object
Procedure
Qualifier value
Record artefact
Situation with explicit context
SNOMED CT Model Component
Social context
Special concept
Specimen
Staging and scales
Substance

Environment or geographical location

Types of environments or named locations, such as countries, states and regions

Examples:

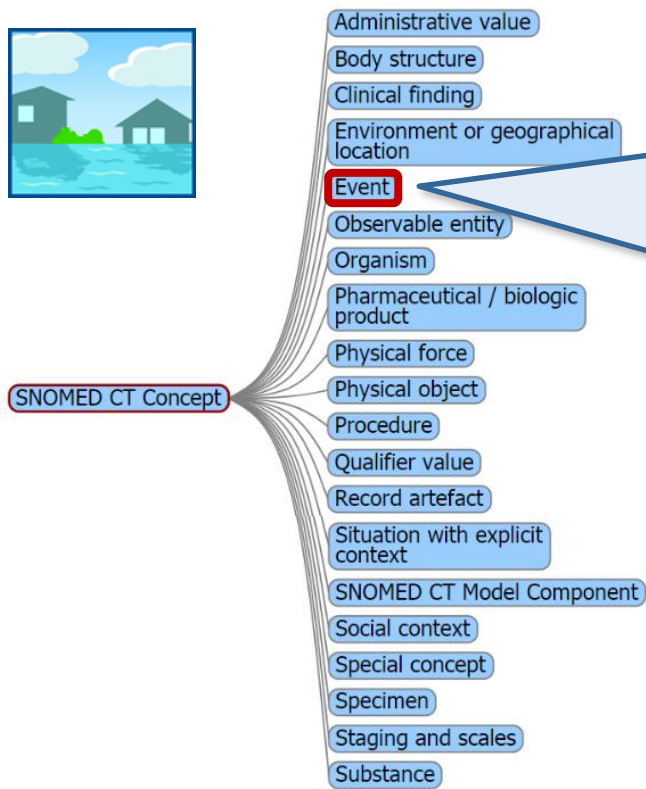
- intensive care unit
- academic medical centre
- Australia

Used for:

- Care setting
- Birth country
- Living environment
- Event location type



Event



Event

Occurrences excluding procedures and interventions

Examples:

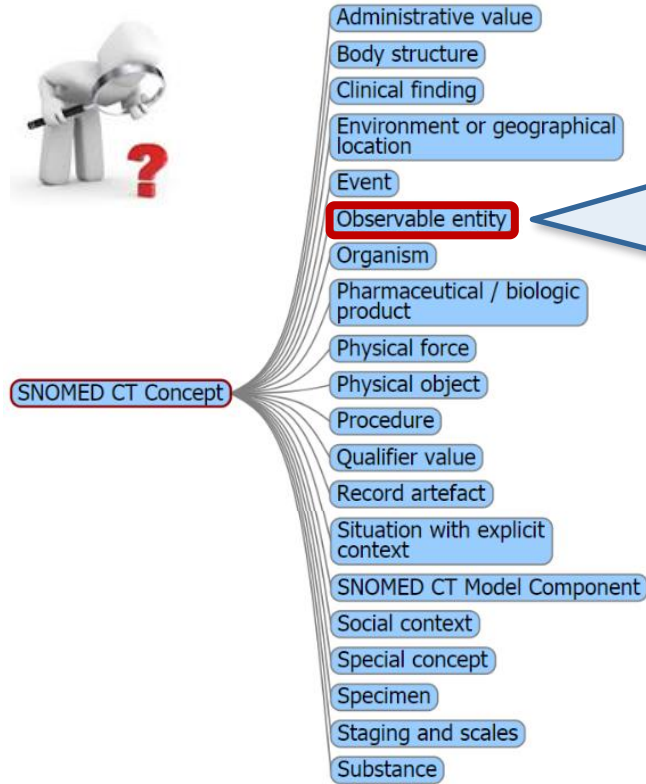
- | flood |
- | earthquake |
- | fall from ladder |
- | exposure to a communicable disease |

Used for:

- Reason for admission
- Past history



Observable entity



Observable entity

A question or assessment which can produce an answer or result.

Examples:

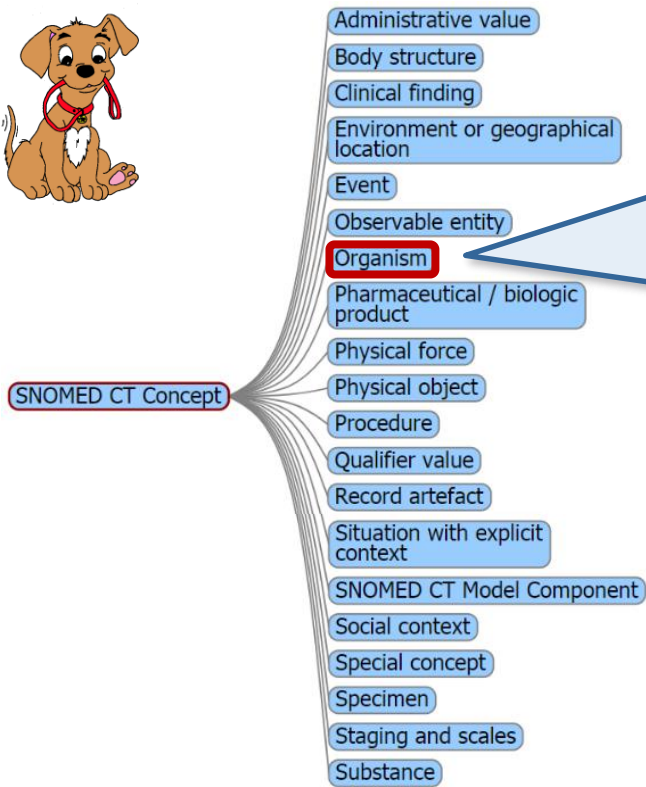
- | systolic blood pressure |
- | color of iris |
- | gender |

Used for:

- Observation names



Organism



Organism

Organisms of significance in human and animal medicine, including microorganisms, animals and plants

Examples:

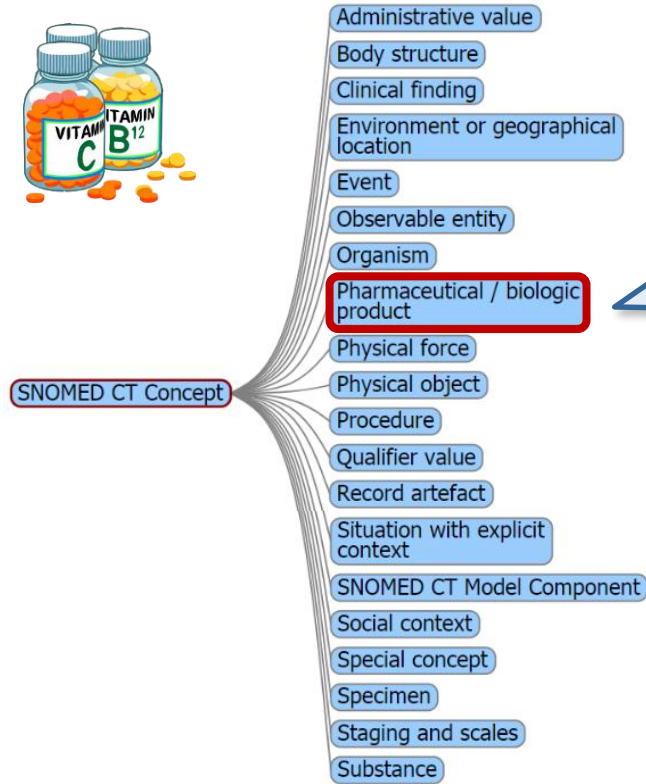
- | human papillomavirus |
- | streptococcus pyogenes |
- | acacia |
- | texon cattle breed |

Used for:

- Microorganism susceptibility
- Cause of disease / infection



Pharmaceutical / biologic product



Pharmaceutical / biologic product

Medication products

Examples:

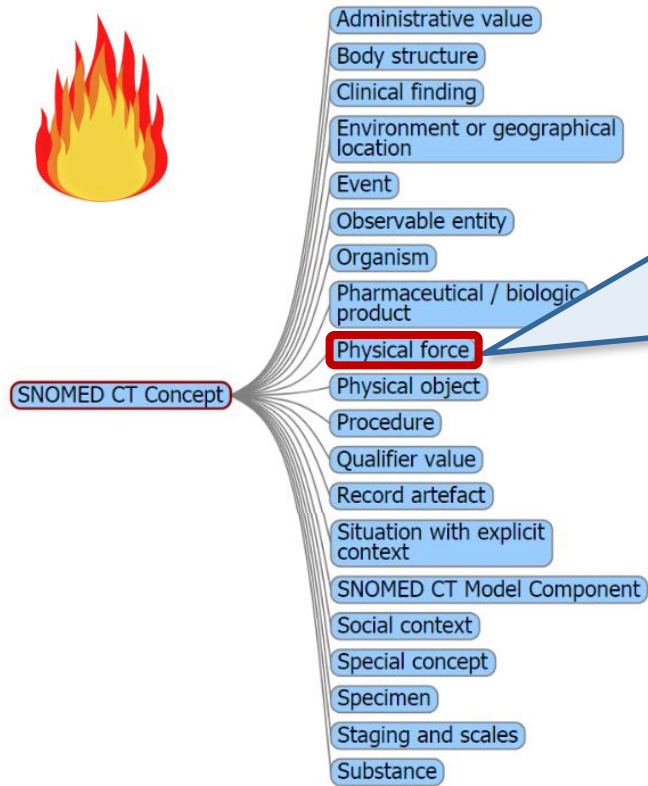
- | paracetamol + codeine |
- | salbutamol infusion |
- | amoxicillin 250 mg capsule |

Used for:

- Not for use in Australia (the AMT should be used instead)



Physical force



Physical force

Physical forces that can play a role as mechanisms of injury.

Examples:

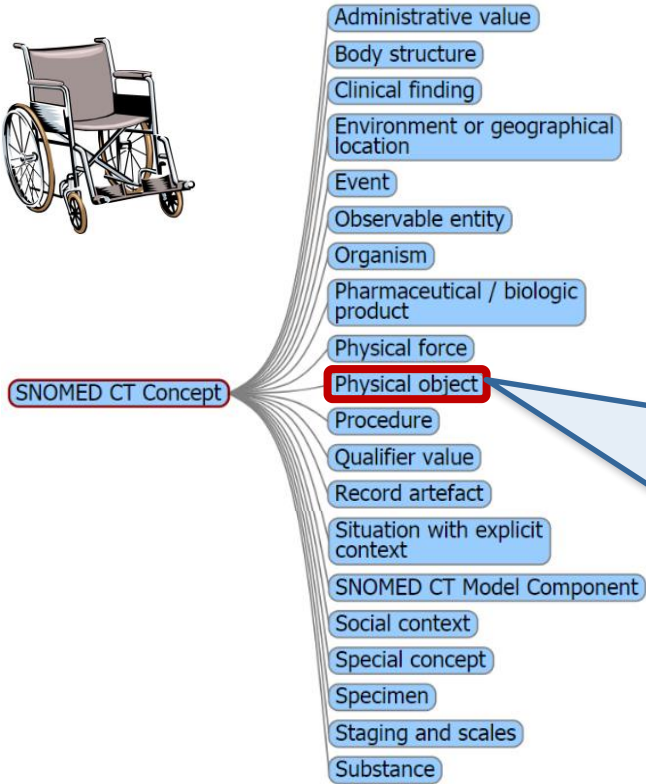
- | friction |
- | fire |
- | radiation |

Used for:

- Reason for injury



Physical object



Physical object

Natural and man-made physical objects.

Examples:

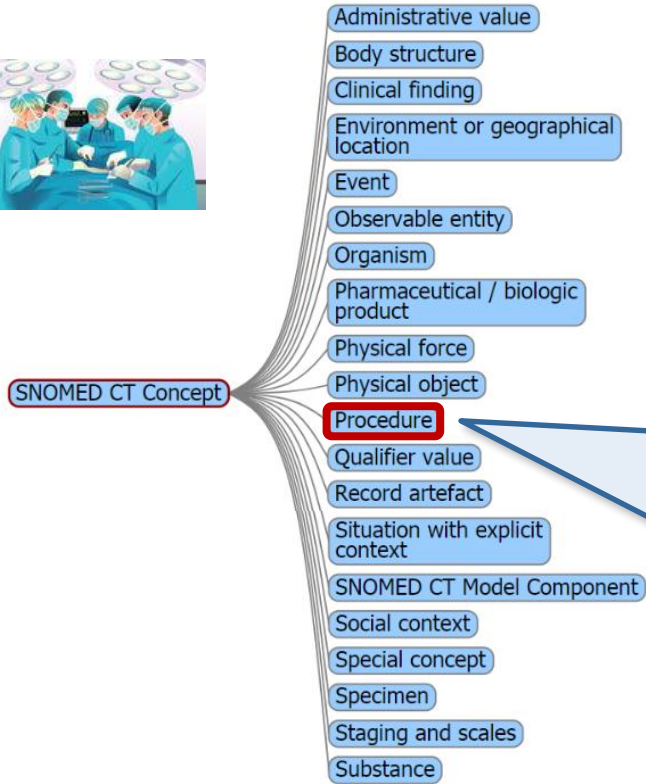
- vena cava filter |
- stent |
- bandage |
- walking frame |
- bed |

Used for:

- Orders & supply of devices
- Procedure device
- Stock inventory



Procedure



Procedure

Activities performed in the provision of health care.

Examples:

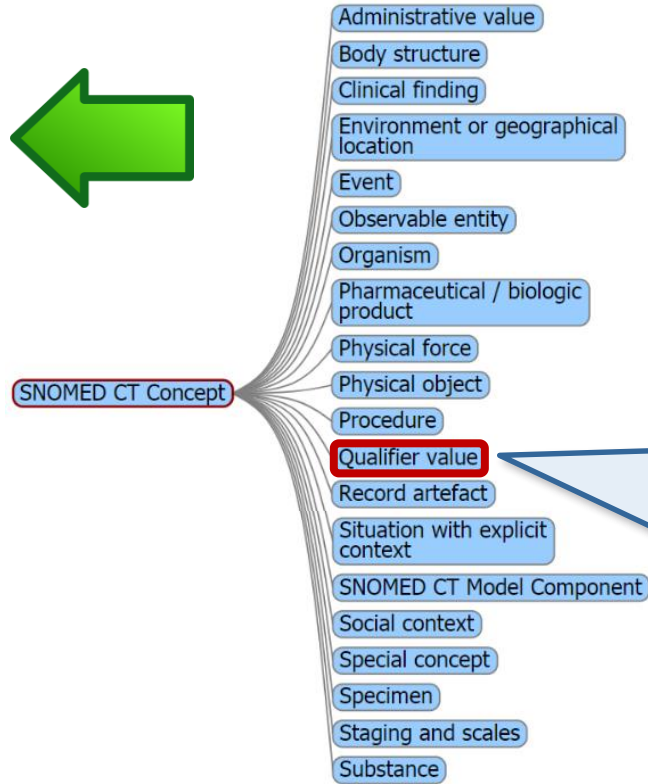
- | appendectomy |
- | administration of anesthesia |
- | x-ray |, | ultrasound |
- | diabetic care education |
- | physiotherapy |
- | discharge |

Used for:

- Procedures performed
- Planned procedures
- Requested procedures



Qualifier value



Qualifier value

The values of some SNOMED CT attributes, where those values are not subtypes of other top level concepts.

Examples:

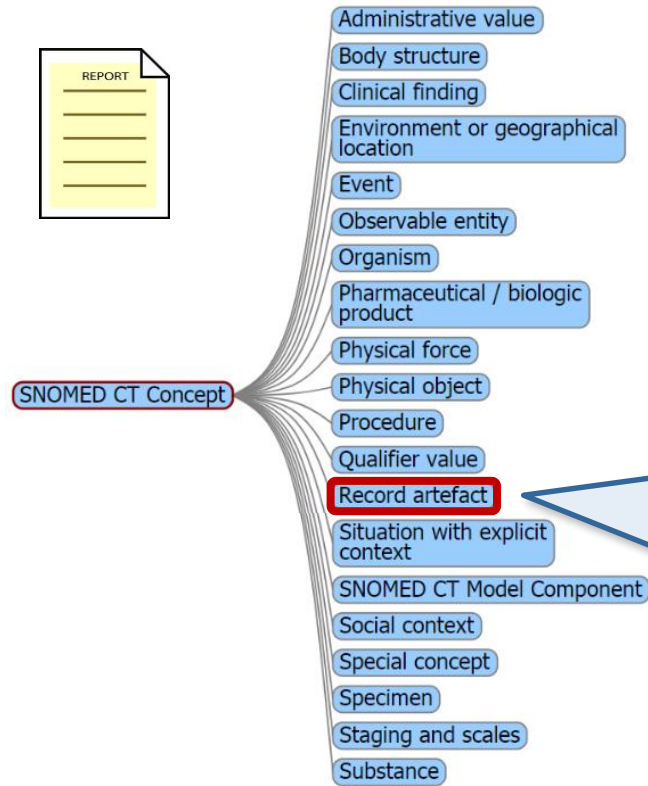
- | left |
- | severe |
- | capsule |

Used for:

- Laterality
- Severity
- Priority
- Medication dose form
- Route of administration



Record artefact



Record artefact

Content created for the purpose of providing other people with information about record events or states of affairs.

Examples:

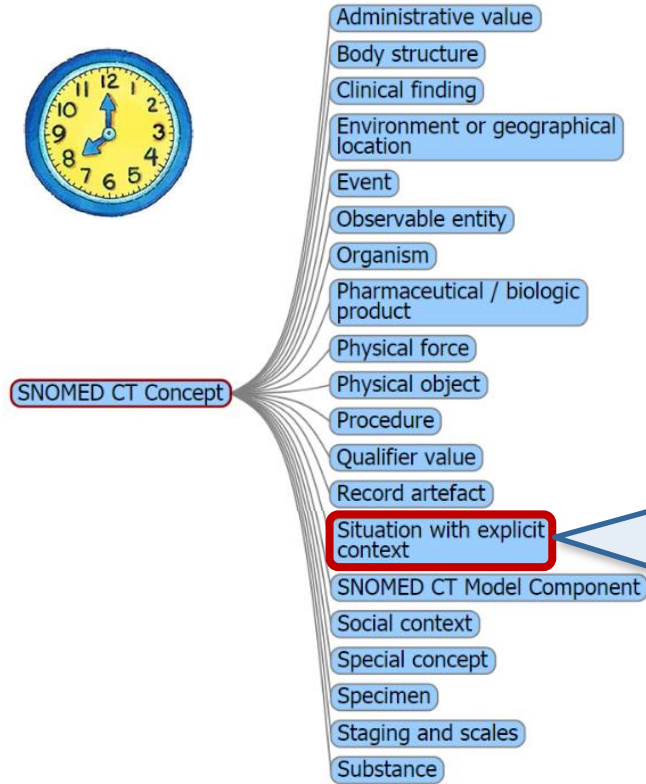
- | patient held record |
- | discharge summary |
- | record entry |
- | family history section |
- | birth certificate |

Used for:

- Type of identification
- Document types



Situation with explicit context



Situation with explicit context

Clinical findings or procedures that explicitly declare their context.

Examples:

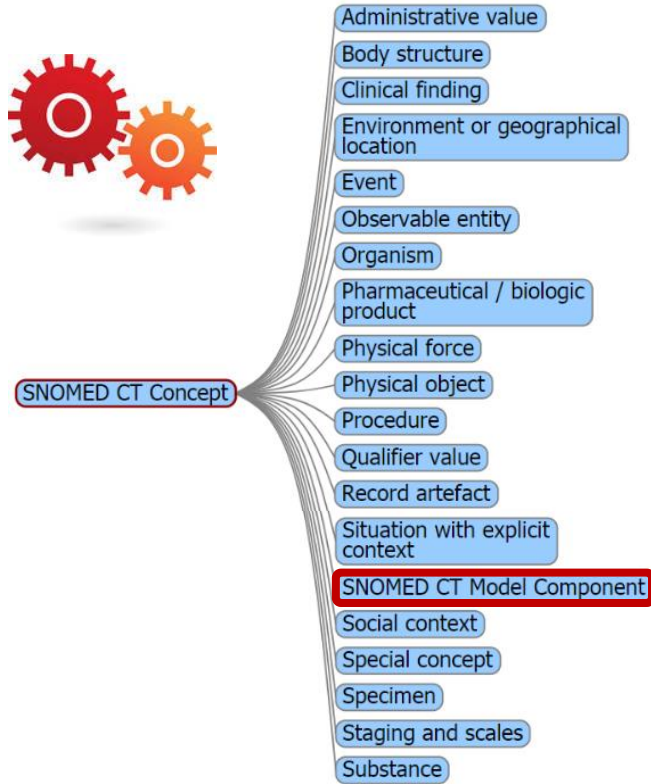
- | endoscopy arranged |
- | family history of glaucoma |
- | past history of myocardial infarction |

Used for:

- Family history
- Past history
- Care plans



SNOMED CT Model Component



SNOMED CT Model Component

The metadata supporting the SNOMED CT release.

Examples:

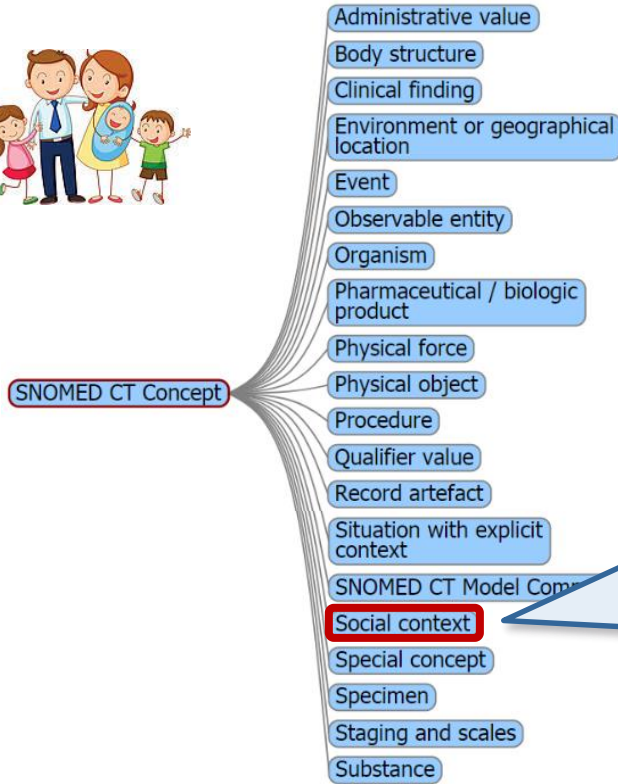
- | case insensitive |
- | fully specified name |
- | simple type reference set |
- | is a |

Used for:

- Terminology server



Social context



Social context

Social conditions and circumstances significant to health care.

Examples:

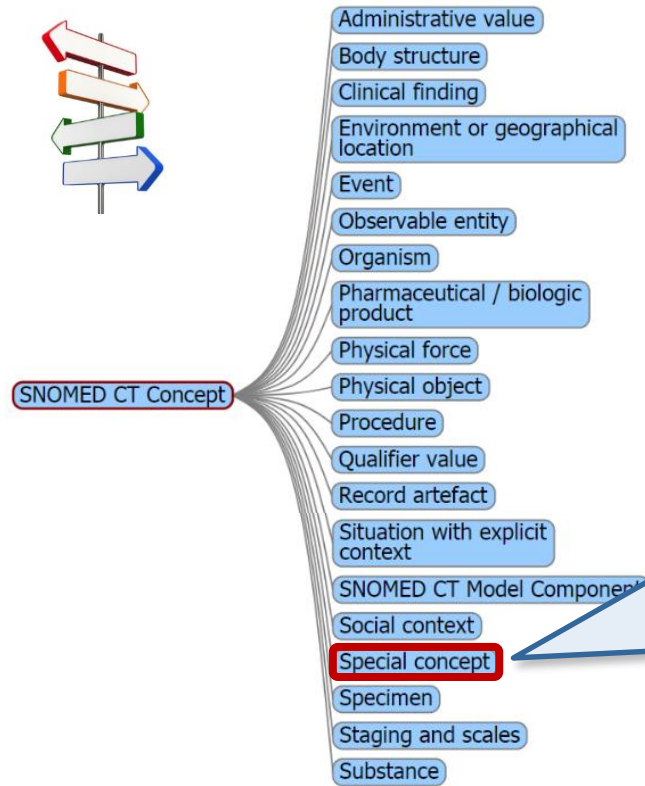
- | construction worker |
- | grandparent of subject |

Used for:

- Occupations
- Family history relationships



Special concept



Special concept

Special concepts that should never be stored in an Electronic Health Record, but which may be useful for specific use cases.

Examples:

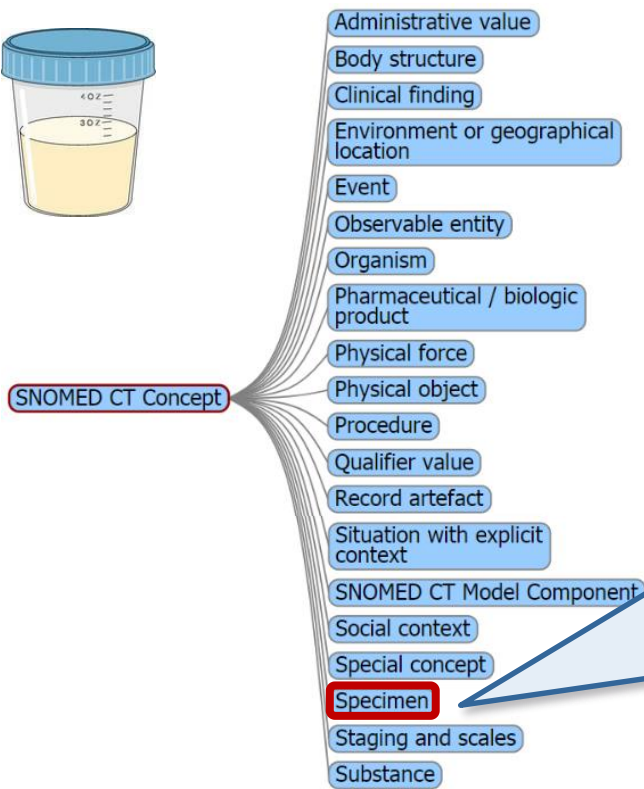
- | duplicate concept |
- | alternative medicine poisoning |

Used for:

- Searching / Navigation



Specimen



Specimen

Entities that are obtained (usually from a patient) for examination or analysis.

Examples:

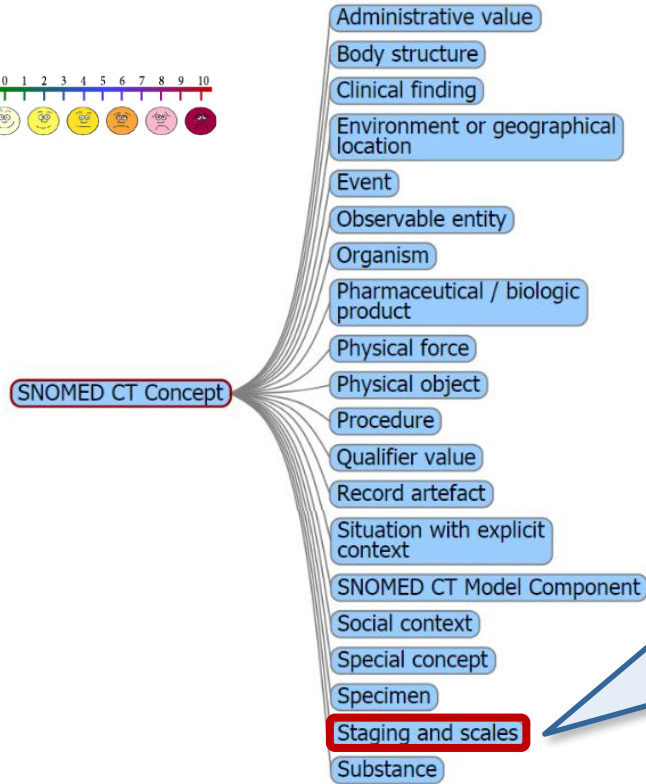
- | urine specimen |
- | blood specimen |
- | skin biopsy sample |

Used for:

- Pathology test specimen
- Biopsy specimen



Staging and scales



Staging and scales

Assessment scales and tumor staging systems

Examples:

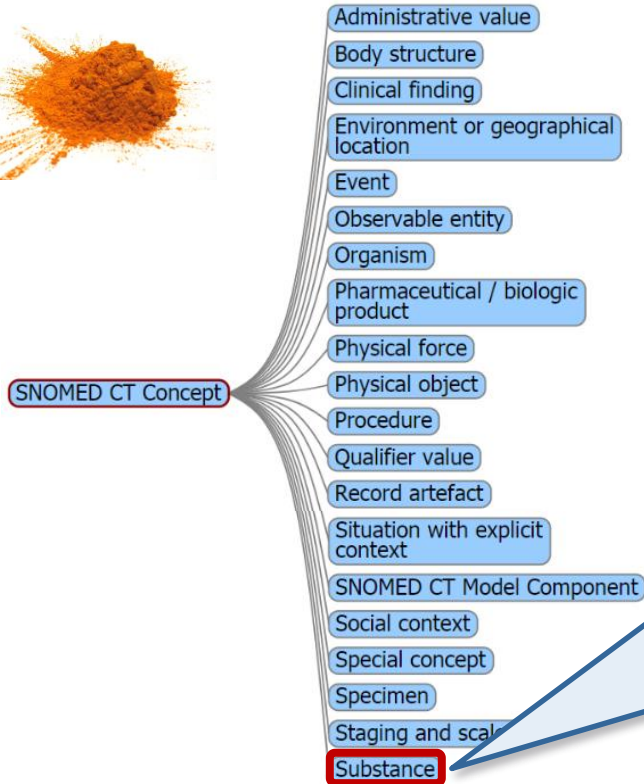
- | Glasgow Coma Scale |
- | FIGO staging system of gynecological malignancy |

Used for:

- Assessments
- Stage of a disease



Substance



Substance

General substances, the chemical constituents of pharmaceutical/biologic products, body substances, dietary substances and diagnostic substances

Examples:

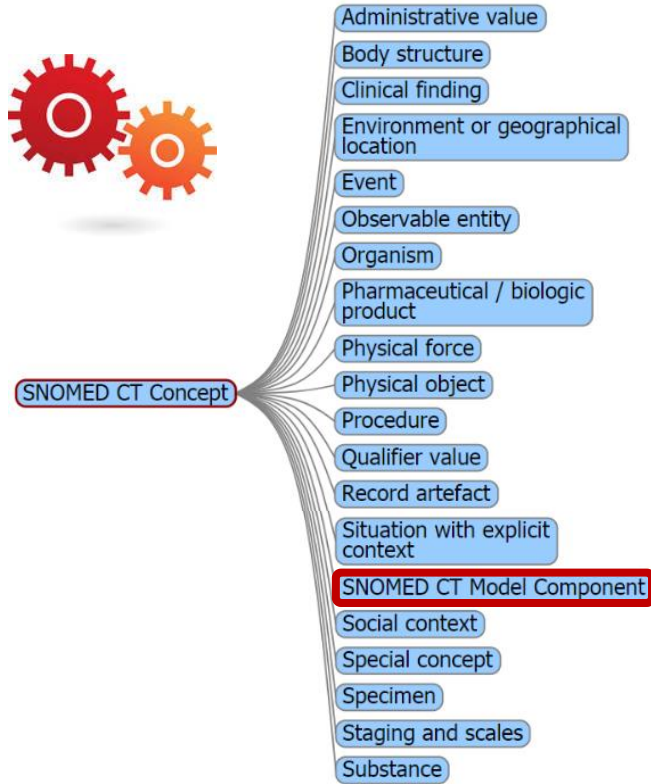
- methane
- insulin
- paracetamol
- albumin

Used for:

- Allergies / adverse reactions
- Medication ingredients
- Diagnostic substance



SNOMED CT Model Component

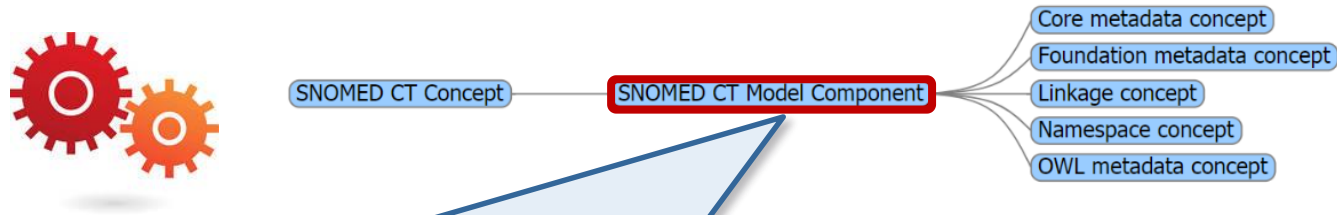


SNOMED CT Model Component

The metadata supporting the SNOMED CT release.



SNOMED CT Model Component

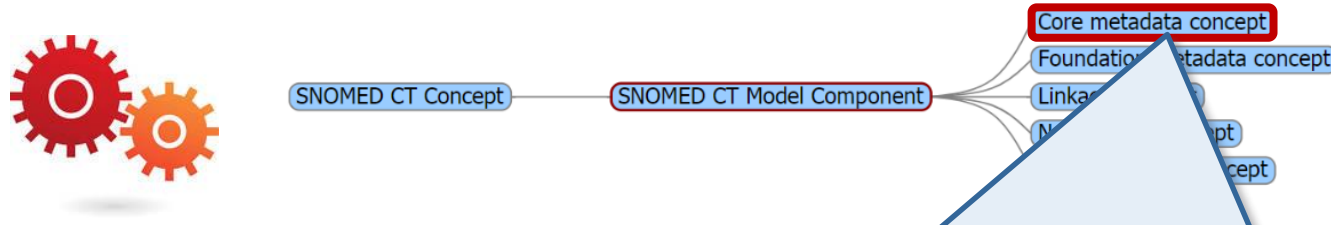


SNOMED CT Model Component

The metadata supporting the SNOMED CT release.



Core metadata concept



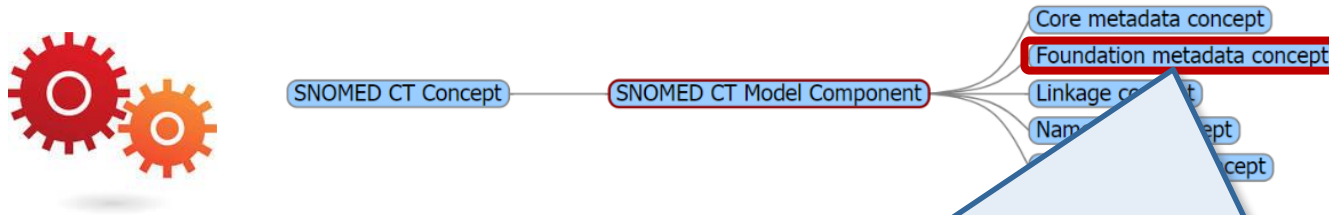
Core metadata concept

The metadata supporting concepts, relationships and descriptions in the SNOMED CT international edition.

Examples:

- | case insensitive |
- | defining relationship |
- | sufficiently defined concept definition |
- | fully specified name |
- | SNOMED CT core module |

Foundation metadata concept



Foundation metadata concept

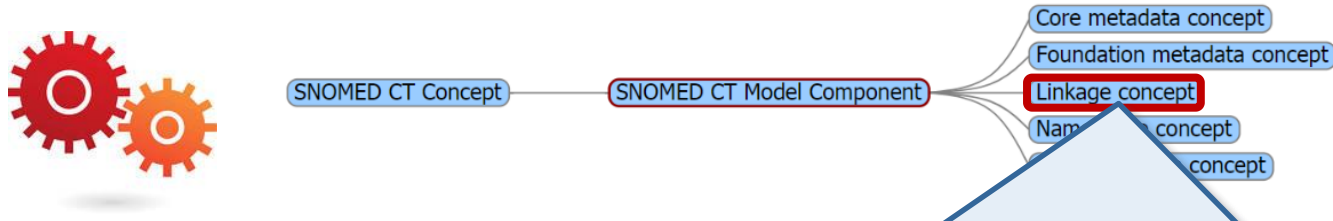
The metadata supporting SNOMED CT reference sets.

Examples:

- | simple type reference set |
- | language type reference set |
- | map target |
- | acceptability |



Linkage concept



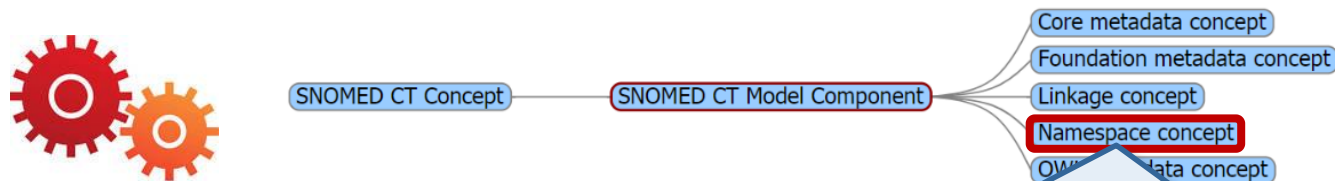
Linkage concept

Concepts intended to link two or more other concepts to each other to express compositional meanings.

Examples:

- | is a |
- | finding site |
- | laterality |

Namespace concept



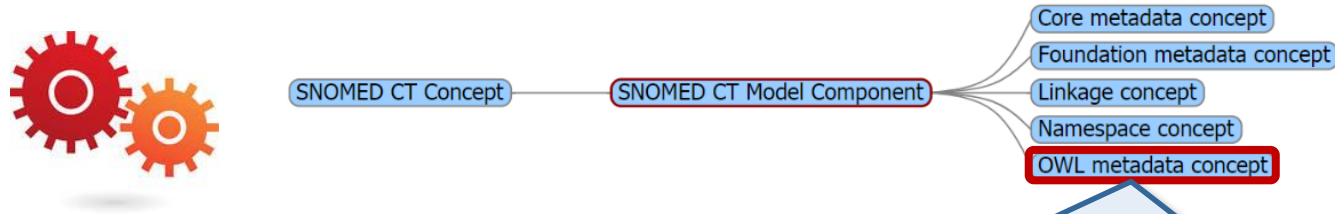
Namespace concept

The concepts that represent the core namespace and each extension namespace that has been assigned by SNOMED International.

Examples:

- | Core Namespace |
- | Extension Namespace {1000036} |
- | Extension Namespace {1000144} |

OWL metadata concept



OWL metadata concept

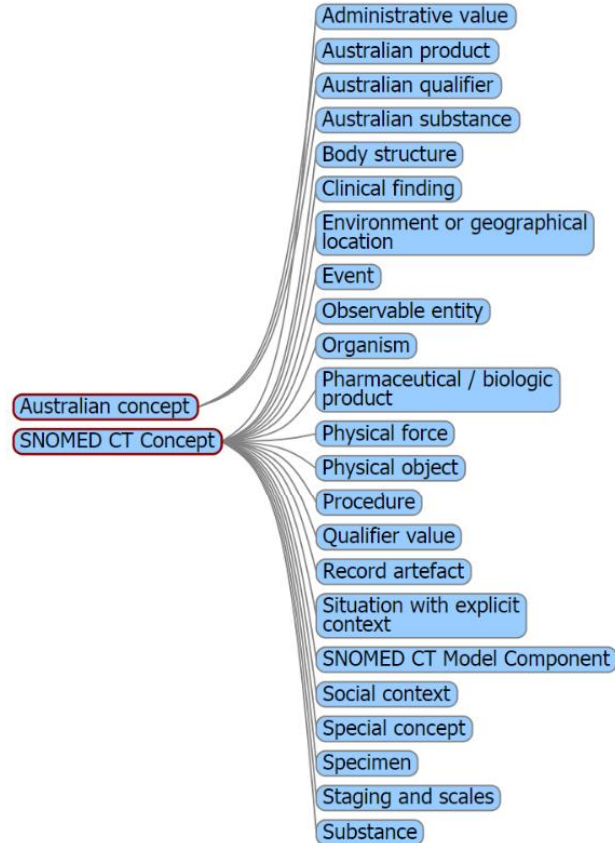
Concepts used by | OWL expression type reference sets | as the referenced component for some OWL expressions.

Examples:

- | general concept inclusion axiom |
- | OWL ontology header |
- | OWL ontology namespace |



SNOMED CT-AU content hierarchies



Australian concept



Australian concept

Australian product

Australian qualifier

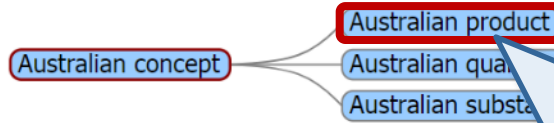
Australian substance

Australian concept

Supports the Australian Medicines Terminology (AMT).



Australian product



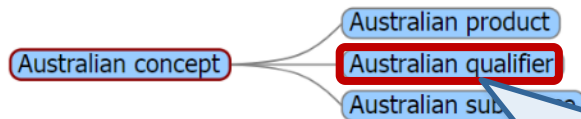
Australian product

Describes the 'seven notable classes', that includes medicinal and trade products.

Examples:

- | paracetamol + codeine |
- | Infanrix Hexa |
- | diclofenac sodium 25 mg enteric tablet |
- | Amoxil 500 mg capsule, 28 |
- | Betadine Antiseptic 10% ointment, 65 g, tube |

Australian qualifier



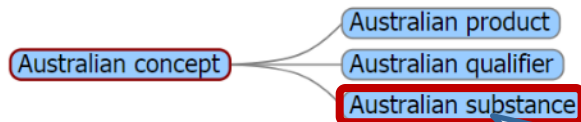
Australian qualifier

Provides values for AMT attributes, and includes container type, form, unit of measure and unit of use.

Examples:

- | blister pack |
- | enteric capsule |
- | mg/mL |

Australian substance



Australian substance

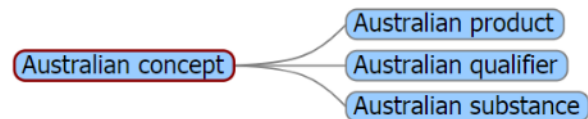
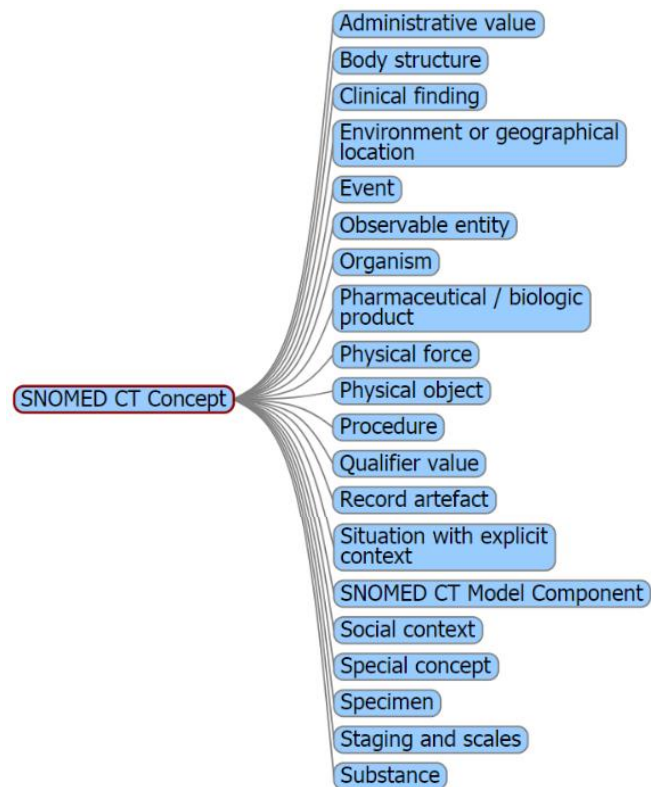
Medicinal substances that are constituents of AMT products

Examples:

- | calcium carbonate |
- | lansoprazole |
- | paracetamol |



Summary



Links to further information

- SNOMED CT editorial guide
 - <https://confluence.ihtsdotools.org/display/DOC/Guides>
- SNOMED CT starter guide
 - <https://confluence.ihtsdotools.org/display/DOC/Overviews>
- AMT concept model and business use cases
 - <https://www.healthterminologies.gov.au/learn?content=documentlibrary>
- AMT editorial rules
 - <https://www.healthterminologies.gov.au/learn?content=documentlibrary>

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