nehta

# Medication Instruction and Action

## Detailed Clinical Model Specification

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# Document Information

## Document owner

| Document Owner |
| --- |
| The National Clinical Terminology and Information Service |

## Change history

| Version | Date | Comments |
| --- | --- | --- |
| 1.0 | 22 Aug 2006 | Initial NEHTA release. |
| 2.0 | 26 Aug 2011 | New version created in accordance with the archetype from *NEHTA Clinical Knowledge Manager*[1]. |

## Related documents

| Name | Version/Release Date |
| --- | --- |
| *NEHTA Acronyms, Abbreviations & Glossary of Terms* | Version 1.2, Issued 25 May 2005 |
| *Participation Data Specification* | Version 3.2, Issued 20 July 2011 |

[1] http://dcm.nehta.org.au/ckm

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- Standards Australia;
- Members of the Australian DataTypes Project;
- Australian Institute of Health & Welfare; and
- Ocean Informatics.

# Table of Contents

# 1 Introduction

## 1.1 Purpose and Scope

This data group specification forms part of a suite of data specifications that NEHTA is developing for the Australian Health Informatics Community. The suite comprises specifications for a range of health topics (represented as “data groups”), which are generally agreed to be of high priority to standardise in order to achieve the benefits brought about by Level 4 (semantic) interoperability in the Australian health care setting.

NEHTA values your questions and comments about this document. Please direct your questions or feedback to *clinicalinformation@nehta.gov.au*.

## 1.2 Intended Audience

This document is intended to be read by jurisdictional ICT managers, clinicians involved in Clinical Information System specifications, software architects and developers, and implementers of Clinical Information Systems in various health care settings.

It is reasonably technical in nature and expects the audience to be familiar with the language of health data specification and have some familiarity with health information standards and specifications. Definitions and examples are provided to clarify relevant terminology usage and intent.

## 1.3 Background

There are several e-health priority areas to be addressed by NEHTA specifications. One area of priority is identification of the data to be communicated and its structure. NEHTA is addressing this through Data Specifications which detail the Data Elements (logically grouped), and their associated value domains.

Data Specifications need to be independent of messaging formats. They are concerned with providing an information framework in which to achieve semantic interoperability.

Data specifications have been developed:

- Based on jurisdiction and clinician identified priorities;
- Specifically to suit the Australian model for a shared EHR;
- To define collections of related information, e.g. event summaries, data groups, data elements;
- To allow for expansion and extension as electronic systems mature;
- So they are “human readable”, (with information enhanced by the hierarchical structure);
- Incorporating clinical examples of use to enhance utility and adoption; and
- To provide a set of clinical terminologies, specific to the requirements of the Australian healthcare system.

Whilst Personally Controlled Electronic Health Record (PCEHR) is referred to in these documents the implementation of the PCEHR is not dealt with here.

# 1.4 Terminology

NEHTA, through the National Clinical Terminology and Information Service (NCTIS), is defining a national approach to clinical terminology. Consistent and accurate articulation and interpretation of clinical terms is critical to the process of safe exchange.

The Systematised Nomenclature of Medicine - Clinical Terms® (SNOMED CT® [1]) has been recommended by NEHTA and endorsed by the Australian, State and Territory governments as the preferred clinical terminology for Australia, and is now freely available for e-health software developers to use in their Australian products under IHTSDO (International Health Terminology Standards Development Organisation) licensing arrangements.

While NEHTA's achievement of a national standard clinical terminology is based on SNOMED CT as the foundational resource, local variations and customisation of terms relevant to the Australian healthcare sector will be incorporated. SNOMED CT Australian Release (SNOMED CT-AU) is the Australian extension to SNOMED CT; the integrated national release of SNOMED CT for implementation in Australian deployed clinical IT systems. NEHTA is also developing the Australian Medicines Terminology (AMT) as the designated clinical terminology for medicines available in Australia. The AMT will provide a consistent approach to the identification and naming of medicines, to support medicines management and activity across the Australian healthcare domain. The AMT will be integrated with SNOMED CT-AU in the near future.

Reference sets listed as value domains within this document have been developed taking into account data element and data group definitions and how they align and complement the SNOMED CT concept model. For further information regarding terminology and the development of reference sets please visit *http://www.nehta.gov.au/connecting-australia/terminology-and-information* and direct your questions or feedback to *terminologies@nehta.gov.au*.

[1] SNOMED CT® is a registered trademark of the International Health Terminology Standards Development Organisation.

# 2 Medication Instruction Data Group

## 2.1 Purpose

Recording intent to use or to continue to use a medicine, vaccine or other therapeutic good including instructions on use, dispensing and administration, where necessary.

## 2.2 Use

For recording instructions to dispense, administer or use a medicine, vaccine or other therapeutic good. This medication instruction can be used in many circumstances including: a record in a progress note; an item in a medication list, prescription or drug chart (to be dispensed and/or administered); or in a summary document such as discharge summary or a referral for care. The instruction may be complex and involve more than one activity, such as in the case of a reducing dose of Predisolone, or multiple medications as components of the same order. This would include a written order by a physician, dentist, nurse practitioner, or other designated health professional for a medication to be dispensed and administered to a patient.

This instruction will generally apply to things that can be prescribed or are available 'over the counter'.

Use for orders for vaccinations or other therapeutic goods. These may be presented differently in different applications but require the same structure.

Use for the consistent representation of an item in a medication list comprising the medicines that a clinicians collectively expect the individual to be taking.

The information recorded may separate dose, route and timing to achieve a computable and sharable specification but also allows for narrative instructions for orders like 'Frusemide 40mg two tablets in the morning and one at lunch' to ensure compatibility with existing systems. To achieve a structure statement for such compound orders, two items are required: 'Frusemide 40mg two tablets in the morning' and 'Frusemide 40mg one tablet at lunch'. The instruction will usually include information about the timing and dose (which may be structured) and in some settings will include the route of administration. The amount of the medicines will usually be given in terms of a number and a dose unit but may be a textural statement to ensure compatibility with existing systems and also coverage of all scenarios.

Use to represent a prescription item for a medicine, vaccine or other therapeutic good within a document such as an electronic prescription or a medication chart.

The content is potentially complex. Where the content is re-usable in other contexts, especially the paired Medication Action DCM (for recording dispensing, administration etc) the content has been specified in re-useable data groups. For example: Amount and Amount range data groups contain the detail about Medication dose; Timing data group contains detail about structured dose timing; Medication administration data group contains structure around administration for both the order and the action; and Chemical description data group described the specific ingredients within a medicine. All of these data groups together are required to make up the total maximal dataset for a re-useable medication instruction.

## 2.3 Misuse

Not to be used to record administration, use or dispensing. (For those use Medication Action DCM)

Not to be used to record ordering of blood products, implants or major devices such as pacemakers and defibrillators, etc.

# 2.4 MEDICATION INSTRUCTION

## Identification

| | |
|---|---|
| **Label** | MEDICATION INSTRUCTION |
| **Metadata Type** | Data Group |
| **Identifier** | DG-16211 |
| **OID** | 1.2.36.1.2001.1001.101.102.16211 |

## Definition

| | |
|---|---|
| **Definition** | Details of a medicine, vaccine or other therapeutic good with instructions for use. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | Prescribed Item |

## Usage

| | |
|---|---|
| **Misuse** | Recording stock on hand of a therapeutic good. |

# Data Hierarchy

| | | | | | |
|---|---|---|---|---|---|
| | MEDICATION INSTRUCTION | | | | |
| | | Medicine (Therapeutic Good Identification) | | | 1..1 |
| | | Directions | | | 0..1 |
| | | Ingredients and Form (CHEMICAL DESCRIPTION OF MEDICATION) | | | 0..* |
| | | | ACTIVE INGREDIENT | | 0..1 |
| | | | | Name (Active Ingredient Name) | 1..1 |
| | | | | Compound (Active Ingredient Compound) | 0..1 |
| | | | | Strength (Active Ingredient Strength) | 0..1 |
| | | | | Role (Active Ingredient Role) | 0..1 |
| | | | Form | | 0..1 |
| | | | INACTIVE INGREDIENT | | 0..* |

| | | | | | |
|---|---|---|---|---|---|
| | | | | Name (Inactive Ingredient Name) | 1..1 |
| | | | | Compound (Inactive Ingredient Compound) | 0..1 |
| | | | | Strength (Inactive Ingredient Strength) | 0..1 |
| | | | | Role (Inactive Ingredient Role) | 0..* |
| | | Dose Description | | | 0..1 |
| | | Structured Dose (AMOUNT OF MEDICATION) | | | 0..1 |
| | | | Quantity | | 0..1 |
| | | | Dose Unit | | 0..1 |
| | | | Quantity Description | | 0..1 |
| | | TIMING | | | 0..1 |
| | | | Timing Description | | 0..1 |
| | | | Structured Timing (STRUCTURED TIMING) | | 0..1 |
| | | | | Frequency Range (Intervention Frequency Range) | 0..1 |
| | | | | Interval Range (Intervention Interval Range) | 0..1 |
| | | | | Time (Intervention Time) | 0..* |
| | | | | Day of Week (Intervention Day of Week) | 0..* |
| | | | | Day of Month (Intervention Day of Month) | 0..* |
| | | | | Date (Intervention Date) | 0..* |
| | | | PRN | | 0..1 |
| | | | Start Criterion | | 0..* |
| | | | Start Date | | 0..1 |
| | | | Stop Criterion | | 0..* |
| | | | Stop Date | | 0..1 |

| | | | | |
|---|---|---|---|---|
| | | | Duration of Treatment | 0..1 |
| | | | Number of Administrations | 0..1 |
| | | | Long-Term | 0..1 |
| | | Additional Instruction | | 0..* |
| | | Clinical Indication | | 0..* |
| | | Administration Details (MEDICATION ADMINISTRATION) | | 0..* |
| | | | Route | 0..1 |
| | | | Site (Anatomical Site) | 0..1 |
| | | | Delivery Method (Medication Delivery Method) | 0..1 |
| | | | Dose Duration | 0..1 |
| | | | Intravenous Details (Intravenous Administration Details) | 0..* |
| | | Comment (Tree Comment) | | 0..* |
| | | DISPENSING | | 0..1 |
| | | | Quantity (AMOUNT OF MEDICATION) | 0..* |
| | | | | Quantity 0..1 |
| | | | | Dose Unit 0..1 |
| | | | | Quantity Description 0..1 |
| | | | Number of Repeats | 0..1 |
| | | | Minimum Interval Between Repeats | 0..1 |
| | | | Brand Substitution Permitted | 0..1 |
| | | | Grounds for Concurrent Supply | 0..1 |
| | | | Dispensing Instructions | 0..1 |
| | | Change Type | | 0..1 |

| | | | |
|---|---|---|---|
| |  | Change or Recommendation? (Change Status) | 0..1 |
| |  | Change Description | 0..1 |
| |  | Change Reason (Change or Recommendation Reason) | 0..1 |
| |  | Indication for Authorised Use | 0..* |
| |  | Medication Instruction ID | 0..* |
| |  | Concession Benefit | 0..1 |
| |  | INFORMATION PROVIDER | 0..1 |
| |  | SUBJECT | 0..1 |
| |  | Medication Instruction Narrative | 0..1 |
| |  | DateTime Medication Instruction Expires | 0..1 |

# 2.5 Therapeutic Good Identification

## Identification

| | |
|---|---|
| **Label** | Medicine |
| **Metadata Type** | Data Element |
| **Identifier** | DE-10194 |
| **OID** | 1.2.36.1.2001.1001.101.103.10194 |

## Definition

| | |
|---|---|
| **Definition** | The medicine, vaccine or other therapeutic good being ordered, administered to or used by the subject of care. |
| **Definition Source** | Therapeutic Goods Administration |
| **Synonymous Names** | Item Name |
| **Context** | This includes medications and medical devices. It includes drugs, appliances, dressings and reagents. |
| **Context Source** | NEHTA |
| **Notes** | Identifies a therapeutic good, which is broadly defined as a good which is represented in any way to be, or is likely to be taken to be, for therapeutic use (unless specifically excluded or included under Section 7 of the Therapeutic Goods Act 1989).<br><br>Therapeutic use means use in or in connection with:<br><br>• preventing, diagnosing, curing or alleviating a disease, ailment, defect or injury;<br><br>• influencing, inhibiting or modifying a physiological process;<br><br>• testing the susceptibility of persons to a disease or ailment;<br><br>• influencing, controlling or preventing conception;<br><br>• testing for pregnancy; or<br><br>• replacement or modification of parts of the anatomy.<br><br>From [TGA1989a].<br><br>The formal definition of a therapeutic good (from the Therapeutic Goods Act 1989) can be found at: [TGA1989a]. |
| **Data Type** | CodeableText |
| **Value Domain** | Medicines Terminology |

## Usage

| | |
|---|---|
| **Conditions of Use** | Where the therapeutic good can be identified by an AMT (Australian Medicines Terminology) concept, this **SHALL** be the AMT ConceptID and Preferred Term. For details see Medicines Terminology. |

| | |
|---|---|
| | For items without an AMT code (including some extemporaneous preparations), a text description is suitable. For a medication this **SHALL** include the name of the medication (brand name or generic name equivalent), strength and dose form, where appropriate. |
| **Conditions of Use Source** | NEHTA |
| **Examples** | Some examples of AMT ConceptID and their AMT Preferred Term are:<br>1. 293049011000036110, paracetamol 500 mg + codeine phosphate 30 mg tablet<br>2. 327004011000036118, paracetamol 500 mg + codeine phosphate 30 mg tablet, 20<br>3. 234184011000036115, Panadeine Forte tablet: uncoated, 20 tablets<br>4. 192727011000036112, Panadeine Forte (paracetamol 500 mg + codeine phosphate 30 mg) tablet: uncoated, 1 tablet<br>5. 278453011000036118, Panadeine Forte tablet: uncoated, 20 tablets, blister pack<br>6. 315236011000036113, bandage compression 10 cm x 3.5 m bandage: high stretch, 1 bandage<br>7. 186324011000036116, Eloflex (2480) (bandage compression 10 cm x 3.5 m) bandage: high stretch, 1 bandage |
| **Misuse** | Detailing the formula of a compounded (extemporaneous) medication. |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | MEDICATION INSTRUCTION | 1..1 | |

# 2.6 Medicines Terminology

## Identification

| | |
|---|---|
| **Label** | Medicines Terminology |
| **Metadata Type** | Value Domain |
| **Identifier** | VD-16115 |
| **OID** | 1.2.36.1.2001.1001.101.104.16115 |

## Definition

| | |
|---|---|
| **Definition** | A set of values used to refer to medicines and other therapeutic goods. |
| **Definition Source** | NEHTA |
| **Notes** | An explanation of AMT concepts can be found in Australian Medicines Terminology Editorial Rules [NEHT2009r].<br><br>Prescribing and dispensing use different sets of values. |

## Value Domain

| | |
|---|---|
| **Source** | Australian Medicines Terminology |
| **Permissible Values** | The permissible values are the members of the following 7 AMT reference sets:<br>• \|929360061000036106 *Medicinal product reference set*\|<br>• \|929360081000036101 *Medicinal product pack reference set*\|<br>• \|929360071000036103 *Medicinal product unit of use reference set*\|<br>• \|929360021000036102 *Trade product reference set*\|<br>• \|929360041000036105 *Trade product pack reference set*\|<br>• \|929360031000036100 *Trade product unit of use reference set*\|<br>• \|929360051000036108 *Contained trade product pack reference set*\|<br><br>Different reference sets are allowed in the differing contexts of prescribing, dispensing and administering and are listed below.<br><br>Prescribing:<br>• \|929360081000036101 *Medicinal product pack reference set*\|<br>• \|929360071000036103 *Medicinal product unit of use reference set*\|<br>• \|929360041000036105 *Trade product pack reference set*\|<br>• \|929360031000036100 *Trade product unit of use reference set*\|<br>• \|929360051000036108 *Contained trade product pack reference set*\| |

Dispensing:

- |929360041000036105 *Trade product pack reference set*|
- |929360031000036100 *Trade product unit of use reference set*|
- |929360051000036108 *Containered trade product pack reference set*|

Administering:

- |929360031000036100 *Trade product unit of use reference set*|

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Medicine (Therapeutic Good Identification) | 1..1 | |

# 2.7 Directions

## Identification

| | |
|---|---|
| **Label** | Directions |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16429 |
| **OID** | 1.2.36.1.2001.1001.101.103.16429 |

## Definition

| | |
|---|---|
| **Definition** | A complete narrative description of how much, when and how to use the medicine, vaccine or other therapeutic good. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | Text |

## Usage

| | |
|---|---|
| **Conditions of Use** | It is essential that when the "Directions" data element is used together with structured information components such as "Ingredient and Form" and "Structured Dose" in clinical records or prescriptions, the contents of "Direction" must not contradict the contents of these structured information components. |
| **Conditions of Use Source** | NEHTA |
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | MEDICATION INSTRUCTION | 0..1 | |

# 2.8 CHEMICAL DESCRIPTION OF MEDICATION

## Identification

| | |
|---|---|
| **Label** | Ingredients and Form |
| **Metadata Type** | Data Group |
| **Identifier** | DG-16408 |
| **OID** | 1.2.36.1.2001.1001.101.102.16408 |

## Definition

| | |
|---|---|
| **Definition** | Detailed information about the ingredient(s) including form and strength. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | MEDICATION INSTRUCTION | 0..* | |

**Children**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | ACTIVE INGREDIENT | 0..1 | |
|  | Form | 0..1 | |
|  | INACTIVE INGREDIENT | 0..* | |

# 2.9 ACTIVE INGREDIENT

## Identification

| | |
|---|---|
| **Label** | ACTIVE INGREDIENT |
| **Metadata Type** | Data Group |
| **Identifier** | DG-30143 |
| **OID** | 1.2.36.1.2001.1001.101.102.30143 |

## Definition

| | |
|---|---|
| **Definition** | Information about an ingredient that is active. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | Active pharmaceutical ingredient<br>active pharmaceutical constituent. |
| **Notes** | The substance in the medication formulation that is pharmaceutically active and is responsible for the medication's therapeutic effect defined by its identifying name and the strength per dose unit. |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
| | Ingredients and Form (CHEMICAL DESCRIPTION OF MEDICATION) | 0..1 | |

**Children**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
| | Name (Active Ingredient Name) | 1..1 | |
| | Compound (Active Ingredient Compound) | 0..1 | |
| | Strength (Active Ingredient Strength) | 0..1 | |
| | Role (Active Ingredient Role) | 0..1 | |

# 2.10 Active Ingredient Name

## Identification

| | |
|---|---|
| **Label** | Name |
| **Metadata Type** | Data Element |
| **Identifier** | DE-10195 |
| **OID** | 1.2.36.1.2001.1001.101.103.10195 |

## Definition

| | |
|---|---|
| **Definition** | The name of the chemical or medication. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | The identifying name of the active ingredient in the formulated medication. |
| **Data Type** | CodedText |
| **Value Domain** | *Not specified.*<br><br>In the absence of national standard code sets, the code sets used **SHALL** be registered code sets, i.e. registered through the *HL7 code set registration procedure*[1] with an appropriate object identifier (OID), and **SHALL** be publicly available.<br><br>When national standard code sets become available, they **SHALL** be used and the non-standard code sets **SHALL** be deprecated. |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | ACTIVE INGREDIENT | 1..1 | |

[1] http://www.hl7.org/oid/index.cfm

# 2.11 Active Ingredient Compound

## Identification

| | |
|---|---|
| **Label** | Compound |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16409 |
| **OID** | 1.2.36.1.2001.1001.101.103.16409 |

## Definition

| | |
|---|---|
| **Definition** | The detailed chemical name of the compound that is an active ingredient. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | Text |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | ACTIVE INGREDIENT | 0..1 | |

# 2.12 Active Ingredient Strength

## Identification

| | |
|---|---|
| **Label** | Strength |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16410 |
| **OID** | 1.2.36.1.2001.1001.101.103.16410 |

## Definition

| | |
|---|---|
| **Definition** | The amount or concentration of this ingredient. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | Quantity |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | ACTIVE INGREDIENT | 0..1 | |

# 2.13 Active Ingredient Role

## Identification

| | |
|---|---|
| **Label** | Role |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16412 |
| **OID** | 1.2.36.1.2001.1001.101.103.16412 |

## Definition

| | |
|---|---|
| **Definition** | The role of the ingredient. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | CodedText |
| **Value Domain** | *Not specified.*<br><br>In the absence of national standard code sets, the code sets used **SHALL** be registered code sets, i.e. registered through the *HL7 code set registration procedure*[2] with an appropriate object identifier (OID), and **SHALL** be publicly available.<br><br>When national standard code sets become available, they **SHALL** be used and the non-standard code sets **SHALL** be deprecated. |

## Usage

| | |
|---|---|
| **Examples** | 1. "Therapeutic". The chemical has a known and desired effect which is positive.<br><br>2. "Toxic". This chemical is toxic and has no therapeutic effect.<br><br>3. "Adjuvant". The chemical is active but aids the therapeutic effect of another ingredient. |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
| | ACTIVE INGREDIENT | 0..1 | |

[2] http://www.hl7.org/oid/index.cfm

# 2.14 Form

## Identification

| | |
|---|---|
| **Label** | Form |
| **Metadata Type** | Data Element |
| **Identifier** | DE-10186 |
| **OID** | 1.2.36.1.2001.1001.101.103.10186 |

## Definition

| | |
|---|---|
| **Definition** | The formulation or presentation of the overall substance. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | manufactured form<br>dose form |
| **Data Type** | CodeableText |
| **Value Domain** | Medication Form Reference Set |

## Usage

| | |
|---|---|
| **Conditions of Use** | The *Form* is used to specify a characteristic of a product as it is manufactured or formulated for dispensing. The form that the medication takes when actually administered may vary somewhat from the manufactured form. Tablets may be soluble. Such tablets may or may not be actually disolved into a solution prior to administration. Similarly with powders and liquids. If it is critical for the care of the patient to differentiate the manufactured form from the administered form, then this should be done via correct labelling and patient instructions. See *Subject of Care Instructions* and *Cautionary Advice*. |
| **Conditions of Use Source** | NEHTA |
| **Examples** | 1. Tablet.<br>2. Capsule.<br>3. Oral Drops.<br>4. Effervescent powder. |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Ingredients and Form (CHEMICAL DESCRIPTION OF MEDICATION) | 0..1 | |

# 2.15 Medication Form Reference Set

## Identification

| | |
|---|---|
| **Label** | Medication Form Reference Set |
| **Metadata Type** | Value Domain |
| **Identifier** | VD-16618 |
| **OID** | 1.2.36.1.2001.1001.101.104.16618 |
| **External Identifier** | SNOMED CT-AU Concept Id: 32570621000036105 |

## Definition

| | |
|---|---|
| **Definition** | The set of values for the medication form. |
| **Definition Source** | NEHTA |

## Value Domain

| | |
|---|---|
| **Source** | SNOMED CT-AU |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
| 001011001 | Form | 1..1 | |

# 2.16 INACTIVE INGREDIENT

## Identification

| | |
|---|---|
| **Label** | INACTIVE INGREDIENT |
| **Metadata Type** | Data Group |
| **Identifier** | DG-16413 |
| **OID** | 1.2.36.1.2001.1001.101.102.16413 |

## Definition

| | |
|---|---|
| **Definition** | Ingredients in the substance that are not active. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |

# Relationships

### Parents

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Ingredients and Form (CHEMICAL DESCRIPTION OF MEDICATION) | 0..* | |

### Children

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Name (Inactive Ingredient Name) | 1..1 | |
|  | Compound (Inactive Ingredient Compound) | 0..1 | |
|  | Strength (Inactive Ingredient Strength) | 0..1 | |
|  | Role (Inactive Ingredient Role) | 0..* | |

# 2.17 Inactive Ingredient Name

## Identification

| | |
|---|---|
| **Label** | Name |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16415 |
| **OID** | 1.2.36.1.2001.1001.101.103.16415 |

## Definition

| | |
|---|---|
| **Definition** | The name of the inactive substance. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | CodedText |
| **Value Domain** | *Not specified.*<br><br>In the absence of national standard code sets, the code sets used **SHALL** be registered code sets, i.e. registered through the *HL7 code set registration procedure*[3] with an appropriate object identifier (OID), and **SHALL** be publicly available.<br><br>When national standard code sets become available, they **SHALL** be used and the non-standard code sets **SHALL** be deprecated. |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
| | INACTIVE INGREDIENT | 1..1 | |

[3] http://www.hl7.org/oid/index.cfm

# 2.18 Inactive Ingredient Compound

## Identification

| | |
|---|---|
| **Label** | Compound |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16416 |
| **OID** | 1.2.36.1.2001.1001.101.103.16416 |

## Definition

| | |
|---|---|
| **Definition** | The detailed chemical name of the compound which is an inactive ingredient. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | Text |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | INACTIVE INGREDIENT | 0..1 | |

# 2.19 Inactive Ingredient Strength

## Identification

| | |
|---|---|
| **Label** | Strength |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16417 |
| **OID** | 1.2.36.1.2001.1001.101.103.16417 |

## Definition

| | |
|---|---|
| **Definition** | The amount or concentration of this ingredient. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | Quantity |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | INACTIVE INGREDIENT | 0..1 | |

# 2.20 Inactive Ingredient Role

## Identification

| | |
|---|---|
| **Label** | Role |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16419 |
| **OID** | 1.2.36.1.2001.1001.101.103.16419 |

## Definition

| | |
|---|---|
| **Definition** | The role of the ingredient. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | CodedText |
| **Value Domain** | *Not specified.*<br><br>In the absence of national standard code sets, the code sets used **SHALL** be registered code sets, i.e. registered through the *HL7 code set registration procedure*[4] with an appropriate object identifier (OID), and **SHALL** be publicly available.<br><br>When national standard code sets become available, they **SHALL** be used and the non-standard code sets **SHALL** be deprecated. |

## Usage

| | |
|---|---|
| **Examples** | 1. "Additive". Inert additive.<br><br>2. "Dilutant". Inert dilutant.<br><br>3. "Propellent". Inert propellent.<br><br>4. "Preservative". The ingredient is present to prolong the life of the substance.<br><br>5. "Colouring". The ingredient is used to colour the substance. |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | INACTIVE INGREDIENT | 0..* | |

[4] http://www.hl7.org/oid/index.cfm

# 2.21 Dose Description

## Identification

| | |
|---|---|
| **Label** | Dose Description |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16430 |
| **OID** | 1.2.36.1.2001.1001.101.103.16430 |

## Definition

| | |
|---|---|
| **Definition** | The amount and units of the medicine, vaccine or other therapeutic good to be used or administered at one time. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | Text |

## Usage

| | |
|---|---|
| **Conditions of Use** | If the 'Dose Description' data element is used together with 'Structured Dose' information component, its contents must not contradict contents included in the structured information component. |
| **Conditions of Use Source** | NEHTA |
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | MEDICATION INSTRUCTION | 0..1 | |

# 2.22 AMOUNT OF MEDICATION

## Identification

| | |
|---|---|
| **Label** | Structured Dose |
| **Metadata Type** | Data Group |
| **Identifier** | DG-16423 |
| **OID** | 1.2.36.1.2001.1001.101.102.16423 |

## Definition

| | |
|---|---|
| **Definition** | Structured information on dose with dose unit. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | If 'Structured dose' is used with 'Dose description' then these must be semantically equivalent. |

# Relationships

### Parents

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
| | MEDICATION INSTRUCTION | 0..1 | |

### Children

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
| | Quantity | 0..1 | |
| | Dose Unit | 0..1 | |
| | Quantity Description | 0..1 | |

# 2.23 Quantity

## Identification

| | |
|---|---|
| **Label** | Quantity |
| **Metadata Type** | Data Element |
| **Identifier** | DE-10145 |
| **OID** | 1.2.36.1.2001.1001.101.103.10145 |

## Definition

| | |
|---|---|
| **Definition** | The quantity, number or proportion. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | The number of doses and/or physical amount of the therapeutic good. |
| **Data Type** | Real<br>QuantityRatio |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Structured Dose (AMOUNT OF MEDICATION) | 0..1 | |

# 2.24 Dose Unit

## Identification

| | |
|---|---|
| **Label** | Dose Unit |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16524 |
| **OID** | 1.2.36.1.2001.1001.101.103.16524 |

## Definition

| | |
|---|---|
| **Definition** | The dose unit of this amount. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | CodedText |
| **Value Domain** | Dose Unit Reference Set |

## Usage

| | |
|---|---|
| **Examples** | 1. Tablets.<br>2. Capsules.<br>3. Sachets.<br>4. Mg.<br>5. mL. |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Structured Dose (AMOUNT OF MEDICATION) | 0..1 | |

# 2.25 Dose Unit Reference Set

## Identification

| | |
|---|---|
| **Label** | Dose Unit Reference Set |
| **Metadata Type** | Value Domain |
| **Identifier** | VD-16523 |
| **OID** | 1.2.36.1.2001.1001.101.104.16523 |
| **External Identifier** | SNOMED CT-AU Concept Id: 32570641000036102 |

## Definition

| | |
|---|---|
| **Definition** | The set of values for dose unit. |
| **Definition Source** | NEHTA |
| **Notes** | Values might include: Tablets, Capsules, Sachets, mg, mL. |

## Value Domain

| | |
|---|---|
| **Source** | SNOMED CT-AU |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Dose Unit | 1..1 | |

# 2.26 Quantity Description

## Identification

| | |
|---|---|
| **Label** | Quantity Description |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16525 |
| **OID** | 1.2.36.1.2001.1001.101.103.16525 |

## Definition

| | |
|---|---|
| **Definition** | Free text description of the amount which may consist of the quantity and dose unit. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | Text |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Structured Dose (AMOUNT OF MEDICATION) | 0..1 | |

# 2.27 TIMING

## Identification

| | |
|---|---|
| **Label** | TIMING |
| **Metadata Type** | Data Group |
| **Identifier** | DG-16431 |
| **OID** | 1.2.36.1.2001.1001.101.102.16431 |

## Definition

| | |
|---|---|
| **Definition** | Details of the timing of the use or administration of the medicine, vaccine or other therapeutic good. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | MEDICATION INSTRUCTION | 0..1 | |

**Children**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Timing Description | 0..1 | |
|  | Structured Timing (STRUCTURED TIMING) | 0..1 | |
|  | PRN | 0..1 | |
|  | Start Criterion | 0..* | |
|  | Start Date | 0..1 | |
|  | Stop Criterion | 0..* | |
|  | Stop Date | 0..1 | |
|  | Duration of Treatment | 0..1 | |

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Number of Administrations | 0..1 | |
|  | Long-Term | 0..1 | |

# 2.28 Timing Description

## Identification

| | |
|---|---|
| **Label** | Timing Description |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16432 |
| **OID** | 1.2.36.1.2001.1001.101.103.16432 |

## Definition

| | |
|---|---|
| **Definition** | The timing of the doses, which may include frequency and details such as relationship to food. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | Text |

## Usage

| | |
|---|---|
| **Conditions of Use** | If timing description is used together with structured timing information component, the contents of both must be semantically equivalent. |
| **Conditions of Use Source** | NEHTA |
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | TIMING | 0..1 | |

# 2.29 STRUCTURED TIMING

## Identification

| | |
|---|---|
| **Label** | Structured Timing |
| **Metadata Type** | Data Group |
| **Identifier** | DG-16431 |
| **OID** | 1.2.36.1.2001.1001.101.102.16431 |

## Definition

| | |
|---|---|
| **Definition** | Structured details of the timing of the use or administration. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |

# Relationships

### Parents

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | TIMING | 0..1 | |

### Children

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Frequency Range (Intervention Frequency Range) | 0..1 | |
|  | Interval Range (Intervention Interval Range) | 0..1 | |
|  | Time (Intervention Time) | 0..* | |
|  | Day of Week (Intervention Day of Week) | 0..* | |
|  | Day of Month (Intervention Day of Month) | 0..* | |
|  | Date (Intervention Date) | 0..* | |

# 2.30 Intervention Frequency Range

## Identification

| | |
|---|---|
| **Label** | Frequency Range |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16547 |
| **OID** | 1.2.36.1.2001.1001.101.103.16547 |

## Definition

| | |
|---|---|
| **Definition** | The frequency as number of times per time period that the intervention is to take place. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | Includes details of variable upper and lower frequency e.g. 3-4 times a day. |
| **Data Type** | QuantityRange |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Structured Timing (STRUCTURED TIMING) | 0..1 | |

# 2.31 Intervention Interval Range

## Identification

| | |
|---|---|
| **Label** | Interval Range |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16548 |
| **OID** | 1.2.36.1.2001.1001.101.103.16548 |

## Definition

| | |
|---|---|
| **Definition** | The length of time between doses or interventions. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | 8 Hourly is PT8H, monthly is P1M, every hour and a half is PT1H30M.<br>Includes details of variable upper and lower intervals e.g. every 2-3 hours. |
| **Data Type** | QuantityRange |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Structured Timing (STRUCTURED TIMING) | 0..1 | |

# 2.32 Intervention Time

## Identification

| | |
|---|---|
| **Label** | Time |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16549 |
| **OID** | 1.2.36.1.2001.1001.101.103.16549 |

## Definition

| | |
|---|---|
| **Definition** | Specific time(s) during the day when the intervention should be applied. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | DateTime |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Structured Timing (STRUCTURED TIMING) | 0..* | |

# 2.33 Intervention Day of Week

## Identification

| | |
|---|---|
| **Label** | Day of Week |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16551 |
| **OID** | 1.2.36.1.2001.1001.101.103.16551 |

## Definition

| | |
|---|---|
| **Definition** | The specific and repeating day(s) of the week. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | CodedText |
| **Value Domain** | *Not specified.*<br><br>In the absence of national standard code sets, the code sets used **SHALL** be registered code sets, i.e. registered through the *HL7 code set registration procedure*[5] with an appropriate object identifier (OID), and **SHALL** be publicly available.<br><br>When national standard code sets become available, they **SHALL** be used and the non-standard code sets **SHALL** be deprecated. |

## Usage

| | |
|---|---|
| **Examples** | 1. Monday<br><br>2. Wednesday<br><br>3. Friday<br><br>4. Sunday |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Structured Timing (STRUCTURED TIMING) | 0..* | |

[5] http://www.hl7.org/oid/index.cfm

# 2.34 Intervention Day of Month

## Identification

| | |
|---|---|
| **Label** | Day of Month |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16552 |
| **OID** | 1.2.36.1.2001.1001.101.103.16552 |

## Definition

| | |
|---|---|
| **Definition** | The specific and repeating day(s) of the month. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | For instance, if it is required to give a dose on the 2nd day of each month then the value is 2. |
| **Data Type** | Integer |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Structured Timing (STRUCTURED TIMING) | 0..* | |

# 2.35 Intervention Date

## Identification

| | |
|---|---|
| **Label** | Date |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16553 |
| **OID** | 1.2.36.1.2001.1001.101.103.16553 |

## Definition

| | |
|---|---|
| **Definition** | Actual dates. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | DateTime |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Structured Timing (STRUCTURED TIMING) | 0..* | |

# 2.36 PRN

## Identification

| | |
|---|---|
| **Label** | PRN |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16433 |
| **OID** | 1.2.36.1.2001.1001.101.103.16433 |

## Definition

| | |
|---|---|
| **Definition** | The timing is dependent within limits on the subject of care's condition or symptoms. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | For example, 4hrly p.r.n. means the medicine can be taken as frequently as every four hours if necessary. "Pro re nata" in latin means as circumstances arise. |
| **Data Type** | Boolean |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | TIMING | 0..1 | |

# 2.37 Start Criterion

## Identification

| | |
|---|---|
| **Label** | Start Criterion |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16434 |
| **OID** | 1.2.36.1.2001.1001.101.103.16434 |

## Definition

| | |
|---|---|
| **Definition** | A condition which, when met, requires the start of administration or use. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | Text |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | TIMING | 0..* | |

# 2.38 Start Date

## Identification

| | |
|---|---|
| **Label** | Start Date |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16435 |
| **OID** | 1.2.36.1.2001.1001.101.103.16435 |

## Definition

| | |
|---|---|
| **Definition** | The date and optional time to begin using the medicine, vaccine or other therapeutic good. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | DateTime |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | TIMING | 0..1 | |

# 2.39 Stop Criterion

## Identification

| | |
|---|---|
| **Label** | Stop Criterion |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16436 |
| **OID** | 1.2.36.1.2001.1001.101.103.16436 |

## Definition

| | |
|---|---|
| **Definition** | A condition which, when met, requires the cessation of administration or use. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | Text |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | TIMING | 0..* | |

# 2.40 Stop Date

## Identification

| | |
|---|---|
| **Label** | Stop Date |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16437 |
| **OID** | 1.2.36.1.2001.1001.101.103.16437 |

## Definition

| | |
|---|---|
| **Definition** | The date and optional time to stop using the medicine, vaccine or other therapeutic good. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | DateTime |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | TIMING | 0..1 | |

# 2.41 Duration of Treatment

## Identification

| | |
|---|---|
| **Label** | Duration of Treatment |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16438 |
| **OID** | 1.2.36.1.2001.1001.101.103.16438 |

## Definition

| | |
|---|---|
| **Definition** | The length of time for which the medicine, vaccine or other therapeutic good should be used or administered (from the initial dose to the final dose). |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | Duration |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | TIMING | 0..1 | |

# 2.42 Number of Administrations

## Identification

| | |
|---|---|
| **Label** | Number of Administrations |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16439 |
| **OID** | 1.2.36.1.2001.1001.101.103.16439 |

## Definition

| | |
|---|---|
| **Definition** | The total number of doses of the medicine, vaccine or other therapeutic good that are to be used or administered (from the initial dose to the final dose). |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | Integer |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | TIMING | 0..1 | |

# 2.43 Long-Term

## Identification

| | |
|---|---|
| **Label** | Long-Term |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16440 |
| **OID** | 1.2.36.1.2001.1001.101.103.16440 |

## Definition

| | |
|---|---|
| **Definition** | It is anticipated that the medicine, vaccine or therapeutic good will be re-prescribed or re-dispensed over a period of time. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | Boolean |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | TIMING | 0..1 | |

# 2.44 Additional Instruction

## Identification

| | |
|---|---|
| **Label** | Additional Instruction |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16441 |
| **OID** | 1.2.36.1.2001.1001.101.103.16441 |

## Definition

| | |
|---|---|
| **Definition** | An additional statement on how to use the medicine, vaccine or other therapeutic good. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | Text |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | MEDICATION INSTRUCTION | 0..* | |

# 2.45 Clinical Indication

## Identification

| | |
|---|---|
| **Label** | Clinical Indication |
| **Metadata Type** | Data Element |
| **Identifier** | DE-10141 |
| **OID** | 1.2.36.1.2001.1001.101.103.10141 |

## Definition

| | |
|---|---|
| **Definition** | A reason for ordering the medicine, vaccine or other therapeutic good. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | Reason for prescribing |
| **Notes** | The clinical justification (e.g. specific therapeutic effect intended) for this subject of care's use of the therapeutic good. |
| **Data Type** | Text |

## Usage

| | |
|---|---|
| **Conditions of Use** | For inpatient discharge summaries, this should always be recorded. |
| **Conditions of Use Source** | NEHTA |
| **Examples** | 1. Long-term maintenance treatment of bronchospasm and dyspnoea. |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | MEDICATION INSTRUCTION | 0..* | |

# 2.46 MEDICATION ADMINISTRATION

## Identification

| | |
|---|---|
| **Label** | Administration Details |
| **Metadata Type** | Data Group |
| **Identifier** | DG-10108 |
| **OID** | 1.2.36.1.2001.1001.101.102.10108 |

## Definition

| | |
|---|---|
| **Definition** | Details of the administration of the medicine, vaccine or other therapeutic good. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
| | MEDICATION INSTRUCTION | 0..* | |

**Children**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
| | Route | 0..1 | |
| | Site (Anatomical Site) | 0..1 | |
| | Delivery Method (Medication Delivery Method) | 0..1 | |
| | Dose Duration | 0..1 | |
| | Intravenous Details (Intravenous Administration Details) | 0..* | |

# 2.47 Route

## Identification

| | |
|---|---|
| **Label** | Route |
| **Metadata Type** | Data Element |
| **Identifier** | DE-10147 |
| **OID** | 1.2.36.1.2001.1001.101.103.10147 |

## Definition

| | |
|---|---|
| **Definition** | The route by which the medication is administered. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | Route of administration. |
| **Notes** | It is used to describe the route by which the substance/agent is entered into the patient's body. This includes the route of medication administration. |
| **Data Type** | CodeableText |
| **Value Domain** | Route of Administration Reference Set |

## Usage

| | |
|---|---|
| **Conditions of Use** | Use "Unknown" only for retrospective data collection. |
| **Conditions of Use Source** | NEHTA |
| **Examples** | 1. Oral.<br>2. Subcutaneous injection.<br>3. Epidural.<br>4. Rectal.<br>5. Otic. |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Administration Details (MEDICATION ADMINISTRATION) | 0..1 | |

# 2.48 Route of Administration Reference Set

## Identification

| | |
|---|---|
| **Label** | Route of Administration Reference Set |
| **Metadata Type** | Value Domain |
| **Identifier** | VD-10147 |
| **OID** | 1.2.36.1.2001.1001.101.104.10147 |
| **External Identifier** | SNOMED CT-AU Concept Id: 32570601000036100 |

## Definition

| | |
|---|---|
| **Definition** | A list of all possible routes of administration of medication. |
| **Definition Source** | NEHTA |
| **Notes** | Set of allowable values to describe the way through which a medication is administered to/by the subject of care. |

## Value Domain

| | |
|---|---|
| **Source** | SNOMED CT-AU |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Route | 1..1 | |

# 2.49 Anatomical Site

## Identification

| | |
|---|---|
| **Label** | Site |
| **Metadata Type** | Data Element |
| **Identifier** | DE-10156 |
| **OID** | 1.2.36.1.2001.1001.101.103.10156 |

## Definition

| | |
|---|---|
| **Definition** | A description of the site of administration. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | Location on or in the body of the subject of care where the substance/agent entered the body or therapeutic good was administered. |
| **Data Type** | CodeableText |
| **Value Domain** | Body Structure Foundation Reference Set |

## Usage

| | |
|---|---|
| **Examples** | 1. Left thigh<br>2. Upper arm<br>3. Entire left renal artery |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Administration Details (MEDICATION ADMINISTRATION) | 0..1 | |

# 2.50 Body Structure Foundation Reference Set

## Identification

| | |
|---|---|
| **Label** | Body Structure Foundation Reference Set |
| **Metadata Type** | Value Domain |
| **Identifier** | VD-16152 |
| **OID** | 1.2.36.1.2001.1001.101.104.16152 |
| **External Identifier** | SNOMED CT-AU Concept Id: 32570061000036105 |

## Definition

| | |
|---|---|
| **Definition** | The set of values for named anatomical locations. |
| **Definition Source** | NEHTA |

## Value Domain

| | |
|---|---|
| **Source** | SNOMED CT-AU |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Site (Anatomical Site) | 1..1 | |

# 2.51 Medication Delivery Method

## Identification

| | |
|---|---|
| **Label** | Delivery Method |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16470 |
| **OID** | 1.2.36.1.2001.1001.101.103.16470 |

## Definition

| | |
|---|---|
| **Definition** | The method of delivery if this should be specified. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | Text |

## Usage

| | |
|---|---|
| **Examples** | 1. Delivery via neubliser or spacer<br>2. Delivery via syringe pump |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Administration Details (MEDICATION ADMINISTRATION) | 0..1 | |

# 2.52 Dose Duration

## Identification

| | |
|---|---|
| **Label** | Dose Duration |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16471 |
| **OID** | 1.2.36.1.2001.1001.101.103.16471 |

## Definition

| | |
|---|---|
| **Definition** | The length of time over which to administer each dose. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | Duration |

## Usage

| | |
|---|---|
| **Examples** | 1. An intravenous administration may have to be over a period of 5 minutes |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Administration Details (MEDICATION ADMINISTRATION) | 0..1 | |

# 2.53 Intravenous Administration Details

## Identification

| | |
|---|---|
| **Label** | Intravenous Details |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16472 |
| **OID** | 1.2.36.1.2001.1001.101.102.16472 |

## Definition

| | |
|---|---|
| **Definition** | Details of intravenous administration. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | This free text data element is currently a placeholder for further structured data that is as yet undefined. See Appendix A, *Known Issues* for further information. |
| **Data Type** | Text |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Administration Details (MEDICATION ADMINISTRATION) | 0..* | |

# 2.54 Tree Comment

## Identification

| | |
|---|---|
| **Label** | Comment |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16044 |
| **OID** | 1.2.36.1.2001.1001.101.103.16044 |

## Definition

| | |
|---|---|
| **Definition** | Any additional information that may be needed to ensure the continuity of supply, rationale for current dose and timing, or safe and appropriate use. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | Text |

## Usage

| | |
|---|---|
| **Examples** | 1. Patient requires an administration aid.<br>2. Portable Pulse Oximeter measurement to be taken by clipping the sensor onto the tip of a finger.<br>3. Consulted prescriber concerning dose. |
| **Misuse** | Use for information that could be recorded as structured data. |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | MEDICATION INSTRUCTION | 0..* | |

# 2.55 DISPENSING

## Identification

| | |
|---|---|
| **Label** | DISPENSING |
| **Metadata Type** | Data Group |
| **Identifier** | DG-16442 |
| **OID** | 1.2.36.1.2001.1001.101.102.16442 |

## Definition

| | |
|---|---|
| **Definition** | Information for the dispenser. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |

# Relationships

### Parents

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | MEDICATION INSTRUCTION | 0..1 | |

### Children

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Quantity (AMOUNT OF MEDICATION) | 0..* | |
|  | Number of Repeats | 0..1 | |
|  | Minimum Interval Between Repeats | 0..1 | |
|  | Brand Substitution Permitted | 0..1 | |
|  | Grounds for Concurrent Supply | 0..1 | |
|  | Dispensing Instructions | 0..1 | |

# 2.56 AMOUNT OF MEDICATION

## Identification

| | |
|---|---|
| **Label** | Quantity |
| **Metadata Type** | Data Group |
| **Identifier** | DG-16423 |
| **OID** | 1.2.36.1.2001.1001.101.102.16423 |

## Definition

| | |
|---|---|
| **Definition** | The amount of medicine, vaccine or other therapeutic good to be dispensed. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
| | DISPENSING | 0..* | |

**Children**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
| | Quantity | 0..1 | |
| | Dose Unit | 0..1 | |
| | Quantity Description | 0..1 | |

# 2.57 Quantity

## Identification

| | |
|---|---|
| **Label** | Quantity |
| **Metadata Type** | Data Element |
| **Identifier** | DE-10145 |
| **OID** | 1.2.36.1.2001.1001.101.103.10145 |

## Definition

| | |
|---|---|
| **Definition** | The quantity, number or proportion. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | The number of doses and/or physical amount of the therapeutic good. |
| **Data Type** | Real<br>QuantityRatio |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Quantity (AMOUNT OF MEDICATION) | 0..1 | |

# 2.58 Dose Unit

## Identification

| | |
|---|---|
| **Label** | Dose Unit |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16524 |
| **OID** | 1.2.36.1.2001.1001.101.103.16524 |

## Definition

| | |
|---|---|
| **Definition** | The dose unit of this amount. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | CodedText |
| **Value Domain** | Dose Unit Reference Set |

## Usage

| | |
|---|---|
| **Examples** | 1. Tablets.<br>2. Capsules.<br>3. Sachets.<br>4. Mg.<br>5. mL. |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Quantity (AMOUNT OF MEDICATION) | 0..1 | |

# 2.59 Dose Unit Reference Set

## Identification

| | |
|---|---|
| **Label** | Dose Unit Reference Set |
| **Metadata Type** | Value Domain |
| **Identifier** | VD-16523 |
| **OID** | 1.2.36.1.2001.1001.101.104.16523 |
| **External Identifier** | SNOMED CT-AU Concept Id: 32570641000036102 |

## Definition

| | |
|---|---|
| **Definition** | The set of values for dose unit. |
| **Definition Source** | NEHTA |
| **Notes** | Values might include: Tablets, Capsules, Sachets, mg, mL. |

## Value Domain

| | |
|---|---|
| **Source** | SNOMED CT-AU |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Dose Unit | 1..1 | |

# 2.60 Quantity Description

## Identification

| | |
|---|---|
| **Label** | Quantity Description |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16525 |
| **OID** | 1.2.36.1.2001.1001.101.103.16525 |

## Definition

| | |
|---|---|
| **Definition** | Free text description of the amount which may consist of the quantity and dose unit. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | Text |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Quantity (AMOUNT OF MEDICATION) | 0..1 | |

# 2.61 Number of Repeats

## Identification

| | |
|---|---|
| **Label** | Number of Repeats |
| **Metadata Type** | Data Element |
| **Identifier** | DE-10169 |
| **OID** | 1.2.36.1.2001.1001.101.103.10169 |

## Definition

| | |
|---|---|
| **Definition** | The number of times the expressed quantity of medicine, vaccine or other therapeutic good may be refilled or redispensed without a new prescription. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | Integer |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | DISPENSING | 0..1 | |

# 2.62 Minimum Interval Between Repeats

## Identification

| | |
|---|---|
| **Label** | Minimum Interval Between Repeats |
| **Metadata Type** | Data Element |
| **Identifier** | DE-10164 |
| **OID** | 1.2.36.1.2001.1001.101.103.10164 |

## Definition

| | |
|---|---|
| **Definition** | The minimum time between repeat dispensing of the medicine, vaccine or therapeutic good. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Context** | For prescriptions and dispense records. |
| **Context Source** | NEHTA |
| **Notes** | This is specified by the ordering clinician for a specific reason such as safety or best practice.<br><br>Where the prescription is for a Schedule 8 medicine and the dispensing of the prescription is authorised to be repeated, the minimum intervals at which it may be dispensed must be written on the prescription by the prescriber.<br><br>The dispensing interval for other scripts is a dispensing issue and is governed by PBS rules. However, there may be other situations where a prescriber may want to limit access – e.g. if there are safety concerns or if the subject of care is taking greater than the prescribed dose. |
| **Data Type** | Duration |

## Usage

| | |
|---|---|
| **Examples** | 1. 20 days |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | DISPENSING | 0..1 | |

# 2.63 Brand Substitution Permitted

## Identification

| | |
|---|---|
| **Label** | Brand Substitution Permitted |
| **Metadata Type** | Data Element |
| **Identifier** | DE-10107 |
| **OID** | 1.2.36.1.2001.1001.101.103.10107 |

## Definition

| | |
|---|---|
| **Definition** | Indicates whether or not the substitution of a prescribed medicine with a different brand name of the same medicine, vaccine or other therapeutic good, which has been determined as bioequivalent, is allowed when the medication is dispensed/supplied. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | Allow substitutions |
| **Notes** | PBS prescriptions must not be prepared using a computer prescribing program that contains a default which would result in all prescriptions being indicated as Brand Substitution Not Permitted [DHA2009a]. |
| **Data Type** | Boolean |

## Usage

| | |
|---|---|
| **Misuse** | Using this data element for therapeutic substitution.<br><br>Using this data element for medical appliances. |
| **Default Value** | "true" |
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | DISPENSING | 0..1 | |

# 2.64 Grounds for Concurrent Supply

## Identification

| | |
|---|---|
| **Label** | Grounds for Concurrent Supply |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16139 |
| **OID** | 1.2.36.1.2001.1001.101.103.16139 |

## Definition

| | |
|---|---|
| **Definition** | Indicates the grounds which authorise a PBS or RPBS subsidy for the concurrent supply of an item specified in a prescription and all of its repeats. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | *Concurrent supply* means supplying an item from a prescription together with all of its repeats at the one time.<br><br>There are different rules for the concurrent supply of prescribed items, depending upon whether they are subsidised by the PBS or the RPBS.<br><br>**For PBS prescriptions** (Regulation 24):<br><br>Generally, a pharmaceutical benefit may not be supplied to the same person more than once in any four clear days (or 20 clear days for items listed in the Schedule with five repeats or more). Under Regulation 24 of the National Health (Pharmaceutical Benefits) Regulations 1960, a prescriber can direct that the original and all repeats of a PBS medicine ordered on a prescription be supplied at the one time, provided that the prescriber is satisfied that all of the following circumstances apply:<br><br>• The maximum quantity or number of units applicable in relation to the pharmaceutical benefit is insufficient for the treatment of the person for whom the prescription is written.<br><br>• The person requires the pharmaceutical benefit for the treatment of a chronic illness or is residing in a place remote from the approved pharmacist nearest to that person's place of residence.<br><br>• The person could not, without great hardship, obtain the required quantity or number of units of the pharmaceutical benefit by means of repeated supplies on separate occasions.<br><br>A PBS prescription must be endorsed by the prescriber with “Regulation 24” as certification that all the above conditions apply.<br><br>An example of where a prescription would need to be endorsed as Regulation 24 for each item would be where a subject of care taking antihypertensive medicine plans to travel overseas and requires the dispensing of the original and repeats at one time.<br><br>**For RPBS prescriptions** (Hardship conditions apply): |

| | |
|---|---|
| | The original and repeat supplies of an item ordered on a prescription may be supplied at the one time if:<br>• the veteran lives a long way from the nearest pharmacy; or<br>• the circumstances of the veteran's condition would impose hardship if separate visits for supply of repeats was required.<br>The words “hardship conditions apply” (or “Regulation 24”) written on the prescription will be sufficient authority for a pharmacist to supply the items and repeats at the one time. |
| **Data Type** | CodedText |
| **Value Domain** | Grounds for Concurrent Supply Values |

# Usage

| | |
|---|---|
| **Conditions of Use** | Only applicable to PBS and RPBS prescriptions. Not applicable to private prescriptions. |
| **Conditions of Use Source** | NEHTA |
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
| | DISPENSING | 0..1 | |

# 2.65 Grounds for Concurrent Supply Values

## Identification

| | |
|---|---|
| **Label** | Grounds for Concurrent Supply Values |
| **Metadata Type** | Value Domain |
| **Identifier** | VD-16085 |
| **OID** | 1.2.36.1.2001.1001.101.104.16085 |

## Definition

| | |
|---|---|
| **Definition** | The set of values of Concurrent Supply Grounds. |
| **Definition Source** | NEHTA |

## Value Domain

| | | |
|---|---|---|
| **Source** | NEHTA | |
| **Permissible Values** | 1, Pursuant to Regulation 24 | Supply is in accord with Regulation 24 of the National Health (Pharmaceutical Benefits) Regulations 1960. |
| | 2, Hardship conditions apply | Supply is in accord with the “Hardship conditions” provision of RPBS prescribing guidelines. |
| | 9, No grounds | There are no grounds for concurrent supply. |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Grounds for Concurrent Supply | 1..1 | |

# 2.66 Dispensing Instructions

## Identification

| | |
|---|---|
| **Label** | Dispensing Instructions |
| **Metadata Type** | Data Element |
| **Identifier** | DE-10165 |
| **OID** | 1.2.36.1.2001.1001.101.103.10165 |

## Definition

| | |
|---|---|
| **Definition** | Additional instructions to the person dispensing the medicine, vaccine or other therapeutic good. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | Information provided by the prescriber to the dispenser in addition to all other Medication data elements relevant to dispensing that provides more detail or guidance about how the medication should be dispensed. |
| **Data Type** | Text |

## Usage

| | |
|---|---|
| **Examples** | 1. Patient has arthritis of the hands, please supply easy-open bottles. |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | DISPENSING | 0..1 | |

# 2.67 Change Type

## Identification

| | |
|---|---|
| **Label** | Change Type |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16593 |
| **OID** | 1.2.36.1.2001.1001.101.103.16593 |

## Definition

| | |
|---|---|
| **Definition** | The way in which this instruction differs from the previous instruction. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | CodedText |
| **Value Domain** | Change Type Values |

## Usage

| | |
|---|---|
| **Examples** | 1. New prescription<br>2. Change of previous<br>3. Cancellation |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | MEDICATION INSTRUCTION | 0..1 | |

# 2.68 Change Type Values

## Identification

| | |
|---|---|
| **Label** | Change Type Values |
| **Metadata Type** | Value Domain |
| **Identifier** | VD-16592 |
| **OID** | 1.2.36.1.2001.1001.101.104.16592 |

## Definition

| | |
|---|---|
| **Definition** | The set of values for the *Change Type*. |
| **Definition Source** | NEHTA |

## Value Domain

| | | |
|---|---|---|
| **Source** | NEHTA | |
| **Permissible Values** | at0041, Unchanged | There is no change to the instruction |
| | at0047, Changed | There is a change to the instruction |
| | at0048, Ceased | The instruction has been ended |
| | at0049, Prescribed | A new prescription has been issued |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Change Type | 1..1 | |

# 2.69 Change Status

## Identification

| | |
|---|---|
| **Label** | Change or Recommendation? |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16595 |
| **OID** | 1.2.36.1.2001.1001.101.103.16595 |

## Definition

| | |
|---|---|
| **Definition** | Identifies whether the change has already been made or is a recomendation which has not been made. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | CodedText |
| **Value Domain** | Change Status Values |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | MEDICATION INSTRUCTION | 0..1 | |

# 2.70 Change Status Values

## Identification

| | |
|---|---|
| **Label** | Change Status Values |
| **Metadata Type** | Value Domain |
| **Identifier** | VD-16626 |
| **OID** | 1.2.36.1.2001.1001.101.104.16626 |

## Definition

| | |
|---|---|
| **Definition** | The set of values for the *Change Status*. |
| **Definition Source** | NEHTA |

## Value Domain

| | | |
|---|---|---|
| **Source** | NEHTA | |
| **Permissible Values** | at0036, Change recommended | The change has not been made, but it is recommended to be made |
| | at0039, Change made | The change has been made |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Change or Recommendation? (Change Status) | 1..1 | |

# 2.71 Change Description

## Identification

| | |
|---|---|
| **Label** | Change Description |
| **Metadata Type** | Data Element |
| **Identifier** | DE-10176 |
| **OID** | 1.2.36.1.2001.1001.101.103.10176 |

## Definition

| | |
|---|---|
| **Definition** | Description of the change in the subject of care's medication item information. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | Text |

## Usage

| | |
|---|---|
| **Examples** | 1. Correction of prescription error.<br>2. Cessation of medication.<br>3. Change of dose.<br>4. Addition of drug.<br>5. Substitution of drug. |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | MEDICATION INSTRUCTION | 0..1 | |

# 2.72 Change or Recommendation Reason

## Identification

| | |
|---|---|
| **Label** | Change Reason |
| **Metadata Type** | Data Element |
| **Identifier** | DE-10177 |
| **OID** | 1.2.36.1.2001.1001.101.103.10177 |

## Definition

| | |
|---|---|
| **Definition** | The justification for the stated change in medication. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | Reason for Alteration<br>Reason for Modification |
| **Notes** | Should be completed if a change has been made. |
| **Data Type** | Text |

## Usage

| | |
|---|---|
| **Examples** | 1. Optimise drug therapy.<br>2. Intolerable side effect of dizziness. |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | MEDICATION INSTRUCTION | 0..1 | |

# 2.73 Indication for Authorised Use

## Identification

| | |
|---|---|
| **Label** | Indication for Authorised Use |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16443 |
| **OID** | 1.2.36.1.2001.1001.101.103.16443 |

## Definition

| | |
|---|---|
| **Definition** | The specific indication for use that is required by an authorising agency to achieve subsidy for or access to the medicine, vaccine or other therapeutic good. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | Authorising agency could be a national medication scheme, insurance company or other funding agency. |
| **Data Type** | Text |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | MEDICATION INSTRUCTION | 0..* | |

# 2.74 Medication Instruction ID

## Identification

| | |
|---|---|
| **Label** | Medication Instruction ID |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16444 |
| **OID** | 1.2.36.1.2001.1001.101.103.16444 |

## Definition

| | |
|---|---|
| **Definition** | An identifier used in an external system and associated with this medication instruction. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | UniqueIdentifier |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | MEDICATION INSTRUCTION | 0..* | |

# 2.75 Concession Benefit

## Identification

| | |
|---|---|
| **Label** | Concession Benefit |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16095 |
| **OID** | 1.2.36.1.2001.1001.101.103.16095 |

## Definition

| | |
|---|---|
| **Definition** | Indicates the category of subsidy appropriate to the item being prescribed. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Context** | Applicable to prescriptions. |
| **Context Source** | NEHTA |
| **Notes** | This indicates whether the item has been prescribed for a use which attracts a subsidy.<br><br>Not to be confused with Claim Category. |
| **Data Type** | CodeableText |
| **Value Domain** | Therapeutic Good Benefit Category Reference Set |

## Usage

| | |
|---|---|
| **Examples** | 1. Eligible for PBS subsidy<br><br>2. Eligible for Closing the Gap - PBS Co-Payment Measure subsidy<br><br>3. Not eligible for a pharmaceutical subsidy |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | MEDICATION INSTRUCTION | 0..1 | |

# 2.76 Therapeutic Good Benefit Category Reference Set

## Identification

| | |
|---|---|
| **Label** | Therapeutic Good Benefit Category Reference Set |
| **Metadata Type** | Value Domain |
| **Identifier** | VD-16095 |
| **OID** | 1.2.36.1.2001.1001.101.104.16095 |
| **External Identifier** | SNOMED CT-AU Concept Id: 32570811000036104 |

## Definition

| | |
|---|---|
| **Definition** | The set of values of Concession Benefit. |
| **Definition Source** | NEHTA |

## Value Domain

| | |
|---|---|
| **Source** | SNOMED CT-AU |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Concession Benefit | 1..1 | |

# 2.77 INFORMATION PROVIDER

## Identification

| | |
|---|---|
| **Label** | INFORMATION PROVIDER |
| **Metadata Type** | Data Group |
| **Identifier** | DG-10296 |
| **OID** | 1.2.36.1.2001.1001.101.102.10296 |

## Definition

| | |
|---|---|
| **Definition** | Details pertinent to the identification of the source of the information about medication instruction. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | This does not necessarily have to be a person and, in particular, not a healthcare provider. Types of sources include:<br>• the patient;<br>• a patient agent, e.g. parent, guardian;<br>• the clinician; and<br>• a device or software |

## Usage

| | |
|---|---|
| **Conditions of Use** | This **SHALL NOT** be used unless the provider of the information is not the *Composer/Author* of the enclosing Structured Document.<br>This is a reuse of the PARTICIPATION data group, which is described in Participation Data Specification [NEHT2011v].<br>The following constraints are additional to those specified in Participation Data Specification [NEHT2011v]. Constraints are explained in *Appendix B*.<br>• Participation Type **SHALL** have a fixed value of “Information Provider”.<br>• PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a PERSON or as a DEVICE. |
| **Conditions of Use Source** | NEHTA |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | MEDICATION INSTRUCTION | 0..1 | |

# 2.78 SUBJECT

## Identification

| | |
|---|---|
| **Label** | SUBJECT |
| **Metadata Type** | Data Group |
| **Identifier** | DG-10296 |
| **OID** | 1.2.36.1.2001.1001.101.102.10296 |

## Definition

| | |
|---|---|
| **Definition** | The individual about whom the information about medication instruction is being recorded. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Scope** | Generally only used when the recorder needs to make it explicit. Otherwise, subject of the enclosing Structured Document is assumed. |
| **Scope Source** | NEHTA |

## Usage

| | |
|---|---|
| **Conditions of Use** | This **SHALL NOT** be used unless the subject of the information is not the *Subject of Care* of the enclosing Structured Document.<br><br>This is a reuse of the PARTICIPATION data group, which is described in Participation Data Specification [NEHT2011v].<br><br>The following constraints are additional to those specified in Participation Data Specification [NEHT2011v]. Constraints are explained in *Appendix B*.<br><br>• Participation Type **SHALL** have a fixed value of “Subject”.<br><br>• PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a PERSON. |
| **Conditions of Use Source** | NEHTA |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | MEDICATION INSTRUCTION | 0..1 | |

# 2.79 Medication Instruction Narrative

## Identification

| | |
|---|---|
| **Label** | Medication Instruction Narrative |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16596 |
| **OID** | 1.2.36.1.2001.1001.101.103.16596 |

## Definition

| | |
|---|---|
| **Definition** | A textual narrative describing what the Medication Instruction is about. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | Text |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | MEDICATION INSTRUCTION | 0..1 | |

# 2.80 DateTime Medication Instruction Expires

## Identification

| | |
|---|---|
| **Label** | DateTime Medication Instruction Expires |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16597 |
| **OID** | 1.2.36.1.2001.1001.101.103.16597 |

## Definition

| | |
|---|---|
| **Definition** | The date and, optionally, time after which the Medication Instruction is no longer effective or in force. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | DateTime |

## Usage

| | |
|---|---|
| **Examples** | |

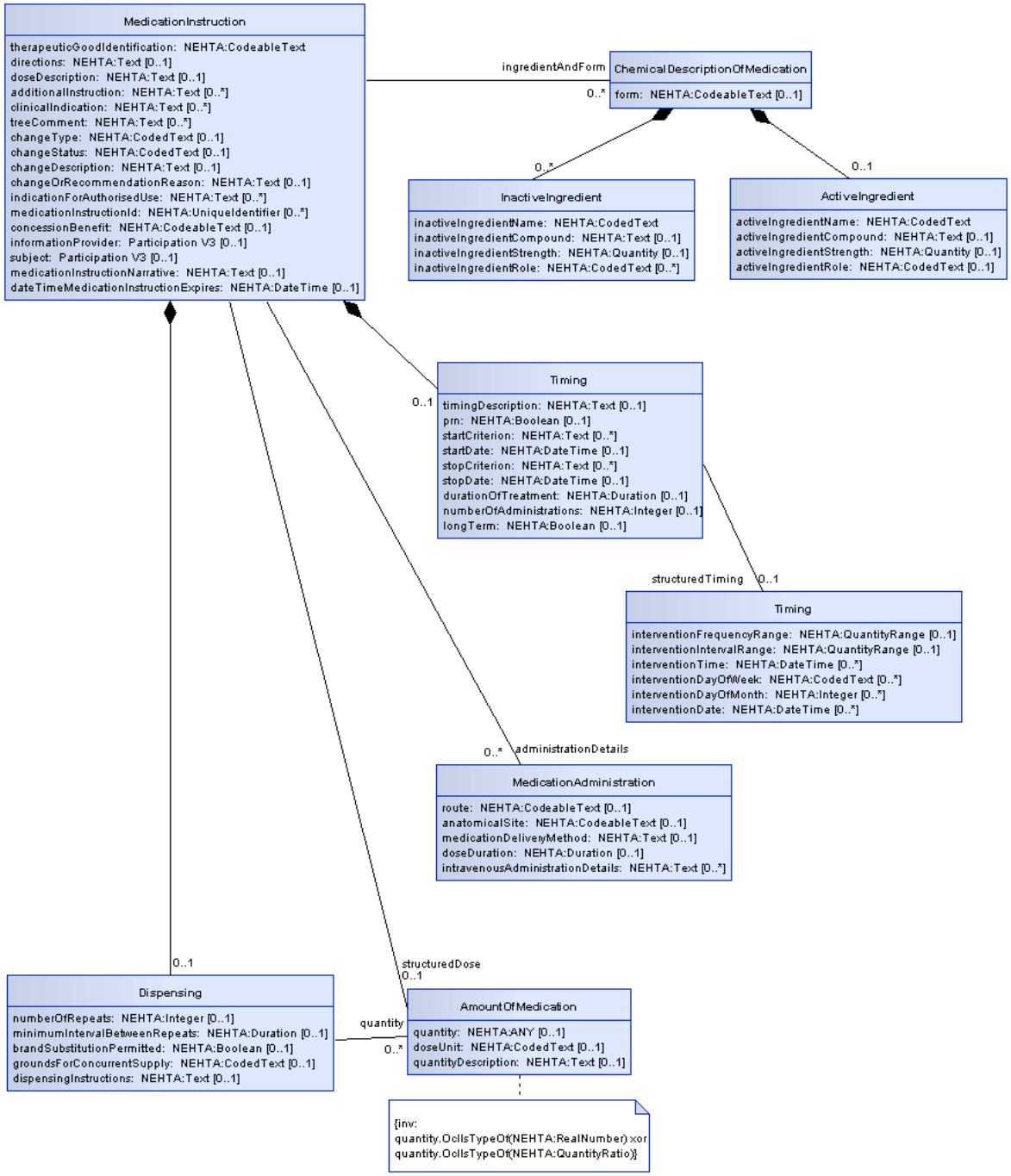
# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | MEDICATION INSTRUCTION | 0..1 | |

# 3 UML Diagram

The following figure presents the data hierarchy using a UML 2.0 class diagram. The diagram displays data groups and data elements, together with their names, data types and multiplicities. Data elements are displayed as attributes. Data groups are displayed as classes, their names are represented as association role names. Association role names are only displayed if they differ from the associated class name. The diagram shows the data hierarchy excluding the details of participation. The default multiplicity is 1..1.



# 4 Medication Action Data Group

## 4.1 Purpose

The recording of activities undertaken with regard to a medicine, vaccine or other therapeutic good and linking to the instruction if appropriate.

## 4.2 Use

For recording the planning, issuing of a prescription, dispensing, administration, cessation, suspension, completion of a medicine, vaccine or other therapeutic good . This will usually be in response to a medication order but may be administered immediately without an order at times, thus requiring recording of the administration alone (e.g. in an emergency situation). Such a record may be made to indicate the administration of a dose, dispensing of a certain quantity or as a record of ceasing a medication. The state of the medication instruction is altered by the action taken as indicated in the Pathway definition.

There is a date and time at which this action took place (as there is for all actions) and use of this DCM indicates that some action has actually occurred.

## 4.3 Misuse

Use when recording an instruction or order (use Medication Instruction DCM).

# 4.4 MEDICATION ACTION

## Identification

| | |
|---|---|
| **Label** | MEDICATION ACTION |
| **Metadata Type** | Data Group |
| **Identifier** | DG-16210 |
| **OID** | 1.2.36.1.2001.1001.101.102.16210 |

## Definition

| | |
|---|---|
| **Definition** | Details of use, administration, dispensing or other care step relating to a medicine, vaccine or other therapeutic good which may arise from an instruction from a clinician. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | Medication Item<br>Prescribed Item Detail |
| **Scope** | The specification of each constituent data element is the same whether it is being used in the context of prescribed, dispensed, administered or reviewed. There may be seperate data instances for each of these contexts. |
| **Scope Source** | NEHTA |
| **Notes** | It is intended to enable correct dispensing of the item to the subject of care.<br><br>Details of the item include a description, duration and quantity of the medication and the dosage which should be administered. |

## Usage

| | |
|---|---|
| **Conditions of Use** | This is a reuse of the ITEM DETAIL data group.<br><br>On this reuse, the following constraints apply:<br><br>• Item Status: Occurrence changes from Single to Zero<br><br>• Reason for Medication: Occurrence changes from Single to Zero<br><br>• Delivery Compliance Aid Description: Occurrence changes from Single to Zero<br><br>• Cautionary Advice: Occurrence changes from Single to Zero<br><br>• QUANTITY OF MEDICATION DETAIL: Occurrence changes from Single to Zero<br><br>• CHANGE DETAIL: Occurrence changes from Single to Zero<br><br>• MEDICATION ITEM AUTHORISER: Occurrence changes from Single to Zero<br><br>• Additional Comments: Occurrence changes from Single to Zero |

| | |
|---|---|
| **Conditions of Use Source** | NEHTA |

# Data Hierarchy

| | | | | | |
|---|---|---|---|---|---|
| | MEDICATION ACTION | | | | |
| | Medicine (Therapeutic Good Identification) | | | | 1..1 |
| | Instructions to Subject of Care or Carer (Medication Action Instructions) | | | | 0..* |
| | Ingredients and Form (CHEMICAL DESCRIPTION OF MEDICATION) | | | | 0..* |
| | | ACTIVE INGREDIENT | | | 0..1 |
| | | | Name (Active Ingredient Name) | | 1..1 |
| | | | Compound (Active Ingredient Compound) | | 0..1 |
| | | | Strength (Active Ingredient Strength) | | 0..1 |
| | | | Role (Active Ingredient Role) | | 0..1 |
| | | Form | | | 0..1 |
| | | INACTIVE INGREDIENT | | | 0..* |
| | | | Name (Inactive Ingredient Name) | | 1..1 |
| | | | Compound (Inactive Ingredient Compound) | | 0..1 |
| | | | Strength (Inactive Ingredient Strength) | | 0..1 |
| | | | Role (Inactive Ingredient Role) | | 0..* |
| | Reason (Reason for Action) | | | | 0..* |
| | Quantity of Medication (QUANTITY OF MEDICATION) | | | | 0..1 |
| | | Quantity | | | 0..1 |
| | | Dose Unit | | | 0..1 |
| | | Quantity Description | | | 0..1 |

| | | | | |
|---|---|---|---|---|
| | | Comment | | 0..1 |
| | | Sequence Number | | 0..1 |
| | | Administration (MEDICATION ADMINISTRATION) | | 0..* |
| | | | Route | 0..1 |
| | | | Site (Anatomical Site) | 0..1 |
| | | | Delivery Method (Medication Delivery Method) | 0..1 |
| | | | Dose Duration | 0..1 |
| | | | Intravenous Details (Intravenous Administration Details) | 0..* |
| | | Brand Substituted (Brand Substitution Occurred) | | 0..1 |
| | | Batchid (Batch Identifier) | | 0..1 |
| | | Date of Expiry (Expiry Date) | | 0..1 |
| | | DISPENSED TO | | 0..1 |
| | | Number of Times Dispensed | | 0..1 |
| | | Remaining Repeats | | 0..1 |
| | | Claim Category | | 0..1 |
| | | INFORMATION PROVIDER | | 0..1 |
| | | SUBJECT | | 0..1 |
| | | Medication Action DateTime | | 1..1 |

# 4.5 Therapeutic Good Identification

## Identification

| | |
|---|---|
| **Label** | Medicine |
| **Metadata Type** | Data Element |
| **Identifier** | DE-10194 |
| **OID** | 1.2.36.1.2001.1001.101.103.10194 |

## Definition

| | |
|---|---|
| **Definition** | The medicine, vaccine or other therapeutic good which was the focus of the action. |
| **Definition Source** | Therapeutic Goods Administration |
| **Synonymous Names** | Item Name |
| **Context** | This includes medications and medical devices. It includes drugs, appliances, dressings and reagents. |
| **Context Source** | NEHTA |
| **Notes** | Identifies a therapeutic good, which is broadly defined as a good which is represented in any way to be, or is likely to be taken to be, for therapeutic use (unless specifically excluded or included under Section 7 of the Therapeutic Goods Act 1989).<br><br>Therapeutic use means use in or in connection with:<br><br>• preventing, diagnosing, curing or alleviating a disease, ailment, defect or injury;<br><br>• influencing, inhibiting or modifying a physiological process;<br><br>• testing the susceptibility of persons to a disease or ailment;<br><br>• influencing, controlling or preventing conception;<br><br>• testing for pregnancy; or<br><br>• replacement or modification of parts of the anatomy.<br><br>From [TGA1989a].<br><br>The formal definition of a therapeutic good (from the Therapeutic Goods Act 1989) can be found at: [TGA1989a]. |
| **Data Type** | CodeableText |
| **Value Domain** | Medicines Terminology |

## Usage

| | |
|---|---|
| **Conditions of Use** | Where the therapeutic good can be identified by an AMT (Australian Medicines Terminology) concept, this **SHALL** be the AMT ConceptID and Preferred Term. For details see Medicines Terminology. |

| | |
|---|---|
| | For items without an AMT code (including some extemporaneous preparations), a text description is suitable. For a medication this **SHALL** include the name of the medication (brand name or generic name equivalent), strength and dose form, where appropriate. |
| **Conditions of Use Source** | NEHTA |
| **Examples** | Some examples of AMT ConceptID and their AMT Preferred Term are:<br>1. 293049011000036110, paracetamol 500 mg + codeine phosphate 30 mg tablet<br>2. 327004011000036118, paracetamol 500 mg + codeine phosphate 30 mg tablet, 20<br>3. 234184011000036115, Panadeine Forte tablet: uncoated, 20 tablets<br>4. 192727011000036112, Panadeine Forte (paracetamol 500 mg + codeine phosphate 30 mg) tablet: uncoated, 1 tablet<br>5. 278453011000036118, Panadeine Forte tablet: uncoated, 20 tablets, blister pack<br>6. 315236011000036113, bandage compression 10 cm x 3.5 m bandage: high stretch, 1 bandage<br>7. 186324011000036116, Eloflex (2480) (bandage compression 10 cm x 3.5 m) bandage: high stretch, 1 bandage |
| **Misuse** | Detailing the formula of a compounded (extemporaneous) medication. |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | MEDICATION ACTION | 1..1 | |

# 4.6 Medicines Terminology

## Identification

| | |
|---|---|
| **Label** | Medicines Terminology |
| **Metadata Type** | Value Domain |
| **Identifier** | VD-16115 |
| **OID** | 1.2.36.1.2001.1001.101.104.16115 |

## Definition

| | |
|---|---|
| **Definition** | A set of values used to refer to medicines and other therapeutic goods. |
| **Definition Source** | NEHTA |
| **Notes** | An explanation of AMT concepts can be found in Australian Medicines Terminology Editorial Rules [NEHT2009r].<br><br>Prescribing and dispensing use different sets of values. |

## Value Domain

| | |
|---|---|
| **Source** | Australian Medicines Terminology |
| **Permissible Values** | The permissible values are the members of the following 7 AMT reference sets:<br>• \|929360061000036106 *Medicinal product reference set*\|<br>• \|929360081000036101 *Medicinal product pack reference set*\|<br>• \|929360071000036103 *Medicinal product unit of use reference set*\|<br>• \|929360021000036102 *Trade product reference set*\|<br>• \|929360041000036105 *Trade product pack reference set*\|<br>• \|929360031000036100 *Trade product unit of use reference set*\|<br>• \|929360051000036108 *Containered trade product pack reference set*\|<br><br>Different reference sets are allowed in the differing contexts of prescribing, dispensing and administering and are listed below.<br><br>Prescribing:<br>• \|929360081000036101 *Medicinal product pack reference set*\|<br>• \|929360071000036103 *Medicinal product unit of use reference set*\|<br>• \|929360041000036105 *Trade product pack reference set*\|<br>• \|929360031000036100 *Trade product unit of use reference set*\|<br>• \|929360051000036108 *Containered trade product pack reference set*\| |

Dispensing:

- |929360041000036105 *Trade product pack reference set*|
- |929360031000036100 *Trade product unit of use reference set*|
- |929360051000036108 *Containered trade product pack reference set*|

Administering:

- |929360031000036100 *Trade product unit of use reference set*|

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Medicine (Therapeutic Good Identification) | 1..1 | |

# 4.7 Medication Action Instructions

## Identification

| | |
|---|---|
| **Label** | Instructions to Subject of Care or Carer |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16491 |
| **OID** | 1.2.36.1.2001.1001.101.103.16491 |

## Definition

| | |
|---|---|
| **Definition** | Any instructions given to the subject of care or carer at the time of the action. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | Text |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | MEDICATION ACTION | 0..* | |

# 4.8 CHEMICAL DESCRIPTION OF MEDICATION

## Identification

| | |
|---|---|
| **Label** | Ingredients and Form |
| **Metadata Type** | Data Group |
| **Identifier** | DG-16408 |
| **OID** | 1.2.36.1.2001.1001.101.102.16408 |

## Definition

| | |
|---|---|
| **Definition** | Detailed information about the ingredient(s) including form and strength. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
| | MEDICATION ACTION | 0..* | |

**Children**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
| | ACTIVE INGREDIENT | 0..1 | |
| | Form | 0..1 | |
| | INACTIVE INGREDIENT | 0..* | |

# 4.9 ACTIVE INGREDIENT

## Identification

| | |
|---|---|
| **Label** | ACTIVE INGREDIENT |
| **Metadata Type** | Data Group |
| **Identifier** | DG-30143 |
| **OID** | 1.2.36.1.2001.1001.101.102.30143 |

## Definition

| | |
|---|---|
| **Definition** | Information about an ingredient that is active. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | Active pharmaceutical ingredient<br>active pharmaceutical constituent. |
| **Notes** | The substance in the medication formulation that is pharmaceutically active and is responsible for the medication's therapeutic effect defined by its identifying name and the strength per dose unit. |

# Relationships

### Parents

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
| | Ingredients and Form (CHEMICAL DESCRIPTION OF MEDICATION) | 0..1 | |

### Children

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
| | Name (Active Ingredient Name) | 1..1 | |
| | Compound (Active Ingredient Compound) | 0..1 | |
| | Strength (Active Ingredient Strength) | 0..1 | |
| | Role (Active Ingredient Role) | 0..1 | |

# 4.10 Active Ingredient Name

## Identification

| | |
|---|---|
| **Label** | Name |
| **Metadata Type** | Data Element |
| **Identifier** | DE-10195 |
| **OID** | 1.2.36.1.2001.1001.101.103.10195 |

## Definition

| | |
|---|---|
| **Definition** | The name of the chemical or medication. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | The identifying name of the active ingredient in the formulated medication. |
| **Data Type** | CodedText |
| **Value Domain** | *Not specified.*<br><br>In the absence of national standard code sets, the code sets used **SHALL** be registered code sets, i.e. registered through the *HL7 code set registration procedure*[1] with an appropriate object identifier (OID), and **SHALL** be publicly available.<br><br>When national standard code sets become available, they **SHALL** be used and the non-standard code sets **SHALL** be deprecated. |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | ACTIVE INGREDIENT | 1..1 | |

[1] http://www.hl7.org/oid/index.cfm

# 4.11 Active Ingredient Compound

## Identification

| | |
|---|---|
| **Label** | Compound |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16409 |
| **OID** | 1.2.36.1.2001.1001.101.103.16409 |

## Definition

| | |
|---|---|
| **Definition** | The detailed chemical name of the compound that is an active ingredient. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | Text |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | ACTIVE INGREDIENT | 0..1 | |

# 4.12 Active Ingredient Strength

## Identification

| | |
|---|---|
| **Label** | Strength |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16410 |
| **OID** | 1.2.36.1.2001.1001.101.103.16410 |

## Definition

| | |
|---|---|
| **Definition** | The amount or concentration of this ingredient. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | Quantity |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | ACTIVE INGREDIENT | 0..1 | |

# 4.13 Active Ingredient Role

## Identification

| | |
|---|---|
| **Label** | Role |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16412 |
| **OID** | 1.2.36.1.2001.1001.101.103.16412 |

## Definition

| | |
|---|---|
| **Definition** | The role of the ingredient. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | CodedText |
| **Value Domain** | *Not specified.*<br><br>In the absence of national standard code sets, the code sets used **SHALL** be registered code sets, i.e. registered through the *HL7 code set registration procedure*[2] with an appropriate object identifier (OID), and **SHALL** be publicly available.<br><br>When national standard code sets become available, they **SHALL** be used and the non-standard code sets **SHALL** be deprecated. |

## Usage

| | |
|---|---|
| **Examples** | 1. "Therapeutic". The chemical has a known and desired effect which is positive.<br><br>2. "Toxic". This chemical is toxic and has no therapeutic effect.<br><br>3. "Adjuvant". The chemical is active but aids the therapeutic effect of another ingredient. |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | ACTIVE INGREDIENT | 0..1 | |

[2] http://www.hl7.org/oid/index.cfm

# 4.14 Form

## Identification

| | |
|---|---|
| **Label** | Form |
| **Metadata Type** | Data Element |
| **Identifier** | DE-10186 |
| **OID** | 1.2.36.1.2001.1001.101.103.10186 |

## Definition

| | |
|---|---|
| **Definition** | The formulation or presentation of the overall substance. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | manufactured form<br>dose form |
| **Data Type** | CodeableText |
| **Value Domain** | Medication Form Reference Set |

## Usage

| | |
|---|---|
| **Conditions of Use** | The *Form* is used to specify a characteristic of a product as it is manufactured or formulated for dispensing. The form that the medication takes when actually administered may vary somewhat from the manufactured form. Tablets may be soluble. Such tablets may or may not be actually disolved into a solution prior to administration. Similarly with powders and liquids. If it is critical for the care of the patient to differentiate the manufactured form from the administered form, then this should be done via correct labelling and patient instructions. See *Subject of Care Instructions* and *Cautionary Advice*. |
| **Conditions of Use Source** | NEHTA |
| **Examples** | 1. Tablet.<br>2. Capsule.<br>3. Oral Drops.<br>4. Effervescent powder. |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Ingredients and Form (CHEMICAL DESCRIPTION OF MEDICATION) | 0..1 | |

# 4.15 Medication Form Reference Set

## Identification

| | |
|---|---|
| **Label** | Medication Form Reference Set |
| **Metadata Type** | Value Domain |
| **Identifier** | VD-16618 |
| **OID** | 1.2.36.1.2001.1001.101.104.16618 |
| **External Identifier** | SNOMED CT-AU Concept Id: 32570621000036105 |

## Definition

| | |
|---|---|
| **Definition** | The set of values for the medication form. |
| **Definition Source** | NEHTA |

## Value Domain

| | |
|---|---|
| **Source** | SNOMED CT-AU |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Form | 1..1 | |

# 4.16 INACTIVE INGREDIENT

## Identification

| | |
|---|---|
| **Label** | INACTIVE INGREDIENT |
| **Metadata Type** | Data Group |
| **Identifier** | DG-16413 |
| **OID** | 1.2.36.1.2001.1001.101.102.16413 |

## Definition

| | |
|---|---|
| **Definition** | Ingredients in the substance that are not active. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
| | Ingredients and Form (CHEMICAL DESCRIPTION OF MEDICATION) | 0..* | |

**Children**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
| | Name (Inactive Ingredient Name) | 1..1 | |
| | Compound (Inactive Ingredient Compound) | 0..1 | |
| | Strength (Inactive Ingredient Strength) | 0..1 | |
| | Role (Inactive Ingredient Role) | 0..* | |

# 4.17 Inactive Ingredient Name

## Identification

| | |
|---|---|
| **Label** | Name |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16415 |
| **OID** | 1.2.36.1.2001.1001.101.103.16415 |

## Definition

| | |
|---|---|
| **Definition** | The name of the inactive substance. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | CodedText |
| **Value Domain** | *Not specified.*<br><br>In the absence of national standard code sets, the code sets used **SHALL** be registered code sets, i.e. registered through the *HL7 code set registration procedure*[3] with an appropriate object identifier (OID), and **SHALL** be publicly available.<br><br>When national standard code sets become available, they **SHALL** be used and the non-standard code sets **SHALL** be deprecated. |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | INACTIVE INGREDIENT | 1..1 | |

[3] http://www.hl7.org/oid/index.cfm

# 4.18 Inactive Ingredient Compound

## Identification

| | |
|---|---|
| **Label** | Compound |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16416 |
| **OID** | 1.2.36.1.2001.1001.101.103.16416 |

## Definition

| | |
|---|---|
| **Definition** | The detailed chemical name of the compound which is an inactive ingredient. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | Text |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | INACTIVE INGREDIENT | 0..1 | |

# 4.19 Inactive Ingredient Strength

## Identification

| | |
|---|---|
| **Label** | Strength |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16417 |
| **OID** | 1.2.36.1.2001.1001.101.103.16417 |

## Definition

| | |
|---|---|
| **Definition** | The amount or concentration of this ingredient. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | Quantity |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | INACTIVE INGREDIENT | 0..1 | |

# 4.20 Inactive Ingredient Role

## Identification

| | |
|---|---|
| **Label** | Role |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16419 |
| **OID** | 1.2.36.1.2001.1001.101.103.16419 |

## Definition

| | |
|---|---|
| **Definition** | The role of the ingredient. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | CodedText |
| **Value Domain** | *Not specified.*<br><br>In the absence of national standard code sets, the code sets used **SHALL** be registered code sets, i.e. registered through the *HL7 code set registration procedure*[4] with an appropriate object identifier (OID), and **SHALL** be publicly available.<br><br>When national standard code sets become available, they **SHALL** be used and the non-standard code sets **SHALL** be deprecated. |

## Usage

| | |
|---|---|
| **Examples** | 1. "Additive". Inert additive.<br><br>2. "Dilutant". Inert dilutant.<br><br>3. "Propellent". Inert propellent.<br><br>4. "Preservative". The ingredient is present to prolong the life of the substance.<br><br>5. "Colouring". The ingredient is used to colour the substance. |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
| | INACTIVE INGREDIENT | 0..* | |

[4] http://www.hl7.org/oid/index.cfm

# 4.21 Reason for Action

## Identification

| | |
|---|---|
| **Label** | Reason |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16492 |
| **OID** | 1.2.36.1.2001.1001.101.103.16492 |

## Definition

| | |
|---|---|
| **Definition** | The reason(s) the specific action or step was carried out. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | This is not the reason for the medication instruction, rather the specific reason e.g. for administration or for ceasing the medication. |
| **Data Type** | Text |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | MEDICATION ACTION | 0..* | |

# 4.22 QUANTITY OF MEDICATION

## Identification

| | |
|---|---|
| **Label** | Quantity of Medication |
| **Metadata Type** | Data Group |
| **Identifier** | DG-16423 |
| **OID** | 1.2.36.1.2001.1001.101.102.16423 |

## Definition

| | |
|---|---|
| **Definition** | The quantity of medicine, vaccine or other therapeutic good. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
| | MEDICATION ACTION | 0..1 | |

**Children**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
| | Quantity | 0..1 | |
| | Dose Unit | 0..1 | |
| | Quantity Description | 0..1 | |

# 4.23 Quantity

## Identification

| | |
|---|---|
| **Label** | Quantity |
| **Metadata Type** | Data Element |
| **Identifier** | DE-10145 |
| **OID** | 1.2.36.1.2001.1001.101.103.10145 |

## Definition

| | |
|---|---|
| **Definition** | The quantity, number or proportion. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | The number of doses and/or physical amount of the therapeutic good. |
| **Data Type** | Real<br>QuantityRatio |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Quantity of Medication (QUANTITY OF MEDICATION) | 0..1 | |

# 4.24 Dose Unit

## Identification

| | |
|---|---|
| **Label** | Dose Unit |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16524 |
| **OID** | 1.2.36.1.2001.1001.101.103.16524 |

## Definition

| | |
|---|---|
| **Definition** | The dose unit of this amount. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | CodedText |
| **Value Domain** | Dose Unit Reference Set |

## Usage

| | |
|---|---|
| **Examples** | 1. Tablets.<br>2. Capsules.<br>3. Sachets.<br>4. Mg.<br>5. mL. |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Quantity of Medication (QUANTITY OF MEDICATION) | 0..1 | |

# 4.25 Dose Unit Reference Set

## Identification

| | |
|---|---|
| **Label** | Dose Unit Reference Set |
| **Metadata Type** | Value Domain |
| **Identifier** | VD-16523 |
| **OID** | 1.2.36.1.2001.1001.101.104.16523 |
| **External Identifier** | SNOMED CT-AU Concept Id: 32570641000036102 |

## Definition

| | |
|---|---|
| **Definition** | The set of values for dose unit. |
| **Definition Source** | NEHTA |
| **Notes** | Values might include: Tablets, Capsules, Sachets, mg, mL. |

## Value Domain

| | |
|---|---|
| **Source** | SNOMED CT-AU |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Dose Unit | 1..1 | |

# 4.26 Quantity Description

## Identification

| | |
|---|---|
| **Label** | Quantity Description |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16525 |
| **OID** | 1.2.36.1.2001.1001.101.103.16525 |

## Definition

| | |
|---|---|
| **Definition** | Free text description of the amount which may consist of the quantity and dose unit. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | Text |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Quantity of Medication (QUANTITY OF MEDICATION) | 0..1 | |

# 4.27 Comment

## Identification

| | |
|---|---|
| **Label** | Comment |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16181 |
| **OID** | 1.2.36.1.2001.1001.101.103.16181 |

## Definition

| | |
|---|---|
| **Definition** | A comment on the action taken. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | Text |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | MEDICATION ACTION | 0..1 | |

# 4.28 Sequence Number

## Identification

| | |
|---|---|
| **Label** | Sequence Number |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16424 |
| **OID** | 1.2.36.1.2001.1001.101.103.16424 |

## Definition

| | |
|---|---|
| **Definition** | The sequence number specific to the action being recorded. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | Used to specify the sequence number of the dispensing (in prescription with repeats) or medication administration action. |
| **Data Type** | Integer |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | MEDICATION ACTION | 0..1 | |

# 4.29 MEDICATION ADMINISTRATION

## Identification

| | |
|---|---|
| **Label** | Administration |
| **Metadata Type** | Data Group |
| **Identifier** | DG-10108 |
| **OID** | 1.2.36.1.2001.1001.101.102.10108 |

## Definition

| | |
|---|---|
| **Definition** | Details about the administration of the medicine, vaccine or other therapeutic good. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |

## Usage

| | |
|---|---|
| **Conditions of Use** | This data group is repeated for every instance of medication administration being recorded. |
| **Conditions of Use Source** | NEHTA |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | MEDICATION ACTION | 0..* | |

**Children**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Route | 0..1 | |
|  | Site (Anatomical Site) | 0..1 | |
|  | Delivery Method (Medication Delivery Method) | 0..1 | |
|  | Dose Duration | 0..1 | |
|  | Intravenous Details (Intravenous Administration Details) | 0..* | |

# 4.30 Route

## Identification

| | |
|---|---|
| **Label** | Route |
| **Metadata Type** | Data Element |
| **Identifier** | DE-10147 |
| **OID** | 1.2.36.1.2001.1001.101.103.10147 |

## Definition

| | |
|---|---|
| **Definition** | The route by which the medication is administered. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | Route of administration. |
| **Notes** | It is used to describe the route by which the substance/agent is entered into the patient's body. This includes the route of medication administration. |
| **Data Type** | CodeableText |
| **Value Domain** | Route of Administration Reference Set |

## Usage

| | |
|---|---|
| **Conditions of Use** | Use "Unknown" only for retrospective data collection. |
| **Conditions of Use Source** | NEHTA |
| **Examples** | 1. Oral.<br>2. Subcutaneous injection.<br>3. Epidural.<br>4. Rectal.<br>5. Otic. |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Administration (MEDICATION ADMINISTRATION) | 0..1 | |

# 4.31 Route of Administration Reference Set

## Identification

| | |
|---|---|
| **Label** | Route of Administration Reference Set |
| **Metadata Type** | Value Domain |
| **Identifier** | VD-10147 |
| **OID** | 1.2.36.1.2001.1001.101.104.10147 |
| **External Identifier** | SNOMED CT-AU Concept Id: 32570601000036100 |

## Definition

| | |
|---|---|
| **Definition** | A list of all possible routes of administration of medication. |
| **Definition Source** | NEHTA |
| **Notes** | Set of allowable values to describe the way through which a medication is administered to/by the subject of care. |

## Value Domain

| | |
|---|---|
| **Source** | SNOMED CT-AU |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Route | 1..1 | |

# 4.32 Anatomical Site

## Identification

| | |
|---|---|
| **Label** | Site |
| **Metadata Type** | Data Element |
| **Identifier** | DE-10156 |
| **OID** | 1.2.36.1.2001.1001.101.103.10156 |

## Definition

| | |
|---|---|
| **Definition** | A description of the site of administration. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | Location on or in the body of the subject of care where the substance/agent entered the body or therapeutic good was administered. |
| **Data Type** | CodeableText |
| **Value Domain** | Body Structure Foundation Reference Set |

## Usage

| | |
|---|---|
| **Examples** | 1. Left thigh<br>2. Upper arm<br>3. Entire left renal artery |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Administration (MEDICATION ADMINISTRATION) | 0..1 | |

# 4.33 Body Structure Foundation Reference Set

## Identification

| | |
|---|---|
| **Label** | Body Structure Foundation Reference Set |
| **Metadata Type** | Value Domain |
| **Identifier** | VD-16152 |
| **OID** | 1.2.36.1.2001.1001.101.104.16152 |
| **External Identifier** | SNOMED CT-AU Concept Id: 32570061000036105 |

## Definition

| | |
|---|---|
| **Definition** | The set of values for named anatomical locations. |
| **Definition Source** | NEHTA |

## Value Domain

| | |
|---|---|
| **Source** | SNOMED CT-AU |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Site (Anatomical Site) | 1..1 | |

# 4.34 Medication Delivery Method

## Identification

| | |
|---|---|
| **Label** | Delivery Method |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16470 |
| **OID** | 1.2.36.1.2001.1001.101.103.16470 |

## Definition

| | |
|---|---|
| **Definition** | The method of delivery if this should be specified. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | Text |

## Usage

| | |
|---|---|
| **Examples** | 1. Delivery via neubliser or spacer<br>2. Delivery via syringe pump |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Administration (MEDICATION ADMINISTRATION) | 0..1 | |

# 4.35 Dose Duration

## Identification

| | |
|---|---|
| **Label** | Dose Duration |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16471 |
| **OID** | 1.2.36.1.2001.1001.101.103.16471 |

## Definition

| | |
|---|---|
| **Definition** | The length of time over which to administer each dose. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | Duration |

## Usage

| | |
|---|---|
| **Examples** | 1. An intravenous administration may have to be over a period of 5 minutes |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Administration (MEDICATION ADMINISTRATION) | 0..1 | |

# 4.36 Intravenous Administration Details

## Identification

| | |
|---|---|
| **Label** | Intravenous Details |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16472 |
| **OID** | 1.2.36.1.2001.1001.101.102.16472 |

## Definition

| | |
|---|---|
| **Definition** | Details of intravenous administration. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | This free text data element is currently a placeholder for further structured data that is as yet undefined. See Appendix A, *Known Issues* for further information. |
| **Data Type** | Text |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
| | Administration (MEDICATION ADMINISTRATION) | 0..* | |

# 4.37 Brand Substitution Occurred

## Identification

| | |
|---|---|
| **Label** | Brand Substituted |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16064 |
| **OID** | 1.2.36.1.2001.1001.101.103.16064 |

## Definition

| | |
|---|---|
| **Definition** | A different brand of the same medicine, vaccine or other therapeutic good was substituted for the one nominated in the order. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Context** | For dispense records for medicines. |
| **Context Source** | NEHTA |
| **Data Type** | Boolean |

## Usage

| | |
|---|---|
| **Examples** | See: Appendix B, *Specification Guide for Use*. |
| **Misuse** | Using this data element for therapeutic substitution.<br><br>Using this data element for medical appliances. |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | MEDICATION ACTION | 0..1 | |

# 4.38 Batch Identifier

## Identification

| | |
|---|---|
| **Label** | Batchid |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16273 |
| **OID** | 1.2.36.1.2001.1001.101.103.16273 |

## Definition

| | |
|---|---|
| **Definition** | Assigned by the manufacturer to identify the manufacturing batch of the item. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | Text |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | MEDICATION ACTION | 0..1 | |

# 4.39 Expiry Date

## Identification

| | |
|---|---|
| **Label** | Date of Expiry |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16425 |
| **OID** | 1.2.36.1.2001.1001.101.103.16425 |

## Definition

| | |
|---|---|
| **Definition** | The expiry date as documented by the manufacturer. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | DateTime |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | MEDICATION ACTION | 0..1 | |

# 4.40 DISPENSED TO

## Identification

| | |
|---|---|
| **Label** | DISPENSED TO |
| **Metadata Type** | Data Group |
| **Identifier** | DG-10296 |
| **OID** | 1.2.36.1.2001.1001.101.102.10296 |

## Definition

| | |
|---|---|
| **Definition** | The name of the person to whom this was dispensed, if not the subject of care. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |

## Usage

| | |
|---|---|
| **Conditions of Use** | This **SHALL NOT** be used unless the subject of the information is not the *Subject of Care* of the enclosing Structured Document.<br><br>This is a reuse of the PARTICIPATION data group, which is described in Participation Data Specification [NEHT2011v].<br><br>The following constraints are additional to those specified in Participation Data Specification [NEHT2011v]. Constraints are explained in *Appendix B*.<br><br>• Participation Type **SHALL** have a fixed value of “Dispensed To”.<br><br>• PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a PERSON. |
| **Conditions of Use Source** | *NEHTA* |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | MEDICATION ACTION | 0..1 | |

# 4.41 Number of Times Dispensed

## Identification

| | |
|---|---|
| **Label** | Number of Times Dispensed |
| **Metadata Type** | Data Element |
| **Identifier** | DE-10114 |
| **OID** | 1.2.36.1.2001.1001.101.103.10114 |

## Definition

| | |
|---|---|
| **Definition** | The number of times this order has been dispensed. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | The sum of this number minus one and the remaining repeats provides the number of repeats on the original order. |
| **Data Type** | Integer |

## Usage

| | |
|---|---|
| **Conditions of Use** | This data element is used when a prescription with one or more dispensing repeat(s) is presented to (community) pharmacy for dispensing. |
| **Conditions of Use Source** | NEHTA |
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | MEDICATION ACTION | 0..1 | |

# 4.42 Remaining Repeats

## Identification

| | |
|---|---|
| **Label** | Remaining Repeats |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16427 |
| **OID** | 1.2.36.1.2001.1001.101.103.16427 |

## Definition

| | |
|---|---|
| **Definition** | The number of times the medicine, vaccine or other therapeutic good may still be dispensed without re-issue of a prescription or order. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | This is the information required by the subject of care and prescriber. |
| **Data Type** | Integer |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | MEDICATION ACTION | 0..1 | |

# 4.43 Claim Category

## Identification

| | |
|---|---|
| **Label** | Claim Category |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16060 |
| **OID** | 1.2.36.1.2001.1001.101.103.16060 |

## Definition

| | |
|---|---|
| **Definition** | The category of reimbursement or subsidy sought for the item. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Context** | Applicable to dispense records. |
| **Context Source** | NEHTA |
| **Notes** | The primary purpose of this data element is to enable the determination of the source of any applicable financial subsidy for the item.<br><br>Not to be confused with Concession Benefit. |
| **Data Type** | CodeableText |
| **Value Domain** | Therapeutic Good Claim Category Reference Set |

## Usage

| | |
|---|---|
| **Conditions of Use** | This data element only relates to Dispense Records of successful dispense events. |
| **Conditions of Use Source** | NEHTA |
| **Examples** | 1. General PBS benefit<br><br>2. Safety Net Concession benefit<br><br>3. Safety Net Entitlement Card benefit |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | MEDICATION ACTION | 0..1 | |

# 4.44 Therapeutic Good Claim Category Reference Set

## Identification

| | |
|---|---|
| **Label** | Therapeutic Good Claim Category Reference Set |
| **Metadata Type** | Value Domain |
| **Identifier** | VD-16060 |
| **OID** | 1.2.36.1.2001.1001.101.104.16060 |
| **External Identifier** | SNOMED CT-AU Concept Id: 32570711000036105 |

## Definition

| | |
|---|---|
| **Definition** | The set of values of Claim Category. |
| **Definition Source** | NEHTA |

## Value Domain

| | |
|---|---|
| **Source** | SNOMED CT-AU |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
| 001011001 | Claim Category | 1..1 | |

# 4.45 INFORMATION PROVIDER

## Identification

| | |
|---|---|
| **Label** | INFORMATION PROVIDER |
| **Metadata Type** | Data Group |
| **Identifier** | DG-10296 |
| **OID** | 1.2.36.1.2001.1001.101.102.10296 |

## Definition

| | |
|---|---|
| **Definition** | Details pertinent to the identification of the source of the information about medication action. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | This does not necessarily have to be a person and, in particular, not a healthcare provider. Types of sources include:<br>• the subject of care;<br>• a subject of care agent, e.g. parent, guardian;<br>• the clinician; and<br>• a device or software |

## Usage

| | |
|---|---|
| **Conditions of Use** | This **SHALL NOT** be used unless the provider of the information is not the *Composer/Author* of the enclosing Structured Document.<br>This is a reuse of the PARTICIPATION data group, which is described in Participation Data Specification [NEHT2011v].<br>The following constraints are additional to those specified in Participation Data Specification [NEHT2011v]. Constraints are explained in *Appendix B*.<br>• Participation Type **SHALL** have a fixed value of “Information Provider”.<br>• PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a PERSON or as a DEVICE. |
| **Conditions of Use Source** | NEHTA |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | MEDICATION ACTION | 0..1 | |

# 4.46 SUBJECT

## Identification

| | |
|---|---|
| **Label** | SUBJECT |
| **Metadata Type** | Data Group |
| **Identifier** | DG-10296 |
| **OID** | 1.2.36.1.2001.1001.101.102.10296 |

## Definition

| | |
|---|---|
| **Definition** | The individual about whom the medication action information is being recorded. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |

## Usage

| | |
|---|---|
| **Conditions of Use** | This **SHALL NOT** be used unless the subject of the information is not the *Subject of Care* of the enclosing Structured Document.<br><br>This is a reuse of the PARTICIPATION data group, which is described in Participation Data Specification [NEHT2011v].<br><br>The following constraints are additional to those specified in Participation Data Specification [NEHT2011v]. Constraints are explained in *Appendix B*.<br><br>• Participation Type **SHALL** have a fixed value of “Subject”.<br><br>• PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a PERSON. |
| **Conditions of Use Source** | NEHTA |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | MEDICATION ACTION | 0..1 | |

# 4.47 Medication Action DateTime

## Identification

| | |
|---|---|
| **Label** | Medication Action DateTime |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16591 |
| **OID** | 1.2.36.1.2001.1001.101.103.16591 |

## Definition

| | |
|---|---|
| **Definition** | The point in time at which the Medication Action is completed. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | DateTime |

## Usage

| | |
|---|---|
| **Examples** | |

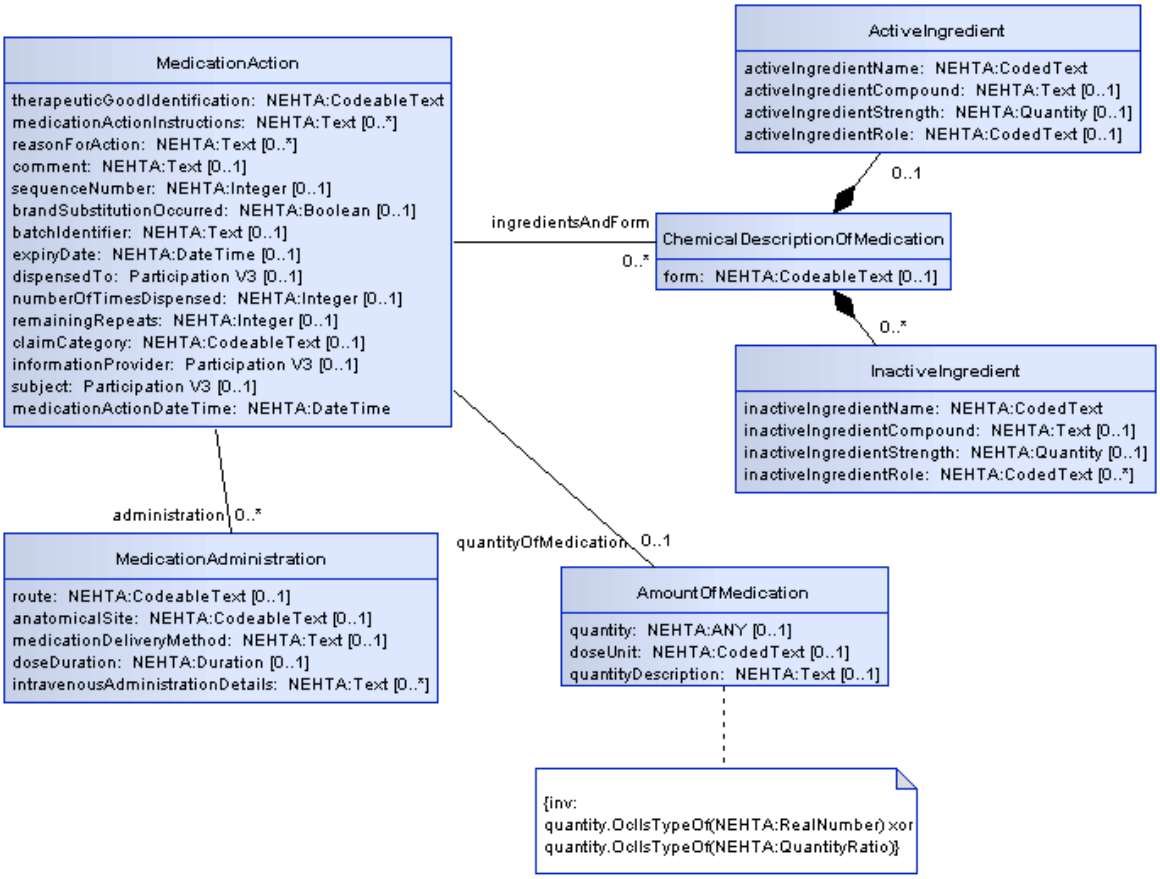
# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | MEDICATION ACTION | 1..1 | |

# 5 UML Diagram

The following figure presents the data hierarchy using a UML 2.0 class diagram. The diagram displays data groups and data elements, together with their names, data types and multiplicities. Data elements are displayed as attributes. Data groups are displayed as classes, their names are represented as association role names. Association role names are only displayed if they differ from the associated class name. The diagram shows the data hierarchy excluding the details of participation. The default multiplicity is 1..1.



# 6 Exclusion Statement - Medications Data Group

## 6.1 Purpose

To positively record the absence or exclusion of any medication use within the health record.

## 6.2 Use

Use to record the positive exclusion or absence of medication use within the health record. This data group avoids the need to use terminology to express negation about any item within the health record. This data group is only to be used to record 'point in time' or event-based information. It is not to be used for a persistent storage of information as the patient should always be questioned about current or past medication use prior to initiation of any treatment or management plan.

# 6.3 EXCLUSION STATEMENT - MEDICATIONS

## Identification

| | |
|---|---|
| **Label** | EXCLUSION STATEMENT - MEDICATIONS |
| **Metadata Type** | Data Group |
| **Identifier** | DG-16136 |
| **OID** | 1.2.36.1.2001.1001.101.102.16136 |

## Definition

| | |
|---|---|
| **Definition** | Statement to positively assert that the patient has not been prescribed or is not taking certain medication. |
| **Definition Source** | openEHR Foundation |
| **Scope** | To positively record the absence or exclusion of any medication use within the health record. |
| **Scope Source** | openEHR Foundation |

## Usage

| | |
|---|---|
| **Conditions of Use** | Use to record the positive exclusion or absence of medication use within the health record. This Detailed Clinical Model (DCM) avoids the need to use terminology to express negation about any item within the health record.It is important to note that the Exclusion Statement information is time-specific. It's validity may not extended beyond the point in time that the information is recorded. The patient should always be asked to verify previous statements on any exclusion statement about medications. |
| **Conditions of Use Source** | NEHTA |

# Data Hierarchy

| | | | |
|---|---|---|---|
| | EXCLUSION STATEMENT - MEDICATIONS | | |
| | | Global Statement | 0..* |
| | | Not Currently Taking | 0..1 |
| | | Not Ever Taken | 0..1 |
| | | INFORMATION PROVIDER | 0..1 |
| | | SUBJECT | 0..1 |

# 6.4 Global Statement

## Identification

| | |
|---|---|
| **Label** | Global Statement |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16302 |
| **OID** | 1.2.36.1.2001.1001.101.103.16302 |

## Definition

| | |
|---|---|
| **Definition** | The statement about the absence or exclusion of certain medication. |
| **Definition Source** | openEHR Foundation |
| **Synonymous Names** | |
| **Context** | Use to capture any information that is needed to be explicitly recorded as being absent or excluded within the record. |
| **Context Source** | openEHR Foundation |
| **Data Type** | CodedText |
| **Value Domain** | Global Statement Values |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | EXCLUSION STATEMENT - MEDICATIONS | 0..* | |

# 6.5 Global Statement Values

## Identification

| | |
|---|---|
| **Label** | Global Statement Values |
| **Metadata Type** | Value Domain |
| **Identifier** | VD-16299 |
| **OID** | 1.2.36.1.2001.1001.101.104.16299 |

## Definition

| | |
|---|---|
| **Definition** | The set of values for the statement about the absence or exclusion. |
| **Definition Source** | openEHR Foundation |

## Value Domain

| | | |
|---|---|---|
| **Source** | NEHTA | |
| **Permissible Values** | *Not asked* | No information about taking any medication is available because the patient was not asked or not able to be asked |
| | *None known* | No information about taking any medication is known |
| | *None supplied* | No information about taking any medication is supplied |
| | *Not currently taking any medication* | Not currently taking any medication |
| | *Never taken any medication* | |
| | Please see Appendix A, *Known Issues* | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | Global Statement | 1..1 | |

# 6.6 Not Currently Taking

## Identification

| | |
|---|---|
| **Label** | Not Currently Taking |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16310 |
| **OID** | 1.2.36.1.2001.1001.101.103.16310 |

## Definition

| | |
|---|---|
| **Definition** | Positive statement about medications that are explicitly not being taken or used at the time of recording. |
| **Definition Source** | openEHR Foundation |
| **Synonymous Names** | |
| **Data Type** | CodeableText |
| **Value Domain** | *Not specified.*<br><br>In the absence of national standard code sets, the code sets used **SHALL** be registered code sets, i.e. registered through the *HL7 code set registration procedure*[1] with an appropriate object identifier (OID), and **SHALL** be publicly available.<br><br>When national standard code sets become available, they **SHALL** be used and the non-standard code sets **SHALL** be deprecated. |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | EXCLUSION STATEMENT - MEDICATIONS | 0..1 | |

[1] http://www.hl7.org/oid/index.cfm

# 6.7 Not Ever Taken

## Identification

| | |
|---|---|
| **Label** | Not Ever Taken |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16311 |
| **OID** | 1.2.36.1.2001.1001.101.103.16311 |

## Definition

| | |
|---|---|
| **Definition** | Positive statement about medications that are explicitly known not to have ever been taken or used at the time of recording. |
| **Definition Source** | openEHR Foundation |
| **Synonymous Names** | |
| **Data Type** | CodeableText |
| **Value Domain** | *Not specified.*<br><br>In the absence of national standard code sets, the code sets used **SHALL** be registered code sets, i.e. registered through the *HL7 code set registration procedure*[2] with an appropriate object identifier (OID), and **SHALL** be publicly available.<br><br>When national standard code sets become available, they **SHALL** be used and the non-standard code sets **SHALL** be deprecated. |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | EXCLUSION STATEMENT - MEDICATIONS | 0..1 | |

[2] http://www.hl7.org/oid/index.cfm

# 6.8 INFORMATION PROVIDER

## Identification

| | |
|---|---|
| **Label** | INFORMATION PROVIDER |
| **Metadata Type** | Data Group |
| **Identifier** | DG-10296 |
| **OID** | 1.2.36.1.2001.1001.101.102.10296 |

## Definition

| | |
|---|---|
| **Definition** | Details pertinent to the identification of the source of the information about the exclusion statement. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | This does not necessarily have to be a person and, in particular, not a healthcare provider. Types of sources include:<br>• the subject of care;<br>• a subject of care agent, e.g. parent, guardian;<br>• the clinician; and<br>• a device or software |

## Usage

| | |
|---|---|
| **Conditions of Use** | This **SHALL NOT** be used unless the provider of the information is not the *Composer/Author* of the enclosing Structured Document.<br>This is a reuse of the PARTICIPATION data group, which is described in Participation Data Specification [NEHT2011v].<br>The following constraints are additional to those specified in Participation Data Specification [NEHT2011v]. Constraints are explained in *Appendix B*.<br>• Participation Type **SHALL** have a fixed value of “Information Provider”.<br>• PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a PERSON or as a DEVICE. |
| **Conditions of Use Source** | NEHTA |

# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | EXCLUSION STATEMENT - MEDICATIONS | 0..1 | |

# 6.9 SUBJECT

## Identification

| | |
|---|---|
| **Label** | SUBJECT |
| **Metadata Type** | Data Group |
| **Identifier** | DG-10296 |
| **OID** | 1.2.36.1.2001.1001.101.102.10296 |

## Definition

| | |
|---|---|
| **Definition** | The individual for whom the exclusion statement is recorded. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |

## Usage

| | |
|---|---|
| **Conditions of Use** | This **SHALL NOT** be used unless the subject of the information is not the *Subject of Care* of the enclosing Structured Document.<br><br>This is a reuse of the PARTICIPATION data group, which is described in Participation Data Specification [NEHT2011v].<br><br>The following constraints are additional to those specified in Participation Data Specification [NEHT2011v]. Constraints are explained in *Appendix B*.<br><br>• Participation Type **SHALL** have a fixed value of “Subject”.<br><br>• PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a PERSON. |
| **Conditions of Use Source** | NEHTA |

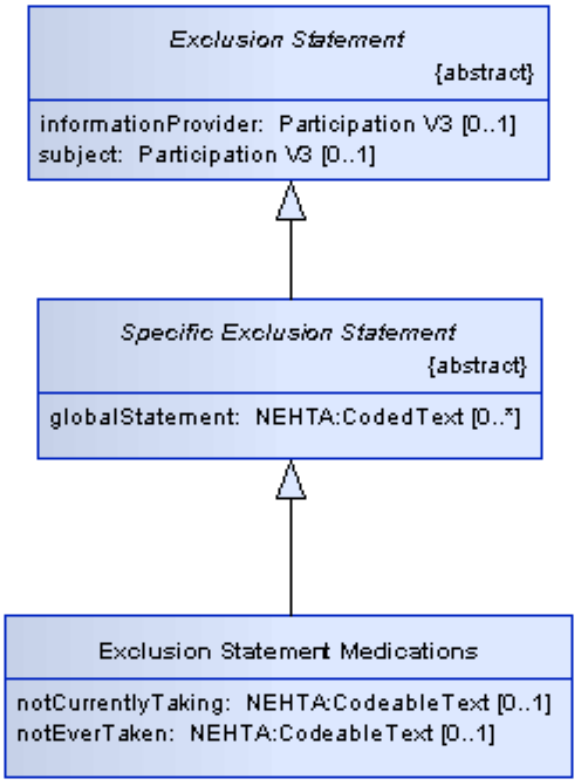
# Relationships

**Parents**

| Data Type | Name | Occur-rences | Condi-tion |
|---|---|---|---|
|  | EXCLUSION STATEMENT - MEDICATIONS | 0..1 | |

# 7 UML Diagram

The following figure presents the data hierarchy using a UML 2.0 class diagram. The diagram displays data groups and data elements, together with their names, data types and multiplicities. Data elements are displayed as attributes. Data groups are displayed as classes, their names are represented as association role names. Association role names are only displayed if they differ from the associated class name. The diagram shows the data hierarchy excluding the details of participation. The default multiplicity is 1..1.



# Reference List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# Appendix A. Known Issues

This appendix lists known issues with this specification at the time of publishing. NEHTA are working on solutions to these issues, but we encourage and invite comments to further assist the development of these solutions.

| Reference | Description |
|---|---|
| 'Chemical Description of Medication' Data Group | This data group is immature and may need revision. The data groups ACTIVE INGREDIENT and INACTIVE INGREDIENT may require different structures. The chosen example values for 'Active Ingredient Role' and 'Inactive Ingredient Role' are likely to be revised. There is no distinct data element for an unstructured description of extemporaneous medications. |
| 'Clinical Indication' Data Element | The data element is a candidate for terminology. In the future its data type is to be changed to 'codeable text'. |
| 'Medication Delivery Method' Data Element | The data element is a candidate for terminology. In the future its data type is to be changed to 'codeable text'. |
| 'Intravenous Administration Details' Data Group | This data group has not yet been designed. |
| 'Indication for Authorised Use' Data Element | This data element is intended to record values such as PBS/RPBS Authority Approval Numbers, PBS/RPBS Streamline Authority Approval Numbers, State Authority Numbers and PBS Item Codes. The current design allows multiple values to be recorded, but does not allow the type of value to be recorded (e.g. State Authority Number or PBS/RPBS Authority Approval Number). This will be corrected in a future revision. |
| Identifiers for Medication Action | Medication Action contains no data element to identify itself, nor one to identify its associated Medication Action. |
| Early supply of medication | There is no distinct data element in Medication Action to indicate early supply with pharmaceutical benefit. |
| Exclusion Statement | The Exclusion Statement detailed clinical model is the subject of on-going development and review and may well change in the future. |
| 'Global Statement Values' Value Domain | The list of permissible values is a sample set to initiate discussion and collaboration to develop the correct set of values. |
| Undefined Value Domains | The following data elements lack a defined value domain: 'Active Ingredient Name','Active Ingredient Role', 'Inactive Ingredient Name', 'Inactive Ingredient Role' and 'Intervention Day of Week'<br><br>NEHTA is in the process of developing national code sets for these items. In the meantime, you are free to use your own code set(s) providing any code set used SHALL be registered, i.e. registered through the HL7 code set registration procedure with an appropriate object identifier (OID), and SHALL be publicly available. Note that when national standard code set(s) do become available, they SHALL be used and the non-standard code sets SHALL be deprecated. |

# Appendix B. Specification Guide for Use

## B.1 Overview

Each Detailed Clinical Model (DCM) and Structured Content Specification (SCS) is designed to be a shared basis for data interpretation. It specifies rigorous business and technical definitions of data which systems may need to share. It is intended to be a logical specification of the data to be persisted within or communicated between systems. It is also the foundation for conformance, compliance and accreditation testing of implemented systems. NEHTA's CDA implementation guides are guides to the implementation of HL7 CDA R2 messages based upon these DCMs and SCSs.

Each DCM specifies all of the data components required for any use of a clinical concept, for instance an entry in a medical record such as a procedure or an imaging test. As such they are maximal data sets. DCMs are building blocks which are trimmed to size for use in construction SCSs.

Each SCS specifies the data for a single type of clinical document or information exchange, such as a discharge summary. It is assembled using DCMs which have been constrained to eliminate data components not relevant to the particular context. For example, procedure in a discharge summary uses only some of the data components required by procedure in a specialist report.

## B.2 The Structured Content Specification Metamodel

The NEHTA Structured Content Metamodel (see Figure 1) is used to specify the overall structure of a Structured Content Specification.

A DCM can be considered as a Data Group with no parent.

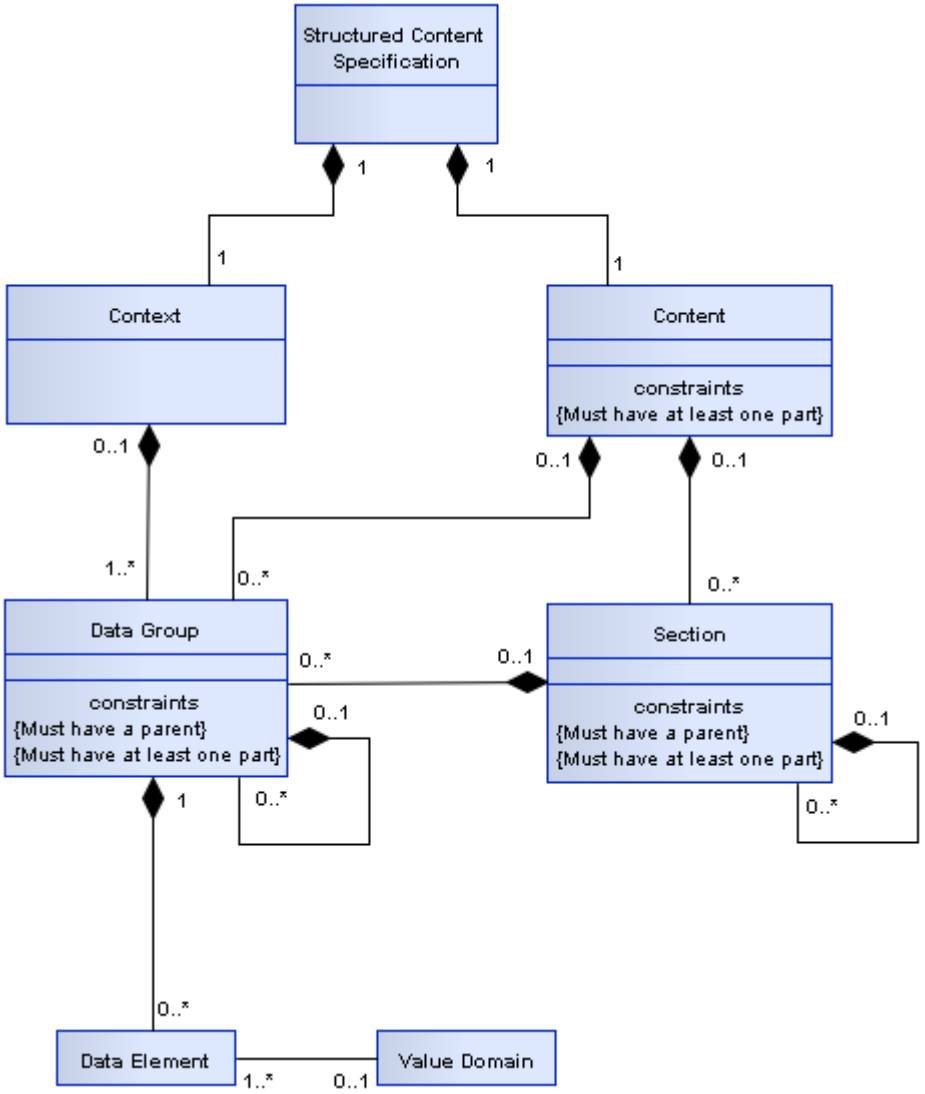


**Figure 1: SCS Metamodel**

There are two main components used to organise information within a Structured Content Specification (SCS) as follows:

Context: This contains information related to the overall context of the document.

Content: This contains information, which changes between different SCSs, but is always structured as shown, and consists of the following components:

- Section
- Data Group
- Data Element
- Value Domain

These components are described in more detail below.

# Context

The purpose of the Context is to identify and classify the document and to provide subjects of care and involved healthcare providers with the information related to the relevant healthcare events.

# Content

The Content contains a collection of health information pertinent to a subject of care which is derived from the healthcare event described in the document. The detail **MAY** be organised into one or more sections, each of which contains one or more data groups and/or possible data elements.

# Section

The contents of the structured document Content **MAY** be subdivided into one or more sections. A section is an organising container that gives a reader a clue as to the expected content. The primary purpose of a section is to organise information in the manner that is suitable for the primary purpose for which it is collected, and that provides a way to navigate through the data components within the document, thereby enabling more efficient querying. It **SHOULD** also support safe re-use for secondary purposes, e.g. clinical coding or inclusion in a summarised form in an electronic health record. A section is context-specific to the document in which it resides.

# Data Group

Each data group is used to represent one concept. A data group consists of other data groups and/or data elements. Some data groups are reused across detailed clinical models.

## Participation

Participation is a special case of a data group that is based on a data group template, which is reused throughout the detailed clinical models (DCMs) and SCSs. Participations are an amalgam of the Actors (see below) operating within a defined healthcare domain and the Roles that they are playing within that domain.

A Participant has been defined to align with the concepts of the NEHTA interoperability framework. It equates to an *Entity* that is related to the action described in an SCS as an *Actor*. A participant can be a human, an organisation or an IT system.

[NEHT2011v] defines the full Participation specification.

# Choice

Choice represents a decision to be made at run-time between a disjunctive mandatory set of data groups defined at design-time, i.e. one and only one member of the set **SHALL** be chosen.

For example, at design time a Healthcare Provider provides a service but it is not until run-time that a decision can be made as to whether the provider is a person or an organisation. Hence when a Healthcare Provider Participant is instantiated, it **SHALL** be done with the choice of either the *Person* data group or the *Organisation* data group.

# Data Element

A data element is the smallest named unit of information in the model that can be assigned a value. For example, 'DateTime of Observation' and 'Observation Note'. Data elements are bound to data types (see Data Types Legend). Some data elements are reused in different data groups.

Whilst all data elements are constrained by their data type, some data elements are further constrained by value domains (see Value Domain below).

# Value Domain

A value domain constrains the permissible values for a data element. The values **MAY** be a subset of values based on a generic data type.

Value domains are reusable components and therefore, the same value domain can be referred to by different data elements in different contexts. Value domains are often specified as a reference set. A reference set (or a subset) is a constrained list of SNOMED CT-AU, AMT or LOINC concepts that are appropriate to a particular context. It **SHOULD**be noted that many of these reference sets have been developed specifically for the context in which they appear. An assessment of fitness for purpose **SHOULD** therefore be undertaken before using any of the reference sets in another context.

Value domains constrain by either specifying a lower and/or upper bound on the range of permissible values or else by specifying a finite set of prescribed values. Such a set of prescribed values can be specified directly within the definition of the data element, or in a separate but associated specification or else by reference to one or more vocabulary/terminology reference sets. The table below provides some examples of value domains.

<table>
<tr><th>Data Element</th><th>Data Type</th><th>Example of Value Domain</th></tr>
<tr><td>Sex</td><td>CodedText</td><td>[SA2006a] and [SA2006b] derive their values from METeOR 270263 which includes values such as:<br><table><tr><th>Value</th><th>Meaning</th></tr><tr><td>1</td><td>Male</td></tr><tr><td>2</td><td>Female</td></tr><tr><td>3</td><td>Intersex or Indeterminate</td></tr><tr><td>9</td><td>Not Stated/Inadequately Described</td></tr></table></td></tr>
<tr><td>Diagnosis</td><td>CodeableText</td><td>A SNOMED CT-AU reference set which references concepts such as 'Bronchitis' (Concept ID: 32398004)</td></tr>
<tr><td>Therapeutic Good Identification</td><td>CodeableText</td><td>An AMT reference set which references concepts such as 'Ibuprofen Blue (Herron) (ibuprofen 200 mg) tablet: film-coated, 1 tablet' (Concept ID: 54363011000036107)</td></tr>
<tr><td>To Be Advised</td><td>CodeableText</td><td>A LOINC subset which references concepts such as 'Cholesterol [Moles/volume] in Serum or Plasma' (ID: 14647-2)</td></tr>
</table>

**Table 1: Value Domain Examples**

# B.3 Icon Legend

These legends describe all icons that are used within the various NEHTA information specifications.

# Metadata Types Legend

The following table explains each of the icons used to represent the metadata types within DCMs and SCSs.

| Icon | Metadata Types |
|---|---|
|  | Structured Document |
|  | Section |
|  | Data Group |
|  | Participation |
|  | Choice |

**Table 2: Metadata Types Legend**

# Data Types Legend

The following table explains each of the icons used to represent the data types bound to each data element in the SCSs. These data types are a profile of the **ISO 21090-2011** data types as specified in [NEHT2010c].

| Icon | Data type | Explanation |
|---|---|---|
|  | Boolean<br><br>(ISO 21090: BL) | A primitive data type, sometimes called the logical data type, having one of two values: *true* and *false*. Many systems represent true as *non-zero* (often 1, or -1) and false as *zero*.<br><br>**Usage/Examples**<br><br>• An actual value entered by a user might be 'yes' or could be chosen by a mouse click on an icon such as ☑. |

CodeableText

(ISO 21090: CD)

Coded text *with* exceptions; flexible data type to support various ways of holding text, both free text and coded text. Commonly used to support compliance for early adopters of the Structured Content Specifications. Whilst it is recommended that the values in this data type come from the bound value domain, it allows other value domains to also be used (with or without translations to the bound value domain) or free text alternatives. This is a recognition that it **MAY** not be possible to define an entire value domain for a complex concept (e.g. *Diagnosis*) or that there **MAY** be competing code sets in existence. Note that within exchange specifications and/or message profiles this data type **MAY** be constrained to mandate compliance with the bound value domain.

**Usage/Examples**

- AIHW Separation Mode specifies the status at separation of a person from an organisation. An early adopter **MAY** have a similar concept (coded or otherwise) that maps to this data element but does not strictly comply with the AIHW values.
- A SNOMED CT-AU coded/complex expression that embodies single or multiple concepts. The SNOMED CT-AU concepts behind these CodeableText components are specified in the Structured Content Specification value domains.

CodedText

(ISO 21090: CD)

Coded text *without* exceptions; text with code mappings. Values in this data type **SHALL** come from the bound value domain, with no exceptions. Often used for reference sets with only a small number of applicable values, e.g. Gender and Document Status.

**Usage/Examples**

[SA2006b] specifies the following value domain representing a type of address:

| Value | Meaning |
|---|---|
| 1 | Business |
| 2 | Mailing or Postal |
| 3 | Temporary Accommodation |
| 4 | Residential (permanent) |
| 9 | Not Stated/Unknown/Inadequately Described |

DateTime

(ISO 21090: TS)

Used for specifying a single date and/or time. Has the ability to indicate a level of precision, but not whether the date/time is estimated. String representations of known dates **SHALL** conform to the nonextended format within the **ISO 21090-2011** standard, i.e. YYYYMMDDHHMMSS.UUUU[+]-ZZzz.

**Usage/Examples**

- Partial dates: 2008, 20081001.
- To indicate 1:20 pm on May the 31st, 1999 for a time zone which is 5 hours behind Coordinated Universal Time (UTC): 19990531132000-0500.

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|---|---|
|  Duration<br><br>(ISO 21090: PQ.TIME) | The period of time during which something continues. Consists of a value and a unit which represents the time value, e.g. hours, months. Compound durations are not allowed, e.g. 10 days 3 weeks 5 hours.<br><br>**Usage/Examples**<br><br>• 3 hours<br><br>• 6 months<br><br>• 1 year |
|  Any<br><br>(ISO 21090: ANY) | Represents a data element where the data type to be used is conditional upon another data component. The values that can be required will vary considerably depending on the context. Note that this is an abstract data type that is the basis for all data types and **SHOULD NOT** be used in an actual implementation. |
|  EncapsulatedData<br><br>(ISO 21090: ED) | Data that is primarily intended for human interpretation or for further machine processing outside the scope of this specification. This includes unformatted or formatted written language, multimedia data, or structured information as defined by a different standard (e.g., XML signatures).<br><br>**Usage/Examples**<br><br>• JPEG images<br><br>• HTML documents<br><br>• [RFC1521] MIME types |
|  Integer<br><br>(ISO 21090: INT) | The mathematical data type comprising the exact integral values (according to [NEHT2010c]).<br><br>**Usage/Examples**<br><br>• 1<br><br>• -50<br><br>• 125 |
|  Link<br><br>(ISO 21090: TEL) | This is a general link, reference or pointer to an object, data or application that exists logically or is stored electronically in a computer system.<br><br>**Usage/Examples**<br><br>• URL (Uniform Resource Locator) – the World Wide Web address of a site on the internet, such as the URL for the Google internet search engine – *'http://www.google.com'*.<br><br>• An absolute or relative path within a file/directory structure – e.g. in the Windows® operating system, the "link" or absolute path to a particular letter could be *C:\Documents and Settings\GuestUser\MyDocuments\letter.doc* |

| | |
|---|---|
|  Quantity<br><br>(ISO 21090: PQ) | Used for recording many real world measurements and observations. Includes the magnitude value and the units.<br><br>**Usage/Examples**<br><br>• 100 centimetres<br><br>• 25.5 grams |
|  QuantityRatio<br><br>(ISO 21090: RTO) | The relative magnitudes of two *Quantity* values (usually expressed as a quotient).<br><br>**Usage/Examples**<br><br>• 25 mg/500 ml<br><br>• 200 mmol per litre |
|  QuantityRange<br><br>(ISO 21090: IVL) | Two *Quantity* values that define the minimum and maximum values, i.e. lower and upper bounds. This is typically used for defining the valid range of values for a particular measurement or observation. Unbounded quantity ranges can be defined by not including a minimum and/or a maximum quantity value.<br><br>**Usage/Examples**<br><br>• -20 to 100 Celsius<br><br>• 30-50 mg<br><br>• >10 kg |
|  RealNumber<br><br>(ISO 21090: REAL) | A computational approximation to the standard mathematical concept of real numbers. These are often called floating point numbers.<br><br>**Usage/Examples**<br><br>• 1.075<br><br>• -325.1<br><br>• 3.14157 |
|  Text<br><br>(ISO 21090: ST) | Character strings (with optional language). Unless otherwise constrained by an implementation, can be any combination of alpha, numeric or symbols from the Unicode character set. Sometimes referred to as free text.<br><br>**Usage/Examples**<br><br>“The patient is a 37 year old man who was referred for cardiac evaluation after complaining of occasional palpitations, racing heart beats and occasional dizziness.” |
|  TimeInterval<br><br>(ISO 21090:TS) | An interval in time, with (optionally) a start date/time and (optionally) an end date/time and/or a duration/width.<br><br>**Usage/Examples**<br><br>• 01/01/2008 – 31/12/2008<br><br>• 1:30 a.m. – 6:00 p.m., duration/width = 16.5 hours |

| | | |
|---|---|---|
|  | UniqueIdentifier<br><br>(ISO 21090: II) | A general unique value to identify a physical or virtual object or concept.<br><br>In using this data type, the attributes of the UniqueIdentifier data type **SHOULD** be populated from the identifiers as defined in AS 4846 (2006) [SA2006a] and AS 5017 (2006) [SA2006b] as follows:<br><br>*root*: a globally unique object identifier that identifies the combination of geographic area, issuer and type. If no such globally unique object identifier exists, it **SHALL** be created.<br><br>*extension*: a unique identifier within the scope of the root that is directly equivalent to the identifier designation element.<br><br>*identifierName*: a human readable name for the namespace represented by the root that is populated with the issuer or identifier type values, or a concatenation of both as appropriate. The content of this attribute is not intended for machine processing and **SHOULD NOT** be used as such.<br><br>*identifierScope*: the geographic span or coverage that applies to or constrains the identifier. It is directly equivalent to the geographic area element. The content of this attribute is not intended for machine processing and **SHOULD NOT** be used as such.<br><br>Also, the following constraints apply on the UniqueIdentifier data type:<br><br>The *root* attribute **SHALL** be used.<br><br>For an entity identifier the *root* attribute **SHALL** be an OID that consists of a node in a hierarchically-assigned namespace, formally defined using the ITU-T's ASN.1 standard.<br><br>For an entity identifier the *root* attribute **SHALL NOT** be a UUID.<br><br>The *extension* attribute **SHALL** be used.<br><br>**Usage/Examples**<br><br>IHIs, HPI-Is, HPI-Os and patient hospital medical record numbers are examples of identifiers that **MAY** be carried by this data type. |

**Table 3: Data Types Legend**

# Keywords Legend

Where used in this document and in DCMs and SCSs, the keywords **SHALL, SHOULD, MAY, SHALL NOT** and **SHOULD NOT** are to be interpreted as described in [RFC2119].

The following table defines these keywords

| Keyword | Interpretation |
|---|---|
| **SHALL** | This word, or the terms ‘required’ or ‘must’, means that the definition is an absolute requirement of the specification. |
| **SHOULD** | This word, or the adjective ‘recommended’, means that there **MAY** exist valid reasons in particular circumstances to ignore a particular component, but the full implications **SHALL** be understood and carefully weighed before choosing a different course. |

| | |
|---|---|
| **MAY** | This word, or the adjective 'optional', means that a component is truly optional. One implementer **MAY** choose to include the component because a particular implementation requires it, or because the implementer determines that it enhances the implementation while another implementer **MAY** omit the same component. An implementation which does not include a particular option **SHALL** be prepared to interoperate with another implementation which does include the option, perhaps with reduced functionality. In the same vein, an implementation which does include a particular option **SHALL** be prepared to interoperate with another implementation which does not include the option (except of course, for the feature the option provides). |
| **SHALL NOT** | This phrase, or the phrase 'must not' means that the definition is an absolute prohibition of the specification. |
| **SHOULD NOT** | This phrase, or the phrase 'not recommended' means that there **MAY** exist valid reasons in particular circumstances when the particular behaviour is acceptable or even useful, but the full implications **SHOULD** be understood and the case carefully weighed before implementing any behaviour described with this label. |

**Table 4: Keywords Legend**

# B.4 Information Model Specification Parts Legends

This section illustrates the format and parts used to define each Section, Data Group and Data Element within NEHTA's information model specifications and identifies when each part is applicable.

## Data Hierarchy

The top-level component contains a data hierarchy. Each row contains information about a single data component. The entries are nested to represent inclusion of one component in another. Each entry contains three occupied cells. One contains an icon to indicate its data type. One contains the label and description of the component (if the label is different from the name, the name is displayed in brackets after the label). One contains the multiplicity range for the data component.

In a SCS a component may be prohibited, that is it occurs in the referenced DCM but it **SHALL** not be included in documents created according to the SCS. This is represented by a multiplicity range of 0..0, the text of the entry is also in a ~~strike through~~ font and it has a grey background.

## Chapter Name

Each section, data group, data element, value domain or choice has its own eponymous chapter. The chapter name is used in all data hierarchies.

## Identification Section Legend

The following table illustrates the layout of the Identification section and describes the various parts of the section.

| | |
|---|---|
| **Label** | A suggested display name for the component. (Source NEHTA.) |

| | |
|---|---|
| **Metadata Type** | The metadata type of the component, e.g. section, data group or data element. (Source NEHTA.) |
| **Identifier** | A NEHTA assigned internal identifier of the concept represented by the component. (Source NEHTA.) |
| **OID** | An object identifier that uniquely identifies the concept represented by the data component. (Source NEHTA.) |
| **External Identifier** | An identifier of the concept represented by the data component which is assigned by an organisation other than NEHTA. (Source NEHTA.) |

**Table 6: Identification Section Legend**

# Definition Section Legend

The following table illustrates the layout of the Definition section and describes the various parts of the section.

| | |
|---|---|
| **Definition** | The meaning, description and/or explanation of the data component. (Source NEHTA.)<br><br>For data groups used in a particular context the definition **MAY** be a refinement of the generic data group definition. |
| **Definition Source** | The authoritative source for the Definition statement. |
| **Synonymous Names** | A list of any names the data component **MAY** also be known as. (Source NEHTA.)<br><br>Implementers **MAY** prefer to use synonymous names to refer to the component in specific contexts. |
| **Scope** | Situations in which the data component may be used, i.e. the extent and capacity within which this data component may be used, including the circumstances under which the collection of specified data are required or recommended.<br><br>For example, Medication Instruction (data group) has a scope which includes all prescribable therapeutic goods, both medicines and non-medicines.<br><br>This attribute is not relevant to data elements or value domains. (Source NEHTA.) |
| **Scope Source** | The authoritative source for the Scope statement. |
| **Context** | The environment in which the data component is meaningful, i.e. the circumstance, purpose and perspective under which this data component is defined or used.<br><br>For example, Street Name has a context of Address. (Source NEHTA.) |
| **Assumptions** | Suppositions and notions used in defining the data component. (Source NEHTA.) |
| **Assumptions Source** | The authoritative source for the Assumptions statement. |
| **Notes** | Informative text that further describes the data component, or assists in the understanding of how the data component can be used. (Source NEHTA.) |
| **Notes Source** | The authoritative source for the Notes statement. |
| **Data Type** | The data type of the data element, e.g. DateTime or Text. (Source NEHTA.) |

| | |
|---|---|
| | The Data type is applicable only to data elements.<br><br>The valid data types are specified in the Data Types Legend. |
| **Value Domain** | The name and identifier of the terminologies, code sets and classifications to define the data element value range, or a statement describing what values to use in the absence of a defined value domain for the related data element.<br><br>In the absence of national standard code sets, the code sets used **SHALL** be registered code sets, i.e. registered through the HL7 code set registration procedure with an appropriate object identifier (OID), and **SHALL** be publicly available.<br><br>When national standard code sets become available, they **SHALL** be used and the non-standard code sets **SHALL** be deprecated. (Source NEHTA.)<br><br>The Value Domain is applicable only to CodedText and CodeableText data elements. |

**Table 7: Definition Section Legend**

# Value Domain Section Legend

The following table illustrates the layout of the Value Domain section and describes the various parts of the section.

| | |
|---|---|
| **Source** | The name of the terminology or vocabulary from which the value domain's permissible values are sourced, e.g. SNOMED CT-AU, LOINC. |
| **Version Number** | Version number of the value domain source. |
| **Permissible Values** | List of permissible values in the value domain. |

**Table 8: Value Domain Section Legend**

# Usage Section Legend

The following table illustrates the layout of the Usage section and describes the various parts of the section.

| | |
|---|---|
| **Examples** | One or more demonstrations of the data that is catered for by the data element. (Source NEHTA.)<br><br>Where a data element has an associated value domain examples representative of that domain are used where possible. Where the value domain is yet to be determined an indicative example is provided.<br><br>Implementation guides **MAY** contain specific examples for how data elements **SHALL** be populated and how they relate to each other.<br><br>The Value Domain is applicable only to CodedText and CodeableText data elements. |
| **Conditions of Use** | Prerequisites, provisos and/or restrictions for use of the component. (Source NEHTA.) |

| | |
|---|---|
| **Conditions of Use Source** | The authoritative source for the Conditions of Use statement. |
| **Misuse** | Incorrect, inappropriate and/or wrong uses of the component. (Source NEHTA.) |
| **Default Value** | A common denomination, or at least a usable denomination, from the Value Domain where available and/or applicable, typically assigned at the creation of an instance of the component. (Source NEHTA.) |

**Table 9: Usage Section Legend**

# Relationships Section Legend

The Relationships section specifies the cardinality and conditionality between parent and child data components.

The following table illustrates the layout of the Children relationships table.

| Data Type | Name | Occurrences | Condition |
|---|---|---|---|
| Icon illustrating the Metadata type or Data type | Component Name | The maximum and minimum number of instances of this child component that **SHALL** occur. | The conditions that **SHALL** be met to include this child data element. Only applicable for elements with a Conditional obligation. |

**Table 10: Children Legend**

The following table illustrates the layout of the Parent relationships table. Note that the relationships described by this table are from the parent to the child component.

| Data Type | Name | Occurrences | Condition |
|---|---|---|---|
| Icon illustrating the Metadata or Data type | Component Name | The maximum and minimum number of instances of the component described on this page that **SHALL** occur. | The conditions that **SHALL** be met to include the data element. Only applicable for elements with a Conditional obligation. |

**Table 11: Parent Legend**

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