Health & Care Information Model:

nl.zorg.Reaction-v1.0

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Content

1. nl.zorg.Reaction-v1.0

DCM::CoderList	Werkgroep Overgevoeligheid
DCM::ContactInformation.Address	*
DCM::ContactInformation.Name	*
DCM::ContactInformation.Telecom	*
DCM::ContentAuthorList	Werkgroep Overgevoelighed
DCM::CreationDate	4-11-2021
DCM::DeprecatedDate	
DCM::DescriptionLanguage	nl
DCM::EndorsingAuthority.Address	
DCM::EndorsingAuthority.Name	PM
DCM::EndorsingAuthority.Telecom	
DCM::Id	2.16.840.1.113883.2.4.3.11.60.40.3.5.3
DCM::KeywordList	Reactie
DCM::LifecycleStatus	Final
DCM::ModelerList	Werkgroep overgevoeligheid
DCM::Name	nl.zorg.Reactie
DCM::PublicationDate	15-10-2023
DCM::PublicationStatus	Prepublished
DCM::ReviewerList	
DCM::RevisionDate	16-11-2021
DCM::Supersedes	
DCM::Version	1.0
HCIM::PublicationLanguage	EN

1.1 Revision History

Publicatieversie 1.0 (01-12-2021)

1.2 Concept

An allergy or intolerance describes a patient's tendency towards hypersensitivity to a certain substance, so that an unwanted physiological reaction is expected after exposure to the substance, while most people would not exhibit such a reaction to that amount. The observed physiological changes are usually the result of an immunological reaction.

The substances can be categorized as follows:

- Medicine
- Medicine category
- Ingredient/addition
- Nutrition
- Environmental factor
- Animal
- Plants
- Chemicals
- Inhaled allergenic

1.3 Mindmap

1.4 Purpose

Documenting and communicating allergies and intolerances is an important part of medical registration. It concerns the core of patient safety in general and medication safety in particular. In the execution of research, treatment and care, these patient characteristics constantly have to be taken into account.

In principle, allergies and intolerances are also disorders and also could be entered as a problem. Nevertheless, these are usually entered separately.

Allergies/Intolerances have a lot in common with warnings (Alert). An important difference is that with allergies and intolerances, a lot of detailed information is recorded on things such as the reactions to the causative substance. Furthermore, not every warning is a problem or medical condition. Every allergy/intolerance is, however, while not every allergy or intolerance implies a warning.
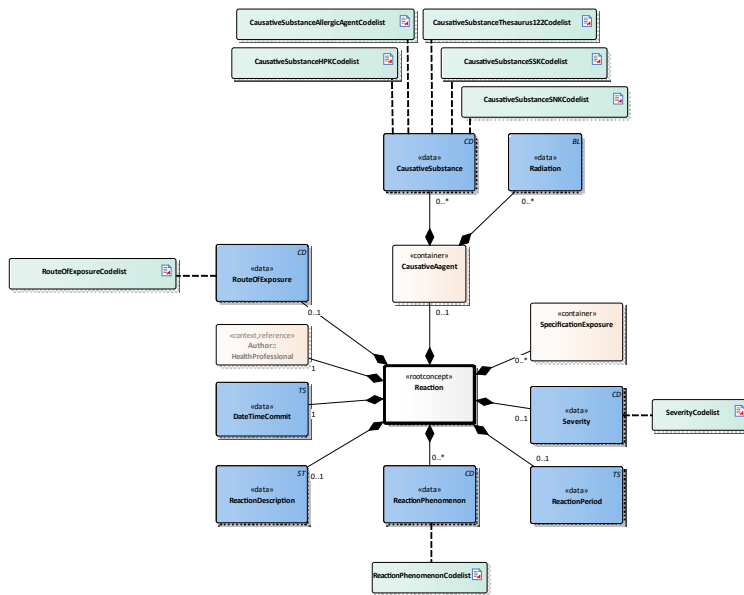
1.5 Patient Population

1.6 Evidence Base

For all allergies in the Netherlands, the codes available in the G standard are used to register and complete medicinal allergies in the work process of prescribers and pharmacists (in medication monitoring). This is outlined in the document "Allergies and unwanted substances IR V-2-3-1".

This code is insufficient when it comes to reactions to exposure to food products, items (such as bandages and band-aids), plants and animals. For these items, the standard allows the use of free text or the use of SNOMED CT code. However, no validated value set is currently available for this purpose for SNOMED CT.

1.7 Information Model

«rootconcept»	Reaction
Definitie	Root concept of the Reaction information model. This root concept contains all data elements of the Reaction information model.
Datatype	
DCM::ConceptId	NL-CM:5.3.1
Opties	

«data»	ReactionPhenomenon	
Definitie	The substantive specification of the reaction (symptoms) that occurs when the patient is exposed to the substance.	
Datatype	CD	
DCM::ConceptId	NL-CM:5.3.7	
DCM::ExampleValue	Anafylaxie,Jeuk	
DCM::ValueSet	ReactionPhenomenonCodeli st	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.5.3.7
Opties		

«container»	CausativeAagent	
Definitie	Container of the CausativeAagent concept.This container contains all data elements of the CausativeAagent concept.	
Datatype		
DCM::ConceptId	NL-CM:5.3.6	
Opties		

«data»	Radiation	
Definitie	Indicates whether it is (presumably) a reaction to radiation.	
Datatype	BL	
DCM::ConceptId	NL-CM:5.3.5	
Opties		

«data»	CausativeSubstance	
Definitie	The substance that (presumably) caused the reaction.	
Datatype	CD	
DCM::ConceptId	NL-CM:5.3.8	
DCM::ValueSet	CausativeSubstanceThesauru s122Codelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.5.3.5
DCM::ValueSet	CausativeSubstanceHPKCode list	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.5.3.2
DCM::ValueSet	CausativeSubstanceSNKCode list	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.5.3.3
DCM::ValueSet	CausativeSubstanceSSKCodel ist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.5.3.4
DCM::ValueSet	CausativeSubstanceAllergicA gentCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.5.3.1
Opties		

«data»	ReactionDescription	
Definitie	Textual description of the reaction as a whole including the reaction phenomena (symptoms).	
Datatype	ST	
DCM::ConceptId	NL-CM:5.3.9	
Opties		

«data»	Severity	
Definitie	The severity of the reaction as a result of exposure to the substance.	
Datatype	CD	
DCM::ConceptId	NL-CM:5.3.10	
DCM::ExampleValue	Ernstig	
DCM::ValueSet	SeverityCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.5.3.8
Opties		

«data»	RouteOfExposure	
Definitie	Way in which the patient came into contact with the causative agent or the way in which the agent was administered.	
Datatype	CD	
DCM::ConceptId	NL-CM:5.3.11	
DCM::ValueSet	RouteOfExposureCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.5.3.6
Opties		

«container»	SpecificationExposure
Definitie	Container of the SpecificationExposure concept.This container contains all data elements of the SpecificationExposure concept.
Datatype	
DCM::ConceptId	NL-CM:5.3.4
Opties	

«data»	ReactionPeriod
Definitie	Start Date: Date and time the response started. This may also only be a date or a partial date, if not known more precisely. TimeDuration: Duration of the reaction. End date: Date and time when the response stopped occurring. This may also only be a date or a partial date, if this is not known more precisely.
Datatype	TS
DCM::ConceptId	NL-CM:5.3.12
Opties	

«data»	DateTimeCommit
Definitie	The date the reaction was recorded.
Datatype	TS
DCM::ConceptId	NL-CM:5.3.3
Opties	

«context»	Author::HealthProfessional	
Definitie	Person who records the reaction, this can be a healthcare professional, patient or contact person.	
Datatype		
DCM::ConceptId	NL-CM:5.3.2	
DCM::ReferencedConceptId	NL-CM:17.1.1	This is a reference to the rootconcept of information model HealthProfessional.
Opties		

«document»	CausativeSubstanceAllergicAgentCodelist	
Definitie		
Datatype		
DCM::ValueSetBinding	Required	
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.5.3.1	
HCIM::ValueSetLanguage	--	
Opties		

VeroorzakendeStofAllergeneStoffenCodelijst		OID: 2.16.840.1.113883.2.4.3.11.60.40.2.5.3.1
Codes	Coding Syst. Name	Coding System OID

SNOMED CT: ^98061000146100| Dutch non-drug allergen simple reference set (foundation metadata concept)	SNOMED CT	2.16.840.1.113883.6.96

«document»	CausativeSubstanceHPKCodelist	
Definitie		
Datatype		
DCM::ValueSetBinding	Required	
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.5.3.2	
HCIM::ValueSetLanguage	--	
Opties		
VeroorzakendeStofHPKCodelijst		**OID: 2.16.840.1.113883.2.4.3.11.60.40.2.5.3.2**
Codes	**Coding Syst. Name**	**Coding System OID**
Alle waarden	G-Standaard Handels Product Kode (HPK)	2.16.840.1.113883.2.4.4.7

«document»	CausativeSubstanceSNKCodelist	
Definitie		
Datatype		
DCM::ValueSetBinding	Required	
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.5.3.3	
HCIM::ValueSetLanguage	--	
Opties		
VeroorzakendeStofSNKCodelijst		**OID: 2.16.840.1.113883.2.4.3.11.60.40.2.5.3.3**
Codes	**Coding Syst. Name**	**Coding System OID**
Alle waarden	G-standaard Stofnaamcode (SNK)	2.16.840.1.113883.2.4.4.1.750

«document»	CausativeSubstanceSSKCodelist	
Definitie		
Datatype		
DCM::ValueSetBinding	Required	
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.5.3.4	
HCIM::ValueSetLanguage	--	
Opties		
VeroorzakendeStofSSKCodelijst		**OID: 2.16.840.1.113883.2.4.3.11.60.40.2.5.3.4**
Codes	**Coding Syst. Name**	**Coding System OID**
Alle waarden	G-standaard Stofnaamcode i.c.m. toedieningsweg (SSK)	2.16.840.1.113883.2.4.4.1.725

«document»	CausativeSubstanceThesaurus122Codelist	
Definitie		
Datatype		
DCM::ValueSetBinding	Required	

DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.5.3.5
HCIM::ValueSetLanguage	--
Opties	

VeroorzakendeStofThesaurus122Codelijst	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.5.3.5	
Codes	**Coding Syst. Name**	**Coding System OID**
Alle waarden	G-standaard Ongewenste medicatiegroepen	2.16.840.1.113883.2.4.4.1.902.122

«document»	RouteOfExposureCodelist
Definitie	
Datatype	
DCM::ValueSetBinding	Required
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.5.3.6
HCIM::ValueSetLanguage	--
Opties	

WijzeVanBlootstellingCodelijst	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.5.3.6	
Codes	**Coding Syst. Name**	**Coding System OID**
SNOMED CT: <284009009 | route of administration value|	SNOMED CT	2.16.840.1.113883.6.96

«document»	ReactionPhenomenonCodelist
Definitie	
Datatype	
DCM::ValueSetBinding	Extensible
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.5.3.7
HCIM::ValueSetLanguage	--
Opties	

ReactieVerschijnselCodelijst			OID: 2.16.840.1.113883.2.4.3.11.60.40.2.5.3.7	
Concept Name	**Concept Code**	**Coding Syst. Name**	**Coding System OID**	**Description**
Anaphylaxis	39579001	SNOMED CT	2.16.840.1.113883.6.96	Anafylaxie
Angioedema	41291007	SNOMED CT	2.16.840.1.113883.6.96	Angio-oedeem
Upper respiratory tract hypersensitivity reaction	490008	SNOMED CT	2.16.840.1.113883.6.96	Overgevoeligheidsreactie van de bovenste luchtwegen
Dyspnea	267036007	SNOMED CT	2.16.840.1.113883.6.96	Kortademigheid
Bronchospasm	4386001	SNOMED CT	2.16.840.1.113883.6.96	Bronchospasme
Urticaria (hives)	126485001	SNOMED CT	2.16.840.1.113883.6.96	Urticaria
Contact dermatitis	40275004	SNOMED CT	2.16.840.1.113883.6.96	Contactdermatitis
Itching of skin	418363000	SNOMED CT	2.16.840.1.113883.6.96	Jeuk
Eruption of skin	271807003	SNOMED CT	2.16.840.1.113883.6.96	Exantheem
Allergic conjunctivitis	473460002	SNOMED CT	2.16.840.1.113883.6.96	Allergische conjunctivitis
Lyell syndrome	768962006	SNOMED CT	2.16.840.1.113883.6.96	Syndroom van Lyle
Nausea and vomiting	16932000	SNOMED CT	2.16.840.1.113883.6.96	Misselijk en braken
Diarrhoea	62315008	SNOMED CT	2.16.840.1.113883.6.96	Diarree
Drug-induced erythema multiforme	297942002	SNOMED CT	2.16.840.1.113883.6.96	Door medicatie veroorzaakte erythema multiforme

| Fever | 386661006 | SNOMED CT | 2.16.840.1.113883.6.96 | Koorts |
| Overig | OTH | NullFlavor | 2.16.840.1.113883.5.1008 | Overig |

«document»	SeverityCodelist	
Definitie		
Datatype		
DCM::ValueSetBinding	Required	
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.5.3.8	
HCIM::ValueSetLanguage	--	
Opties		

ErnstCodelijst				OID: 2.16.840.1.113883.2.4.3.11.60.40.2.5.3.8	
Concept Name	**Concept Code**	**Coding Syst. Name**		**Coding System OID**	**Description**
Mild	255604002	SNOMED CT		2.16.840.1.113883.6.96	Licht
Moderate	6736007	SNOMED CT		2.16.840.1.113883.6.96	Matig
Severe	24484000	SNOMED CT		2.16.840.1.113883.6.96	Ernstig

	Legend
Definitie	
Datatype	
Opties	

1.8 Example Instances

Reactie		
ReactieErnst	Ernstig	Matig
ReactieTijdstip	12-10-2020	02-06-2021
ReactieSymptomen	Trombocytopenie	Jeuk
Veroorzakendestof	Fragmin	Amoxicilline
DatumTijdVastlegging	13-10-2020 13:15	03-06-2021 12:00
Auteur::Zorgverlener	Mevr. Zaal	Dhr. Jacobs
EersteAuteur::Zorgverlener		
Naam	Mevr. Zaal	Mevr. Zaal
Specialisme	SEH-arts	SEH-arts
ReactieBeschrijving	-	Over het hele lichaam.

1.9 Instructions

1.10 Interpretation

1.11 Care Process

1.12 Example of the Instrument

1.13 Constraints

1.14 Issues

No known allergies

The question is whether to offer a code for "No known allergies (SNOMED CT 160244002)" and subdirectories in this information model that fall under this code, or to determine that, where applicable, the document should outline when the information model is to be applied.

Value set for the 'Causative substance' concept

Currently, no defined code list is yet available for allergenic substances other than medication. Entering SNOMED CT must therefore suffice to code allergenic substances for the time-being. The G standard is used to code medical products.

1.15 References

1. Z-INDEX. (2011) *Allergieën en ongewenste middelen* [Online] v. R V-2-3-1 Beschikbaar op: http://www.z-index.nl/g-standaard/beschrijvingen/functioneel/wijzigingen/mb/bewaking-op-allergie/IR%20 Allergieen%20V%202-1-1.pdf [Geraadpleegd: 15 oktober 2014]

2. HL7 FHIR *Resource AllergyIntolerance.* [Online] Continuous Build. Beschikbaar op: http://hl7-fhir.github.io/allergyintolerance.html [Geraadpleegd: 12 maart 2014]

1.16 Functional Model

1.17 Traceability to other Standards

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