

Health & Care Information Model: nl.zorg.MedicationAdministration2-v1.0

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1. nl.zorg.MedicationAdministration2-v1.0

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DCM::ContentAuthorList	Projectgroep Medicatieproces
DCM::CreationDate	1-2-2017
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1.1 Revision History

Publicatieversie 1.0 (04-09-2017)

1.2 Concept

Medication administration is the registration of the individual administrations of the medicine on the patient by the administrator (e.g. a nurse or patient themselves), in relation to the entered agreements.

1.3 Mindmap

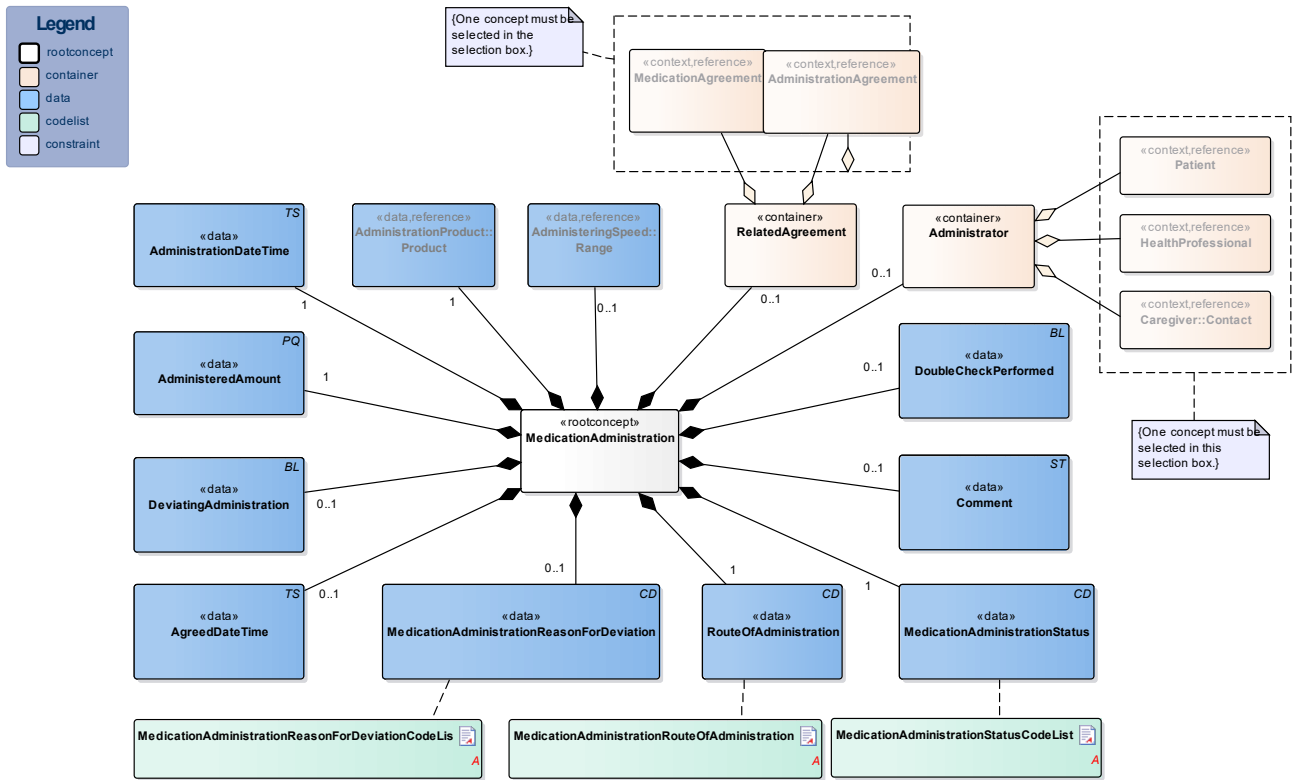
1.4 Purpose

The goal of administering the medication is to provide insight into the actual administered products.

1.5 Patient Population

1.6 Evidence Base

1.7 Information Model



«rootconcept»	MedicationAdministration	
Definitie	Root concept of the MedicationAdministration information model. This root concept contains all data elements of the MedicationAdministration information model.	
Datatype		
DCM::ConceptId	NL-CM:9.13.20928	
DCM::DefinitionCode	SNOMED CT: 18629005	Administration of drug or medicament
Opties		

«data»	AdministrationProduct::Product	
Definitie	The product taken or administered. This is usually medication. Food, blood products, aids and bandages do not strictly fall under the category of medication, but can be reported as well. In principle, this will be the prescribed product, but the administrator may substitute it by replacing the product with an equivalent product. For example: two 50mg tablets can be administered instead of one 100mg tablet.	
Datatype		
DCM::ConceptId	NL-CM:9.13.20929	
DCM::ReferencedConceptId	NL-CM:9.7.19926	This is a reference to the rootconcept of de sub-bouwsteen Product.
Opties		

«data»	AdministeringSpeed::Range	
Definitie	The administering speed is used in slow administration of liquid. In practice, the measuring unit is almost always ml/hour.	

	<p>Entering an interval (such as 0-10 ml/hour) is also a commonly used option.</p> <p>For example, with an administering speed of 10ml/hour:</p> <ul style="list-style-type: none"> • amount = 10, • dose unit = ml • time unit = hour 	
Datatype		
DCM::ConceptId	NL-CM:9.13.23159	
DCM::ExampleValue	Aantal= 10 Gebruikseenheid= ml Tijdseenheid= uur	
DCM::ReferencedConceptId	NL-CM:20.1.1	This is a reference to the root concept of partial information model Range.
Opties		

«data»	AdministrationDateTime	
Definitie	The date and time at which the medication was administered.	
Datatype	TS	
DCM::ConceptId	NL-CM:9.13.21193	
Opties		

«data»	AgreedDateTime	
Definitie	Date and time in the medication or administration agreement to which this administration pertains. Since multiple times can be indicated in one medication/administration agreement, this can be used to identify the agreed time in the event of e.g. early administration or a late administration.	
Datatype	TS	
DCM::ConceptId	NL-CM:9.13.23171	
Opties		

«data»	AdministeredAmount	
Definitie	Amount of the administered product.	
Datatype	PQ	
DCM::ConceptId	NL-CM:9.13.21194	
Opties		

«data»	DeviatingAdministration	
Definitie	In the administration, was there a deviation from the medication or administration agreement? This can be a deviation in product, time, amount, route of administration or administering speed or foregoing administration altogether.	
Datatype	BL	
DCM::ConceptId	NL-CM:9.13.23167	
Opties		

«data»	RouteOfAdministration	
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Definitie	The route through which the medication is administered (oral, nasal, intravenous,...).	
Datatype	CD	
DCM::ConceptId	NL-CM:9.13.21195	
DCM::DefinitionCode	SNOMED CT: 410675002 Route of administration	
DCM::ValueSet	MedicationAdministrationRo uteOfAdministration	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.9.13.2
Opties		

«data»	DoubleCheckPerformed	
Definitie	Was a double check performed prior to the administration? This is only legally required for certain medication.	
Datatype	BL	
DCM::ConceptId	NL-CM:9.13.23168	
Opties		

«context»	MedicationAgreement	
Definitie	Medication agreement on which this administration is based.	
Datatype		
DCM::ConceptId	NL-CM:9.13.23170	
DCM::ReferencedConceptId	NL-CM:9.6.9580	This is a reference to the rootconcept of information model MedicationAgreement.
Opties		

«context»	AdministrationAgreement	
Definitie	Administration agreement on which this administration is based.	
Datatype		
DCM::ConceptId	NL-CM:9.13.23237	
DCM::ReferencedConceptId	NL-CM:9.8.20132	This is a reference to the rootconcept of information model AdministrationAgreement.
Opties		

«container»	RelatedAgreement	
Definitie	Medication or administration agreement on which this administration is based.	
Datatype		
DCM::ConceptId	NL-CM:9.13.23169	
Opties		

«container»	Administrator	
Definitie	Container of the Administrator concept. This container contains all data elements of the Administrator concept. The concept describes the person who administered the product. This is a professional authorised administrator, the patient themselves or the caregiver, for example.	
Datatype		
DCM::ConceptId	NL-CM:9.13.21196	
Opties		

«context»	Patient	
Definitie	If the patient administered the medication themselves, indicate that here. If the medication is administered by a health professional or caregiver/family member/etc., the health professional is entered in the 'Healthcare provider' element or the caregiver/family member/etc. is entered in the 'Contact' element respectively.	
Datatype		
DCM::ConceptId	NL-CM:9.13.23380	
DCM::ReferencedConceptId	NL-CM:0.1.1	This is a reference to the rootconcept of information model Patient.
Opties		

«context»	HealthProfessional	
Definitie	The concept describes the person who administered the product. This is a professional authorised administrator.	
Datatype		
DCM::ConceptId	NL-CM:9.13.23172	
DCM::ReferencedConceptId	NL-CM:17.1.1	This is a reference to the rootconcept of information model HealthProfessional.
Opties		

«context»	Caregiver::Contact	
Definitie	Information on the patient's personal relative or contact that administered the medication.	
Datatype		
DCM::ConceptId	NL-CM:9.13.23355	
DCM::ReferencedConceptId	NL-CM:3.1.1	This is a reference to the rootconcept of information model ContactPerson.
Opties		

«data»	MedicationAdministrationReasonForDeviation	
Definitie	Reason why the medication was not taken or administered or was taken or administered differently. Here, you can choose to enter text or one of the codes.	
Datatype	CD	
DCM::ConceptId	NL-CM:9.13.23166	
DCM::ValueSet	MedicationAdministrationReasonForDeviationCodeList	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.9.13.3
Opties		

«data»	MedicationAdministrationStatus	
Definitie	<p>The status of the administration, as a description of the stage within the administering process. Only the status codes 'completed' and 'cancelled' apply to indivisible products (such as tablets or suppositories). For divisible products (such as infusions), doses can also be 'suspended' or 'aborted'.</p> <p>When documenting this, the following interpretations are used:</p> <ul style="list-style-type: none"> • Active: The product is administered. • Interrupted: Use has (temporarily) been interrupted, because of a side 	

	<p>effect, for example. Later, the patient and/or doctor can decide whether or not to resume or discontinue use.</p> <ul style="list-style-type: none"> Discontinued: Administration has stopped. Completed: Administration has been completed. 	
	<ul style="list-style-type: none"> Not started: The product was never administered. 	
Datatype	CD	
DCM::ConceptId	NL-CM:9.13.21191	
DCM::ValueSet	MedicationAdministrationStatusCodeList	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.9.13.1
Opties		

«data»	Comment	
Definitie	Comments on administering the medication.	
Datatype	ST	
DCM::ConceptId	NL-CM:9.13.21337	
DCM::DefinitionCode	LOINC: 48767-8 Annotation comment	
Opties		

«document»	MedicationAdministrationRouteOfAdministration	
Definitie		
Datatype		
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.9.13.2	
Opties		

Medicatie Toediening Toedieningsweg Codelijst		OID: 2.16.840.1.113883.2.4.3.11.60.40.2.9.13.2
Codes	Coding Syst. Name	Coding System OID
Alle waarden	G-Standaard Toedieningswegen	2.16.840.1.113883.2.4.4.9

«document»	MedicationAdministrationStatusCodeList	
Definitie		
Datatype		
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.9.13.1	
Opties		

Medicatie Toediening Status Codelijst			OID: 2.16.840.1.113883.2.4.3.11.60.40.2.9.13.1	
Concept Name	Concept Code	Code System Name	Code System OID	Description
Active	active	ActStatus	2.16.840.1.113883.5.14	Actief
Suspended	suspended	ActStatus	2.16.840.1.113883.5.14	Onderbroken
Aborted	aborted	ActStatus	2.16.840.1.113883.5.14	Afgebroken
Completed	completed	ActStatus	2.16.840.1.113883.5.14	Voltooid

Cancelled	cancelled	ActStatus	2.16.840.1.113883.5.14	Niet gestart
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«document» MedicationAdministrationReasonForDeviationCodeLis	
Definitie	
Datatype	
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.9.13.3
Opties	

MedicatieToedieningRedenVanAfwijken Codelijst OID: 2.16.840.1.113883.2.4.3.11.60.40.2.9.13.3

Concept Name	Concept Code	Code System Name	Code System OID	Description
Product discontinued	DISCONT	ActReason	2.16.840.1.113883.5.8	Product niet meer leverbaar
Patient not available	NON-AVAIL	ActReason	2.16.840.1.113883.5.8	Patiënt niet beschikbaar
Patient refuse	PREFUS	ActReason	2.16.840.1.113883.5.8	Patiënt heeft geweigerd
Unable to use	UNABLE	ActReason	2.16.840.1.113883.5.8	Toediening volgens voorschrift niet mogelijk
Order aborted	FOABORT	ActReason	2.16.840.1.113883.5.8	Medicatieafpraak is gestopt
Forgotten to administer	FORGOT	NL-CM-CS	2.16.840.1.113883.2.4.3.11.60.40.4	Vergeeten toe te dienen
Administration performer not available	APNA	NL-CM-CS	2.16.840.1.113883.2.4.3.11.60.40.4	Toediener niet aanwezig
No information	NI	NullFlavor	2.16.840.1.113883.5.1008	Geen informatie

1.8 Example Instances

MedicatieToedieningDatumTijd	Toedieningsproduct	Afwijkende Toediening	MedicatieToedieningStatus	Toedieningsweg	Toegedijnde Hoeveelheid	Afgesproken DatumTijd	MedicatieToedieningRedenVanAfwijken	MedicatieAfspraak
	ProductCode							Gebruiksaanwijzing Doseerinstructie Doseringsfrequentie Keerdosis
3-6-2014 16:19:07	Pantoprazol mylan tablet msr 20mg	Nee	Gereed	Oraal	1 stuk			
11-9-2012 17:21:00	Bumetanide pch tablet 2 mg	Ja	Afgebroken	Oraal	1 stuk		Patiënt heeft geweigerd	2 stuks
19-9-2014 14:12:11	Novorapid Flexpen Injvlst 100e/MI Pen 3ml	Ja	Uitgesteld	Subcutaan	22 eenheden	19-9-2014 9:00:00	Vergeeten toe te dienen	22 elementen

1.9 Instructions

1.10 Interpretation

1.11 Care Process

1.12 Example of the Instrument

1.13 Constraints

1.14 Issues

1.15 References

1.16 Functional Model

1.17 Traceability to other Standards

1.18 Disclaimer

This Health and Care Information Model (a.k.a Clinical Building Block) has been made in collaboration with several different parties in healthcare. These parties asked Nictiz to manage good maintenance and development of the information models. Hereafter, these parties and Nictiz are referred to as the collaborating parties. The collaborating parties paid utmost attention to the reliability and topicality of the data in these Health and Care Information Models. Omissions and inaccuracies may however occur. The collaborating parties are not liable for any damages resulting from omissions or inaccuracies in the information provided, nor are they liable for damages resulting from problems caused by or inherent to distributing information on the internet, such as malfunctions, interruptions, errors or delays in information or services provide by the parties to you or by you to the parties via a website or via e-mail, or any other digital means. The collaborating parties will also not accept liability for any damages resulting from the use of data, advice or ideas provided by or on behalf of the parties by means of this Health and Care Information Model. The parties will not accept any liability for the content of information in this Health and Care Information Model to which or from which a hyperlink is referred. In the event of contradictions in mentioned Health and Care Information Model documents and files, the most recent and highest version of the listed order in the revisions will indicate the priority of the documents in question. If information included in the digital version of this Health and Care Information Model is also distributed in writing, the written version will be leading in case of textual differences. This will apply if both have the same version number and date. A definitive version has priority over a draft version. A revised version has priority over previous versions.

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