# **Health & Care Information Model:**

# nl.zorg.part.InstructionsForUse-v1.3

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# 1. nl.zorg.part.InstructionsForUse-v1.3

DCM::CoderList	Projectgroep Medicatieproces
DCM::ContactInformation.Address	
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DCM::ContactInformation.Telecom	
DCM::ContentAuthorList	Projectgroep Medicatieproces
DCM::CreationDate	1-3-2017
DCM::DeprecatedDate	
DCM::DescriptionLanguage	nl
DCM::EndorsingAuthority.Address	
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DCM::EndorsingAuthority.Telecom	
DCM::Id	2.16.840.1.113883.2.4.3.11.60.40.3.9.12
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DCM::Version	1.3
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## **1.1 Revision History**

Publicatieversie 1.0 (04-09-2017)

Publicatieversie 1.1 (31-12-2017) Bevat: ZIB-617, ZIB-643.

Publicatieversie 1.1.1 (01-10-2018) Bevat: ZIB-637.

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Publicatieversie 1.1.3 (06-07-2019) Bevat: ZIB-786.

Publicatieversie 1.2 (31-01-2020) Bevat: ZIB-909, ZIB-785, ZIB-787.

Publicatieversie <u>1.2.1</u> (01-09-2020) Bevat: ZIB-782, ZIB-799, ZIB-1028, ZIB-1032.

Publicatieversie <u>1.3</u> (01-12-2021) Bevat: ZIB-1305, ZIB-1380, ZIB-1411.

## 1.2 Concept

Instructions for the use or administration of the medication, e.g. dose and route of administration. In the

event of medication use, this is the pattern of use established by the patient or which the patient followed. This is a partial information model

# 1.3 Mindmap

# 1.4 Purpose

InstructionsForUse gives an insight into the manner a drug is to be used.

# 1.5 Patient Population

# 1.6 Evidence Base

## 1.7 Information Model



«rootconcept»	InstructionsForUse	
Definitie	Root concept of the InstructionsForUse partial information model. This	
	root concept contains all data elements of the InstructionsForUse partial	
	information model.	
Datatype		
DCM::ConceptId	NL-CM:9.12.22504	
Opties		

«data»	AdditionalInstructions
Definitie	The additional instructions contain extra information on the use of the current prescription.
	This includes all instructions for use. The text can come from the original "paper" medication prescription, but can also be generated from the coded information.
	This concept may contain more information than what is structurally coded in the information below, but may not conflict with it.

	The instructions may not conflict with other components of the request for		
	administration.		
	The instructions can also refer to an existing protocol.		
	The texts in the G-standard that can support this attribute are included in		
	table 362 where the texts from the general practitioner' standard		
	'NHG-tabel Gebruiksvoorschrift' are included. These texts can be used to		
	structure this concept.		
Datatype			
DCM::ConceptId	NL-CM:9.12.19944		
Opties			

«data»	Description
Definitie	Textual description of the complete instructions for use including the period of use.
Datatype	
DCM::ConceptId	NL-CM:9.12.9581
Opties	

«data»	RepeatPeriodCyclicalSch	nedule
Definitie	The repeated period in a cyclic instructions). A cyclic schedule duration is also in days. Examples of a cyclical schedule contraceptive pill (21 days, 1 p repeat period here is 28 days	al schedule (of one or more dosing e is noted in days, the corresponding dosing e: will 1x a day, then skip for 7 days, repeat),
Datatype		
DCM::ConceptId	NL-CM:9.12.22505	
DCM::ExampleValue	28 d	
Opties		

«data»	RouteOfAdministration	
Definitie	The route through which the medication is administered (oral, nasal,	
	intravenous, etc.).	
Datatype		
DCM::ConceptId	NL-CM:9.12.19941	
DCM::ValueSet	RouteOfAdministrationCodel	OID:
	ist	2.16.840.1.113883.2.4.3.11.60.40.2.9.12.1
Opties		

«container»	DosingInstructions
Definitie	Dosing instructions
Datatype	
DCM::ConceptId	NL-CM:9.12.22095
Opties	

«data»	DoseDuration	
Definitie	The intended time duration for these dosing instructions, <i>e.g.</i> 5 days or 8 weeks. In the case of medication for an indefinite period, the dosing duration is left empty in the last dosing instruction.	
Datatype		
DCM::ConceptId	NL-CM:9.12.22506	
DCM::ExampleValue	5 dagen	
DCM::ExampleValue	8 weken	

Opties	
«data»	SequenceNumber
Definitie	This indicates the sequence of the dosing instructions within the medication agreement.
Datatype	
DCM::ConceptId	NL-CM:9.12.22503
Opties	

«container»	Dosage	
Definitie	Container of the Dosage concept. This container contains all data elements of the Dosage concept.	
	Instructions for the administrator to administer the medication (the patient themselves, a nurse or other aid). When taking stock of medication use, the dosage describes the pattern of use established by the patient.	
	Once the dose schedule (distribution of doses over time) and the dose have been determined, then there should be one single instruction for use.	
	Multiple <i>parallel</i> instructions for use can be included in the event of a changing dose within one day and in the event of a variable use frequency.	
	Multiple <i>sequential</i> instructions for use can be included in the event of changing doses within one period and/or in the event of a changing dose schedule.	
Datatype		
DCM::ConceptId	NL-CM:9.12.19935	
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. Entering an interval (such as 0-10 ml/hour) is also a commonly used option. For example, with an administering speed of 10ml/hour: • amount = 10,	
	<ul> <li>time unit = hour</li> </ul>	
Datatype		
DCM::ConceptId	NL-CM:9.12.19942	
DCM::ReferencedConc	NL-CM:20.1.1	This is a reference to the rootconcept of the
eptId		partial information model Range.
Opties		

«data»	DurationOfAdministration::TimeInterval	
Definitie	The duration of administration defines the length of time during which the drug is administered and is mainly used in the slow parenteral administration of fluids.	
Datatype		
DCM::ConceptId	NL-CM:9.12.23141	
DCM::ExampleValue	6 uur	
DCM::ExampleValue	120 min	
DCM::ReferencedConc	NL-CM:20.3.1	This is a reference to the rootconcept of
eptId		information model TimeInterval.

Opties		
«data»	Dose::Range	
Definitie	The dose indicates the amou any unit that can occur with	nt/unit per administration. The unit can be this particular medicine.
Datatype		
DCM::ConceptId	NL-CM:9.12.19940	
DCM::ReferencedConc	NL-CM:20.1.1	This is a reference to the rootconcept of the
eptId		partial information model Range.
Opties		

«container»	AsNeeded	
Definitie	As needed means that the dose is only to be administered under certain conditions. See also the Instructions section for more information about use of the element.	
Datatype		
DCM::ConceptId	NL-CM:9.12.22512	
Opties		

«data»	Condition	
Definitie	<ul> <li>a physiological measurement value (plasma glucose concentration, body temperature, blood pressure);</li> <li>a symptom or other circumstance (in the event of a headache, or itch). Supplemental information from G-standard bst362 make up the list of values for coded entering of this concept. Also always include the textual description of that code.</li> <li>Physiological measurement values or other conditions that do not occur in bst362 do not need to be coded. These can be expressed in free text in the Description concept.</li> </ul>	
Datatype		
DCM::ConceptId	NL-CM:9.12.19945	
DCM::ValueSet	AsNeededCriteriumCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.9.12.4
Opties		

«data»	MaximumDose	
Definitie	A MaximumDose maximizes (in time) the usage of a drug in an 'as needed' prescription	
Datatype	h h	
DCM::ConceptId	NL-CM:9.12.19946	
DCM::ExampleValue	maximaal 200 ml per week	
DCM::ExampleValue	maximaal 6 stuks per dag	
Opties		

«container»	AdministeringSchedule
Definitie	<ul> <li>Specifications of the times at which the medication is to be administered.</li> <li>This is indicated as follows:</li> <li>Time(s) (16:00) or indications ("before meals") at which the medication is to be taken each day.</li> <li>A specific number of times the medication is to be taken each day ("3x a day"), indicated with the frequency.</li> <li>A time interval between consecutive doses ("Every 2 hours", "every 3 days"), indicated with the word Interval.</li> </ul>

	<ul> <li>Combined periods with an interval and duration ("1 daily for three out of four weeks: the pill schedule")</li> <li>If a certain medication is not to be taken daily, the aforementioned can be combined with daily indications:</li> <li>One or more week days on which the medication is to be administered (e.g. "Monday, Wednesday, Friday")</li> <li>"3x a week", "2x a month".</li> <li>The specified administration "infinite" is automatically to be repeated until:</li> <li>The end date and time has been reached</li> <li>The total administration duration has been reached (14 days)</li> <li>A specific amount of administrations has been reached ("20 doses"), to</li> </ul>
	be entered in the Frequency concept.
Datatype	
DCM::ConceptId	NL-CM:9.12.19948
Opties	

«data»	Frequency::Range	
Definitie	The frequency indicates the number of dose moments per time unit, usually per day. If this frequency is included, then the Interval will not have been included. Usually, frequency comprises both amount and time unit (3 times a day), but it can occur without the time unit (single use). In that case, a reasonable distribution over the day is expected, but exact times are not given. This is left to the patient. It is the most common manner of extramural prescription. In the case of Baxter packs and intramural care, such a prescription is used to draw up a (location-specific) outline for distribution times (logistics). The time unit of the frequency must be the same as how it is indicated in the textual description of the dose.	
	Example: for a '2x a day' dose:	
	<ul> <li>amount = 2</li> </ul>	
	• time unit = 'day'.	
	for a '3x a week' dose:	
	• amount = 3	
	<ul> <li>time unit = 'week'.</li> </ul>	
Datatype		
DCM::ConceptId	NL-CM:9.12.19949	
DCM::ReferencedConc	NL-CM:20.1.1	This is a reference to the rootconcept of the
eptId		partial information model Range.
Opties		

«data»	WeekDay	
Definitie	WeekDay indicates a pattern of doses on fixed week days.	
Datatype		
DCM::ConceptId	NL-CM:9.12.19952	
DCM::ExampleValue	Maandag	
DCM::ValueSet	WeekDayCodelist	OID:
		2.16.840.1.113883.2.4.3.11.60.40.2.9.12.2
Opties		

«data»

DayPart

Definitie	Time of day: morning, afternoon, evening, night.	
Datatype		
DCM::ConceptId	NL-CM:9.12.19953	
DCM::ExampleValue	Ochtend	
DCM::ValueSet	PartOfDayCodelist	OID:
		2.16.840.1.113883.2.4.3.11.60.40.2.9.12.3
Opties		

«data»	AdministrationTime	
Definitie	The time of administration is a specific time of day (on the clock). This time usually isn't (intended to be) exact. There can be multiple administering times in one day. The ideal time of administration can also be entered as a time of day (morning, afternoon, evening, night-time). The administration time is then to be left empty, and the time of day can be entered in the TimeOfDay	
	concept.	
Datatype		
DCM::ConceptId	NL-CM:9.12.19951	
DCM::ExampleValue	07:30	
Opties		

«data»	Interval
Definitie	Interval indicates the time between dose times. If this is included, then the <i>Frequency</i> will not have been included.
	Examples: every 4 hours, every 3 weeks.
	The times can now be chosen freely, but distribution throughout the day is more precise, and the interval between times is important (e.g. in the case of antibiotics)
	In the case of Baxter packs and intramural care, such a prescription is used to draw up a (location-specific) outline for distribution times (logistics).
Datatype	
DCM::ConceptId	NL-CM:9.12.19950
Opties	

«document»	PartOfDayCodelist
Definitie	
Datatype	
DCM::ValueSetBinding	Required
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.
	60.40.2.9.12.3
HCIM::ValueSetLangu	
age	
Opties	

DagdeelCodelijst		OID:	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.9.12.3				
Concept Name	Concept Code	Coding Syst. Name	Coding System OID	Description			
During the morning	73775008	SNOMED CT	2.16.840.1.113883.6.96	's ochtends			
During the afternoon	255213009	SNOMED CT	2.16.840.1.113883.6.96	's middags			
During the evening	3157002	SNOMED CT	2.16.840.1.113883.6.96	's avonds			
During the night	2546009	SNOMED CT	2.16.840.1.113883.6.96	's nachts			

«document»	<b>&gt;</b>	RouteOfAdministrationCodelist			
Definitie					
Datatype					
DCM::ValueSet	Binding	Required			
DCM::ValueSetI	d	2.16.840.1.113883.2.4.3.11.			
		60.40.2.9.12.1			
HCIM::ValueSetLangu					
age					
Opties					
MedicatieToediening		gswegCodelijst		OID:	
				2.16.840.1.113883.2.4.3.11.60.40.2.9.12.1	
Codes	Coding Syst. Name			Coding System OID	
Alle waarden	len G-Standaard Toedieningswegen			2.16.840.1.113883.2.4.4.9	

«document	t»	WeekD	) ayCodelist		
Definitie					
Datatype					
DCM::ValueSe	tBinding	Required	1		
DCM::ValueSe	tld	2.16.840	.1.113883.2.4.3.1	1.	
		60.40.2.9	9.12.2		
HCIM::ValueSe	etLangu				
age					
Opties					
WeekdagC	odelijs	t O	ID: 2.16.840.1.	113883.2.4.3.11.60.40.2	2.9.12.2
Concept Name	Concep	ot Code	Code System Name	Code System OID	Description
Monday	307145	004	SNOMED CT	2.16.840.1.113883.6.96	maandag
Tuesday	307147007		SNOMED CT	2.16.840.1.113883.6.96	dinsdag
Wednesday	307148002		SNOMED CT	2.16.840.1.113883.6.96	woensdag
Thursday	307149005		SNOMED CT	2.16.840.1.113883.6.96	donderdag
Friday	307150005		SNOMED CT	2.16.840.1.113883.6.96	vrijdag
Saturday	307151009		SNOMED CT	2.16.840.1.113883.6.96	zaterdag
Sunday	307146003		SNOMED CT	2.16.840.1.113883.6.96	zondag

«document»	AsNe	sNeededCriteriumCodelist				
Definitie						
Datatype						
DCM::ValueSetBinding	Requir	ed				
DCM::ValueSetId	2.16.8	40.1.113883.2.4.3.11.				
	60.40.	60.40.2.9.12.4				
HCIM::ValueSetLangu	NL					
age						
Opties						
ZonodigCriteriumCodelijst		OID:	2.16.840.1.113883.2.4.3.11.6	0.40.2.9.1	2.4	
Concept Name Con Cod	icept le	Coding Syst. Name		Coding System OID	Descriptio	n

Bij een aanval	1022	GSt bst362	2.16.840.1.113883.2.4.4.5	Bij een aanval
Bij benauwdheid	1023	GSt bst362	2.16.840.1.113883.2.4.4.5	Bij benauwdheid
Bij diarree	1024	GSt bst362	2.16.840.1.113883.2.4.4.5	Bij diarree
Bij pijn	1028	GSt bst362	2.16.840.1.113883.2.4.4.5	Bij pijn
Bij jeuk	1121	GSt bst362	2.16.840.1.113883.2.4.4.5	Bij jeuk
Zo nodig	1137	GSt bst362	2.16.840.1.113883.2.4.4.5	Zo nodig
Bij hoofdpijn	1144	GSt bst362	2.16.840.1.113883.2.4.4.5	Bij hoofdpijn
Bij koorts	1145	GSt bst362	2.16.840.1.113883.2.4.4.5	Bij koorts
Bij hoge koorts	1146	GSt bst362	2.16.840.1.113883.2.4.4.5	Bij hoge koorts
Bij koorts en/of pijn	1147	GSt bst362	2.16.840.1.113883.2.4.4.5	Bij koorts en/of pijn
Bij hoest	1387	GSt bst362	2.16.840.1.113883.2.4.4.5	Bij hoest
Bij	1540	GSt bst362	2.16.840.1.113883.2.4.4.5	Bij
menstruatiepijnen				menstruatiepijnen
Overig	ОТН	NullFlavor	2.16.840.1.113883.5.1008	Overig
Geen Informatie	NI	NullFlavor	2.16.840.1.113883.5.1008	Geen Informatie

	Legend
Definitie	
Datatype	
Opties	

# **1.8 Example Instances**

Gebruiksinstructie					
Omschrijving	Doseerinstructie				
	Doseerduur	Dosering Keerdosis	Toedieningsschema Frequentie Interval Toedientijd  Weekdag Dagdeel		
Van 8-9-2017 tot 18-9-2017 1x per dag 1 stuk. Vanaf 18-9-2017 staken.		1 stuk	1x per dag		
Vanaf 6 maart 2016 1x per week op maandag om 14uur 15 mg (=0,6 ml)		15 mg (=0,6 ml)	1x per week op maandag (14u)		

# 1.9 Instructions

AsNeeded dosage:

Using the term 'as needed' or a specific reason (eg 'in case of pain') to use medication leads to ambiguity. It is not always clear whether the whole dose is 'as needed' or only part of the dose. For example: 1x daily 1-2 tablets as needed. This can mean: 1 tablet fixed per day and 1 tablet as needed or, as needed, a maximum of 2 tablets. As needed medication is not included in GDS. In the first situation, 1 tablet comes in the GDS (drug dispensing systems) and 1 tablet is delivered separately. In the second situation there is only separate delivery. The system must make sufficiently clear whether the entire instruction or part of the dose is necessary. The ZIB supports both options described above.

RouteOfAdministration:

For choosing the route of administration the advice is to use bst760 to search for the right code. For more information about the g-standard see https://www.z-index.nl/english

## **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

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