# Health & Care Information Model: nl.zorg.part.InstructionsForUse-v1.1.2

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# 1. nl.zorg.part.InstructionsForUse-v1.1.2

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## 1.1 Revision History

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Bevat: ZIB-644.

## 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

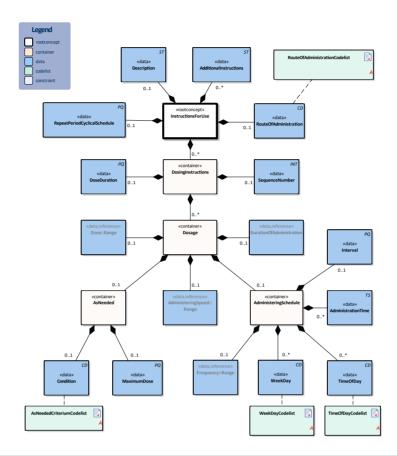
## 1.4 Purpose

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 WCIA table 25 are included. These texts can be used to structure this concept.	
Datatype	ST	
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	ST	
DCM::ConceptId	NL-CM:9.12.9581	
Opties		

«data»	RepeatPeriodCyclicalSchedule	
Definitie	The repeated period in a cyclical schedule (of one or more dosing instructions). A cyclic schedule is noted in days, the corresponding dosing duration is also in days.	
	Examples of a cyclical schedule:	
	contraceptive pill (21 days, 1 pill 1x a day, then skip for 7 days, repeat),	
	repeat period here is 28 days	
Datatype	PQ	
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	CD	
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. Leaving dose duration empty should only be used for medication for an indefinite period.	
Datatype	PQ	
DCM::ConceptId	NL-CM:9.12.22506	
DCM::ExampleValue	8 weken	
DCM::ExampleValue	5 dagen	
Opties		

«data»	SequenceNumber
--------	----------------

Definitie	This indicates the sequence of the dosing instructions within the medication agreement.	
Datatype	INT	
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,  dose unit = ml,  time unit = hour  Optionally a translation to NHG table Gebruiksvoorschriften(Table 25) is also allowed.	
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	
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. Optionally a translation to NHG table Gebruiksvoorschriften (Table 25) is also allowed.	
Datatype		
DCM::ConceptId	NL-CM:9.12.23141	
DCM::ExampleValue	120 min	
DCM::ExampleValue	6 uur	
DCM::ReferencedConc	NL-CM:20.1.1	This is a reference to the rootconcept of the
eptId		partial information model Range.
Opties		

«data»	Dose::Range		
Definitie	The dose indicates the dose a	mount per administration.	
	The dosage is described in the unit accompanying the product; usually, this is just a number of units or doses. Liquids and other divisible products will usually include a unit of volume (preferably "ml").		
	In many cases, the prescriber weight of the active ingredien	will want to indicate the dose in units of t.	
	If only the ingredient is included and not the product, then the amount of that ingredient will be given. Paracetamol 1000mg is equivalent to 2 Paracetamol 500mg tablets or units.		
	The dosage is sometimes given as a calculation, in which the patient's body weight or body surface area is used as a parameter. The calculation is however no more than an aid in reaching a decision.		
	In the event of constant administration, sometimes the dose is given in addition to the administration speed (infusion rate) (e.g. 20ml in a syringe or 500ml in a bag), but it is often also omitted.		
	A general dosage recommendation such as 'Use according to protocol' or 'See instructions' can be sufficient. In that case, no dose is given.		
	Optionally a translation to NHG table Gebruiksvoorschriften(Table 25) is also allowed.		
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	body temperature, blood  a symptom or other circur Relevant B codes in Table 25 n of this concept. Also always in Physiological measurement va	ent value (plasma glucose concentration, pressure); mstance (in the event of a headache, or itch). make up the list of values for coded entering clude the textual description of that code. llues or other conditions that do not occur in need to be coded. These can be expressed in
Datatype	CD	
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 maximum dose indicates the maximum duration a product can be used with an 'as needed' prescription.	
	Optionally a translation to NHG table Gebruiksvoorschriften(Table 25) is	
	also allowed.	
Datatype	PQ	
DCM::ConceptId	NL-CM:9.12.19946	
DCM::ExampleValue	maximaal 200 ml per week	
DCM::ExampleValue	maximaal 6 stuks per dag	
Opties		

"contain av"	AdministaringCohodulo		
«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> <li>Combined periods with an interval and duration ("1 daily for three out of four weeks: the pill schedule")</li> </ul>		
	combined with daily indications:  One or more week days on which the medication is to be administered (e.g. "Monday, Wednesday, Friday")  "3x a week", "2x a month".		
	<ul> <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:     amount = 2     time unit = 'day'.  for a '3x a week' dose:     amount = 3     time unit = 'week'.  Optionally a translation to lalso allowed.	NHG table Gebruiksvoorschriften(Table 25) is
Datatype		
DCM::ConceptId	NL-CM:9.12.19949	
DCM::ReferencedConc eptId	NL-CM:20.1.1	This is a reference to the rootconcept of the partial information model Range.
Opties		,.

«data»	WeekDay	
Definitie	WeekDay indicates a pattern of doses on fixed week days.	
Datatype	CD	
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»	TimeOfDay		
Definitie	Time of day: morning, afterno	oon, evening, night.	
Datatype	CD		
DCM::ConceptId	NL-CM:9.12.19953		
DCM::ExampleValue	Ochtend		
DCM::ValueSet	TimeOfDayCodelist	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	TS		
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.
	Examples. Every 4 flours, every 5 weeks.

	more precise, and the interval of antibiotics) In the case of Baxter packs and	freely, but distribution throughout the day is between times is important (e.g. in the case d intramural care, such a prescription is used ) outline for distribution times (logistics).
Datatype	PQ	
DCM::ConceptId	NL-CM:9.12.19950	_
Opties		

«document»	TimeOfDayCodelist	
Definitie		
Datatype		
DCM::ValueSetBinding	Extensible	
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.	
	60.40.2.9.12.3	
Opties		

DagdeelCodelijst		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»	RouteOfAdministrationCodelist	
Definitie		
Datatype		
DCM::ValueSetBinding	Extensible	
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.	
	60.40.2.9.12.1	
Opties		

MedicatieToedieningswegCodelijst		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	G-Standaard	2.16.840.1.113883.2.4.4.9
	Toedieningswegen	

«document»	WeekDayCodelist
Definitie	
Datatype	
DCM::ValueSetBinding	Extensible
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.
	60.40.2.9.12.2
Opties	

WeekdagC	ekdagCodelijst OID: 2.16.840.1.113883.2.4.3.11.60.40.2.9.12.2			.9.12.2
Concept	Concept Code	Code System	Code System OID	Description
Name		Name	-	

Monday	307145004	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»	As Needed Criterium Codelist	
Definitie		
Datatype		
DCM::ValueSetBinding	Extensible	
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.	
	60.40.2.9.12.4	
Opties		

Optics				
ZonodigCriteri	umCode	lijst OID: 2	.16.840.1.113883.2.4.3.11	1.60.40.2.9.12.4
Concept Name	Concept Code	Code System Name	Code System OID	Description
Bij een aanval	1022	WCIAv3 Tabel 25 B-codes	2.16.840.1.113883.2.4.4.5	Bij een aanval
Bij benauwdheid	1023	WCIAv3 Tabel 25 B-codes	2.16.840.1.113883.2.4.4.5	Bij benauwdheid
Bij diarree	1024	WCIAv3 Tabel 25 B-codes	2.16.840.1.113883.2.4.4.5	Bij diarree
Bij pijn	1028	WCIAv3 Tabel 25 B-codes	2.16.840.1.113883.2.4.4.5	Bij pijn
Bij jeuk	1121	WCIAv3 Tabel 25 B-codes	2.16.840.1.113883.2.4.4.5	Bij jeuk
Zo nodig	1137	WCIAv3 Tabel 25 B-codes	2.16.840.1.113883.2.4.4.5	Zo nodig
Bij hoofdpijn	1144	WCIAv3 Tabel 25 B-codes	2.16.840.1.113883.2.4.4.5	Bij hoofdpijn
Bij koorts	1145	WCIAv3 Tabel 25 B-codes	2.16.840.1.113883.2.4.4.5	Bij koorts
Bij hoge koorts	1146	WCIAv3 Tabel 25 B-codes	2.16.840.1.113883.2.4.4.5	Bij hoge koorts
Bij koorts en/of pijn	1147	WCIAv3 Tabel 25 B-codes	2.16.840.1.113883.2.4.4.5	Bij koorts en/of pijn
Bij hoest	1387	WCIAv3 Tabel 25 B-codes	2.16.840.1.113883.2.4.4.5	Bij hoest
Overig	OTH	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.

#### 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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