Health & Care Information Model:

nl.zorg.part.InstructionsForUse-v1.1

Status:Final
Release:2017
Release status: Published

Managed by:

Content

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

DCM::CoderList	Projectgroep Medicatieproces
DCM::ContactInformation.Address	
DCM::ContactInformation.Name	
DCM::ContactInformation.Telecom	
DCM::ContentAuthorList	Projectgroep Medicatieproces
DCM::CreationDate	1-3-2017
DCM::DeprecatedDate	
DCM::DescriptionLanguage	nl
DCM::EndorsingAuthority.Address	
DCM::EndorsingAuthority.Name	
DCM::EndorsingAuthority.Telecom	
DCM::Id	2.16.840.1.113883.2.4.3.11.60.40.3.9.12
DCM::KeywordList	
DCM::LifecycleStatus	Final
DCM::ModelerList	
DCM::Name	nl.zorg.part.GebruiksInstructie
DCM::PublicationDate	31-12-2017
DCM::PublicationStatus	Published
DCM::ReviewerList	Projectgroep Medicatieproces & Architectuurgroep Registratie aan de Bron
DCM::RevisionDate	31-12-2017
DCM::Superseeds	nl.zorg.part.GebruiksInstructie-v1.0
DCM::Version	1.1
HCIM::PublicationLanguage	EN

1.1 Revision History

Publicatieversie 1.0 (04-09-2017)

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

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
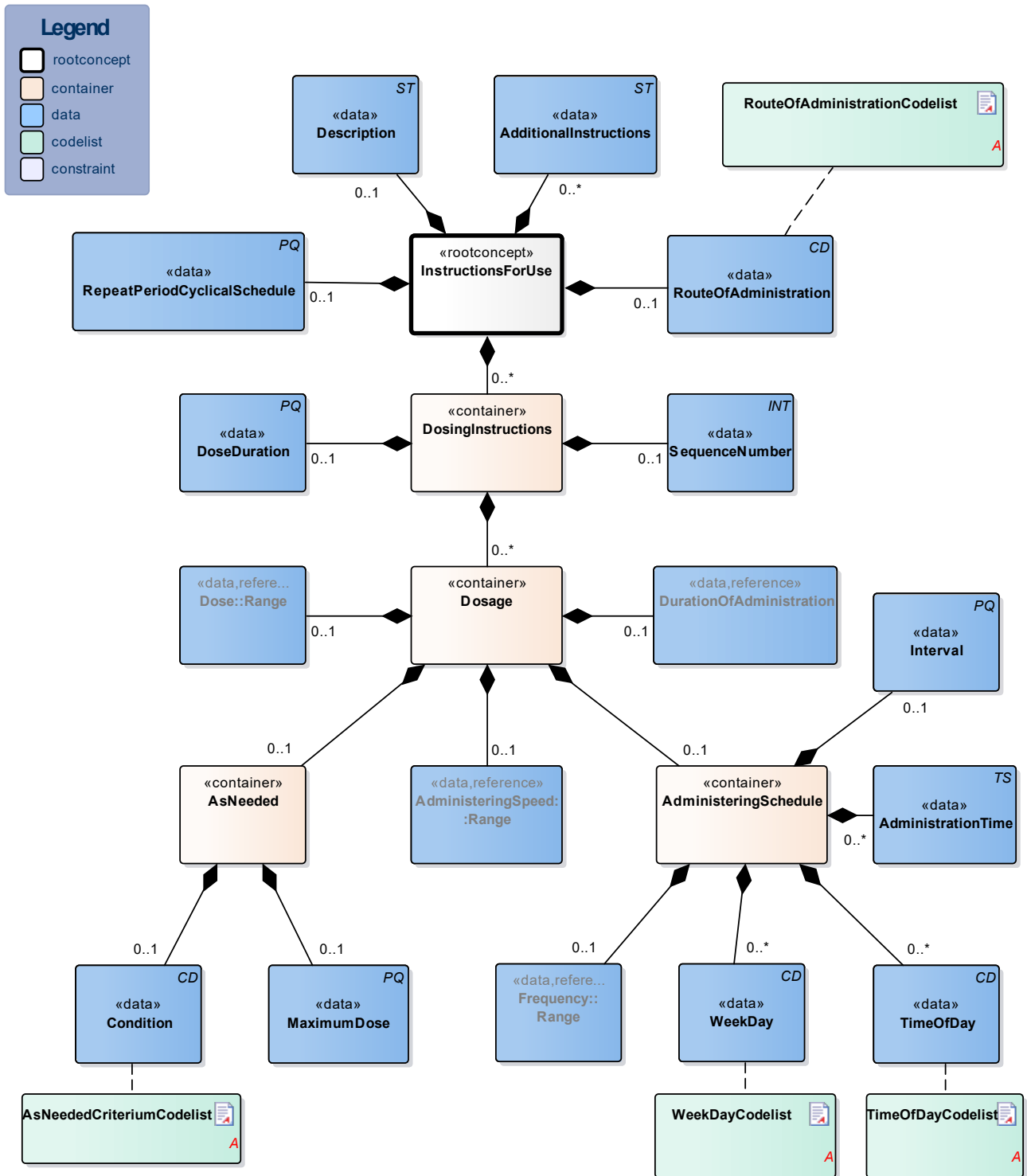
1.3 Mindmap

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 or considerations for the current prescription. This can also include 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 G standard contains many texts that can support this attribute, in for example G standard table 362, which contains texts from the general practitioners' standard WCIA table 25. If desired, 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 ist	OID: 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, *e.g.* 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 *parallel* 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 *sequential* 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::ReferencedConceptId	NL-CM:20.1.1	This is a reference to the rootconcept of the 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::ReferencedConceptId	NL-CM:20.1.1	This is a reference to the rootconcept of the partial information model Range.
Opties		

«data»	Dose::Range
Definitie	The dose indicates the dose amount 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 will want to indicate the dose in units of weight of the active ingredient.
	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::ReferencedConceptId	NL-CM:20.1.1	This is a reference to the rootconcept of the 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	The condition for administering medication can be: • a physiological measurement value (plasma glucose concentration, body temperature, blood pressure); • a symptom or other circumstance (in the event of a headache, or itch). Relevant B codes in Table 25 make up the list of values for coded entering of this concept. Also always include the textual description of that code. Physiological measurement values or other conditions that do not occur in the B codes in Tabel25 do not need to be coded. These can be expressed in free text in the Description concept.	
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		

«container»	AdministeringSchedule
Definitie	Specifications of the times at which the medication is to be administered. This is indicated as follows:

	• Time(s) (16:00) or indications ("before meals") at which the medication is to be taken each day. • A specific number of times the medication is to be taken each day ("3x a day"), indicated with the frequency. • A time interval between consecutive doses ("Every 2 hours", "every 3 days"), indicated with the word Interval. • Combined periods with an interval and duration ("1 daily for three out of four weeks: the pill schedule") If a certain medication is not to be taken daily, the aforementioned can be 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". The specified administration "infinite" is automatically to be repeated until: • The end date and time has been reached • The total administration duration has been reached (14 days) • A specific amount of administrations has been reached ("20 doses"), to 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 NHG table Gebruiksvoorschriften(Table 25) is also allowed.
Datatype	
DCM::ConceptId	NL-CM:9.12.19949
DCM::ReferencedConceptId	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, afternoon, 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 *Frequency* 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	PQ
DCM::ConceptId	NL-CM:9.12.19950
Opties	

«document»	TimeOfDayCodelist
Definitie	
Datatype	
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::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 Toedieningswegen	2.16.840.1.113883.2.4.4.9

«document»	WeekDayCodelist
Definitie	
Datatype	
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.9.12.2
Opties	

WeekdagCodelijst		OID: 2.16.840.1.113883.2.4.3.11.60.40.2.9.12.2		
Concept Name	**Concept Code**	**Code System Name**	**Code System OID**	**Description**
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»	AsNeededCriteriumCodelist
Definitie	
Datatype	
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.9.12.4
Opties	

ZonodigCriteriumCodelijst			OID: 2.16.840.1.113883.2.4.3.11.60.40.2.9.12.4	
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

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

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.

1.19 Terms of Use

The user may use the information in this Health and Care Information Model without limitations. The copyright provisions in the paragraph concerned apply to copying, distributing and passing on information from this Health and Care Information Model.

1.20 Copyrights

The user may copy, distribute and pass on the information in this Health and Care Information Model under the conditions that apply for Creative Commons license Attribution-NonCommercial-ShareAlike 3.0 Netherlands (CC BY-NCSA-3.0). The content is available under Creative Commons Attribution-NonCommercial-ShareAlike 3.0 (see also http://creativecommons.org/licenses/by-nc-sa/3.0/nl/)