Health & Care Information Model:

nl.zorg.part.Product-v1.0

Final

Managed by:

Content

1. nl.zorg.part.Product-v1.0

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	PM
DCM::EndorsingAuthority.Telecom	
DCM::Id	2.16.840.1.113883.2.4.3.11.60.40.3.9.7
DCM::KeywordList	Product
DCM::LifecycleStatus	Final
DCM::ModelerList	Architectuurgroep Registratie aan de Bron
DCM::Name	nl.zorg.part.Product
DCM::PublicationDate	04-09-2017
DCM::PublicationStatus	Prepublished
DCM::ReviewerList	Projectgroep Medicatieproces & Architectuurgroep Registratie aan de Bron
DCM::RevisionDate	04-09-2017
DCM::Superseeds	
DCM::Version	1.0
HCIM::PublicationLanguage	EN

1.1 Revision History

Publicatieversie 1.0 (04-09-2017)

1.2 Concept

The prescribed substance is usually medication. However, medical aids and bandages can also be prescribed and supplied via the pharmacy. Food and blood products do not strictly belong in the medication category, but can be prescribed and supplied by a pharmacy as well.

A type of medication can be indicated with **a single code**. That code can be chosen from several possible coding systems (concretely: GPK, PRK, HPK or article numbers). Correct use of these codes in the software systems will sufficiently record the composition of the product used, making a complete product specification unnecessary.

In addition to a primary code, **alternative codes** from other coding systems can also be entered (so that the GPK can be sent along in the event that the patient was registered based on PRK, for example).

Entering multiple ingredients will enable you to display a compound product. If one of the composite parts is liquid, the dosage will be given in milliliters; otherwise it will be given in ‘units’.

In that case, the **composition of the medication** can be specified implicitly (with the use of a medication code) or explicitly, for example by listing the (active) ingredient(s) of the medication.

Magistral prescriptions can be entered as well. This can be done by means of the option listed above to enter coded ingredients and/or by entering the composition and preparation method as free text.
This is a partial information model

1.3 Mindmap

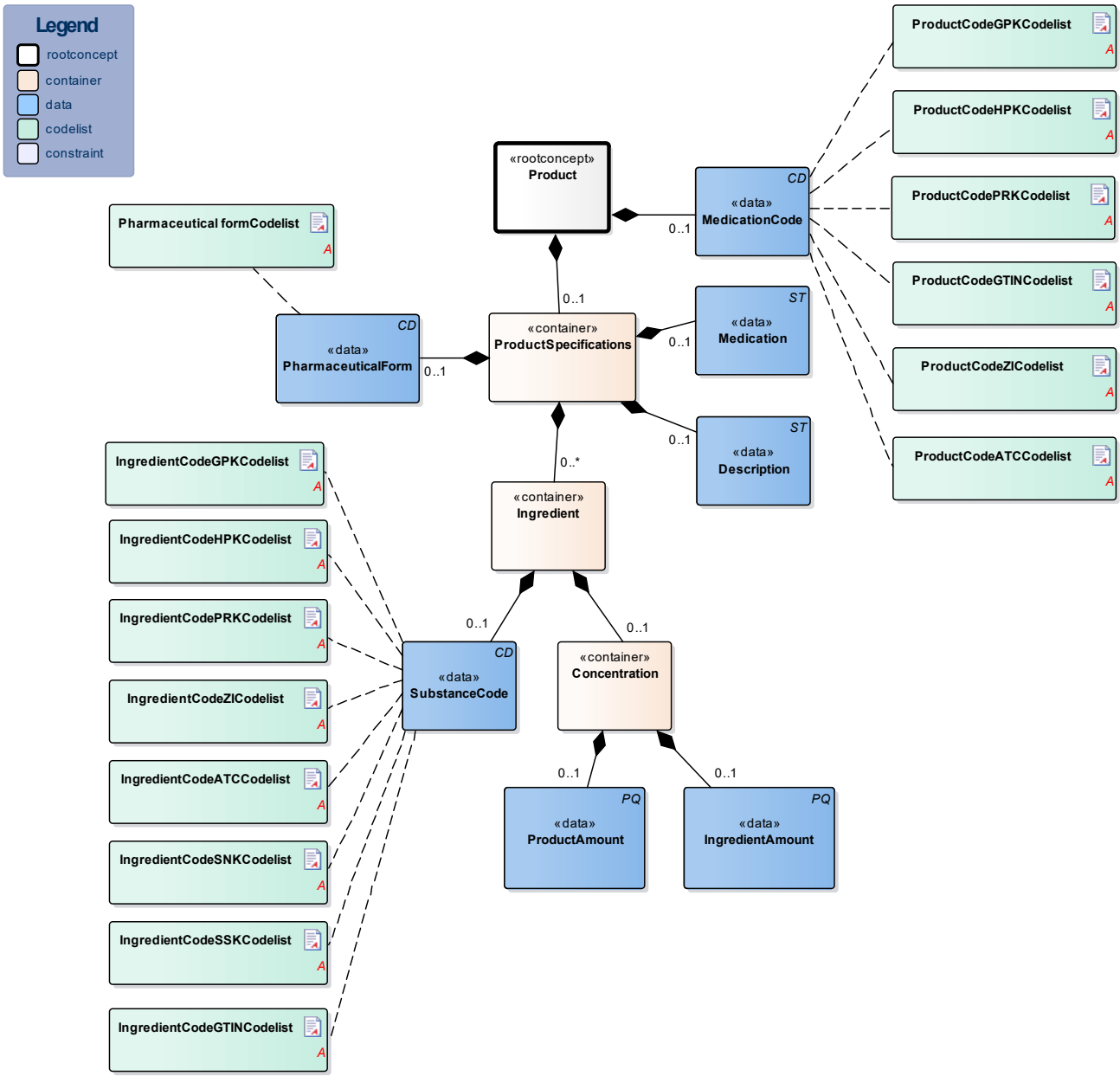
1.4 Purpose

The purpose of Product is to unambiguously describe the medication to be used.

1.5 Patient Population

1.6 Evidence Base

1.7 Information Model



«rootconcept»	Product	
Definitie	Root concept of the Product partial information model. This root concept contains all data elements of the Product partial information model. The prescribed product is usually a medicine. However, medical aids and bandages can also be prescribed and supplied via the pharmacy. Strictly speaking, food and blood products do not belong in the medication category, but can be prescribed and supplied by a pharmacy as well. A type of medication can be indicated with **a single code**. That code can be chosen from several possible coding systems (concretely: GPK, PRK, HPK or article numbers). Correct use of these codes in the software systems will sufficiently record the composition of the product used, making a complete product specification unnecessary. In addition to a primary code, **alternative codes** from other coding systems can also be entered (so that the GPK can be sent along in the event that the patient was registered based on PRK, for example). Entering multiple ingredients will enable you to display a compound product. If one of the composite parts is liquid, the dosage will be given in milliliters; otherwise it will be given in 'units'. In that case, the **composition of the medication** can be specified implicitly (with the use of a medication code) or explicitly, for example by listing the (active) substance(s) of the medication. **Prescriptions to be prepared by the pharmacy** can be entered as well. This can be done by means of the option listed above to enter coded ingredients and/or by entering the composition and preparation method as free text.	
Datatype		
DCM::ConceptId	NL-CM:9.7.19926	
Opties		

«container»	ProductSpecifications	
Definitie	Container of the ProductSpecifications concept. This container contains all data elements of the ProductSpecifications concept. Product specifications are required if the product code is not sufficient to ascertain the active substances and strength.	
Datatype		
DCM::ConceptId	NL-CM:9.7.19928	
Opties		

«data»	PharmaceuticalForm
Definitie	The pharmaceutical form indicates the form of the medication in accordance with the route of administration. Examples include: tablet, suppository, infusion liquid, ointment. If the product has a generic code in the G standard, the form will be known in the G standard. For products without a code (free text, preparation by the pharmacy), the means of administration can be entered.

Datatype	CD	
DCM::ConceptId	NL-CM:9.7.19931	
DCM::ExampleValue	230 (TABLET)	
DCM::ValueSet	Pharmaceutical formCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.9.7.8
Opties		

«data»	MedicationCode
Definitie	Coding medication in the Netherlands is done on the basis of the G standard (issued by Z-index), which is filled under the direction of KNMP. The coded medication can be expressed as: • GTIN International Article Number • KNMP article number = ATKODE (2.16.840.1.113883.2.4.4.8) • Trade product code (HPK) • Prescription code (PRK) • Generic product code (GPK) • Anatomic Therapeutic Classification code (ATC) • SNOMED CT code • Substance Name Code (SNK) • Substance Name Code, in combination with Route of Administration (SSK) • 90.000.000 number (individual code setting) (or similar from the facility) The GTIN enables identification of the product including its origin with a barcode. The ATKODE is the number with which wholesalers link the article to pharmacy systems (e.g. a box with 3 strips of 10 tablets). The HPK is the code for the trade product (with the brand name) as used per dose/per time the medication is taken (1 pill, 1 puff, 1ml) The PRK codes for the same product as the HPK does, but is not linked to a manufacturer (no brand name, no characteristics such as color, geometrical shape etc.). This code will enable a generic prescription, while still defining which trade product can be taken (e.g. a 200ml bag). The generic product code defines the composition of a product, and is sufficient for recording the prescription, but not the order. The prescription code (PRK) was developed and added to the older generic (GPK) and supplier-specific (HPK, ATKODE) coding to enable a generic product to be entered without listing a specific brand on the one hand, and to enable providing enough information to support the pharmacy supplying it on the other. The Substance Name Code (SNK) and the Substance Name Code, in combination with Route of Administration (SSK) are used to prescribe at a more generic level. The GTIN coding is used for the implementation of a barcode scanning standard and to be able to trace the origin of the product. The 90.000.000 number is used in accordance with national agreements.
Datatype	CD

DCM::ConceptId	NL-CM:9.7.19927	
DCM::ExampleValue	55026 (CARBASALAATCALCIUM TABLET 100MG)	
DCM::ValueSet	ProductCodeHPKCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.9.7.5
DCM::ValueSet	ProductCodePRKCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.9.7.3
DCM::ValueSet	ProductCodeGTINCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.9.7.2
DCM::ValueSet	ProductCodeZICodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.9.7.1
DCM::ValueSet	ProductCodeATCCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.9.7.7
DCM::ValueSet	ProductCodeGPKCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.9.7.6
Opties		

«data»	Medication	
Definitie	There is no code for medication entered in free text. In these cases, enter the complete description.	
Datatype	ST	
DCM::ConceptId	NL-CM:9.7.19929	
DCM::ExampleValue	PARACETAMOL 500MG TABLET	
Opties		

«data»	Description	
Definitie	A textual description of the type of medication (including relevant properties of the composition and preparation method if possible), which is only used if no coded indication from the G Standard is available (magistral preparation).	
Datatype	ST	
DCM::ConceptId	NL-CM:9.7.19784	
Opties		

«container»	Ingredient	
Definitie	Container of the Ingredient concept. This container contains all data elements of the Ingredient concept. A product contains one or more active substances and excipients. These are usually determined by the product code. For medication prepared or compounded by the local pharmacy, each ingredient must be entered separately. The active substances play an important role, as they: a) determine the pharmacotherapeutic effect of the medication and b) serve as the basis for the indication of the strength of the medication (e.g. 200mg).	
Datatype		
DCM::ConceptId	NL-CM:9.7.19932	
DCM::ExampleValue	captopril	

Opties	

«data»	SubstanceCode	
Definitie	Active substance or excipient. Here, the same codes can be used as for the ProductCode (for dilutions and compounds in particular), but now, the ATC, SSK and SNK codes can also be used to indicate a substance (to list ingredients of local products prepared by the pharmacy). • GTIN International Article Number • KNMP article number • Trade product code (HPK) • Prescription code (PRK) • Generic product code (GPK) • ATC (anatomic therapeutic classification) • SSK (substance name code with route of administration) • SNK (substance name code) The ATC is an international classification of pharmaceutical substances without a reference to specific products on the market. Therefore, the ATC code of a generic product will not contain a reference to a certain dose, pharmaceutical form or route of administration; it will only contain a reference to the ingredients (not the amount/concentration/strength).	
Datatype	CD	
DCM::ConceptId	NL-CM:9.7.19934	
DCM::ExampleValue	ATC C09BA01	CAPTOPRIL
DCM::ValueSet	IngredientCodeATCCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.9.7.13
DCM::ValueSet	IngredientCodeGTINCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.9.7.16
DCM::ValueSet	IngredientCodeSNKCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.9.7.14
DCM::ValueSet	IngredientCodeZICodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.9.7.12
DCM::ValueSet	IngredientCodePRKCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.9.7.11
DCM::ValueSet	IngredientCodeHPKCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.9.7.10
DCM::ValueSet	IngredientCodeGPKCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.9.7.9
DCM::ValueSet	IngredientCodeSSKCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.9.7.15
Opties		

«container»	Concentration	
Definitie	The relative amount of this ingredient in this product. Calculation of Concentration = Ingredient Amount ÷ Product Amount. This could be a concentration if the medication is dissolved in liquid, for example.	
Datatype		
DCM::ConceptId	NL-CM:9.7.19933	
DCM::ExampleValue	25mg/stuk of 50IE/ml of 200mg/500ml	

Opties	

«data»	IngredientAmount	
Definitie	The amount of this ingredient. This is the numerator for the calculation of the concentration. The unit should be selected from the G-Standard (Table 902).	
Datatype	PQ	
DCM::ConceptId	NL-CM:9.7.22277	
DCM::ExampleValue	5 ml 20 mg	
Opties		

«data»	ProductAmount	
Definitie	Amount of the product. This is the denominator for the calculation of the concentration.	
Datatype	PQ	
DCM::ConceptId	NL-CM:9.7.22278	
DCM::ExampleValue	200 ml 500 mg	
Opties		

«document»	ProductCodeZICodelist	
Definitie		
Datatype		
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.9.7.1	
Opties		

ProductCodeZICodelijst		**OID: 2.16.840.1.113883.2.4.3.11.60.40.2.9.7.1**
Codes	Coding Syst. Name	Coding System OID
Alle waarden	G-Standaard Artikelen (ook KNMP-nummer, ATKODE)	2.16.840.1.113883.2.4.4.8

«document»	ProductCodeGTINCodelist	
Definitie		
Datatype		
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.9.7.2	
Opties		

ProductCodeGTINCodelijst		**OID: 2.16.840.1.113883.2.4.3.11.60.40.2.9.7.2**
Codes	Coding Syst. Name	Coding System OID
Alle waarden	Global Trade Item Number (GTIN)	1.3.160

«document»	ProductCodePRKCodelist	
Definitie		
Datatype		
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.9.7.3	
Opties		

ProductCodePRKCodelijst		**OID: 2.16.840.1.113883.2.4.3.11.60.40.2.9.7.3**
Codes	Coding Syst. Name	Coding System OID
Alle waarden	G-Standaard Voorschrijfproducten (PRK)	2.16.840.1.113883.2.4.4.10

«document»	ProductCodeHPKCodelist	
Definitie		
Datatype		
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.9.7.5	
Opties		

ProductCodeHPKCodelijst		**OID: 2.16.840.1.113883.2.4.3.11.60.40.2.9.7.5**
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»	ProductCodeGPKCodelist	
Definitie		
Datatype		
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.9.7.6	
Opties		

ProductCodeGPKCodelijst		**OID: 2.16.840.1.113883.2.4.3.11.60.40.2.9.7.6**
Codes	Coding Syst. Name	Coding System OID
Alle waarden	G-Standaard Generieke Product Kode (GPK)	2.16.840.1.113883.2.4.4.1

«document»	ProductCodeATCCodelist	
Definitie		
Datatype		
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.9.7.7	
Opties		

ProductCodeATCCodelijst		**OID: 2.16.840.1.113883.2.4.3.11.60.40.2.9.7.7**
Codes	Coding Syst. Name	Coding System OID
Alle waarden	Anatomic Therapeutic Classification (ATC)	2.16.840.1.113883.6.73

«document»	Pharmaceutical formCodelist	
Definitie		
Datatype		
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.9.7.8	
Opties		

FarmaceutischeVormCodelijst		**OID: 2.16.840.1.113883.2.4.3.11.60.40.2.9.7.8**
Codes	Coding Syst. Name	Coding System OID
Alle waarden	G-Standaard Farmaceutische vormen	2.16.840.1.113883.2.4.4.11

«document»	IngredientCodeGPKCodelist	
Definitie		
Datatype		
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.9.7.9	

Opties	

IngredientCodeGPKCodelijst		OID: 2.16.840.1.113883.2.4.3.11.60.40.2.9.7.9
Codes	Coding Syst. Name	Coding System OID
Alle waarden	G-Standaard Generieke Product Kode (GPK)	2.16.840.1.113883.2.4.4.1

«document»	IngredientCodeHPKCodelist	
Definitie		
Datatype		
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.9.7.10	
Opties		

IngredientCodeHPKCodelijst		OID: 2.16.840.1.113883.2.4.3.11.60.40.2.9.7.10
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»	IngredientCodePRKCodelist	
Definitie		
Datatype		
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.9.7.11	
Opties		

IngredientCodePRKCodelijst		OID: 2.16.840.1.113883.2.4.3.11.60.40.2.9.7.11
Codes	Coding Syst. Name	Coding System OID
Alle waarden	G-Standaard Voorschrijfproducten (PRK)	2.16.840.1.113883.2.4.4.10

«document»	IngredientCodeZICodelist	
Definitie		
Datatype		
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.9.7.12	
Opties		

IngredientCodeZICodelijst		OID: 2.16.840.1.113883.2.4.3.11.60.40.2.9.7.12
Codes	Coding Syst. Name	Coding System OID
Alle waarden	G-Standaard Artikelen (ook KNMP-nummer, ATKODE)	2.16.840.1.113883.2.4.4.8

«document»	IngredientCodeATCCodelist	
Definitie		
Datatype		
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.9.7.13	
Opties		

IngredientCodeATCCodelijst		OID: 2.16.840.1.113883.2.4.3.11.60.40.2.9.7.13
Codes	Coding Syst. Name	Coding System OID
Alle waarden	Anatomic Therapeutic Classification (ATC)	2.16.840.1.113883.6.73

«document»	IngredientCodeSNKCodelist	
Definitie		
Datatype		
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.9.7.14	
Opties		

IngredientCodeSNKCodelijst		OID: 2.16.840.1.113883.2.4.3.11.60.40.2.9.7.14
Codes	Coding Syst. Name	Coding System OID
Alle waarden	G-standaard Stofnaamcode (SNK)	2.16.840.1.113883.2.4.4.1.750

«document»	IngredientCodeSSKCodelist	
Definitie		
Datatype		
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.9.7.15	
Opties		

IngredientCodeSSKCodelijst		OID: 2.16.840.1.113883.2.4.3.11.60.40.2.9.7.15
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»	IngredientCodeGTINCodelist	
Definitie		
Datatype		
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.9.7.16	
Opties		

IngredientCodeGTINCodelijst		OID: 2.16.840.1.113883.2.4.3.11.60.40.2.9.7.16
Codes	Coding Syst. Name	Coding System OID
Alle waarden	Global Trade Item Number (GTIN)	1.3.160

1.8 Example Instances

Afgesproken geneesmiddel
Product
Lisinopril tablet 10mg
Methotrexaat injvlst 25mg/ml 0,6 ml

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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