Health&Care Information Model:

nl.zorg.OverdrachtLaboratoriumUitslag

Draft

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Content

1. nl.zorg.OverdrachtLaboratoriumUitslag-v3.0

DCM::CoderList	Kerngroep Registratie aan de Bron
DCM::ContactInformation.Address	*
DCM::ContactInformation.Name	*
DCM::ContactInformation.Telecom	*
DCM::ContentAuthorList	Projectgroep Generieke Overdrachtsgegevens & Kerngroep Registratie aan de Bron
DCM::CreationDate	7-6-2012
DCM::DeprecatedDate	
DCM::DescriptionLanguage	nl
DCM::EndorsingAuthority.Address	
DCM::EndorsingAuthority.Name	PM
DCM::EndorsingAuthority.Telecom	
DCM::Id	2.16.840.1.113883.2.4.3.11.60.40.3.13.1
DCM::KeywordList	laboratorium uitslag, lab, laboratorium bepaling
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DCM::Version	3.0

1.1 Revision History

Publicatieversie 1.0 (15-02-2013)

Publicatieversie 1.1 (01-07-2013)

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Bevat: ZIB-453.

1.2 Concept

A laboratory result describes the result of a laboratory analysis.
In addition to the results of tests with a singular result, the results of more complex tests with multiple results or a ‘panel’ can also be recorded.

1.3 Mindmap

1.4 Purpose

Laboratory tests are done for the purpose of diagnosing and preventing disease and follow-up on the effects of treatment.

1.5 Patient Population

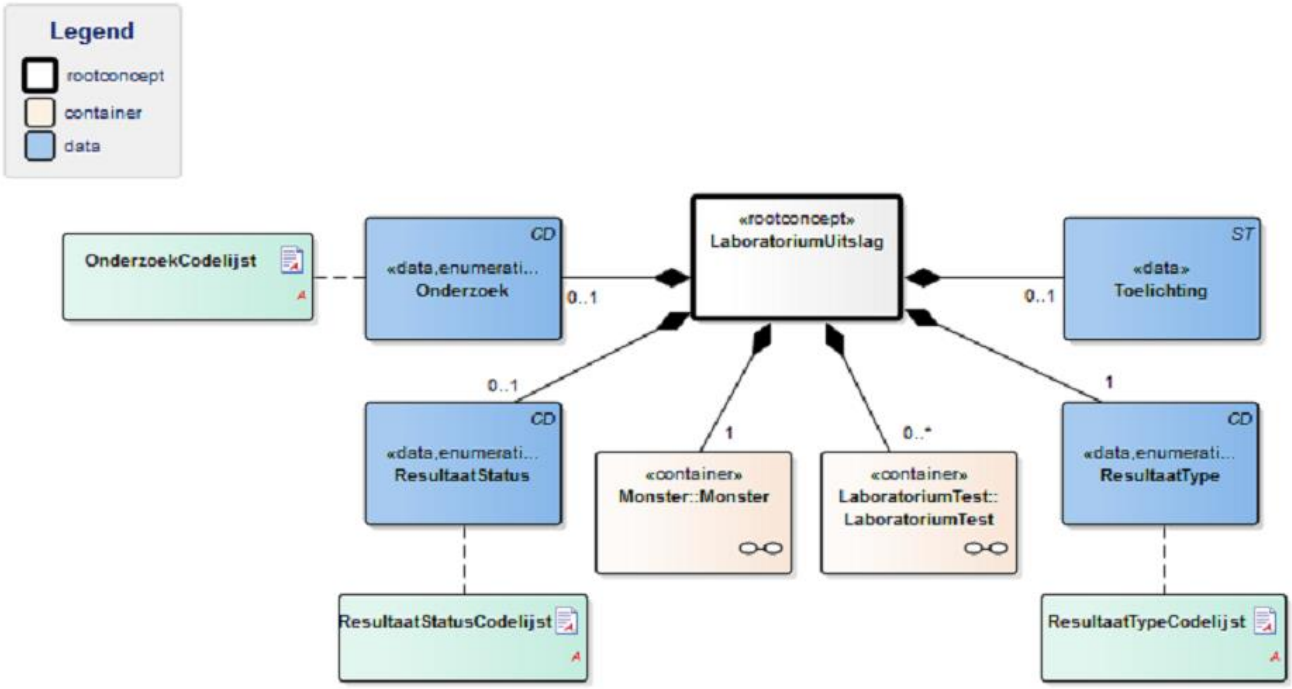
1.6 Evidence Base

There are two information models for recording laboratory test results: TextResultTransfer and LaboratoryResultTransfer.

In the case of laboratory test results, it is difficult to clearly indicate exactly when to use this information model and when to use the TextResultTransfer information model.
In general, laboratory tests resulting in a value (7.1 mmol/L), ordinal number (++ from series to ++++) or a quantitative result (Low) are recorded using this information model. The TextResultTransfer information model is better suited for textual results that are more descriptive in nature and which are longer than just a few words. Both types of tests occur in almost all laboratories.
The applicability of the aforementioned information models is not determined by the kind of lab but by the kind of result.

In developing the information model, the definitions were used from the data set and coding choices from the IHE/Nictiz e-Lab program.
The now determined information model is a subset of the e-Lab data set, provided that the detailing that is less relevant to the general transfer use case was left out. If this information is required, it can be entered in the comments field.

1.7 Information Model



«rootconcept»	LaboratoriumUitslag	
Alias	EN: LaboratoryTestResult	
Definition	Root concept of the LaboratoryTestResultTransfer information model. This root concept contains all data elements of the Laboratory TestResultTransfer information model.	
Datatype		
DCM::DefinitionCode	NL-CM:13.1.1	
Options		

«data»	Onderzoek	
Alias	EN: Test	
Definition	For laboratory tests comprising multiple subtests and often requested together as a whole, this concept contains the name of the compound request (often indicated as a ‘panel’, ‘battery’ or ‘cluster’). Examples include: blood gases and EBV serology.	
Datatype	CD	
DCM::DefinitionCode	NL-CM:13.1.4	
DCM::ExampleValue	Bloedgassen	
DCM::ValueSet	OnderzoekCodelijst	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.13.1.5
Options		

«data»	ResultaatStatus	
Alias	EN: ResultStatus	
Definition	The status of the laboratory test result.	
Datatype	CD	
DCM::DefinitionCode	NL-CM:13.1.6	
DCM::ExampleValue	Definitief	
DCM::ValueSet	ResultaatStatusCodelijst	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.13.1.8
Options		

«data»	Toelichting	
Alias	EN: Explanation	
Definition	Comments, such as a textual interpretation or advice accompanying the result, for example.	
Datatype	ST	
DCM::DefinitionCode	NL-CM:13.1.5	
DCM::DefinitionCode	LOINC: 48767-8 Annotation comment	
Options		

«data»	ResultaatType	
Alias	EN: ResultType	
Definition	The type of result defines the laboratory specialty under which the test is categorized.	
Datatype	CD	
DCM::DefinitionCode	NL-CM:13.1.7	
DCM::ExampleValue	Klinische Chemie	
DCM::ValueSet	ResultaatTypeCodelijst	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.13.1.1
Options		

«document»	OnderzoekCodelijst
Alias	
Definition	
Datatype	
Options	

OnderzoekCodelijst		**OID: 2.16.840.1.113883.2.4.3.11.60.40.2.13.1.5**
Codes	Coding Syst. Name	Coding System OID
Alle waarden	LOINC	2.16.840.1.113883.6.1

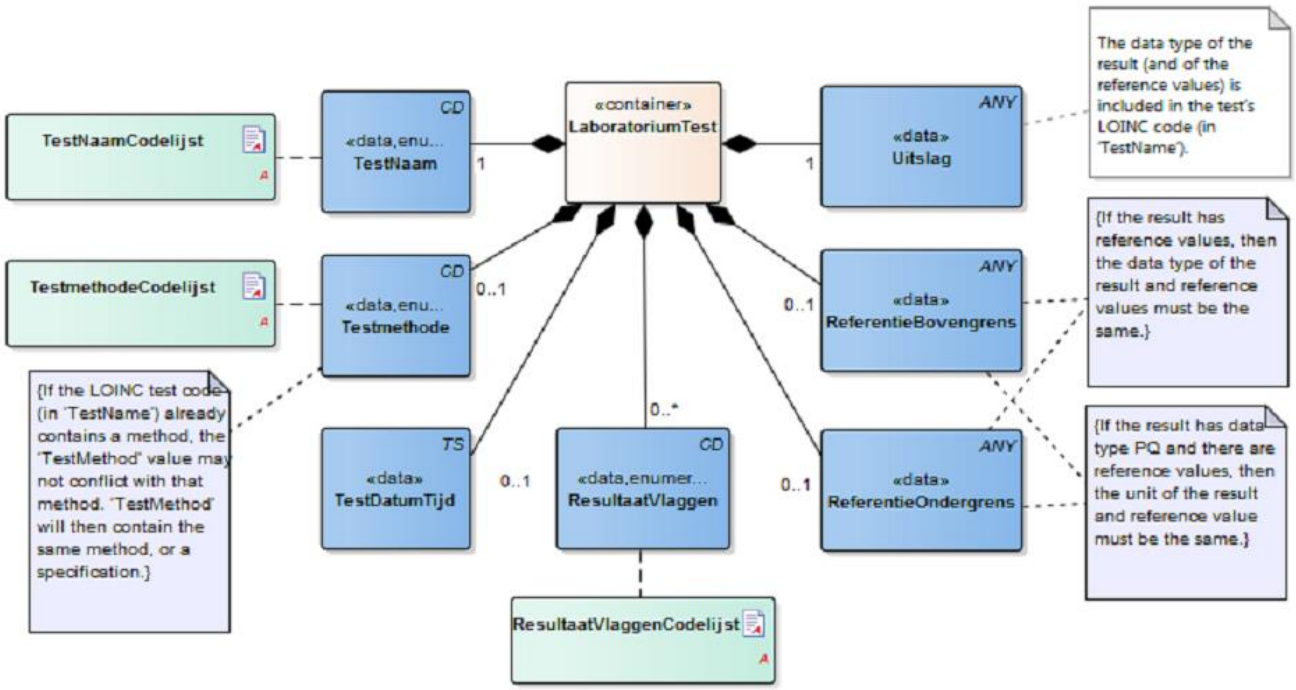
«document»	ResultaatStatusCodelijst
Alias	
Definition	
Datatype	
Options	

ResultaatStatusCodelijst		**OID: 2.16.840.1.113883.2.4.3.11.60.40.2.13.1.8**		
Concept Name	**Concept Code**	**CodeSys. Name**	**CodeSystem OID**	**Description**
Pending	pending	ResultaatStatus	2.16.840.1.113883.2.4.3.11.60.40.4.16.1	Uitslag volgt
Preliminary	preliminary	ResultaatStatus	2.16.840.1.113883.2.4.3.11.60.40.4.16.1	Voorlopig
Final	final	ResultaatStatus	2.16.840.1.113883.2.4.3.11.60.40.4.16.1	Definitief
Appended	appended	ResultaatStatus	2.16.840.1.113883.2.4.3.11.60.40.4.16.1	Aanvullend
Corrected	corrected	ResultaatStatus	2.16.840.1.113883.2.4.3.11.60.40.4.16.1	Gecorrigeerd

«document»	ResultaatTypeCodelijst
Alias	
Definition	
Datatype	
Options	

ResultaatTypeCodelijst			OID: 2.16.840.1.113883.2.4.3.11.60.40.2.13.1.1	
Concept Name	**Concept Code**	**Coding Syst. Name**	**Coding System OID**	**Omschrijving**
Hematology	252275004	SNOMED CT	2.16.840.1.113883.6.96	Hematologie
Chemistry	275711006	SNOMED CT	2.16.840.1.113883.6.96	Klinische chemie
Serology	68793005	SNOMED CT	2.16.840.1.113883.6.96	Serologie/ immunologie
Virology	395124008	SNOMED CT	2.16.840.1.113883.6.96	Virologie
Toxicology	314076009	SNOMED CT	2.16.840.1.113883.6.96	Toxicologie
Microbiology	19851009	SNOMED CT	2.16.840.1.113883.6.96	Microbiologie

1.7.1 LaboratoriumTest



«container»	LaboratoriumTest	
Alias	EN: LaboratoryTest	
Definition	Container of the LaboratoryTest concept. This container contains all data elements of the LaboratoryTest concept.	
Datatype		
DCM::DefinitionCode	NL-CM:13.1.3	
Options		

«data»	TestNaam	
Alias	EN: TestName	
Definition	The TestName is the name of the executed test.	
Datatype	CD	
DCM::DefinitionCode	NL-CM:13.1.8	
DCM::ExampleValue	HbA1c	
DCM::ValueSet	TestNaamCodelijst	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.13.1.3
Options		

«data»	Testmethode	
Alias	EN: TestMethod	
Definition	The test method used to obtain the result.	
Datatype	CD	
DCM::DefinitionCode	NL-CM:13.1.9	
DCM::ExampleValue	IFCC	
DCM::ValueSet	TestmethodeCodelijst	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.13.1.4
Options		

«data»	TestDatumTijd	
Alias	EN: TestDateTime	
Definition	The date and if possible the time at which the test was carried out.	
Datatype	TS	
DCM::DefinitionCode	NL-CM:13.1.13	
DCM::ExampleValue	10-07-2012 20:15	
Options		

«data»	Uitslag	
Alias	EN: Result	
Definition	The test result. Depending on the type of test, the result will consist of a value with a unit or a coded value (ordinal or nominal).	
Datatype	ANY	
DCM::DefinitionCode	NL-CM:13.1.10	
DCM::ExampleValue	53 mmol/mol	
Options		

«data»	ReferentieBovengrens	
Alias	EN: UpperReferenceLimit	
Definition	The upper reference limit for the patient of the value measured in the test.	
Datatype	ANY	
DCM::DefinitionCode	NL-CM:13.1.11	
DCM::ExampleValue	42 mmol/mol	
Options		

«data»	ReferentieOndergrens
Alias	EN: LowerReferenceLimit
Definition	The lower reference limit for the patient of the value measured with the

	test.	
Datatype	ANY	
DCM::DefinitionCode	NL-CM:13.1.12	
DCM::ExampleValue	20 mmol/mol	
Options		

«data»	ResultaatVlaggen	
Alias	EN: ResultFlags	
Definition	Attention codes indicating whether the result is above or below certain reference values.	
Datatype	CD	
DCM::DefinitionCode	NL-CM:13.1.14	
DCM::ExampleValue	High	
DCM::ValueSet	ResultaatVlaggenCodelijst	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.13.1.7
Options		

«document»	TestNaamCodelijst
Alias	
Definition	
Datatype	
Options	

TestNaamCodelijst		**OID: 2.16.840.1.113883.2.4.3.11.60.40.2.13.1.3**
Codes	Coding Syst. Name	Coding System OID
Alle waarden	LOINC	2.16.840.1.113883.6.1

«document»	TestmethodeCodelijst
Alias	
Definition	
Datatype	
Options	

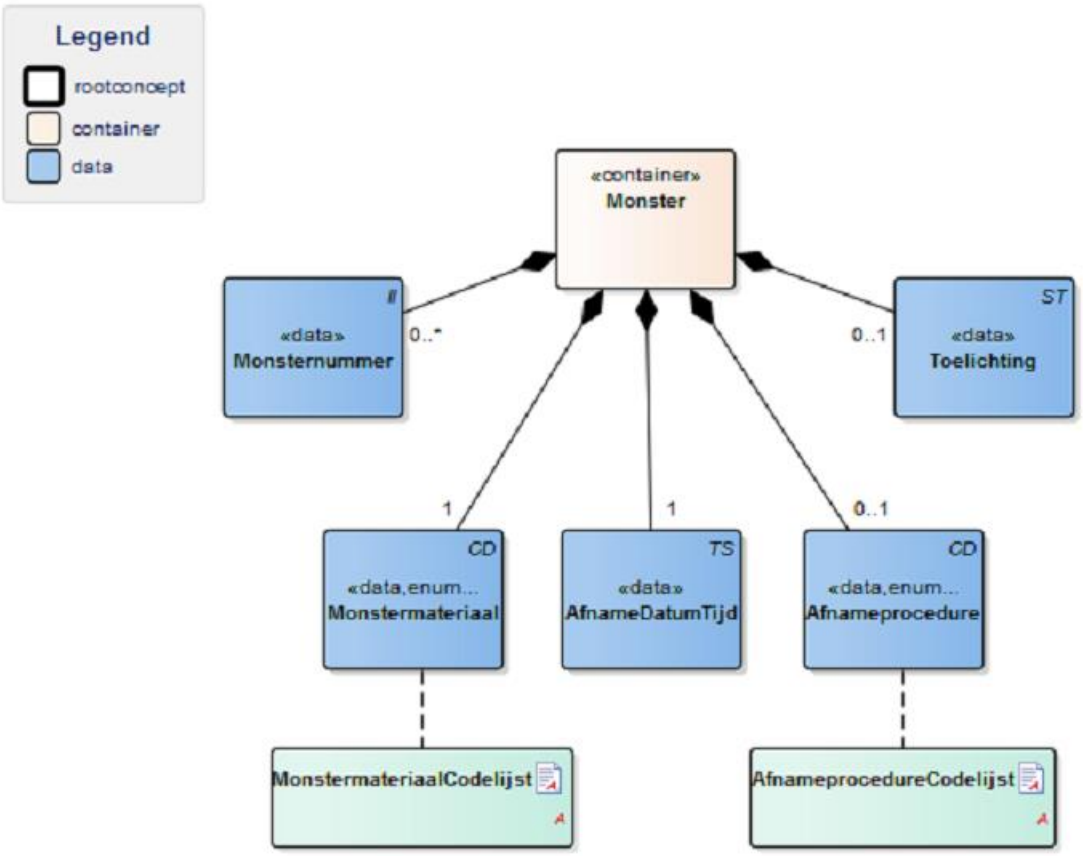
TestmethodeCodelijst		**OID: 2.16.840.1.113883.2.4.3.11.60.40.2.13.1.4**
Codes	Coding Syst. Name	Coding System OID
Alle waarden	SNOMED CT	2.16.840.1.113883.6.96

«document»	ResultaatVlaggenCodelijst
Alias	
Definition	
Datatype	
Options	

ResultaatVlaggenCodelijst			**OID: 2.16.840.1.113883.2.4.3.11.60.40.2.13.1.7**	
Concept Name	Concept Code	Coding Syst. Name	Coding System OID	Description
High	H	ObservationInterpretation	2.16.840.1.113883.5.83	Boven referentiewaarde
Low	L	ObservationInterpretation	2.16.840.1.113883.5.83	Onder referentiewaarde

Intermediate	I	ObservationInterpretation	2.16.840.1.113883.5.83	Variabel
Resistant	R	ObservationInterpretation	2.16.840.1.113883.5.83	Resistent
Susceptible	S	ObservationInterpretation	2.16.840.1.113883.5.83	Sensitief

1.7.2 Monster



«container»	Monster	
Alias	EN: Specimen	
Definition	Container of the Specimen concept. This container contains all data elements of the Specimen concept.	
Datatype		
DCM::DefinitionCode	NL-CM:13.1.2	
Options		

«data»	Monsternummer	
Alias	EN: SpecimenNumber	
Definition	Identification number of the material obtained, as a reference for inquiries to the source organization. In a transmural setting, this number will consist of a specimen number including the identification of the issuing organization, to be unique outside of the borders of an organization.	
Datatype	II	
DCM::DefinitionCode	NL-CM:13.1.15	
Options		

«data»	Monstermateriaal	
Alias	EN: SpecimenMaterial	
Definition	SpecimenMaterial describes the material obtained. If the LOINC test code also implicitly describes a material, this element may not conflict with the description. If desired, this component can provide a more detailed description of the material: LOINC codes only contain the materials at a main level. This is in line with the agreements made in the IHE/Nictiz program e-Lab. If the test is carried out on derived material (such as plasma), this element will still contain the material drawn (in this case, blood). In this case, the LOINC code will generally refer to plasma.	
Datatype	CD	
DCM::DefinitionCode	NL-CM:13.1.16	
DCM::ExampleValue	Urine	
DCM::ValueSet	MonstermateriaalCodelijst	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.13.1.6
Options		

«data»	AfnameDatumTijd	
Alias	EN: DrawingDateTime	
Definition	Time at which the material was drawn.	
Datatype	TS	
DCM::DefinitionCode	SNOMED CT: 399445004 specimen collection date	
DCM::DefinitionCode	NL-CM:13.1.17	
DCM::ExampleValue	10-07-2012 17:20	
Options		

«data»	Afnameprocedure	
Alias	EN: DrawingProcedure	
Definition	If relevant for the results, the method of obtaining the specimen can be entered as well.	
Datatype	CD	
DCM::DefinitionCode	NL-CM:13.1.18	
DCM::ExampleValue	Midstream	
DCM::ValueSet	AfnameprocedureCodelijst	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.13.1.2
Options		

«data»	Toelichting	
Alias	EN: Explanation	
Definition	Comments on administering the test, such as drawing material after a (glucose) stimulus or taking medicine.	
Datatype	ST	
DCM::DefinitionCode	LOINC: 48767-8 Annotation comment	
DCM::DefinitionCode	NL-CM:13.1.19	
DCM::ExampleValue	Na (glucose)stimulus	
Options		

«document»	AfnameprocedureCodelijst
Alias	
Definition	
Datatype	
Options	

AfnameprocedureCodelijst		OID: 2.16.840.1.113883.2.4.3.11.60.40.2.13.1.2
Codes	Coding Syst. Name	Coding System OID
SNOMED CT: <17636008 | specimen collection |	SNOMED CT	2.16.840.1.113883.6.96

«document»	MonstermateriaalCodelijst
Alias	
Definition	
Datatype	
Options	

MonstermateriaalCodelijst		OID: 2.16.840.1.113883.2.4.3.11.60.40.2.13.1.6
Codes	Coding Syst. Name	Coding System OID
SNOMED CT: <123038009 | specimen |	SNOMED CT	2.16.840.1.113883.6.96

1.8 Example Instances

LaboratoriumUitslag									
Resultaat Type	Resultaat Status	Monster		LaboratoriumTest					
		Monster materiaal	Afname DatumTijd	TestNaam	Test DatumTijd	Uitslag	Referentie Ondergrens	Referentie Bovengrens	Resultaat Vlaggen
Klinische chemie	Definitief	Bloed	12-06-2012 09:00	Natrium	12-06-2012 13:15	138 mmol/l	136 mmol/l	146 mmol/l	

LaboratoriumUitslag									
Resultaat Type	Resultaat Status	Monster		LaboratoriumTest					
		Monster materiaal	Afname DatumTijd	TestNaam	Test DatumTijd	Uitslag	Referentie Ondergrens	Referentie Bovengrens	Resultaat Vlaggen
Klinische chemie	Definitief	Bloed	23-05-2012 08:08	Chloride	23-05-2012 12:00	109 mmol/l	99 mmol/l	108 mmol/l	Boven referentie-waarde

LaboratoriumUitslag									
Resultaat Type	Resultaat Status	Monster		LaboratoriumTest					
		Monster materiaal	Afname DatumTijd	TestNaam	Test DatumTijd	Uitslag	Referentie Ondergrens	Referentie Bovengrens	Resultaat Vlaggen
Virologie	Definitief	Bloed	16-01-2012 08:00	Hepatitis A IgM	16-01-2012 10:12	Negatief			

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. Nederlandse Vereniging voor Medische Microbiologie (2010) *ELab en EvT.* [Online] Beschikbaar op: http://www.nvmm.nl/ict/vereniging/werkgroepen_commissies/elab-en-evt [Geraadpleegd: 23 juli 2014].

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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