

Health & Care Information Model:

nl.zorg.Problem-v4.4

Status: Final

Release: 2020

Release status: Published

Managed by:



Content

1. nl.zorg.Problem-v4.4	3
1.1 Revision History	3
1.2 Concept	4
1.3 Mindmap	4
1.4 Purpose	4
1.5 Patient Population	4
1.6 Evidence Base	4
1.7 Information Model	4
1.8 Example Instances	8
1.9 Instructions	9
1.10 Interpretation	9
1.11 Care Process	9
1.12 Example of the Instrument	9
1.13 Constraints	9
1.14 Issues	9
1.15 References	9
1.16 Functional Model	10
1.17 Traceability to other Standards	10
1.18 Disclaimer	10
1.19 Terms of Use	10
1.20 Copyrights	10

1. nl.zorg.Problem-v4.4

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	11-6-2012
DCM::DeprecatedDate	
DCM::DescriptionLanguage	nl
DCM::EndorsingAuthority.Address	
DCM::EndorsingAuthority.Name	PM
DCM::EndorsingAuthority.Telecom	
DCM::Id	2.16.840.1.113883.2.4.3.11.60.40.3.5.1
DCM::KeywordList	problemen, klachten, diagnoses
DCM::LifecycleStatus	Final
DCM::ModelerList	Kerngroep Registratie aan de Bron
DCM::Name	nl.zorg.Probleem
DCM::PublicationDate	01-09-2020
DCM::PublicationStatus	Published
DCM::ReviewerList	Projectgroep Generieke Overdrachtsgegevens & Kerngroep Registratie aan de Bron
DCM::RevisionDate	15-07-2020
DCM::Supersedes	nl.zorg.Probleem-v4.3
DCM::Version	4.4
HCIM::PublicationLanguage	EN

1.1 Revision History

Publicatieversie 1.0 (15-02-2013)

-

Publicatieversie 1.1 (01-07-2013)

-

Publicatieversie 1.2 (01-04-2015)

Bevat: ZIB-150, ZIB-267, ZIB-268, ZIB-269, ZIB-305, ZIB-310, ZIB-353.

Incl. algemene wijzigingsverzoeken:

ZIB-94, ZIB-154, ZIB-200, ZIB-201, ZIB-309, ZIB-324, ZIB-326.

Publicatieversie 3.0 (01-05-2016)

Bevat: ZIB-400, ZIB-453.

Publicatieversie 4.0 (04-09-2017)

Bevat: ZIB-107, ZIB-108, ZIB-446, ZIB-459, ZIB-467, ZIB-549, ZIB-564, ZIB-529, ZIB-576.

Publicatieversie 4.1 (31-12-2017)

Bevat: ZIB-579, ZIB-646.

Publicatieversie 4.1.1 (01-10-2018)

Bevat: ZIB-661.

Publicatieversie 4.2 (26-02-2019)

Bevat: ZIB-624, ZIB-627.

Publicatieversie 4.2.1 (06-07-2019)

Bevat: ZIB-816

Publicatieversie 4.3 (31-01-2020)

Bevat: ZIB-908, ZIB-963, ZIB-987.

Publicatieversie 4.4 (01-09-2020)

Bevat: ZIB-1116, ZIB-1147, ZIB-1175, ZIB-1202, ZIB-1133.

1.2 Concept

A problem describes a situation with regard to an individual's health and/or welfare. This situation can be described by the person involved (the patient) themselves (in the form of a complaint), or by their healthcare provider (in the form of a diagnosis, for example). The situation can form cause for diagnostic or therapeutic policy.

A problem includes all kinds of medical or nursing information that represents a health problem. A problem can represent various types of health problems:

- A complaint, finding by patient: a subjective, negatively experienced observation of the patient's health. Examples: stomach ache, amnesia
- A symptom: an observation by or about the patient which may indicate a certain disease. Examples: fever, blood in stool, white spots on the roof of the mouth;
- A diagnosis: medical interpretation of complaints and findings. Examples: Diabetes Mellitus type II, pneumonia, hemolytic-uremic syndrome.
- A functional limitation: a reduction of functional options. Examples: reduced mobility, help required for dressing.
- A complication: Every diagnosis seen by the healthcare provider as an unforeseen and undesired result of medical action. Examples: post-operative wound infections, loss of hearing through the use of antibiotics.

1.3 Mindmap

1.4 Purpose

An overview of a patient's health problems has the purpose of informing all healthcare providers involved in the patient's care on the patient's current and past health condition. It provides insight into which problems require medical action, which are under control and which are no longer current. The problem overview also directly provides medical context for medication administered and procedures carried out.

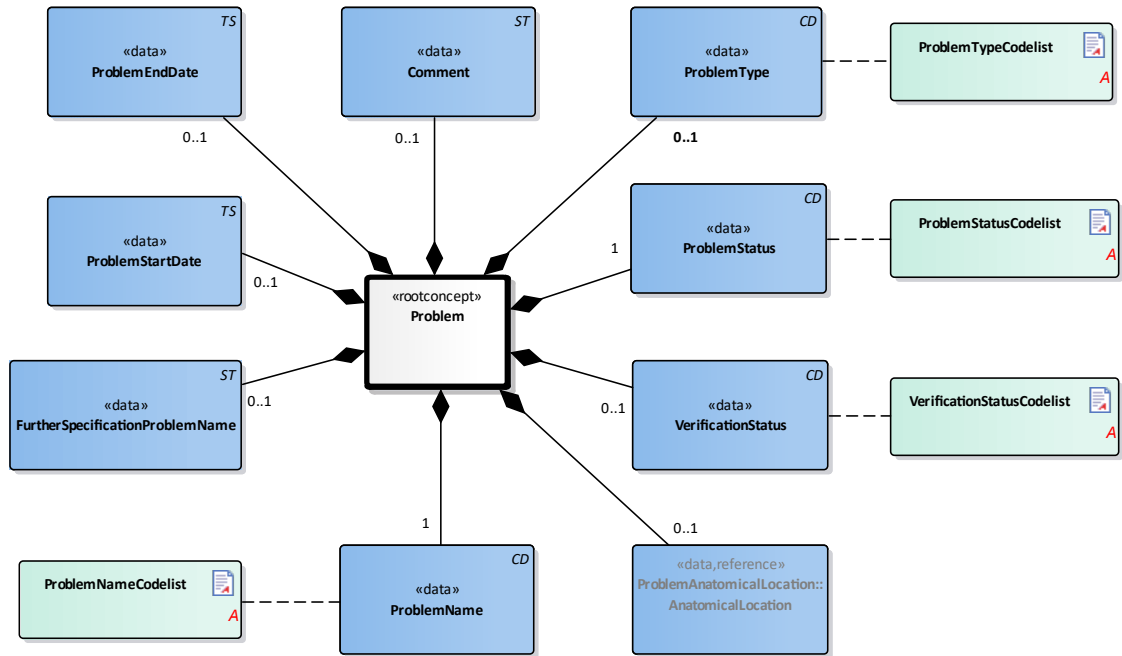
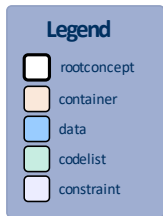
The overview promotes an efficient, targeted continuation of the patient's care.

A complete list of problems is of importance for automated decision support and determining contraindications.

1.5 Patient Population

1.6 Evidence Base

1.7 Information Model



«rootconcept»	Problem
Definitie	Root concept of the Problem information model. A problem describes a situation with regard to an individual's health and/or welfare. This situation can be described by the patient himself (in the form of a complaint) or by their healthprofessional (in the form of a diagnosis, for example).
Datatype	
DCM::ConceptId	NL-CM:5.1.1
Opties	

«data»	ProblemType
Definitie	The type of problem; see the concept description.
Datatype	CD
DCM::ConceptId	NL-CM:5.1.8
DCM::ExampleValue	Symptom
DCM::ValueSet	ProblemTypeCodelist OID: 2.16.840.1.113883.2.4.3.11.60.40.2.5.1.1
Opties	

«data»	ProblemName
Definitie	The problem name defines the problem. Depending on the setting, different code systems can be used. The ProblemNameCodelist provides an overview of the possible code systems.
Datatype	CD
DCM::ConceptId	NL-CM:5.1.3
DCM::ExampleValue	Nausea
DCM::ValueSet	ProblemNameCodelist OID: 2.16.840.1.113883.2.4.3.11.60.40.2.5.1.3
Opties	

«data»	FurtherSpecificationProblemName
Definitie	Further specification of problem name when it is recorded via a thesaurus or code system in which the required level of detail is not (yet) available.

Datatype	ST	
DCM::ConceptId	NL-CM:5.1.13	
DCM::ExampleValue	veroorzaakt door vossenlintworm	
Opties		

«data»	ProblemAnatomicalLocation::AnatomicalLocation	
Definitie	Anatomical location which is the focus of the problem.	
Datatype		
DCM::ConceptId	NL-CM:5.1.14	
DCM::DefinitionCode	SNOMED CT: 405813007 Procedure site - Direct	
DCM::ReferencedConceptId	NL-CM:20.7.1	This is a reference to the rootconcept of information model AnatomicalLocation.
Opties		

«data»	ProblemStartDate	
Definitie	Onset of the symptom, complaint, functional limitation, complication or date of diagnosis. A 'vague' date, such as only the year or the month and the year, is permitted.	
Datatype	TS	
DCM::ConceptId	NL-CM:5.1.6	
DCM::ExampleValue	12-05-2011	
Opties		

«data»	ProblemEndDate	
Definitie	Date on which the disorder to which the problem applies, is considered not to be present anymore. This datum needs not to be the same as the date of the change in problem status. A 'vague' date, such as only the year or the month and the year, is permitted.	
Datatype	TS	
DCM::ConceptId	NL-CM:5.1.9	
Opties		

«data»	ProblemStatus	
Definitie	The problem status describes the condition of the problem: <ol style="list-style-type: none"> Active problems are problems of which the patient experiences symptoms or for which evidence exists. Problems with the status 'Inactive' refer to problems that don't affect the patient anymore or that of which there is no evidence of existence anymore. 	
Datatype	CD	
DCM::ConceptId	NL-CM:5.1.4	
DCM::ExampleValue	Actueel	
DCM::ValueSet	ProblemStatusCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.5.1.2
Opties		

«data»	VerificationStatus	
Definitie	Clinical status of the problem or the diagnosis.	
Datatype	CD	
DCM::ConceptId	NL-CM:5.1.10	

DCM::DefinitionCode	SNOMED CT:408729009 Finding context	
DCM::ValueSet	VerificationStatusCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.5.1.4
Opties		

«data»	Comment	
Definitie	Comment by the one who determined or updated the Problem.	
Datatype	ST	
DCM::ConceptId	NL-CM:5.1.5	
DCM::DefinitionCode	LOINC: 48767-8 Annotation comment	
Opties		

«document»	ProblemNameCodelist	
Definitie		
Datatype		
DCM::ValueSetBinding	Required	
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.5.1.3	
Opties		

ProbleemNaamCodelijst		OID: 2.16.840.1.113883.2.4.3.11.60.40.2.5.1.3
Codes	Coding Syst. Name	Coding System OID
Alle waarden [DEPRECATED]	Omaha Systems [DEPRECATED]	2.16.840.1.113883.6.98
Alle waarden [DEPRECATED]	G-Standaard Contra Indicaties (Tabel 40) [DEPRECATED]	2.16.840.1.113883.2.4.4.1.902.40
Alle waarden	DHD Diagnosethesaurus	2.16.840.1.113883.2.4.3.120.5.1
Alle waarden	ICD-10, dutch translation	2.16.840.1.113883.6.3.2
SNOMED CT: ^11721000146100 RefSet Patiëntproblemen V&VN	SNOMED CT	2.16.840.1.113883.6.96
Alle waarden	NANDA-I	2.16.840.1.113883.6.20
Alle waarden	ICF	2.16.840.1.113883.6.254
Alle waarden	ICPC-1 NL	2.16.840.1.113883.2.4.4.31.1
Alle waarden	DSM-IV	2.16.840.1.113883.6.126
Alle waarden	DSM-5	2.16.840.1.113883.6.344
Alle waarden	GGZ Diagnoselijst	2.16.840.1.113883.3.3210.14.2.2.35

«document»	VerificationStatusCodelist	
Definitie		
Datatype		
DCM::ValueSetBinding	Required	
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.5.1.4	
Opties		

VerificatieStatusCodelijst			OID: 2.16.840.1.113883.2.4.3.11.60.40.2.5.1.4	
Concept Name	Concept Code	Codesystem	Codesystem OID	Description
Suspected	415684004	SNOMED CT	2.16.840.1.113883.6.96	Werk
Known possible	410590009	SNOMED CT	2.16.840.1.113883.6.96	Differentiaal

Confirmed present	410605003	SNOMED CT	2.16.840.1.113883.6.96	Bevestigd
Known absent	410516002	SNOMED CT	2.16.840.1.113883.6.96	Uitgesloten
Unknown	UNK	NullFlavor	2.16.840.1.113883.5.1008	Onbekend

«document»		ProblemTypeCodelist		
Definitie				
Datatype				
DCM::ValueSetBinding	Extensible			
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.5.1.1			
Opties				

ProbleemTypeCodelijst			OID: 2.16.840.1.113883.2.4.3.11.60.40.2.5.1.1	
-----------------------	--	--	---	--

Concept Name	Concept Code	Codesystem	Codesystem OID	Description
Diagnosis	282291009	SNOMED CT	2.16.840.1.113883.6.96	Diagnose
Symptom	418799008	SNOMED CT	2.16.840.1.113883.6.96	Symptoom
Finding	404684003	SNOMED CT	2.16.840.1.113883.6.96	Bevinding
Complaint	409586006	SNOMED CT	2.16.840.1.113883.6.96	Klacht
Functional Limitation	248536006	SNOMED CT	2.16.840.1.113883.6.96	Functionele Beperking
Complication	116223007	SNOMED CT	2.16.840.1.113883.6.96	Complicatie

«document»		ProblemStatusCodelist		
Definitie				
Datatype				
DCM::ValueSetBinding	Required			
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.5.1.2			
Opties				

ProbleemStatusCodelijst			OID: 2.16.840.1.113883.2.4.3.11.60.40.2.5.1.2	
-------------------------	--	--	---	--

Concept Name	Concept Code	Codesystem	Codesystem OID	Description
Active	55561003	SNOMED CT	2.16.840.1.113883.6.96	Actueel
Inactive	73425007	SNOMED CT	2.16.840.1.113883.6.96	Niet actueel

Legend	
Definitie	
Datatype	
Opties	

1.8 Example Instances

Probleem						
ProbleemType	ProbleemNaam	Probleem BeginDatum	ProbleemStatus	Probleem EindDatum	Verificatie Status	Toelichting
Klacht	Oedeem	10-08-2012	Actueel			Geleidelijk in de loop van dagen erger geworden. Geen roodheid of pijn.
Diagnose	Nefrotisch syndroom	11-2012	Actueel		Werkdiagnose	Membraneuze glomerulopathie.

Probleem						
ProbleemType	ProbleemNaam	Probleem BeginDatum	ProbleemStatus	Probleem EindDatum	Verificatie Status	Toelichting
Diagnose	Anteroseptaal myocardinfarct	24-05-1998	Niet actueel	11-12-1998	Bevestigd	Coronariaalijden als complicatie diabetes.
Diagnose	Hartfalen		Actueel		Bevestigd	Opnieuw actief geworden.
Klacht	Kortademigheid	15-11-2012	Niet actueel			
Diagnose	Diabetes mellitus type II	1996	Actueel		Bevestigd	

Probleem						
ProbleemType	ProbleemNaam	Probleem BeginDatum	ProbleemStatus	Probleem EindDatum	Verificatie Status	Toelichting
Diagnose	Polsfractuur links	20-04-2011	Niet actueel	07-06-2011	Bevestigd	Gevallen op kunstijsbaan.

1.9 Instructions

For the nursing domain: When two parties use different coding systems, the Snomed CT-based V&VN Dutch nursing problem list should be used for exchange, so data becomes comparable and exchangeable. A mapping table is available from the V&VN Dutch nursing problem list to Omaha System, NANDA-I and ICF. For the mental health domain, if the GGZ diagnosis list is used then the description of the relevant diagnosis from the DSM-5 or DSM-IV must be entered in the 'comments' of this HCIM.

1.10 Interpretation

1.11 Care Process

1.12 Example of the Instrument

1.13 Constraints

1.14 Issues

1.15 References

1. openEHR-EHR-EVALUATION.problem.v1 [Online] Beschikbaar op: <http://www.openehr.org/knowledge/> [Geraadpleegd: 23 juli 2014].
2. North American Nursing Diagnosis Association [Online] Beschikbaar op: <http://www.nanda.org> [Geraadpleegd: 23 juli 2014].
3. Diagnosethesaurus. Dutch Hospital Data [Online] Beschikbaar op: <http://www.dutchhospitaldata.nl> [Geraadpleegd: 23 juli 2014].

4. Health Level Seven International EHR Technical Committee (February 2007) *Electronic Health Record–System Functional Model, Release 1*. Chapter Three: Direct Care Functions.

5. HL7 (April 2007) *HL7 Implementation Guide: CDA Release 2 – Continuity of Care Document (CCD)*

6. Nederlands Huisartsen Genootschap (2013) *HIS-Referentiemodel 2013*

1.16 Functional Model

1.17 Traceability to other Standards

1.18 Disclaimer

The Health and Care Information Models (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 the Health and Care Information Models. 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 a 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 Health and Care Information Models without limitations. The copyright provisions in the paragraph concerned apply to copying, distributing and passing on the Health and Care Information Models.

1.20 Copyrights

A Health and Care Information Model qualifies as a work within the meaning of Section 10 of the Copyright Act (Auteurswet). Copyrights protect the Health and Care Information Models and these rights are owned by the cooperating parties.

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-NC-SA-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/>)

This does not apply to information from third parties that sometimes is used and / or referred to in a Health and Care Information Model, for example to an international medical terminology system. Any (copyright) rights that protect this information are not owned by the cooperating parties but by those third parties.

Nictiz is the independent national competence centre for electronic exchange of health and care information. The activities of Nictiz include the targeted development and management of information standards at the request of and in partnership with the stakeholders in healthcare. Nictiz advises these parties on all aspects of information exchange and identifies (future) national and international developments.

Nictiz

P.O. Box 19121
2500 CC Den Haag
Oude Middenweg 55
2491 AC Den Haag

070-3173450
info@nictiz.nl
www.nictiz.nl

