

# Health & Care Information Model: nl.nfu.ConcernForTransfer-v1.2

Status:Final

Release:2015

Release status: Published

Managed by:

Better health  
through better IT



# Content

<b>1. nl.nfu.ConcernForTransfer-v1.2</b>	<b>3</b>
1.1 Revision History	3
1.2 Concept	3
1.3 Mindmap	4
1.4 Purpose	4
1.5 Patient Population	4
1.6 Evidence Base	4
1.7 Information Model	5
1.8 Example Instances	8
1.9 Instructions	8
1.10 Interpretation	8
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	9
1.17 Traceability to other Standards	9
1.18 Disclaimer	9
1.19 Terms of Use	10
1.20 Copyrights	10

## 1. nl.nfu.ConcernForTransfer-v1.2

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	NFU
DCM::EndorsingAuthority.Telecom	
DCM::Id	2.16.840.1.113883.2.4.3.11.60.40.3.5.1
DCM::KeywordList	problemen, klachten, diagnoses, episode
DCM::LifecycleStatus	Final
DCM::ModelerList	Kerngroep Registratie aan de Bron
DCM::Name	nl.nfu.OverdrachtConcern
DCM::PublicationDate	1-4-2015
DCM::PublicationStatus	Published
DCM::ReviewerList	Projectgroep Generieke Overdrachtsgegevens & Kerngroep Registratie aan de Bron
DCM::RevisionDate	1-4-2015
DCM::Superseeds	
DCM::Version	1.2
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.

### 1.2 Concept

Determining relevant health issues of the patient involves two important aspects: observing the problem itself on the one hand (complaints, symptoms, diagnosis, etc.) and evaluation of whether or not an active policy is required on the other. This evaluation by the healthcare provider is documented in the 'Concern', the point of attention. Multiple, linked Problems can be subsumed under a single Concern.

The difference between recorded problems and the attention they require enables an indication of which issues medical or nursing policy applies to, or in which issues policy is necessary. An example is well-managed diabetes; this requires no active policy of the healthcare provider.

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 *finding*: a healthcare provider's observation of a patient's health. Examples: enlarged liver, pathological plantar reflex, deviating Minimal Mental State, missing teeth.
- A *condition*: a description of a (deviating) bodily state, which may or may not be seen as a disease. Examples: pregnancy, circulatory disorder, poisoning.
- 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.
- A *problem*: any circumstance that is relevant to the medical treatment, but does not fit into one of the categories listed. Examples: Patient resides in the Netherlands without a legal status and is not insured; patient is not able to check their own blood sugar levels.

In first-line care the Episode concept fills the role of Concern.

## 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

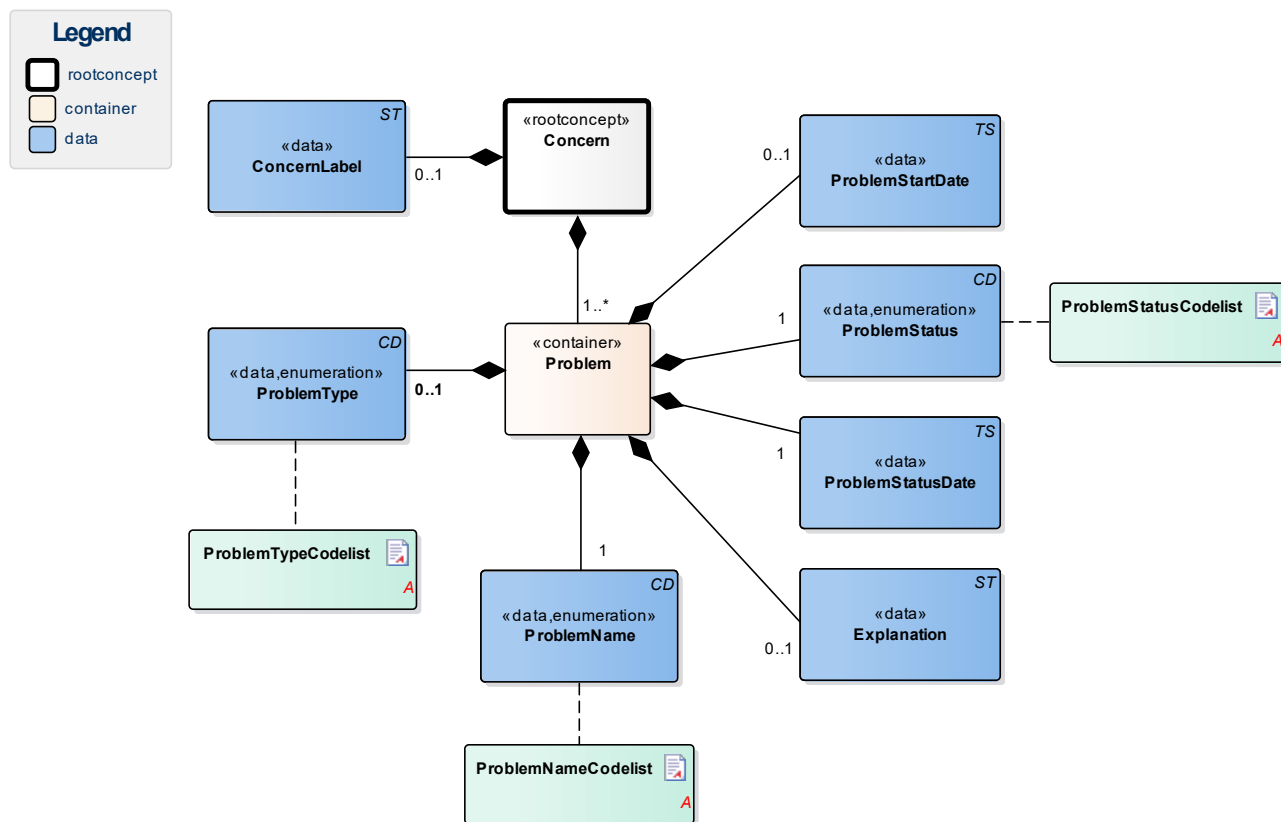
## 1.6 Evidence Base

The working group has decided to only use the values 'Current', 'Non-current' and 'Under control' for the ProblemStatus concept. The other CCR/CCD attributes are at another level and cannot be used instead of Current or Non-current.

CCD concept HealthStatus:

It was decided not to document the patient's condition with the problem, as it is more generic patient information.

## 1.7 Information Model



«rootconcept»	Concern
Definitie	Root concept of the ConcernTransfer building block. This root concept contains all data elements of the ConcernTransfer building block.
Datatype	
DCM::ConceptId	NL-CM:5.1.1
Opties	

«data»	ConcernLabel
Definitie	If needed, a short, written description of the concern. Mainly in first-line care this will be used for the episode name.
Datatype	ST
DCM::ConceptId	NL-CM:5.1.9
Opties	

«container»	Problem
Definitie	<p>Container of the Problem concept. This container contains all data elements of the Problem concept.</p> <p>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).</p>
Datatype	
DCM::ConceptId	NL-CM:5.1.2
Opties	

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

«data»	ProblemName	
Definitie	<p>The problem name defines the problem.</p> <p>Depending on the setting, one or more of the code systems below can be used:</p> <ul style="list-style-type: none"> <li>• Structured terms: SNOMED CT</li> <li>• Medical diagnoses: national DHD list</li> <li>• Nurse diagnoses: NANDA</li> <li>• Paramedic diagnoses: DHD and NANDA (partially offer solutions for this)</li> <li>• For functional constraints: ICF</li> <li>• For first-line care: ICPC-1 NL</li> </ul>	
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»	ProblemStartDate	
Definitie	Start of the disorder to which the problem applies. Especially in symptoms in which it takes longer for the final diagnosis, it is important to know not only the date of the diagnosis, but also how long the patient has had the disorder. 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»	ProblemStatus	
Definitie	<p>The problem status describes the condition of the problem:</p> <ol style="list-style-type: none"> <li>1. Current problems are the focus of the current medical policy.</li> <li>2. Non-current (historic) problems are part of the case history.</li> <li>3. Problems with the status 'Under control' refer to problems that still exist, but which currently do not require specific medical policy (such as well-managed diabetes).</li> </ol>	
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»	ProblemStatusDate	
Definitie	Date from when the current value of the ProblemStatus applies: since when is the problem current, under control or non-current.	
Datatype	TS	
DCM::ConceptId	NL-CM:5.1.7	
DCM::ExampleValue	03-2012	
Opties		

«data»	Explanation	
Definitie	Explanation 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::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	ICPC-1 NL	2.16.840.1.113883.2.4.4.31.1
<<404684003   Clinical Finding	SNOMED CT	2.16.840.1.113883.6.96
Alle waarden	NANDA	2.16.840.1.113883.6.20
Alle waarden	ICF	2.16.840.1.113883.6.254
Alle waarden	ICD-10	2.16.840.1.113883.6.90
Alle waarden	G-Standaard Contra Indicaties (Tabel 40)	2.16.840.1.113883.2.4.4.1.902.40
Alle waarden	Diagnosethesaurus DHD	9999

«document»	ProblemTypeCodelist	
Definitie		
Datatype		
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
Problem	55607006	SNOMED CT	2.16.840.1.113883.6.96	Probleem
Condition	64572001	SNOMED CT	2.16.840.1.113883.6.96	Conditie
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::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	Codesysteem	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
Resolved	413322009	SNOMED CT	2.16.840.1.113883.6.96	Onder controle

## 1.8 Example Instances

Concern					
Probleem					
ProbleemType	ProbleemNaam	Probleem BeginDatum	ProbleemStatus	Probleem StatusDatum	Toelichting
Bevinding	Oedeem	10-08-2012	Actueel	20-10-2012	Geleidelijk in de loop van dagen erger geworden. Geen roodheid of pijn.
Diagnose	Nefrotisch syndroom	11-2012	Actueel	15-11-2012	Membraneuze glomerulopathie.

Concern					
Probleem					
ProbleemType	ProbleemNaam	Probleem BeginDatum	ProbleemStatus	Probleem StatusDatum	Toelichting
Diagnose	Anteroseptaal myocardinfarct	24-05-1998	Niet actueel	11-06-1998	Coronariaalijden als complicatie diabetes.
Diagnose	Hartfalen		Actueel	20-11-2012	Opnieuw actief geworden.
Klacht	Kortademigheid	15-11-2012	Onder controle	20-11-2012	
Diagnose	Diabetes mellitus type II	1996	Onder controle	10-09-2012	

Concern					
Probleem					
ProbleemType	ProbleemNaam	Probleem BeginDatum	ProbleemStatus	Probleem StatusDatum	Toelichting
Diagnose	Polsfractuur links	20-04-2011	Niet actueel	07-06-2011	Gevallen op kunstijsbaan.

## 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. 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 program 'Registratie aan de Bron' [Registration at the Source] is a collaboration between the NFU (Nederlandse Federatie van Universitair Medische Centra, [Netherlands Federation of University Medical Centers]) and Nictiz, hereinafter referred to as the partners. Other parties outside the university medical centers and Nictiz also made important contributions to and worked within 'Registration at the Source'. The parties pay the utmost attention to the reliability and topicality of the data in these Healthcare Information Building Blocks (Clinical Building Block). Omissions and inaccuracies may however occur. The 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 provided by the parties to you or by you to the parties via a website or via e-mail, or any other digital means.

The 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 Healthcare Information Building Block. The parties will not accept any liability for the content of information in this Healthcare Information Building

Block to which or from which a hyperlink is referred.

In the event of contradictions in said Healthcare Information Building Block 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 Healthcare Information Building Block is also distributed in writing, the written version will be leading in cases 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 Healthcare Information Building Block without limitations. The copyright provisions in the paragraph in question apply to copying, distributing and passing on information from this Healthcare Information Building Block.

## 1.20 Copyrights

The user may copy, distribute and pass on the information in this Healthcare Information Building Block 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 (also see <http://creativecommons.org/licenses/by-nc-sa/3.0/nl/>)