

Health & Care Information Model: nl.zorg.Problem-v4.2.1

Status:Final

Release:2019

Release status: Prepublished

Managed by:



Content

| | |
|--------------------------------------|----------|
| 1. nl.zorg.Problem-v4.2.1 | 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 | 9 |
| 1.9 Instructions | 9 |
| 1.10 Interpretation | 9 |
| 1.11 Care Process | 10 |
| 1.12 Example of the Instrument | 10 |
| 1.13 Constraints | 10 |
| 1.14 Issues | 10 |
| 1.15 References | 10 |
| 1.16 Functional Model | 10 |
| 1.17 Traceability to other Standards | 10 |
| 1.18 Disclaimer | 10 |
| 1.19 Terms of Use | 11 |
| 1.20 Copyrights | 11 |

1. nl.zorg.Problem-v4.2.1

| | |
|---------------------------------|--|
| 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 | 06-07-2019 |
| DCM::PublicationStatus | Prepublished |
| DCM::ReviewerList | Projectgroep Generieke Overdrachtsgegevens & Kerngroep Registratie aan de Bron |
| DCM::RevisionDate | |
| DCM::Superseeds | nl.zorg.Probleem-v4.2 |
| DCM::Version | 4.2.1 |
| 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.

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.

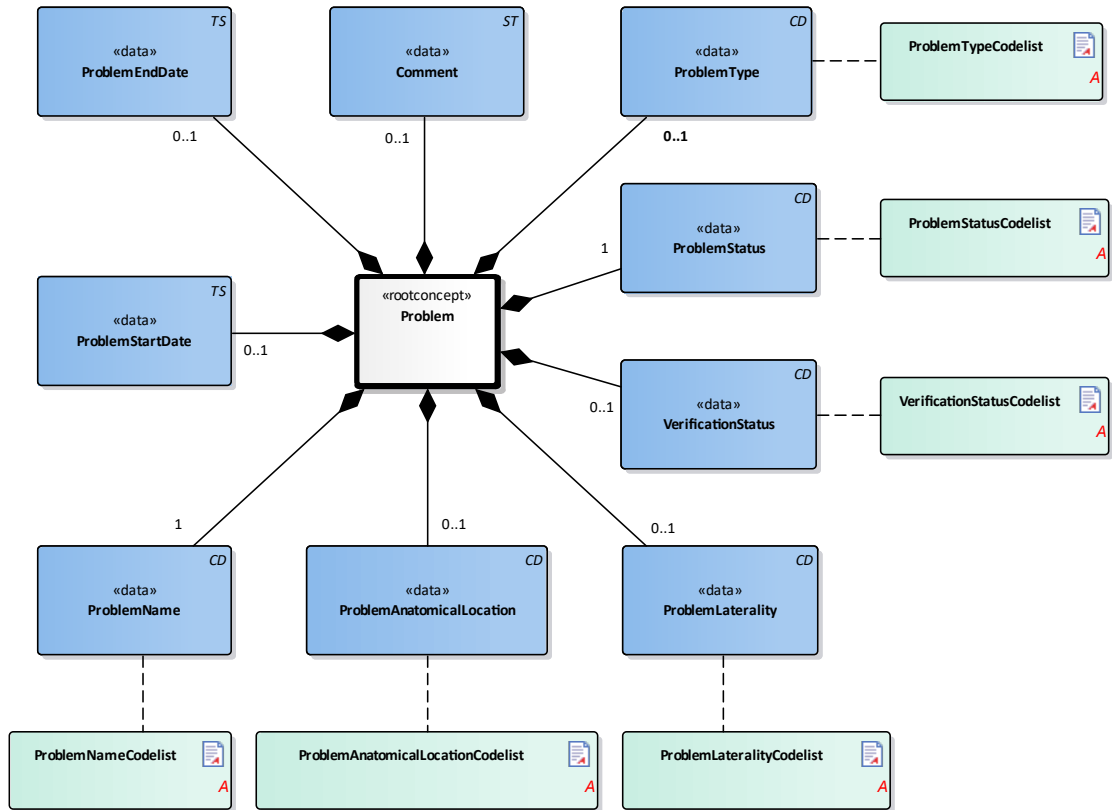
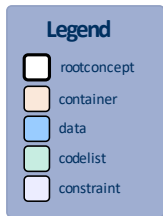
The overview promotes an efficient, targeted continuation of the patient's care.

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» | ProblemAnatomicalLocation | |
|---------------------|--|--|
| Definitie | Anatomical location which is the focus of the problem. | |
| Datatype | CD | |
| DCM::ConceptId | NL-CM:5.1.11 | |
| DCM::DefinitionCode | SNOMED CT: 405813007 Procedure site - Direct | |
| DCM::ValueSet | ProblemAnatomicalLocation Codelist | OID: 2.16.840.1.113883.2.4.3.11.60.40.2.5.1.5 |
| Opties | | |

| «data» | ProblemLaterality | |
|---------------------|--|--|
| Definitie | Laterality adds information about body side to the anatomic location, <i>e.g.</i> left | |
| Datatype | CD | |
| DCM::ConceptId | NL-CM:5.1.12 | |
| DCM::DefinitionCode | SNOMED CT: 272741003 Laterality | |
| DCM::ValueSet | ProblemLateralityCodelist | OID: 2.16.840.1.113883.2.4.3.11.60.40.2.5.1.6 |
| Opties | | |

| «data» | ProblemStartDate | |
|-------------------|---|--|
| Definitie | Onset 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» | 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» | ProblemAnatomicalLocationCodelist | |
|----------------------|--|--|
| Definitie | | |
| Datatype | | |
| DCM::ValueSetBinding | Extensible | |
| DCM::ValueSetId | 2.16.840.1.113883.2.4.3.11. 60.40.2.5.1.5 | |
| Opties | | |

| ProbleemAnatomischeLocatieCodelijst | | OID: 2.16.840.1.113883.2.4.3.11.60.40.2.5.1.5 |
|---|-------------------|---|
| Codes | Coding Syst. Name | Coding System OID |
| SNOMED CT: < 442083009 Anatomical or acquired body structure | SNOMED CT | 2.16.840.1.113883.6.96 |

| «document» | ProblemLateralityCodelist | |
|----------------------|--|--|
| Definitie | | |
| Datatype | | |
| DCM::ValueSetBinding | Extensible | |
| DCM::ValueSetId | 2.16.840.1.113883.2.4.3.11. 60.40.2.5.1.6 | |
| Opties | | |

| ProbleemLateraleiteitCodelijst | | OID: 2.16.840.1.113883.2.4.3.11.60.40.2.5.1.6 | | |
|--------------------------------|--------------|---|------------------------|-----------------|
| Concept Name | Concept Code | CodeSys. Name | CodeSystem OID | Description |
| Left | 7771000 | SNOMED CT | 2.16.840.1.113883.6.96 | Links |
| Right | 24028007 | SNOMED CT | 2.16.840.1.113883.6.96 | Rechts |
| Right and left | 51440002 | SNOMED CT | 2.16.840.1.113883.6.96 | Rechts en links |

| «document» | ProblemNameCodelist |
|------------|---------------------|
| Definitie | |

| | | |
|-----------------------------|--|--|
| Datatype | | |
| DCM::ValueSetBinding | Extensible | |
| 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 |
| SNOMED CT: ^tbd RefSet Diagnosethesaurus DHD | SNOMED CT | 2.16.840.1.113883.6.96 |
| Alle waarden | ICD-10 | 2.16.840.1.113883.6.90 |
| 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 | Omaha Systems | 2.16.840.1.113883.6.98 |
| 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 | G-Standaard Contra Indicaties (Tabel 40) | 2.16.840.1.113883.2.4.4.1.902.40 |
| Alle waarden | DSM-IV | 2.16.840.1.113883.6.126 |
| Alle waarden | DSM-V | 2.16.840.1.113883.6.344 |

| | | |
|-----------------------------|--|--|
| «document» | VerificationStatusCodelist | |
| Definitie | | |
| Datatype | | |
| DCM::ValueSetBinding | Extensible | |
| 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 | | |

| ProblemTypeCodelijst | | | 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 | Extensible | | |
| 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.

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.