Health & Care Information Model:

nl.zorg.NursingIntervention-v5.0

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Release status: Published

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Content

1. nl.zorg.NursingIntervention-v5.0

DCM::CoderList	Werkgroep RadB Verpleegkundige Gegevens
DCM::ContactInformation.Address	*
DCM::ContactInformation.Name	*
DCM::ContactInformation.Telecom	*
DCM::ContentAuthorList	Werkgroep RadB Verpleegkundige Gegevens
DCM::CreationDate	7-7-2014
DCM::DeprecatedDate	
DCM::DescriptionLanguage	nl
DCM::EndorsingAuthority.Address	
DCM::EndorsingAuthority.Name	PM
DCM::EndorsingAuthority.Telecom	
DCM::Id	2.16.840.1.113883.2.4.3.11.60.40.3.14.2
DCM::KeywordList	Interventie, verpleegkundige actie
DCM::LifecycleStatus	Final
DCM::ModelerList	Werkgroep RadB Verpleegkundige Gegevens
DCM::Name	nl.zorg.VerpleegkundigeInterventie
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DCM::RevisionDate	07-04-2025
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DCM::Version	5.0
HCIM::PublicationLanguage	EN

1.1 Revision History

Publicatieversie 1.0 (01-07-2015)

Publicatieversie 3.0 (01-05-2016)
Bevat: ZIB-453.

Publicatieversie 3.1 (04-09-2017)
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Publicatieversie 3.2 (01-10-2018)
Bevat: ZIB-728.

Publicatieversie 4.0 (01-12-2021)
Bevat: ZIB-1252, ZIB-1281, ZIB-1483, ZIB-1486, ZIB-1502, ZIB-1510, ZIB-1558.

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Bevat: ZIB-1974.

Publicatieversie 4.1 (15-04-2024)
Bevat: ZIB-1876.

Publicatieversie 5.0 (24-04-2025)
Bevat: ZIB-2431, ZIB-2627.

1.2 Concept

A nursing intervention is the care and/or treatment that a nurse performs on the basis of expert judgment and clinical knowledge. It is part of the nursing process; interventions are determined on the basis of nursing diagnoses (indicated care problems) and on the basis of treatment goals. In the home care situation, after

instruction, some actions can also be performed by the patient themselves or by a caregiver. In the right context, the concept can describe historical, future and advised nursing interventions.
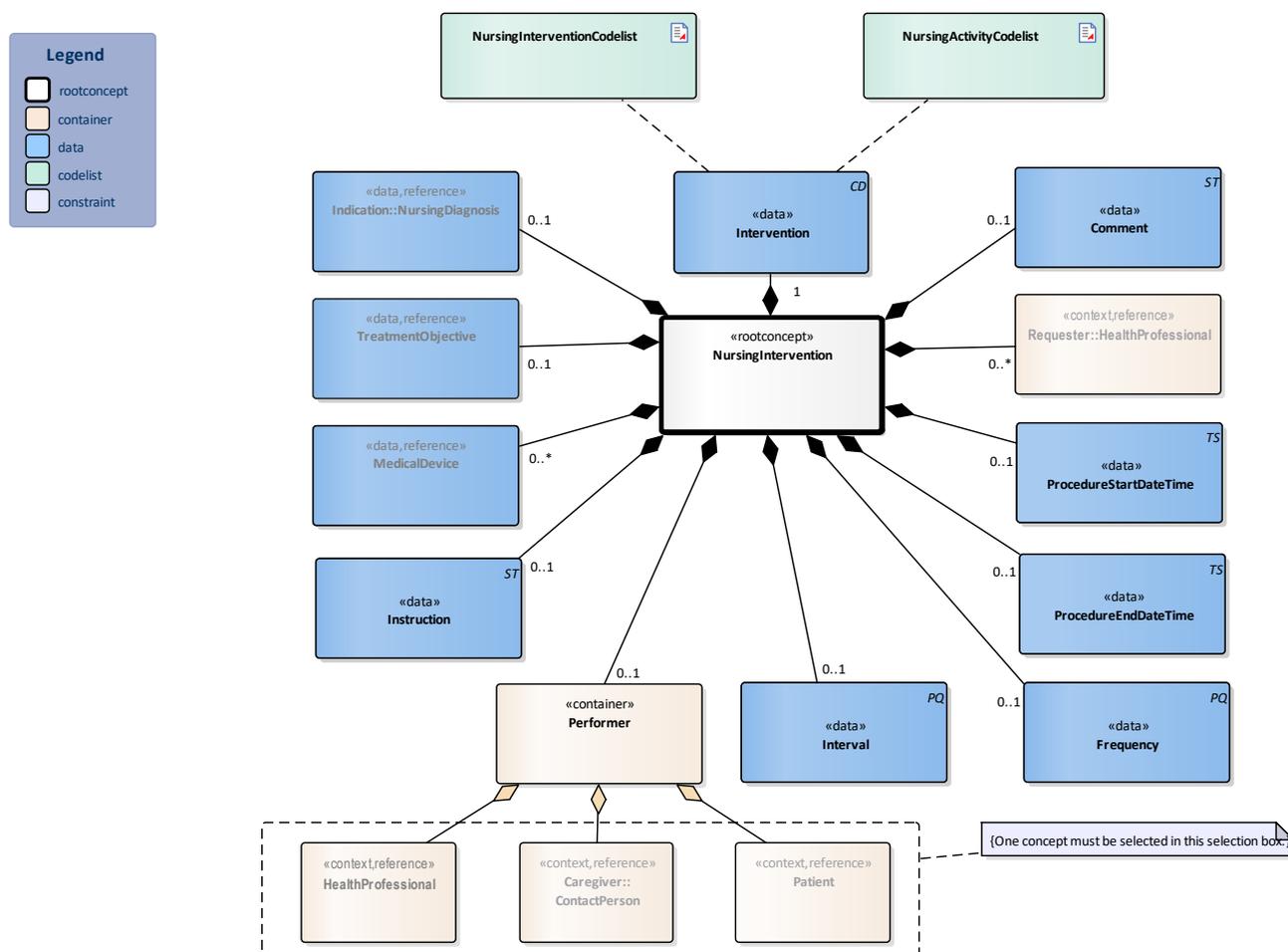
1.3   Mindmap

1.4   Purpose

Nursing interventions are an essential part of the nursing process. A nursing intervention is recorded to document nursing actions and to inform other healthcare providers. In this way, optimal nursing and continuity of care can be facilitated.

1.5   Patient Population

1.6   Evidence Base

1.7   Information Model

«rootconcept»	NursingIntervention
Definitie	Root concept of the NursingIntervention information model. This root concept contains all data elements of the NursingIntervention information model.
Datatype	

DCM::ConceptId	NL-CM:14.2.1	
DCM::DefinitionCode	SNOMED CT:9632001 Nursing procedure	
Opties		

«data»	Indication::NursingDiagnosis	
Definitie	The nursing diagnosis that serves as the indication for the nursing intervention.	
Datatype		
DCM::ConceptId	NL-CM:14.2.19	
DCM::ReferencedConceptId	NL-CM:5.8.1	This is a reference to the rootconcept of information model NursingDiagnosis.
Opties		

«data»	Intervention	
Definitie	A nursing intervention is a treatment carried out by a nurse based on an expert opinion and clinical knowledge for the benefit of the person requesting healthcare. The intervention is targeted towards a certain problem (diagnosis) and has a predetermined healthcare result. It is possible to build a hierarchy of nursing interventions (where one intervention is part of another).	
Datatype	CD	
DCM::ConceptId	NL-CM:14.2.2	
DCM::ValueSet	NursingInterventionCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.14.2.5
DCM::ValueSet	NursingActivityCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.14.2.6
Opties		

«data»	Comment	
Definitie	Comment on the nursing intervention.	
Datatype	ST	
DCM::ConceptId	NL-CM:14.2.5	
DCM::DefinitionCode	LOINC: 48767-8 Annotation comment	
Opties		

«context»	Requester::HealthProfessional	
Definitie	The health professional who requested the nursing intervention. If desired, only the requester's specialty can be entered.	
Datatype		
DCM::ConceptId	NL-CM:14.2.8	
DCM::ExampleValue	0330 Neurologie	
DCM::ReferencedConceptId	NL-CM:17.1.1	This is a reference to the rootconcept of information model HealthProfessional.
Opties		

«data»	ProcedureStartDateTime	
Definitie	The start date (and if possible start time) of the procedure. The concept offers the option to indicate the start of the period of a series of repeating procedures.	
Datatype	TS	
DCM::ConceptId	NL-CM:14.2.11	
DCM::ExampleValue	20120605	
Opties		

«data»	ProcedureEndDateTime	
Definitie	The end date (and if possible end time) of the procedure. The concept offers the option to indicate the end of the period of a series of repeating procedures.	
Datatype	TS	
DCM::ConceptId	NL-CM:14.2.12	
DCM::ExampleValue	20120607	
Opties		

«data»	Frequency	
Definitie	The frequency describes how often and in which period certain procedures are carried out, e.g. 3x a day.	
Datatype	PQ	
DCM::ConceptId	NL-CM:14.2.4	
DCM::DefinitionCode	SNOMED CT: 153681000146109 Frequency of procedure	
Opties		

«data»	Interval	
Definitie	Interval indicates the time between planned procedures. When entering an interval, the focus is on the time between the consecutive procedures, such as in the treatment of a wound, for example. The exact times are of lesser importance.	
Datatype	PQ	
DCM::ConceptId	NL-CM:14.2.3	
DCM::DefinitionCode	SNOMED CT: 153691000146106 Interval between procedures	
Opties		

«container»	Performer	
Definitie	The person carrying out the nursing procedure.	
Datatype		
DCM::ConceptId	NL-CM:14.2.15	
Opties		

«context»	HealthProfessional	
Definitie	The health professional carrying out the nursing procedure.	
Datatype		
DCM::ConceptId	NL-CM:14.2.7	
DCM::ReferencedConceptId	NL-CM:17.1.1	This is a reference to the rootconcept of information model HealthProfessional.
Opties		

«context»	Caregiver::ContactPerson	
Definitie	The caregiver carrying out the nursing procedure.	
Datatype		
DCM::ConceptId	NL-CM:14.2.16	
DCM::ReferencedConceptId	NL-CM:3.1.1	This is a reference to the rootconcept of information model ContactPerson.
Opties		

«context»	Patient	
Definitie	The patient carrying out the nursing procedure.	
Datatype		
DCM::ConceptId	NL-CM:14.2.17	
DCM::ReferencedConceptId	NL-CM:0.1.1	This is a reference to the rootconcept of information model Patient.
Opties		

«data»	Instruction	
Definitie	Instructions for performing the nursing action. This is particularly at issue when the action is performed by the patient himself or by a caregiver.	
Datatype	ST	
DCM::ConceptId	NL-CM:14.2.18	
Opties		

«data»	MedicalDevice	
Definitie	Description of the materials used for the nursing procedure, such as bandages.	
Datatype		
DCM::ConceptId	NL-CM:14.2.13	
DCM::ReferencedConceptId	NL-CM:10.1.1	This is a reference to the rootconcept of information model MedicalDevice.
Opties		

«data»	TreatmentObjective	
Definitie	The description of the treatment goal that the intervention decision is based on.	
Datatype		
DCM::ConceptId	NL-CM:14.2.14	
DCM::ReferencedConceptId	NL-CM:13.5.1	This is a reference to the rootconcept of information model TreatmentObjective.
Opties		

«document»	NursingActivityCodelist	
Definitie		
Datatype		
DCM::ValueSetBinding	Required	
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.14.2.6	
DCM::ValueSetIncludeOTH	True	
DCM::ValueSetStatus	Active	
HCIM::ValueSetLanguage	--	
Opties		

VerpleegkundigeActiviteitCodelijst		OID: 2.16.840.1.113883.2.4.3.11.60.40.2.14.2.6
Codes	**Coding Syst. Name**	**Coding System OID**
SNOMED CT: ^733990004 | Nursing Activities Reference Set |	SNOMED CT	2.16.840.1.113883.6.96

«document»	NursingInterventionCodelist	
Definitie		
Datatype		
DCM::ValueSetBinding	Required	

DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.14.2.5	
DCM::ValueSetInclude OTH	True	
DCM::ValueSetStatus	Active	
HCIM::ValueSetLanguage	--	
Opties		

VerpleegkundigeInterventieCodelijst		OID: 2.16.840.1.113883.2.4.3.11.60.40.2.14.2.5
Codes	**Coding Syst. Name**	**Coding System OID**
SNOMED CT: ^99051000146107 | Dutch nursing intervention simple reference set |	SNOMED CT	2.16.840.1.113883.6.96

Legend	
Definitie	
Datatype	
Opties	

Constraint	
Definitie	One concept must be selected in this selection box.
Datatype	
Opties	

1.8 Example Instances

VerpleegkundigeInterventie	
Interventie	Ondersteunen bij wassen en/of persoonlijke hygiëne
ActieStartDatumTijd	10-9-2021
Frequentie	1/dag
Instructie	Let op: valrisico
Indicatie	
VerpleegkundigeDiagnose	Probleem met zichzelf wassen en drogen
BeginDatum	28-8-2021
Toelichting	Meneer kan niet buigen
Behandeldoel	
GewenstZorgresultaat	Wassen onafhankelijk

1.9 Instructions

For the nursing domain: when two parties use different classification systems, the SNOMED CT based Dutch nursing problem list is used for exchange of information, so that data becomes comparable and interchangeable. A mapping table is available from the Dutch nursing problem list to Omaha System, NANDA-I and ICF.

- "Interval": for an implemented set of interventions, an instantiation of the zib can consist of a main intervention with its own end and start date. The sub-interventions that fall under the main intervention can be considered as their own instantiations of the zib. It is customary to link them to each other in the implementation/information standard. The concept of "Interval" is not explicitly modeled for performed sets of interventions because an interval applies only to a planned set of interventions. The instantiations of the partial interventions have then already taken place;
- "Frequency": for an executed series of interventions, an instantiation of the zib may consist of a main intervention with its own end and start date. The partial interventions covered by the main intervention

can be considered own instantiations of the zib. It is customary to link them to each other in the implementation/information standard. The concept of "Frequency" is not explicitly modeled for performed sets of interventions because an interval applies only to a planned set of interventions. The instantiations of the partial interventions have then already taken place;

- "Start Date" and 'End Date': based on the Start Date and End Date, it is not always possible to distinguish between interventions that have yet to be implemented, that are ongoing, that have been completed, or that were instantaneous. In the implementation/information standard this distinction should be made, for example via a status field (the expectation is then that a status field is present which can be used in the translation from the zib to the implementation as for example in FHIR):

- For an implemented (series of) intervention(s), a Start Date without End Date can mean that the intervention(series) is still ongoing, or that it is a momentarily implemented intervention. This requires additional status entry (as described above);

- A planned one-time intervention has at least a Start Date and optionally an End Date. Frequency and Interval are absent in this case. Additional status entry is not needed here (but can be clarifying to send along to indicate that the intervention is still open). It is recommended to add the End Date when it is known;

- A scheduled series of interventions has at least a Start Date and an Interval or Frequency, and optionally an End Date. If the Start Date is in the past, and the End Date is in the future or absent, then the sequence is in execution. If the End Date is in the past, then the sequence is closed. Additional status entry is not needed here (but can be clarifying to send along to indicate that the intervention is still open). It is recommended to add the End Date when it is known.

1.10 Interpretation

1.11 Care Process

1.12 Example of the Instrument

1.13 Constraints

1.14 Issues

1.15 References

1. Richtlijn Verpleegkundige en verzorgende verslaglegging (V&VN, 2011) [Online] Beschikbaar op: https://www.venvn.nl/media/jutbak5v/verple-1.pdf [Geraadpleegd: 16 januari 2024]

2. Vreeke E, Klein Wolterink G. *Classificatie- en terminologiestelsels voor verpleegkundige informatie.* Nictiz & NFU (2014). [Geraadpleegd: 13 februari 2015]

3. The Omaha System [Online] Beschikbaar op: http://www.omahasystem.org/ [Geraadpleegd: 13 februari 2015]

4. Nursing Intervention Classification (NIC) [Online] Beschikbaar op: http://www.nursing.uiowa.edu/center-for-nursing-classification-and-clinical-effectiveness [Geraadpleegd: 13 februari 2015]

5. Nursing Outcome Classification (NOC) [Online] Beschikbaar op: http://www.nursing.uiowa.edu/center-for-nursing-classification-and-clinical-effectivenesg [Geraadpleegd: 13 februari 2015]

6. North American Nursing Diagnosis Association (NANDA) [Online] Beschikbaar op: http://www.nanda.org/
[Geraadpleegd: 13 februari 2015]

7. International Classification for Nursing Practice (ICNP) [Online] Beschikbaar op: www.icn.ch
[Geraadpleegd: 16 januari 2024]

8. International Classification of Functioning, Disability and Health (ICF) [Online] Beschikbaar op:
https://www.whofic.nl/ [Geraadpleegd: 16 januari 2024]

1.16 Functional Model

1.17 Traceability to other Standards

The HCIM NursingIntervention is a specialization of the HCIM Procedure.

1.18 Disclaimer

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