

# **Health & Care Information Model:**

## **nl.zorg.Wound-v3.5**

Status: Final

Release status: Prepublished

# Content

<b>1. nl.zorg.Wound-v3.5.....</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 .....	4
1.8 Example Instances.....	10
1.9 Instructions.....	11
1.10 Interpretation.....	11
1.11 Care Process .....	11
1.12 Example of the Instrument .....	11
1.13 Constraints.....	11
1.14 Issues .....	11
1.15 References .....	11
1.16 Functional Model .....	11
1.17 Traceability to other Standards.....	12
1.18 Disclaimer .....	12
1.19 Terms of Use .....	12
1.20 Copyrights .....	12

# 1. nl.zorg.Wound-v3.5

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	2.16.840.1.113883.2.4.3.11.60.40.3.19.2
DCM::KeywordList	Wond, wondzorg, WCS, TIME, ulcus
DCM::LifecycleStatus	Final
DCM::ModelerList	Werkgroep RadB Verpleegkundige Gegevens
DCM::Name	nl.zorg.Wond
DCM::PublicationDate	15-10-2023
DCM::PublicationStatus	Prepublished
DCM::ReviewerList	Projectgroep RadB Verpleegkundige Gegevens & Kerngroep Registratie aan de Bron
DCM::RevisionDate	12-09-2023
DCM::Supersedes	nl.zorg.Wond-v3.4
DCM::Version	3.5
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)

Bevat: ZIB-530, ZIB-533, ZIB-572, ZIB-585.

Publicatieversie 3.2 (31-01-2020)

Bevat: ZIB-903.

Publicatieversie 3.3 (01-09-2020)

Bevat: ZIB-1116.

Publicatieversie 3.4 (01-12-2021)

Bevat: ZIB-1374.

Publicatieversie 3.5 (15-10-2023)

Bevat: ZIB-1980.

## 1.2 Concept

A wound is an interruption of the continuity of the skin, often caused by external influences.

A commonly used model for documenting the wound properties is the TIME ('Tissue', 'Infection', 'Moisture', 'Edge') model, which can be used to systematically describe the wound. For wound tissue (T in the TIME model), the structure of the WCS model (Woundcare Consultant Society, WCS Kenniscentrum Wondzorg) is used. The WCS model is not suited for describing oncological ulcers. There is a separate classification for that.

Oncological ulcers are skin defects which result from the tumor process. They are different from wounds resulting from cancer treatment, such as radiotherapy, chemotherapy or surgery.

The concept does not describe decubitus wounds and burn wounds. For these, the relevant information models can be used.

## **1.3 Mindmap**

## **1.4 Purpose**

Information on the wound is recorded to share this information with other health professionals. This information can be used to monitor the wound's healing process and provide insight into the implemented policy. In a transfer situation, it facilitates continuation of the treatment.

## **1.5 Patient Population**

## **1.6 Evidence Base**

Though the TIME model can be applied to all types of wounds in the list of wound types, the wound tissue classification (T in the TIME model) is different for different types.

The WCS classification is used for surgical wounds, trauma wounds, diabetic foot and venous ulcers. The following values are used:

- Red wound: granulation tissue
- Yellow wound: signs of infection or fibrin layer
- Black wound: with necrosis

(Source: [www.wcs.nl](http://www.wcs.nl))

Tissue in oncological ulcers is classified as follows:

- Degree I: intact epidermis with imminent damage to the skin through underlying tumor tissue
- Degree II: beginning damage to the subcutis
- Degree III: deep continued growth with damaged subcutis
- Degree IV: dry and/or liquefactive necrosis of up to 30% of the wound surface
- Degree V: dry and/or liquefactive necrosis of more than 30% of the wound surface

(Source: [www.oncoline.nl](http://www.oncoline.nl))

## **1.7 Information Model**



<b>Definitie</b>	Indication stating whether the wound is infected.	
<b>Datatype</b>	BL	
<b>DCM::ConceptId</b>	NL-CM:19.2.7	
<b>DCM::DefinitionCode</b>	SNOMED CT: 405009004 Infection status	
<b>Opties</b>		

«data»	WoundMoisture	
<b>Definitie</b>	Description of the moisture in the wound.	
<b>Datatype</b>	CD	
<b>DCM::ConceptId</b>	NL-CM:19.2.6	
<b>DCM::DefinitionCode</b>	SNOMED CT: 298007001 Moistness of wound	
<b>DCM::ExampleValue</b>	Droge wond	
<b>DCM::ValueSet</b>	WoundMoistureCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.19.2.3
<b>Opties</b>		

«data»	WoundEdge	
<b>Definitie</b>	Description of the condition of the outer edges of the wound.	
<b>Datatype</b>	CD	
<b>DCM::ConceptId</b>	NL-CM:19.2.11	
<b>DCM::DefinitionCode</b>	SNOMED CT: 449747006 Wound edge finding	
<b>DCM::ValueSet</b>	WoundEdgeCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.19.2.5
<b>Opties</b>		

«data»	WoundLength	
<b>Definitie</b>	The length of the wound.	
<b>Datatype</b>	PQ	
<b>DCM::ConceptId</b>	NL-CM:19.2.12	
<b>DCM::DefinitionCode</b>	LOINC: 39126-8 Length of Wound	
<b>DCM::ExampleValue</b>	100 mm	
<b>Opties</b>		

«data»	WoundWidth	
<b>Definitie</b>	The width of the wound.	
<b>Datatype</b>	PQ	
<b>DCM::ConceptId</b>	NL-CM:19.2.13	
<b>DCM::DefinitionCode</b>	LOINC: 39125-0 Width of Wound	
<b>DCM::ExampleValue</b>	30 mm	
<b>Opties</b>		

«data»	WoundDepth	
<b>Definitie</b>	The depth of the wound.	
<b>Datatype</b>	PQ	
<b>DCM::ConceptId</b>	NL-CM:19.2.14	
<b>DCM::DefinitionCode</b>	LOINC: 39127-6 Depth of Wound	
<b>DCM::ExampleValue</b>	8 mm	
<b>Opties</b>		

«data»	AnatomicalLocation	
Definitie	The location of the wound on the body.	
Datatype		
DCM::ConceptId	NL-CM:19.2.19	
DCM::DefinitionCode	SNOMED CT: 363698007 Finding site	
DCM::ExampleValue	Bovenbeen	
DCM::ReferencedConceptId	NL-CM:20.7.1	This is a reference to the rootconcept of information model AnatomicalLocation.
Opties		

«data»	WoundDateOfOnset	
Definitie	The date on which the wound appeared.	
Datatype	TS	
DCM::ConceptId	NL-CM:19.2.2	
DCM::ExampleValue	12-04-2014	
Opties		

«data»	DateOfLastDressingChange	
Definitie	Date on which the dressing was last changed.	
Datatype	TS	
DCM::ConceptId	NL-CM:19.2.3	
DCM::ExampleValue	15-08-2014	
Opties		

«data»	Drain::MedicalDevice	
Definitie	A drain is a medical aid placed to drain blood and exudate from the wound area.	
Datatype		
DCM::ConceptId	NL-CM:19.2.17	
DCM::DefinitionCode	SNOMED CT: 258646005 Wound drain	
DCM::ReferencedConceptId	NL-CM:10.1.1	This is a reference to the rootconcept of information model MedicalDevice.
Opties		

«data»	ProductType	
Definitie	Type of drain applied to the wound.	
Datatype	CD	
DCM::ConceptId	NL-CM:10.1.3	
DCM::ValueSet	WoundDrainTypeCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.19.2.7
Opties		

«data»	WoundImage	
Definitie	A photo of the wound.	
Datatype	ED	
DCM::ConceptId	NL-CM:19.2.15	
DCM::DefinitionCode	SNOMED CT: 9561000146103 Medical photograph	
DCM::DefinitionCode	LOINC: 72170-4 Photographic image	
Opties		

«data»	Comment	
Definitie	Comment on the wound.	
Datatype	ST	
DCM::ConceptId	NL-CM:19.2.9	
DCM::DefinitionCode	LOINC: 48767-8 Annotation comment	
Opties		

«document»	WoundDrainTypeCodelist		
Definitie			
Datatype			
DCM::ValueSetBinding	Required		
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.6 0.40.2.19.2.7		
HCIM::ValueSetLanguage	--		
Opties			
WondDrainTypeCodelijst		OID:	2.16.840.1.113883.2.4.3.11.60.40.2.19.2.7
Codes		Coding Syst. Name	Coding System OID
SNOMED CT: <<32712000   Drain		SNOMED CT	2.16.840.1.113883.6.96

«document»	WoundEdgeCodelist			
Definitie				
Datatype				
DCM::ValueSetBinding	Extensible			
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.6 0.40.2.19.2.5			
HCIM::ValueSetLanguage	--			
Opties				
WondRandCodelijst		OID: 2.16.840.1.113883.2.4.3.11.60.40.2.19.2.5		
Concept Name	Concept Code	CodeSys. Name	CodeSystem OID	Description
Wound epithelialisation	449743005	SNOMED CT	2.16.840.1.113883.6.96	Epithelisatie
Skin irritation	367466007	SNOMED CT	2.16.840.1.113883.6.96	Irritatie
Wound tissue undermining	449752001	SNOMED CT	2.16.840.1.113883.6.96	Ondermijning
Macerated skin	3644009	SNOMED CT	2.16.840.1.113883.6.96	Verweking
Other	OTH	NullFlavor	2.16.840.1.113883.5.10 08	Anders

«document»	WoundTissueOncoUlcerCodelist	
Definitie		
Datatype		
DCM::ValueSetBinding	Required	
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.6 0.40.2.19.2.2	
HCIM::ValueSetLanguage	NL	
Opties		
WondWeefselOncoUlcerCodelijst		OID: 2.16.840.1.113883.2.4.3.11.60.40.2.19.2.2



Concept Name	Concept Code	CodeSys. Name	CodeSystem OID	Description
Graad I	GRAAD1	OncoUlcerWeefse I	2.16.840.1.113883.2.4.3 .11.60.40.4.7.1	Graad I
Graad II	GRAAD2	OncoUlcerWeefse I	2.16.840.1.113883.2.4.3 .11.60.40.4.7.1	Graad II
Graad III	GRAAD3	OncoUlcerWeefse I	2.16.840.1.113883.2.4.3 .11.60.40.4.7.1	Graad III
Graad IV	GRAAD4	OncoUlcerWeefse I	2.16.840.1.113883.2.4.3 .11.60.40.4.7.1	Graad IV
Graad V	GRAAD5	OncoUlcerWeefse I	2.16.840.1.113883.2.4.3 .11.60.40.4.7.1	Graad V

«document»		WoundTissueWCSCodelist		
Definitie				
Datatype				
DCM::ValueSetBinding		Required		
DCM::ValueSetId		2.16.840.1.113883.2.4.3.11.60.40.2.19.2.1		
HCIM::ValueSetLanguage		NL		
Opties				
WondWeefselWCSCodelijst		OID: 2.16.840.1.113883.2.4.3.11.60.40.2.19.2.1		
Concept Name	Concept Code	CodeSys. Name	CodeSystem OID	Description
Rode wond	ROOD	WondWeefselWCS	2.16.840.1.113883.2.4.3.11.60.40.4.7.2	granulerend weefsel
Gele wond	GEEL	WondWeefselWCS	2.16.840.1.113883.2.4.3.11.60.40.4.7.2	met infectieverschijnselen of fibrinebeslag
Zwarte wond	ZWART	WondWeefselWCS	2.16.840.1.113883.2.4.3.11.60.40.4.7.2	met necrose

«document»		WoundTypeCodelist		
Definitie				
Datatype				
DCM::ValueSetBinding		Extensible		
DCM::ValueSetId		2.16.840.1.113883.2.4.3.11.6 0.40.2.19.2.4		
HCIM::ValueSetLanguage		--		
Opties				
WondSoortCodelijst		OID: 2.16.840.1.113883.2.4.3.11.60.40.2.19.2.4		
Concept Name	Concept Code	CodeSys. Name	CodeSystem OID	Description
Surgical wound	112633009	SNOMED CT	2.16.840.1.113883.6.96	Chirurgische wond
Wound	416462003	SNOMED CT	2.16.840.1.113883.6.96	Traumatische wond
Ulcer of lower extremity	95344007	SNOMED CT	2.16.840.1.113883.6.96	Ulcus cruris
Secondary	94579000	SNOMED CT	2.16.840.1.113883.6.96	Oncologische ulcer

malignant neoplasm of skin				
Radiation ulcer	403722002	SNOMED CT	2.16.840.1.113883.6.96	Stralingswond
Diabetic foot ulcer	371087003	SNOMED CT	2.16.840.1.113883.6.96	Ulcus van diabetische voet
Skin tear	428220001	SNOMED CT	2.16.840.1.113883.6.96	Skin tear
Other	OTH	NullFlavor	2.16.840.1.113883.5.1008	Anders

«document»		WoundMoistureCodelist		
Definitie				
Datatype				
DCM::ValueSetBinding		Required		
DCM::ValueSetId		2.16.840.1.113883.2.4.3.11.60.40.2.19.2.3		
HCIM::ValueSetLanguage		NL		
Opties				
WondVochtigheidCodelijst		OID: 2.16.840.1.113883.2.4.3.11.60.40.2.19.2.3		
Concept Name	Concept Code	CodeSys. Name	CodeSystem OID	Description
Droge wond	DROOG	WondVochtigheid	2.16.840.1.113883.2.4.3.11.60.40.4.7.3	Droge wond
Vochtige wond	VOCHTIG	WondVochtigheid	2.16.840.1.113883.2.4.3.11.60.40.4.7.3	Vochtige wond
Natte wond	NAT	WondVochtigheid	2.16.840.1.113883.2.4.3.11.60.40.4.7.3	Natte wond

Legend	
Definitie	
Datatype	
Opties	

## 1.8 Example Instances

Wond	
WondSoort	Chirurgische wond
AnatomischeLocatie	Bovenbuik
Lateraliteit	Rechts
WondOntstaansdatum	10-10-2014
WondWeefsel	Gele wond
WondInfectie	Nee
WondVochtigheid	Vochtige wond
WondRand	Ondermijning
Wondlengte	5 cm
Wondbreedte	2 cm
Wonddiepte	1 cm
DatumLaatsteVerbandwissel	18-10-2014
Toelichting	Wond lekt steeds minder.

## 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. Richtlijn Wondzorg (Nederlandse Vereniging voor Heelkunde, 2013) [Online] Beschikbaar op: <http://www.heelkunde.nl/uploads/o1/hl/o1hIRR2oR4QDojTm5pGjGA/Richtlijn-Wondzorg-final.pdf> [Geraadpleegd: 13 februari 2015]
2. Richtlijn Oncologische ulcera (2010) [Online] Beschikbaar op: [http://www.oncoline.nl/index.php?pagina=/richtlijn/item/pagina.php&id=32570&richtlijn\\_id=769](http://www.oncoline.nl/index.php?pagina=/richtlijn/item/pagina.php&id=32570&richtlijn_id=769) [Geraadpleegd: 13 februari 2015]
3. WCS [Online] Beschikbaar op: [www.wcs.nl](http://www.wcs.nl) [Geraadpleegd: 13 februari 2015]
4. Oncoline [Online] Beschikbaar op: [www.oncoline.nl](http://www.oncoline.nl) [Geraadpleegd: 13 februari 2015]

### 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.