

# **Health & Care Information Model:**

**nl.zorg.Wound-v3.6**

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# 1. nl.zorg.Wound-v3.6

DCM::CoderList	Werkgroep RadB Verpleegkundige Gegevens
DCM::ContactInformation.Address	*
DCM::ContactInformation.Name	*
DCM::ContactInformation.Telcom	*
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.Telcom	
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	15-04-2024
DCM::PublicationStatus	Prepublished
DCM::ReviewerList	Projectgroep RadB Verpleegkundige Gegevens & Kerngroep Registratie aan de Bron
DCM::RevisionDate	08-04-2024
DCM::Supersedes	nl.zorg.Wond-v3.5
DCM::Version	3.6
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.

Publicatieversie 3.6 (15-04-2024)

Bevat: ZIB-2106, ZIB-2042.

## 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

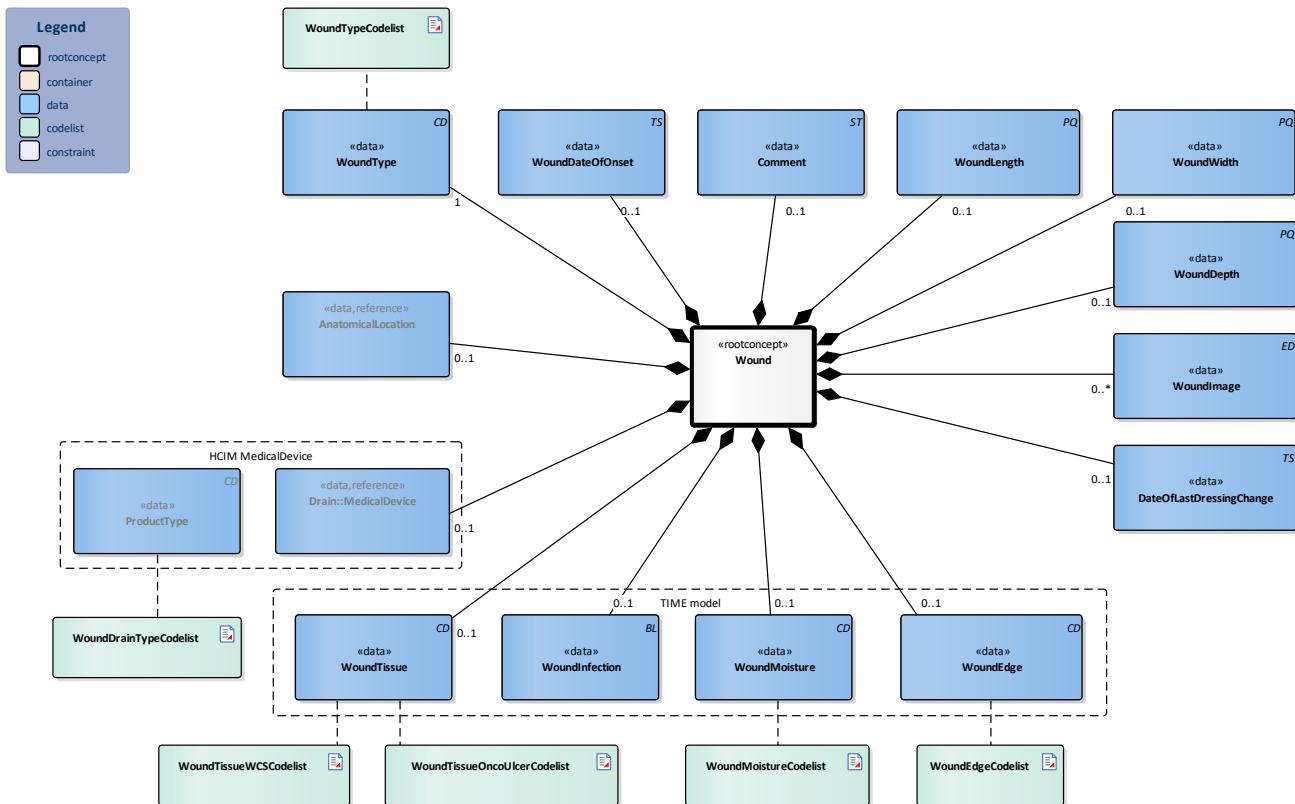
(Source: [www.wcs.nl](http://www.wcs.nl))

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



«rootconcept»	Wound
Definitie	Root concept of the Wound information model. This root concept contains all data elements of the Wound information model.
Datatype	
DCM::ConceptId	NL-CM:19.2.1
DCM::DefinitionCode	SNOMED CT: 416462003 Wound
Opties	

«data»	WoundType
Definitie	Description of the type of wound.
Datatype	CD
DCM::ConceptId	NL-CM:19.2.5
DCM::DefinitionCode	SNOMED CT: 239953001 Soft tissue lesion
DCM::ExampleValue	Chirurgische wond
DCM::ValueSet	WoundTypeCodelist OID: 2.16.840.1.113883.2.4.3.11.60.40.2.19.2.4
Opties	

«data»	WoundTissue
Definitie	Description of the tissue of the wound. For this, the WCS model can be used. A different classification is used for oncological ulcers.
Datatype	CD
DCM::ConceptId	NL-CM:19.2.4
DCM::DefinitionCode	SNOMED CT: 148641000146109 Wound tissue observable
DCM::ExampleValue	Rode wond
DCM::ValueSet	WoundTissueWCSCodelist OID: 2.16.840.1.113883.2.4.3.11.60.40.2.19.2.1

<b>DCM::ValueSet</b>	WoundTissueOncoUlcerCode list	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.19.2.2
<b>Opties</b>		

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

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

«data»	DateOfLastDressingChange	
<b>Definitie</b>	Date on which the dressing was last changed.	
<b>Datatype</b>	TS	
<b>DCM::ConceptId</b>	NL-CM:19.2.3	
<b>DCM::DefinitionCode</b>	SNOMED CT: 360541000146109 Date of last change of wound dressing	
<b>DCM::ExampleValue</b>	15-08-2014	
<b>Opties</b>		

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

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

«data»	WoundImage	
<b>Definitie</b>	A photo of the wound.	

<b>Datatype</b>	ED	
<b>DCM::ConceptId</b>	NL-CM:19.2.15	
<b>DCM::DefinitionCode</b>	SNOMED CT: 9561000146103 Medical photograph	
<b>DCM::DefinitionCode</b>	LOINC: 72170-4 Photographic image	
<b>Opties</b>		

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

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

«document»	WoundEdgeCodelist			
<b>Definitie</b>				
<b>Datatype</b>				
<b>DCM::ValueSetBinding</b>	Extensible			
<b>DCM::ValueSetId</b>	2.16.840.1.113883.2.4.3.11.6 0.40.2.19.2.5			
<b>HCIM::ValueSetLanguage</b>	--			
<b>Opties</b>				
<b>WondRandCodelijst</b>	<b>OID: 2.16.840.1.113883.2.4.3.11.60.40.2.19.2.5</b>			
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			
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<b>Definitie</b>			
<b>Datatype</b>			
<b>DCM::ValueSetBinding</b>	Required		
<b>DCM::ValueSetId</b>	2.16.840.1.113883.2.4.3.11.6 0.40.2.19.2.2		
<b>HCIM::ValueSetLanguage</b>	NL		
<b>Opties</b>			

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	OncoUlcerWeefsel	2.16.840.1.113883.2.4.3 .11.60.40.4.7.1	Graad I
Graad II	GRAAD2	OncoUlcerWeefsel	2.16.840.1.113883.2.4.3 .11.60.40.4.7.1	Graad II
Graad III	GRAAD3	OncoUlcerWeefsel	2.16.840.1.113883.2.4.3 .11.60.40.4.7.1	Graad III
Graad IV	GRAAD4	OncoUlcerWeefsel	2.16.840.1.113883.2.4.3 .11.60.40.4.7.1	Graad IV
Graad V	GRAAD5	OncoUlcerWeefsel	2.16.840.1.113883.2.4.3 .11.60.40.4.7.1	Graad V

«document»	WoundTissueWCSCodelist		
<b>Definitie</b>			
<b>Datatype</b>			
<b>DCM::ValueSetBinding</b>	Required		
<b>DCM::ValueSetId</b>	2.16.840.1.113883.2.4.3.11.6 0.40.2.19.2.1		
<b>HCIM::ValueSetLanguage</b>	NL		
<b>Opties</b>			

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		
<b>Definitie</b>			
<b>Datatype</b>			
<b>DCM::ValueSetBinding</b>	Extensible		
<b>DCM::ValueSetId</b>	2.16.840.1.113883.2.4.3.11.6 0.40.2.19.2.4		
<b>HCIM::ValueSetLanguage</b>	--		
<b>Opties</b>			

WondSoortCodelijst			OID: 2.16.840.1.113883.2.4.3.11.60.40.2.19.2.4	
Concept Name	Concept Code	Coding Syst. Name	Coding System 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 [DEPRECATED]
tbd	tbd	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 malignant neoplasm of skin	94579000	SNOMED CT	2.16.840.1.113883.6.96	Oncologische ulcer
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	2.16.840.1.113883.2.4.3.11.6 0.40.2.19.2.3
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

- Richtlijn Wondzorg (Nederlandse Vereniging voor Heelkunde, 2013) [Online] Beschikbaar op: <http://www.heelkunde.nl/uploads/o1/h1/o1hIRR2oR4QDjTm5pGjGA/Richtlijn-Wondzorg-final.pdf> [Geraadpleegd: 13 februari 2015]
- 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]
- WCS [Online] Beschikbaar op: [www.wcs.nl](http://www.wcs.nl) [Geraadpleegd: 13 februari 2015]
- 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

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