

# Health & Care Information Model:

## nl.zorg.Wound-v3.1

Status:Final

Release:2018

Release status: Prepublished

Managed by:



# Content

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

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	01-10-2018
DCM::PublicationStatus	Prepublished
DCM::ReviewerList	Projectgroep RadB Verpleegkundige Gegevens & Kerngroep Registratie aan de Bron
DCM::RevisionDate	31-12-2017
DCM::Supersedes	nl.zorg.Wond-v3.0
DCM::Version	3.1
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.

## 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

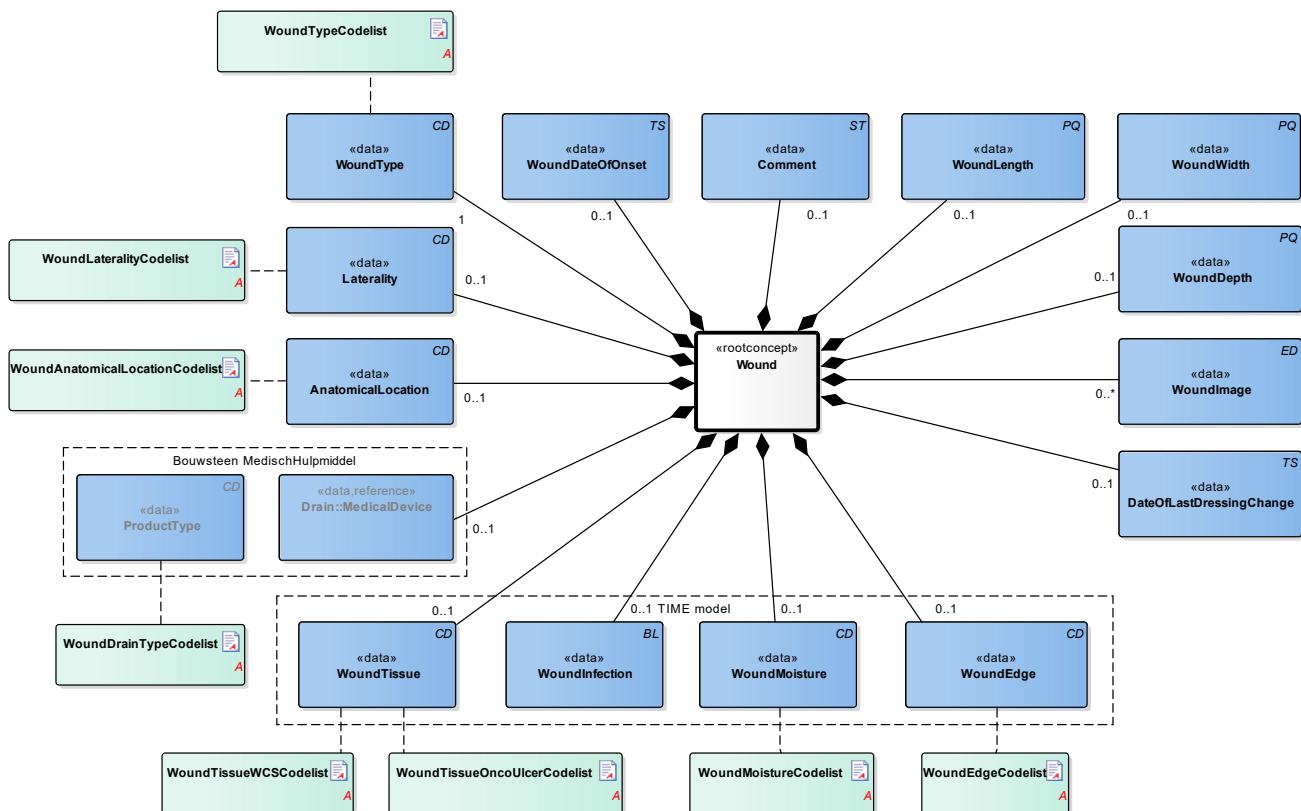
(Source: [www.wcs.nl](http://www.wcs.nl))

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	
<b>Definitie</b>	Root concept of the Wound information model. This root concept contains all data elements of the Wound information model.	
<b>Datatype</b>		
<b>DCM::ConceptId</b>	NL-CM:19.2.1	
<b>Opties</b>		

«data»	WoundType	
<b>Definitie</b>	Description of the type of wound.	
<b>Datatype</b>	CD	
<b>DCM::ConceptId</b>	NL-CM:19.2.5	
<b>DCM::ExampleValue</b>	Chirurgische wond	
<b>DCM::ValueSet</b>	WoundTypeCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.19.2.4
<b>Opties</b>		

«data»	WoundTissue	
<b>Definitie</b>	Description of the tissue of the wound. For this, the WCS model can be used. A different classification is used for oncological ulcers.	
<b>Datatype</b>	CD	
<b>DCM::ConceptId</b>	NL-CM:19.2.4	
<b>DCM::ExampleValue</b>	Rode wond	
<b>DCM::ValueSet</b>	WoundTissueOncoUlcerCode list	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.19.2.2
<b>DCM::ValueSet</b>	WoundTissueWCSCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.19.2.1
<b>Opties</b>		

«data»	WoundInfection	
Definitie	Indication stating whether the wound is infected.	
Datatype	BL	
DCM::ConceptId	NL-CM:19.2.7	
DCM::DefinitionCode	SNOMED CT: 405009004 Infection status	
Opties		

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

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

«data»	WoundLength	
Definitie	The length of the wound.	
Datatype	PQ	
DCM::ConceptId	NL-CM:19.2.12	
DCM::DefinitionCode	SNOMED CT: 401238003 Length of wound	
DCM::ExampleValue	100 mm	
Opties		

«data»	WoundWidth	
Definitie	The width of the wound.	
Datatype	PQ	
DCM::ConceptId	NL-CM:19.2.13	
DCM::DefinitionCode	SNOMED CT: 401239006 Width of wound	
DCM::ExampleValue	30 mm	
Opties		

«data»	WoundDepth	
Definitie	The depth of the wound.	

<b>Datatype</b>	PQ	
<b>DCM::ConceptId</b>	NL-CM:19.2.14	
<b>DCM::DefinitionCode</b>	SNOMED CT: 425094009 Depth of wound	
<b>DCM::ExampleValue</b>	8 mm	
<b>Opties</b>		

<b>«data»</b>	<b>AnatomicalLocation</b>	
<b>Definitie</b>	The location of the wound on the body.	
<b>Datatype</b>	CD	
<b>DCM::ConceptId</b>	NL-CM:19.2.8	
<b>DCM::DefinitionCode</b>	SNOMED CT: 363698007 Finding site	
<b>DCM::ExampleValue</b>	Bovenbeen	
<b>DCM::ValueSet</b>	WoundAnatomicalLocationCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.19.2.6
<b>Opties</b>		

<b>«data»</b>	<b>Laterality</b>	
<b>Definitie</b>	Laterality adds information about body side to the anatomic location, <i>e.g.</i> left	
<b>Datatype</b>	CD	
<b>DCM::ConceptId</b>	NL-CM:19.2.18	
<b>DCM::DefinitionCode</b>	SNOMED CT: 272741003 Laterality	
<b>DCM::ExampleValue</b>	Links	
<b>DCM::ValueSet</b>	WoundLateralityCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.19.2.8
<b>Opties</b>		

<b>«data»</b>	<b>WoundDateOfOnset</b>	
<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>		

<b>«data»</b>	<b>DateOfLastDressingChange</b>	
<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::ExampleValue</b>	15-08-2014	
<b>Opties</b>		

<b>«data»</b>	<b>Drain::MedicalDevice</b>	
<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>		

<b>«data»</b>	<b>ProductType</b>	
<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>		

<b>«data»</b>	<b>WoundImage</b>	
<b>Definitie</b>	A photo of the wound.	
<b>Datatype</b>	ED	
<b>DCM::ConceptId</b>	NL-CM:19.2.15	
<b>Opties</b>		

<b>«data»</b>	<b>Comment</b>	
<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>		

<b>«document»</b>	<b>WoundAnatomicalLocationCodelist</b>	
<b>Definitie</b>		
<b>Datatype</b>		
<b>DCM::ValueSetBinding</b>	Extensible	
<b>DCM::ValueSetId</b>	2.16.840.1.113883.2.4.3.11.60.40.2.19.2.6	
<b>Opties</b>		
<b>WondAnatomischeLocatieCodelijst</b>		<b>OID: 2.16.840.1.113883.2.4.3.11.60.40.2.19.2.6</b>
<b>Codes</b>	<b>Coding Syst. Name</b>	<b>Coding System OID</b>
SNOMED CT: < 442083009  Anatomical or acquired body structure	SNOMED CT	2.16.840.1.113883.6.96

<b>«document»</b>	<b>WoundLateralityCodelist</b>	
<b>Definitie</b>		
<b>Datatype</b>		
<b>DCM::ValueSetBinding</b>	Required	
<b>DCM::ValueSetId</b>	2.16.840.1.113883.2.4.3.11.60.40.2.19.2.8	
<b>Opties</b>		

<b>WondLateraliteitCodelijst</b>		<b>OID: 2.16.840.1.113883.2.4.3.11.60.40.2.19.2.8</b>		
<b>Concept Name</b>	<b>Concept Code</b>	<b>CodeSys.</b>	<b>CodeSystem OID</b>	<b>Description</b>



		Name		
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»		WoundDrainTypeCodelist		
Definitie				
Datatype				
DCM::ValueSetBinding	Extensible			
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.19.2.7			
Opties				
WondDrainTypeCodelijst		OID: 2.16.840.1.113883.2.4.3.11.60.40.2.19.2.7		
Concept Name	CodeSys. Name	CodeSystem OID		
SNOMED CT: << 32712000   drain	SNOMED CT	2.16.840.1.113883.6.96		

«document»		WoundEdgeCodelist		
Definitie				
Datatype				
DCM::ValueSetBinding	Extensible			
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.19.2.5			
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	2.16.840.1.113883.2.4.3.11.60.40.2.19.2.2			
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	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>	2.16.840.1.113883.2.4.3.11.60.40.2.19.2.1		
<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>	2.16.840.1.113883.2.4.3.11.60.40.2.19.2.4		
<b>Opties</b>			

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 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	2.16.840.1.113883.5.10 08	Anders
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«document»		WoundMoistureCodelist		
Definitie				
Datatype				
DCM::ValueSetBinding	Extensible			
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11. 60.40.2.19.2.3			
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

## 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

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