

# Health&Care Information Model:

## nl.zorg.Bloeddruk

Final

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# Content

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# 1. nl.zorg.Bloeddruk-v3.0

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	29-11-2012
DCM::DeprecatedDate	
DCM::DescriptionLanguage	nl
DCM::EndorsingAuthority.Address	
DCM::EndorsingAuthority.Name	PM
DCM::EndorsingAuthority.Telecom	
DCM::Id	2.16.840.1.113883.2.4.3.11.60.40.3.12.4
DCM::KeywordList	bloeddruk, diastolische bloeddruk, systolische bloeddruk, tensie
DCM::LifecycleStatus	Final
DCM::ModelerList	Kerngroep Registratie aan de Bron
DCM::Name	nl.zorg.Bloeddruk
DCM::PublicationDate	1-5-2016
DCM::PublicationStatus	Published
DCM::ReviewerList	Projectgroep Generieke Overdrachtsgegevens & Kerngroep Registratie aan de Bron
DCM::RevisionDate	1-4-2015
DCM::Superseeds	nl.nfu.Bloeddruk-v1.2
DCM::Version	3.0

## 1.1 Revision History

Publicatieversie 1.0 (15-02-2013)

Publicatieversie 1.1 (01-07-2013)

Publicatieversie 1.2 (01-04-2015)

Bevat: ZIB-135, ZIB-136, ZIB-137, ZIB-148, ZIB-169, ZIB-218, ZIB-219, ZIB-220, ZIB-308, ZIB-315, ZIB-362, ZIB-363.

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-453

## 1.2 Concept

The blood pressure is a parameter for determining the condition of the blood circulation and is expressed in systolic and diastolic pressure in mmHg.

## 1.3 Mindmap

## 1.4 Purpose

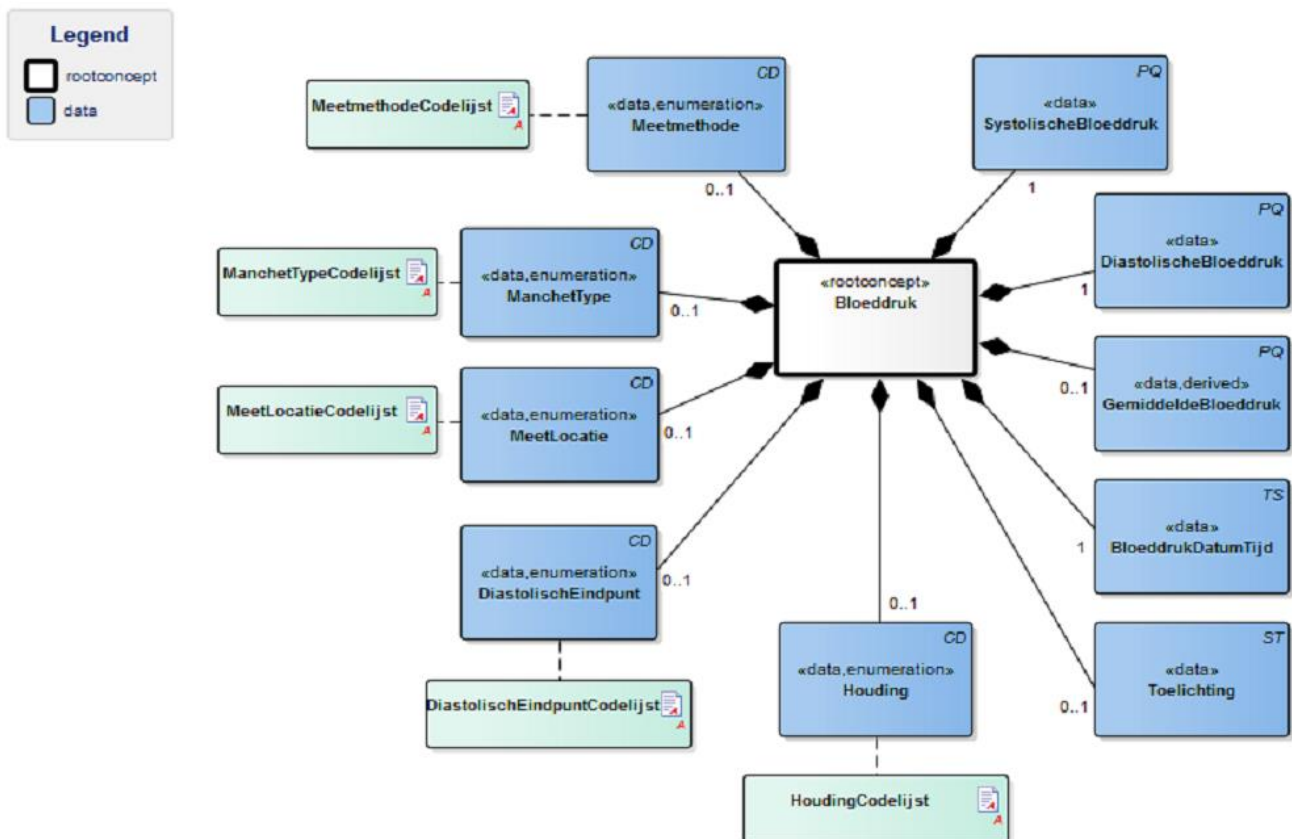
Blood pressure is measured to gain an indication of the health condition of the patient's cardiovascular system.

## 1.5 Patient Population

## 1.6 Evidence Base

The local measurement of the arterial blood pressure, which acts as a surrogate for the arterial pressure in the systematic circulation. In most cases, the term 'blood pressure' refers to the measurement of blood pressure of the arteria brachialis in the upper arm with the cuff using the Riva-Rocci method. The protocol for this measurement comprises many details that are not general knowledge (such as the correct way to interpret Korotkoff sounds) or carried out correctly (adjusting the cuff width to a very large or small diameter of the upper arm, the right rate of descent of the mercury column, cut-off values for cardiac arrhythmias).

## 1.7 Information Model



<b>«rootconcept»</b>	<b>Bloeddruk</b>
<b>Alias</b>	EN: BloodPressure
<b>Definition</b>	Root concept of the BloodPressure information model. This root concept contains all data elements of the BloodPressure information model.
<b>Datatype</b>	
<b>DCM::DefinitionCode</b>	NL-CM:12.4.1

<b>DCM::DefinitionCode</b>	SNOMED CT: 75367002 blood pressure	
<b>Options</b>		

<b>«data»</b>	<b>Meetmethode</b>	
<b>Alias</b>	EN: MeasuringMethod	
<b>Definition</b>	The type of method used to measure blood pressure.	
<b>Datatype</b>	CD	
<b>DCM::DefinitionCode</b>	NL-CM:12.4.7	
<b>DCM::ValueSet</b>	MeetmethodeCodelijst	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.12.4.1
<b>Options</b>		

<b>«data»</b>	<b>ManchetType</b>	
<b>Alias</b>	EN: CuffType	
<b>Definition</b>	The size of the cuff used in the measurement.	
<b>Datatype</b>	CD	
<b>DCM::DefinitionCode</b>	NL-CM:12.4.9	
<b>DCM::DefinitionCode</b>	SNOMED CT: 70665002 blood pressure cuff	
<b>DCM::ValueSet</b>	ManchetTypeCodelijst	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.12.4.3
<b>Options</b>		

<b>«data»</b>	<b>MeetLocatie</b>	
<b>Alias</b>	EN: MeasuringLocation	
<b>Definition</b>	Anatomical location where the blood pressure was measured.	
<b>Datatype</b>	CD	
<b>DCM::DefinitionCode</b>	NL-CM:12.4.10	
<b>DCM::ExampleValue</b>	Bovenarm	
<b>DCM::ValueSet</b>	MeetLocatieCodelijst	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.12.4.4
<b>Options</b>		

<b>«data»</b>	<b>DiastolischEindpunt</b>	
<b>Alias</b>	EN: DiastolicEndpoint	
<b>Definition</b>	Registration of the Korotkoff sound used to measure diastolic pressure with the auscultatory method.	
<b>Datatype</b>	CD	
<b>DCM::DefinitionCode</b>	NL-CM:12.4.8	
<b>DCM::DefinitionCode</b>	SNOMED CT: 85549003 Korotkoff sound	
<b>DCM::ValueSet</b>	DiastolischEindpuntCodelijst	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.12.4.2
<b>Options</b>		

<b>«data»</b>	<b>SystolischeBloeddruk</b>	
<b>Alias</b>	EN: SystolicBloodPressure	
<b>Definition</b>	The highest (peak) systematic arterial blood pressure - measured in the contraction stage or systole of the cardiac cycle.	

<b>Datatype</b>	PQ
<b>DCM::DefinitionCode</b>	NL-CM:12.4.2
<b>DCM::DefinitionCode</b>	SNOMED CT: 271649006 systolic blood pressure
<b>DCM::ExampleValue</b>	155 mmHg
<b>Options</b>	

<b>«data»</b>	<b>DiastolischeBloeddruk</b>
<b>Alias</b>	EN: DiastolicBloodPressure
<b>Definition</b>	The lowest systematic arterial blood pressure - measured in the relaxation stage or diastole of the cardiac cycle.
<b>Datatype</b>	PQ
<b>DCM::DefinitionCode</b>	NL-CM:12.4.3
<b>DCM::DefinitionCode</b>	SNOMED CT: 271650006 diastolic blood pressure
<b>DCM::ExampleValue</b>	70 mmHg
<b>Options</b>	

<b>«data»</b>	<b>GemiddeldeBloeddruk</b>
<b>Alias</b>	EN: AverageBloodPressure
<b>Definition</b>	Average blood pressure during one cycle of the heart contracting and relaxing. Estimated based on systolic and diastolic blood pressure. This estimate is unreliable in cases of circulatory disorders. This value can only be reliably determined when invasive blood pressure is measured.
<b>Datatype</b>	PQ
<b>DCM::DefinitionCode</b>	NL-CM:12.4.4
<b>DCM::DefinitionCode</b>	SNOMED CT: 6797001 mean arterial pressure
<b>Options</b>	

<b>«data»</b>	<b>BloeddrukDatumTijd</b>
<b>Alias</b>	EN: BloodPressureDateTime
<b>Definition</b>	The date and time at which these blood pressure values were measured.
<b>Datatype</b>	TS
<b>DCM::DefinitionCode</b>	NL-CM:12.4.5
<b>Options</b>	

<b>«data»</b>	<b>Toelichting</b>
<b>Alias</b>	EN: Explanation
<b>Definition</b>	Comments on the measured blood pressure. Here, an explanation could be given, for example, of circumstances that may have influenced the patient's blood pressure, such as pain, stress, exertion and sleep/wake cycles.
<b>Datatype</b>	ST
<b>DCM::DefinitionCode</b>	NL-CM:12.4.6
<b>Options</b>	

<b>«data»</b>	<b>Houding</b>
<b>Alias</b>	EN: Position
<b>Definition</b>	The position of the patient when the blood pressure was measured.

<b>Datatype</b>	CD	
<b>DCM::DefinitionCode</b>	NL-CM:12.4.11	
<b>DCM::ExampleValue</b>	Zittend	
<b>DCM::ValueSet</b>	HoudingCodelijst	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.12.4.5
<b>Options</b>		

<b>«document»</b>		<b>DiastolischEindpuntCodelijst</b>		
<b>Alias</b>				
<b>Definition</b>				
<b>Datatype</b>				
<b>Options</b>				
<b>DiastolischEindpuntCodelijst</b>		OID: 2.16.840.1.113883.2.4.3.11.60.40.2.12.4.2		
<b>Concept Name</b>	<b>Concept Code</b>	<b>Coding Syst. Name</b>	<b>Coding System OID</b>	<b>Description</b>
Phase 4	255271000	SNOMED CT	2.16.840.1.113883.6.96	Fase IV
Phase 5	255272007	SNOMED CT	2.16.840.1.113883.6.96	Fase V

<b>«document»</b>		<b>ManchetTypeCodelijst</b>		
<b>Alias</b>				
<b>Definition</b>				
<b>Datatype</b>				
<b>Options</b>				
<b>ManchetTypeCodelijst</b>		OID: 2.16.840.1.113883.2.4.3.11.60.40.2.12.4.3		
<b>Concept Name</b>	<b>Concept Code</b>	<b>Coding Syst. Name</b>	<b>Coding System OID</b>	<b>Description</b>
Standaard	STD	ManchetType	2.16.840.1.113883.2.4.3.11.60.40.4.15.1	Standaard (Standaard manchet voor een volwassene (manchet 16x30 cm))
Groot	L	ManchetType	2.16.840.1.113883.2.4.3.11.60.40.4.15.1	Groot (Een manchet voor een volwassene met een armomtrek van 35 tot 44 cm (manchet 16x36 cm))
Klein	S	ManchetType	2.16.840.1.113883.2.4.3.11.60.40.4.15.1	Klein (Een manchet voor een volwassene met een armomtrek van 22 tot 26 cm (manchet 12x22 cm) )
Extra groot	XL	ManchetType	2.16.840.1.113883.2.4.3.11.60.40.4.15.1	Extra groot (Een manchet voor het dijbeen of arm wanneer de armomtrek 45 tot 52 cm is (manchet 16x42 cm))
Kind	KIND	ManchetType	2.16.840.1.113883.2.4.3.11.60.40.4.15.1	Maat voor kind (Een manchet voor kinderen of voor volwassenen met een dunne arm (manchet ca. 8x21 cm) )
Jong kind	JONGKIND	ManchetType	2.16.840.1.113883.2.4.3.11.60.40.4.15.1	Maat voor jong kind (Een manchet voor jonge kinderen

				(manchet ca. 5x15 cm))
Neonaat	NEONAAT	ManchetType	2.16.840.1.113883.2.4.3.11.60.40.4.15.1	Maat voor neonaat (Een manchet voor neonaten (manchet ca. 3x6 cm))

«document»		HoudingCodelijst		
Alias				
Definition				
Datatype				
Options				
HoudingCodelijst		OID: 2.16.840.1.113883.2.4.3.11.60.40.2.12.4.5		
Concept Name	Concept Code	Coding Syst. Name	Coding System OID	Description
Orthostatic body position	10904000	SNOMED CT	2.16.840.1.113883.6.96	Staand
Recumbent body position	102538003	SNOMED CT	2.16.840.1.113883.6.96	Liggend
Sitting position	33586001	SNOMED CT	2.16.840.1.113883.6.96	Zittend
Position with tilt	272587006	SNOMED CT	2.16.840.1.113883.6.96	Achteroverleunend
Trendelenburg position	34106002	SNOMED CT	2.16.840.1.113883.6.96	Positie van Trendelenburg

«document»		MeetmethodeCodelijst		
Alias				
Definition				
Datatype				
Options				
MeetmethodeCodelijst		OID: 2.16.840.1.113883.2.4.3.11.60.40.2.12.4.1		
Concept Name	Concept Code	Coding Syst. Name	Coding System OID	Description
Non-invasive	22762002	SNOMED CT	2.16.840.1.113883.6.96	Niet-invasief
Invasive	10179008	SNOMED CT	2.16.840.1.113883.6.96	Invasief

«document»		MeetLocatieCodelijst		
Alias				
Definition				
Datatype				
Options				
MeetLocatieCodelijst		OID: 2.16.840.1.113883.2.4.3.11.60.40.2.12.4.4		



Concept Name	Concept Code	Coding Syst. Name	Coding System OID	Description
Upper arm structure	40983000	SNOMED CT	2.16.840.1.113883.6.96	Bovenarm
Right upper arm structure	368209003	SNOMED CT	2.16.840.1.113883.6.96	Rechter bovenarm
Left upper arm structure	368208006	SNOMED CT	2.16.840.1.113883.6.96	Linker bovenarm
Thigh structure	68367000	SNOMED CT	2.16.840.1.113883.6.96	Bovenbeen
Structure of right thigh	11207009	SNOMED CT	2.16.840.1.113883.6.96	Rechter bovenbeen
Structure of left thigh	61396006	SNOMED CT	2.16.840.1.113883.6.96	Linker bovenbeen
Wrist region structure	8205005	SNOMED CT	2.16.840.1.113883.6.96	Pols
Structure of right wrist	9736006	SNOMED CT	2.16.840.1.113883.6.96	Rechterpols
Structure of left wrist	5951000	SNOMED CT	2.16.840.1.113883.6.96	Linkerpols
Finger structure	7569003	SNOMED CT	2.16.840.1.113883.6.96	Vinger
Ankle region structure	344001	SNOMED CT	2.16.840.1.113883.6.96	Enkel
Structure of right ankle	6685009	SNOMED CT	2.16.840.1.113883.6.96	Rechterenkel
Structure of left ankle	51636004	SNOMED CT	2.16.840.1.113883.6.96	Linkerenkel

## 1.8 Example Instances

Bloeddruk DatumTijd	Systolische Bloeddruk	Diastolische Bloeddruk	Houding	Manchet Type	Meet Locatie	Toelichting
08-02-2013 6:43	125 mmHg	75 mmHg	liggend	standaard	rechter bovenarm	

Bloeddruk DatumTijd	Systolische Bloeddruk	Diastolische Bloeddruk	Houding	Manchet Type	Meet Locatie	Toelichting
07-02-2013	108 mmHg	56 mmHg	zittend	groot	linker pols	Mw. is zwanger

## 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. Parelsnoer DCM Bloeddruk v0.9 [Online] Beschikbaar op: <http://www.nictiz.nl/uploaded/FILES/htmlcontent/dcm/parelsnoer/Bloeddruk%20v0.9.pdf> [Geraadpleegd: 23 februari 2015].
2. openEHR-EHR-OBSERVATION.blood\_pressure.v1 [Online] Beschikbaar op: <http://www.openehr.org/knowledge/> [Geraadpleegd: 23 februari 2015].

## 1.16 Functional Model

## 1.17 Traceability to other Standards

## 1.18 Disclaimer

This Health and Care Information Model (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 this Health and Care Information Model. 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 this 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.

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