

# Health & Care Information Model:

## nl.zorg.HeartRate-v3.1

Status:Final

Release:2017

Release status: Published

Managed by:



# Content

<b>1. nl.zorg.HeartRate-v3.1</b>	<b>3</b>
1.1 Revision History	3
1.2 Concept	3
1.3 Mindmap	3
1.4 Purpose	4
1.5 Patient Population	4
1.6 Evidence Base	4
1.7 Information Model	4
1.8 Example Instances	6
1.9 Instructions	6
1.10 Interpretation	6
1.11 Care Process	6
1.12 Example of the Instrument	6
1.13 Constraints	6
1.14 Issues	6
1.15 References	7
1.16 Functional Model	7
1.17 Traceability to other Standards	7
1.18 Disclaimer	7
1.19 Terms of Use	7
1.20 Copyrights	7

# 1. nl.zorg.HeartRate-v3.1

DCM::Codelist	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	2.16.840.1.113883.2.4.3.11.60.40.3.12.3
DCM::KeywordList	hartfrequentie, vitale parameters, hartslag
DCM::LifecycleStatus	Final
DCM::ModelerList	Kerngroep Registratie aan de Bron
DCM::Name	nl.zorg.Hartfrequentie
DCM::PublicationDate	31-12-2017
DCM::PublicationStatus	Published
DCM::ReviewerList	Projectgroep Generieke Overdrachtsgegevens & Kerngroep Registratie aan de Bron
DCM::RevisionDate	31-12-2017
DCM::Superseeds	nl.zorg.Hartfrequentie-v3.0
DCM::Version	3.1
HCIM::PublicationLanguage	EN

## 1.1 Revision History

Publicatieversie 1.0 (15-02-2013)

Publicatieversie 1.1 (01-07-2013)

Publicatieversie 1.2 (01-04-2015)

Bevat: ZIB-141, ZIB-234, ZIB-308, ZIB-360.

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

Publicatieversie 3.1 (04-09-2017)

Bevat: ZIB-431, ZIB-549, ZIB-564

## 1.2 Concept

The heart rate is the number of heartbeats per minute.

## 1.3 Mindmap

## 1.4 Purpose

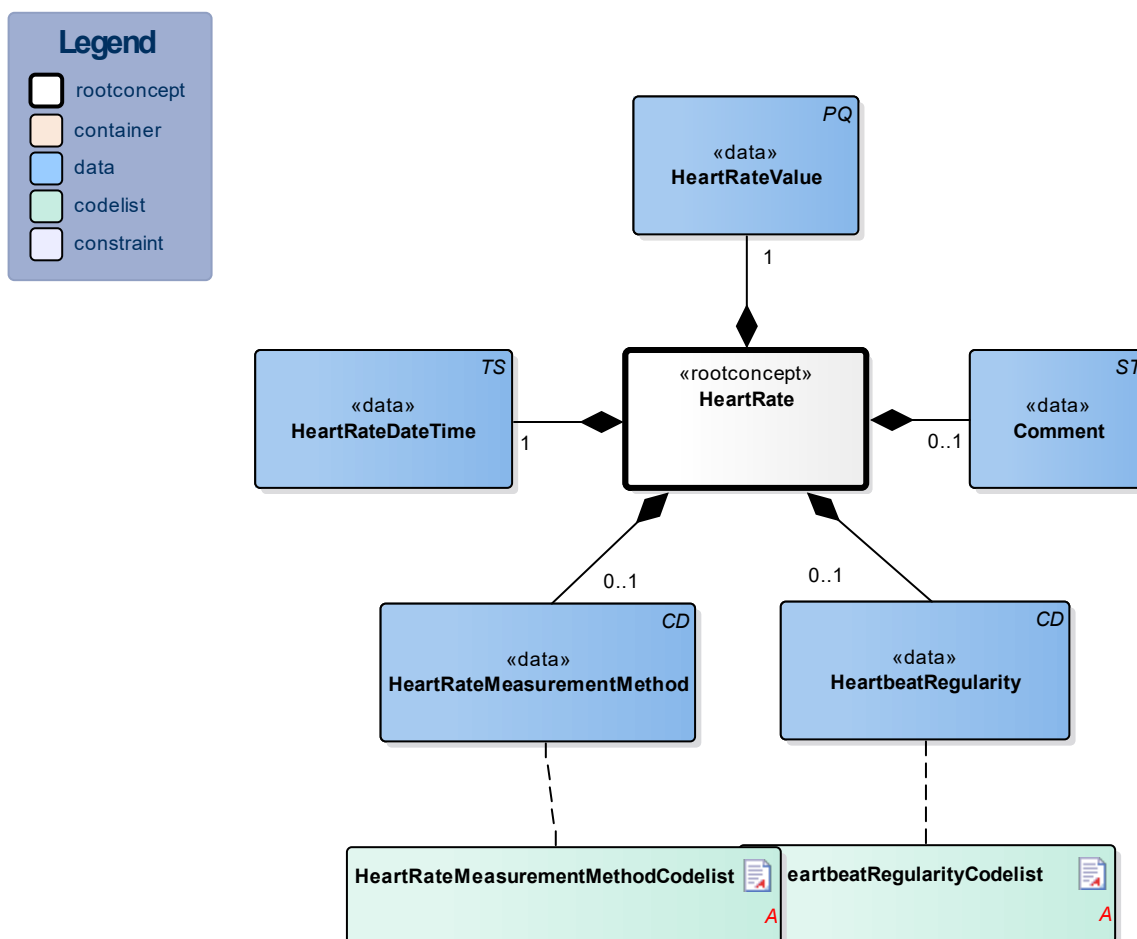
Obtaining information on circulation and heart function by measuring the heartrate.

## 1.5 Patient Population

## 1.6 Evidence Base

Heart rate (electric or auscultatory rhythm of the ventricles) and pulse rate (tangible output in the peripheral arteries) are physiologically different things, but produce the same values in normal circulation (beats per minute) and are therefore used interchangeably by many healthcare providers (and laymen). This is however incorrect, as a patient's pulse rate can be lower than their heart rate. Nevertheless, in daily practice, the pulse is usually palpated to measure heart rate and also written down as the heart rate. For this reason, the HeartRate information model, in addition to the PulseRate information model, offers the option to enter palpation as the HeartRateMeasurementMethod.

## 1.7 Information Model



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

DCM::ConceptId	NL-CM:12.3.1	
Opties		

«data»	HeartRateValue	
Definitie	The heart rate measured as the number of heartbeats per minute.	
Datatype	PQ	
DCM::ConceptId	NL-CM:12.3.2	
DCM::DefinitionCode	LOINC: 8867-4 Heart Rate	
DCM::ExampleValue	76/min	
Opties		

«data»	HeartRateDateTime	
Definitie	Date and time of the heart rate measurement.	
Datatype	TS	
DCM::ConceptId	NL-CM:12.3.4	
Opties		

«data»	HeartRateMeasurementMethod	
Definitie	The method used to count and observe the heart rate.	
Datatype	CD	
DCM::ConceptId	NL-CM:12.3.6	
DCM::ValueSet	HeartRateMeasurementMethodCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.12.3.2
Opties		

«data»	Comment	
Definitie	Comment on any problems or factors that may influence the measurement. Further explanation can be provided here as well.	
Datatype	ST	
DCM::ConceptId	NL-CM:12.3.3	
DCM::DefinitionCode	LOINC: 48767-8 Annotation comment	
Opties		

«data»	HeartbeatRegularity	
Definitie	Regularity of the heartbeat.	
Datatype	CD	
DCM::ConceptId	NL-CM:12.3.5	
DCM::ValueSet	HeartbeatRegularityCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.12.3.1
Opties		

«document»	HeartRateMeasurementMethodCodelist	
Definitie		
Datatype		
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.12.3.2	
Opties		

HartslagMeetMethodeCodelist

OID: 2.16.840.1.113883.2.4.3.11.60.40.2.12.3.2

Concept Name	Concept Code	Coding Syst. Name	Coding System OID	Description
Palpation	113011001	SNOMED CT	2.16.840.1.113883.6.96	Palpatie
Auscultation	37931006	SNOMED CT	2.16.840.1.113883.6.96	Auscultatie
Cardiac monitoring	88140007	SNOMED CT	2.16.840.1.113883.6.96	Cardiale monitoring
ECG	46825001	SNOMED CT	2.16.840.1.113883.6.96	Electrocardiografie

«document»		HeartbeatRegularityCodelist		
Definitie				
Datatype				
DCM::ValueSetId		2.16.840.1.113883.2.4.3.11.60.40.2.12.3.1		
Opties				
HartslagRegelmatigheidCodelijst		OID: 2.16.840.1.113883.2.4.3.11.60.40.2.12.3.1		
Concept Name	Concept Code	Coding Syst. Name	Coding System OID	Description
Heart regular	271636001	SNOMED CT	2.16.840.1.113883.6.96	Hartslag regelmatig
Heart irregular	248650006	SNOMED CT	2.16.840.1.113883.6.96	Hartslag onregelmatig

## 1.8 Example Instances

Hartfrequentie DatumTijd	Hartfrequentie Waarde	Hartslag Methode	Hartslag Regelmatigheid	Toelichting
08-02-2013 6:43	126/min	Auscultatie	Hartslag onregelmatig	Misschien bigeminie?

## 1.9 Instructions

A Holter registration is a 24-hour ECG: an ECG with a very long measuring period.

## 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 Hartslag v0.98. [Online] Beschikbaar op: <http://www.nictiz.nl/uploaded/FILES/htmlcontent/dcm/parelsnoer/Hartslag%20v0.64.pdf> [Geraadpleegd: 19 februari 2015].
2. openEHR-EHR-OBSERVATION.heart\_rate.v1 [Online] Beschikbaar op: <http://www.openehr.org/knowledge/> [Geraadpleegd: 19 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.

## 1.19 Terms of Use

The user may use the information in this Health and Care Information Model without limitations. The copyright provisions in the paragraph concerned apply to copying, distributing and passing on information from this Health and Care Information Model.

## 1.20 Copyrights

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/>)