

# Health & Care Information Model:

## nl.zorg.HeartRate-v3.2

Status:Final

Release:2018

Release status: Prepublished

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# Content

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# 1. nl.zorg.HeartRate-v3.2

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	2.16.840.1.113883.2.4.3.11.60.40.3.12.3
DCM::KeywordList	hartfrequentie, vitale parameters, hartslag
DCM::LifecycleStatus	Final
DCM::ModelerList	Kerngroep Registratie aan de Bron
DCM::Name	nl.zorg.Hartfrequentie
DCM::PublicationDate	01-10-2018
DCM::PublicationStatus	Prepublished
DCM::ReviewerList	Projectgroep Generieke Overdrachtsgegevens & Kerngroep Registratie aan de Bron
DCM::RevisionDate	31-12-2017
DCM::Superseeds	nl.zorg.Hartfrequentie-v3.1
DCM::Version	3.2
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.

Publicatieversie 3.2 (01-10-2018)

Bevat: ZIB-509.

## 1.2 Concept

The heart rate is the number of heartbeats per minute.

## 1.3 Mindmap

## 1.4 Purpose

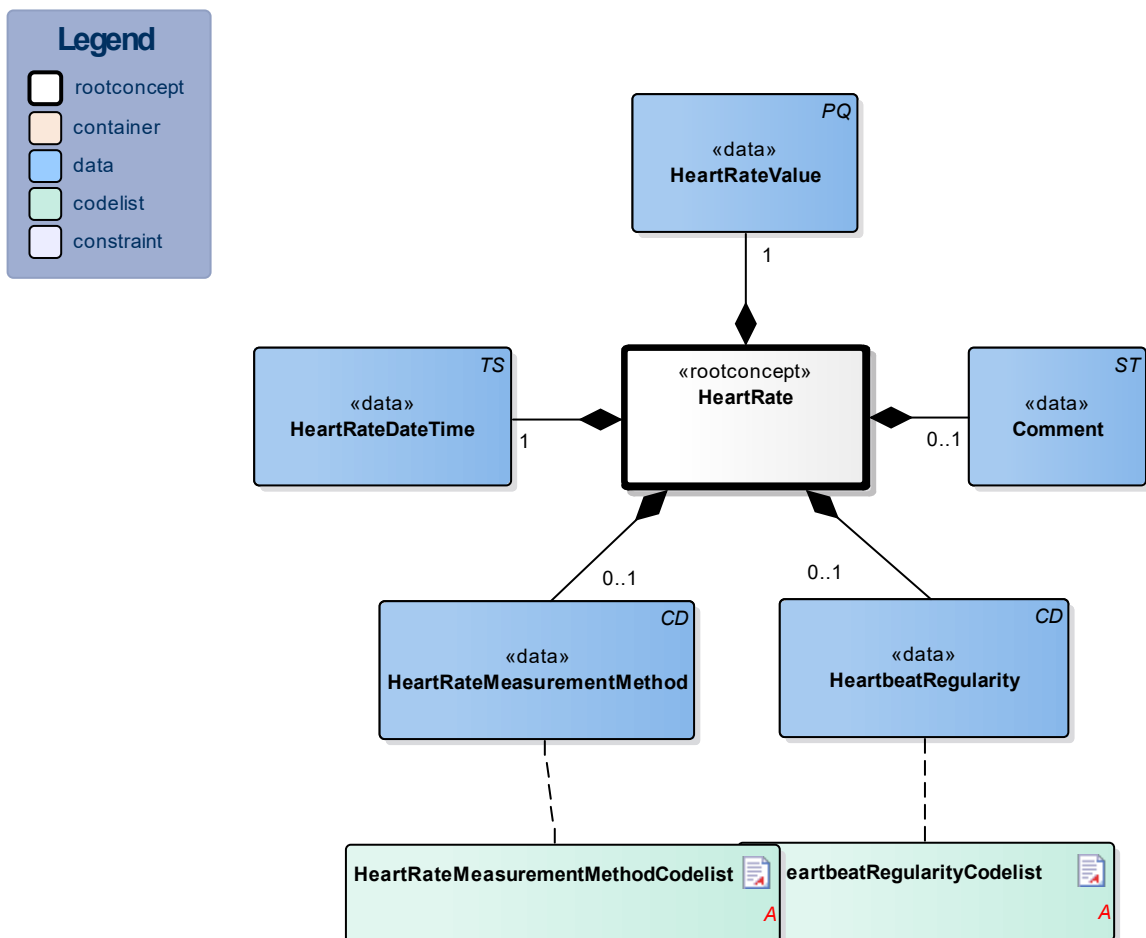
Obtaining information on circulation and heart function by measuring the heartrate.

## 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



<b>«rootconcept»</b>	<b>HeartRate</b>
<b>Definitie</b>	Root concept of the HeartRate information model. This root concept

	contains all data elements of the HeartRate information model.	
<b>Datatype</b>		
<b>DCM::ConceptId</b>	NL-CM:12.3.1	
<b>Opties</b>		

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

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

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

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

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

<b>«document»</b>	<b>HeartRateMeasurementMethodCodelist</b>	
<b>Definitie</b>		
<b>Datatype</b>		
<b>DCM::ValueSetBinding</b>	Extensible	

<b>DCM::ValueSetId</b>	2.16.840.1.113883.2.4.3.11.60.40.2.12.3.2			
<b>Opties</b>				
<b>HartslagMeetMethodeCodelijst</b>		<b>OID: 2.16.840.1.113883.2.4.3.11.60.40.2.12.3.2</b>		
Concept Name	Concept Code	Coding Syst. Name	Coding System OID	Description
Palpation	113011001	SNOMED CT	2.16.840.1.113883.6.96	Palpatie <b>(DEPRECATED)</b>
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

<b>«document»</b>	<b>HeartbeatRegularityCodelist</b>			
<b>Definitie</b>				
<b>Datatype</b>				
<b>DCM::ValueSetBinding</b>	Extensible			
<b>DCM::ValueSetId</b>	2.16.840.1.113883.2.4.3.11.60.40.2.12.3.1			
<b>Opties</b>				
<b>HartslagRegelmatigheidCodelijst</b>		<b>OID: 2.16.840.1.113883.2.4.3.11.60.40.2.12.3.1</b>		
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

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