Health & Care Information Model:

nl.zorg.HeartRate-v3.4.1

Status: Final
Release: 2024
Release status: Prepublished

Managed by:

Content

1. nl.zorg.HeartRate-v3.4.1

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	15-04-2024
DCM::PublicationStatus	Prepublished
DCM::ReviewerList	Projectgroep Generieke Overdrachtsgegevens & Kerngroep Registratie aan de Bron
DCM::RevisionDate	17-11-2021
DCM::Supersedes	nl.zorg.Hartfrequentie-v3.4
DCM::Version	3.4.1
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.

Publicatieversie 3.2 (01-10-2018)
Bevat: ZIB-509.

Publicatieversie 3.3 (06-07-2019)
Bevat: ZIB-732.

Publicatieversie 3.4 (01-09-2020)
Bevat: ZIB-881.

Publicatieversie 3.4.1 (01-12-2021)
Bevat: ZIB-1575.

1.2 Concept

The heart rate is the number of heartbeats per minute.
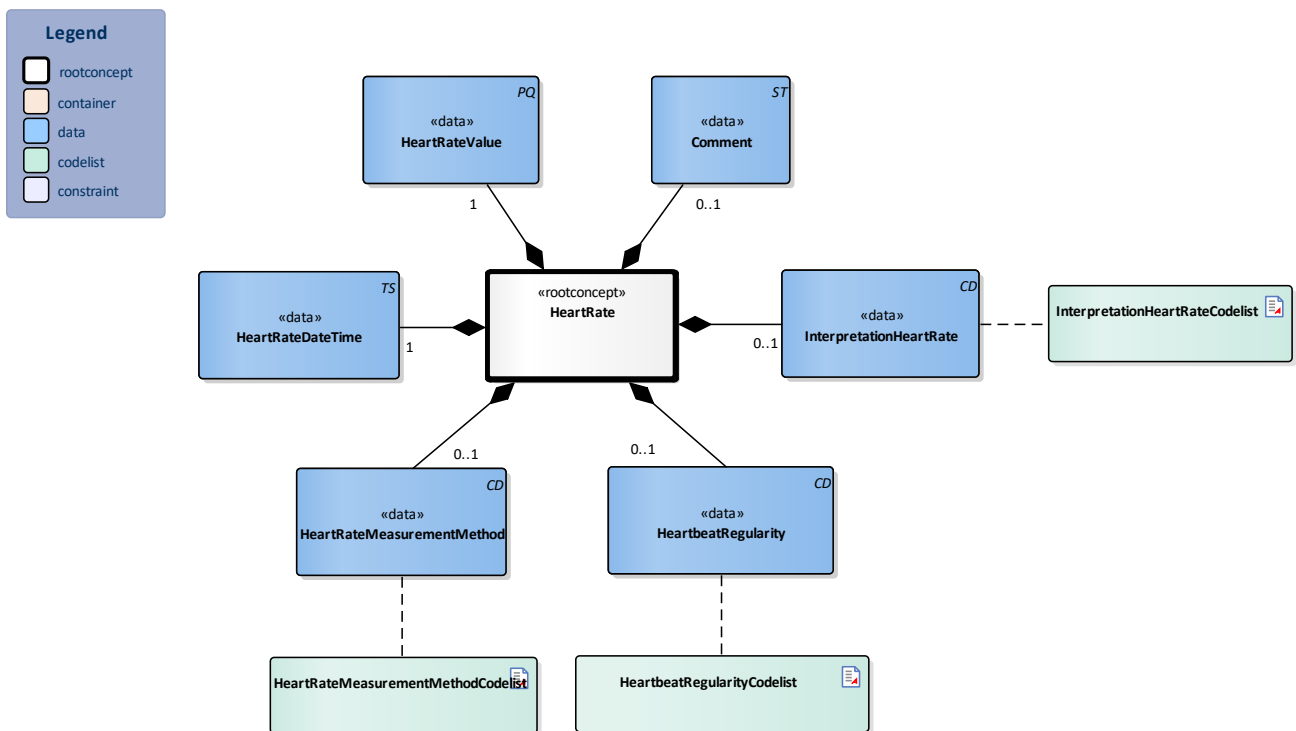
1.3 Mindmap

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

DCM::DefinitionCode	SNOMED CT: 106066004 Cardiac rhythm AND/OR rate finding	
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	SNOMED CT: 364075005 Heart rate	
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::DefinitionCode	SNOMED CT: 315306007 Examination by method	
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.	
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::DefinitionCode	SNOMED CT: 301112006 Finding of heart rhythm	
DCM::ValueSet	HeartbeatRegularityCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.12.3.1
Opties		

«data»	InterpretationHeartRate	
Definitie	Interpretation heart rate	
Datatype	CD	
DCM::ConceptId	NL-CM:12.3.7	

DCM::DefinitionCode	SNOMED CT: 301113001 Finding of heart rate	
DCM::ValueSet	InterpretationHeartRateCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.12.3.3
Opties		

«document»	HeartRateMeasurementMethodCodelist	
Definitie		
Datatype		
DCM::ValueSetBinding	Extensible	
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.12.3.2	
HCIM::ValueSetLanguage	--	
Opties		

HartslagMeetMethodeCodelijst			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
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::ValueSetBinding	Required	
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.12.3.1	
HCIM::ValueSetLanguage	--	
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
Irregular heart beat	361137007	SNOMED CT	2.16.840.1.113883.6.96	Hartslag onregelmatig

«document»	InterpretationHeartRateCodelist	
Definitie		
Datatype		
DCM::ValueSetBinding	Extensible	
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.12.3.3	
HCIM::ValueSetLanguage	--	
Opties		

InterpretatieFrequentieCodelijst			OID: 2.16.840.1.113883.2.4.3.11.60.40.2.12.3.3	
Concept Name	Concept Code	Coding System Name	Coding System OID	Description
Bradycardia	48867003	SNOMED CT	2.16.840.1.113883.6.96	Bradycardie
Normal heart rate	76863003	SNOMED CT	2.16.840.1.113883.6.96	Normale hartfrequentie

Tachycardia	3424008	SNOMED CT	2.16.840.1.113883.6.96	Tachycardie

Legend	
Definitie	
Datatype	
Opties	

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

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Nictiz
P.O. Box 19121
2500 CC Den Haag
Oude Middenweg 55
2491 AC Den Haag

070-3173450
info@nictiz.nl
www.nictiz.nl

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