

Health & Care Information Model:

nl.zorg.HeartRate-v3.4.1

Status: Final

Release: 2023

Release status: Prepublished

Managed by:



Content

1. nlzorg.HeartRate-v3.4.1	3
1.1 Revision History	3
1.2 Concept	4
1.3 Mindmap	4
1.4 Purpose	4
1.5 Patient Population	4
1.6 Evidence Base	4
1.7 Information Model	4
1.8 Example Instances	7
1.9 Instructions	7
1.10 Interpretation	7
1.11 Care Process	7
1.12 Example of the Instrument	7
1.13 Constraints	7
1.14 Issues	7
1.15 References	7
1.16 Functional Model	7
1.17 Traceability to other Standards	8
1.18 Disclaimer	8
1.19 Terms of Use	8
1.20 Copyrights	8

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	15-10-2023
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.

1.2 Concept

The heart rate is the number of heartbeats per minute.

1.3 Mindmap

1.4 Purpose

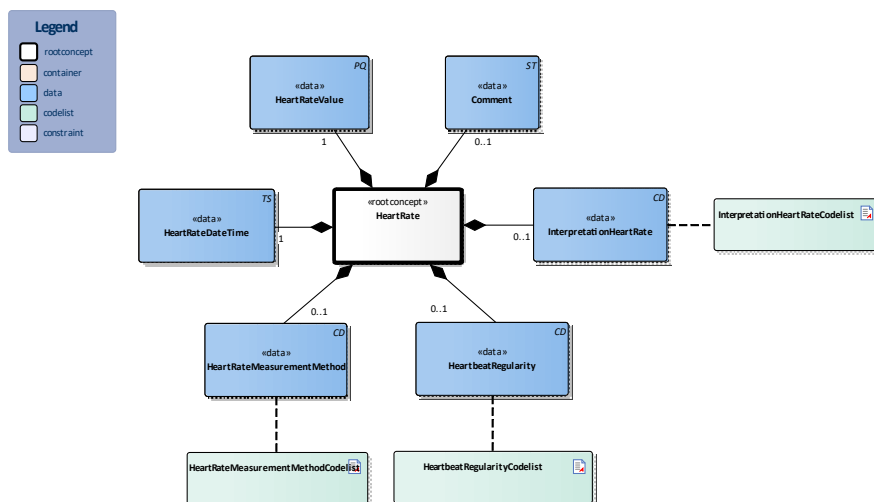
Obtaining information on circulation and heart function by measuring the heartrate.

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

1.18 Disclaimer

The Health and Care Information Models (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 the Health and Care Information Models. 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 a 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 Health and Care Information Models without limitations. The copyright provisions in the paragraph concerned apply to copying, distributing and passing on the Health and Care Information Models.

1.20 Copyrights

A Health and Care Information Model qualifies as a work within the meaning of Section 10 of the Copyright Act (Auteurswet). Copyrights protect the Health and Care Information Models and these rights are owned by the cooperating parties.

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/>)

This does not apply to information from third parties that sometimes is used and / or referred to in a Health and Care Information Model, for example to an international medical terminology system. Any (copyright) rights that protect this information are not owned by the cooperating parties but by those third parties.

Nictiz is the independent national competence centre for electronic exchange of health and care information. The activities of Nictiz include the targeted development and management of information standards at the request of and in partnership with the stakeholders in healthcare. Nictiz advises these parties on all aspects of information exchange and identifies (future) national and international developments.

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

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



