

Health & Care Information Model:

nl.zorg.O2Saturation-v4.0

Status: Final

Release status: Prepublished

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1. nl.zorg.O2Saturation-v4.0

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	2.16.840.1.113883.2.4.3.11.60.40.3.12.10
DCM::KeywordList	zuurstofsaturatie, vitale parameters, saturatie
DCM::LifecycleStatus	Final
DCM::ModelerList	Kerngroep Registratie aan de Bron
DCM::Name	nl.zorg.O2Saturation
DCM::PublicationDate	15-10-2023
DCM::PublicationStatus	Prepublished
DCM::ReviewerList	Projectgroep Generieke Overdrachtsgegevens & Kerngroep Registratie aan de Bron
DCM::RevisionDate	11-11-2021
DCM::Supersedes	nl.zorg.O2Saturation-v3.1
DCM::Version	4.0
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-308.

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-564.

Publicatieversie 4.0 (01-12-2021)

Bevat: ZIB-1217, ZIB-1476.

1.2 Concept

Arterial oxygen saturation, also referred to as saturation, is an indicator for the amount of oxygen bound to the hemoglobin in the red blood cells of the arteries. The measurement is usually carried out as a transcutaneous measurement with a blood oxygen monitor or pulse oximeter. The saturation level is expressed as a percentage and should be over 95% in healthy people.

1.3 Mindmap

1.4 Purpose

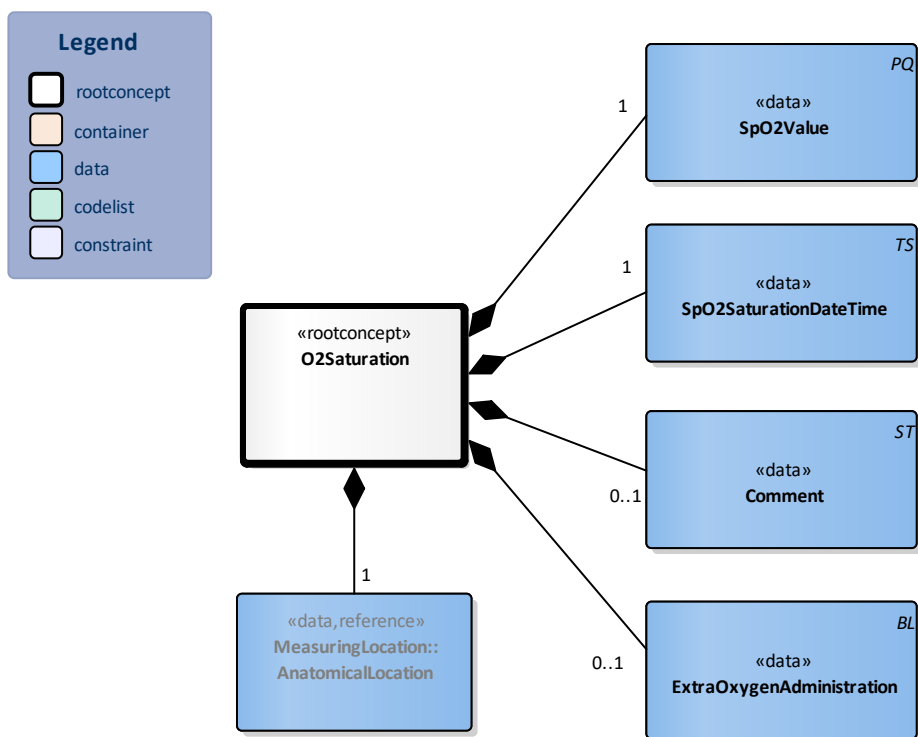
Measuring and monitoring oxygen saturation is done to monitor the oxygenation, or the amount of bound oxygen in the arterial blood.

This HCIM concerns the peripherally measured oxygen saturation (SpO2). For the oxygen saturation measured as a blood-gas measurement (SaO2), the HCIM LaboratoryTestResults must be used.

1.5 Patient Population

1.6 Evidence Base

1.7 Information Model



«rootconcept»	O2Saturation	
Definitie	Root concept of the O2Saturation information model. This root concept contains all data elements of the O2Saturation information model.	
Datatype		
DCM::ConceptId	NL-CM:12.10.1	
DCM::DefinitionCode	SNOMED CT: 250554003 Measurement of oxygen saturation at periphery	
Opties		

«data»	SpO2Value
Definitie	The element contains the value of the indirect, peripheral measured O2

	<p>saturation.</p> <p>The O2 saturation gives a percentage expressing the extent to which the blood's hemoglobin is saturated with oxygen, the ratio of oxygen-saturated hemoglobin to hemoglobin.</p> <p>The measurement is done in places where sufficient light can get through the skin, such as a finger, toe or earlobe.</p>	
Datatype	PQ	
DCM::ConceptId	NL-CM:12.10.2	
DCM::DefinitionCode	LOINC: 59408-5 Oxygen saturation in Arterial blood by Pulse oximetry	
DCM::DefinitionCode	SNOMED CT: 431314004 Peripheral oxygen saturation	
DCM::ExampleValue	98 %	
Opties		

«data»	SpO2SaturationDateTime	
Definitie	The moment (date and time) of the SpO2 measurement.	
Datatype	TS	
DCM::ConceptId	NL-CM:12.10.3	
Opties		

«data»	Comment	
Definitie	Comment on the saturation measurement.	
Datatype	ST	
DCM::ConceptId	NL-CM:12.10.4	
DCM::DefinitionCode	LOINC: 48767-8 Annotation comment	
DCM::ExampleValue	Saturatie afhankelijk van O2 via mondkap	
Opties		

«data»	ExtraOxygenAdministration	
Definitie	Indication stating whether the measurement was done in a situation in which extra oxygen was administered.	
Datatype	BL	
DCM::ConceptId	NL-CM:12.10.5	
DCM::DefinitionCode	SNOMED CT: 266702001 Oxygen enrichment therapy	
Opties		

«data»	MeasuringLocation::AnatomicalLocation	
Definitie	Anatomical location where the SpO2 is measured.	
Datatype		
DCM::ConceptId	NL-CM:12.10.6	
DCM::ReferencedConceptId	NL-CM:20.7.1	This is a reference to the rootconcept of information model AnatomicalLocation.
Opties		

	Legend	
Definitie		
Datatype		
Opties		

1.8 Example Instances

O2SaturatieDatumTijd	SpO2Waarde	ExtraZuurstofToediening	Toelichting
08-02-2013 6:43	92%	Ja	Stijgt snel bij aanspreken

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. openEHR-EHR-OBSERVATION.indirect_oximetry.v1[Online] Beschikbaar op: <http://www.openehr.org/knowledge/> [Geraadpleegd: 19 december 2014].

1.16 Functional Model

1.17 Traceability to other Standards

This health and care information model is in accordance with the information model template Measurement v1.0.

1.18 Disclaimer

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