

Health & Care Information Model: nl.nfu.Respiration-v1.0.2

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1. nl.nfu.Respiration-v1.0.2

DCM::CoderList	Kerngroep Registratie aan de Bron
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DCM::ContentAuthorList	Projectgroep Generieke Overdrachtsgegevens & Kerngroep Registratie aan de Bron
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DCM::EndorsingAuthority.Address	
DCM::EndorsingAuthority.Name	NFU
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DCM::Id	2.16.840.1.113883.2.4.3.11.60.40.3.12.5
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DCM::RevisionDate	16-7-2015
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1.1 Revision History

Publicatieversie 1.0 (01-04-2015)

Bevat: ZIB-113, ZIB-308, ZIB-361, ZIB-364, ZIB-365, ZIB-366.

Incl. algemene wijzigingsverzoeken:

ZIB-94, ZIB-154, ZIB-200, ZIB-201, ZIB-309, ZIB-324, ZIB-326.

Publicatieversie 1.0.1 (22-05-2015)

Bevat: ZIB-407, ZIB-398.

Publicatieversie 1.0.2 (16-07-2015)

Bevat: ZIB-415, ZIB-416.

1.2 Concept

During breathing or respiration, air flows to and from the lungs, where gas exchange occurs, absorbing oxygen from the air into the blood and exhaling carbon dioxide into the air. Observations of spontaneous breathing, usually registered as part of the observation of vital functions.

1.3 Mindmap

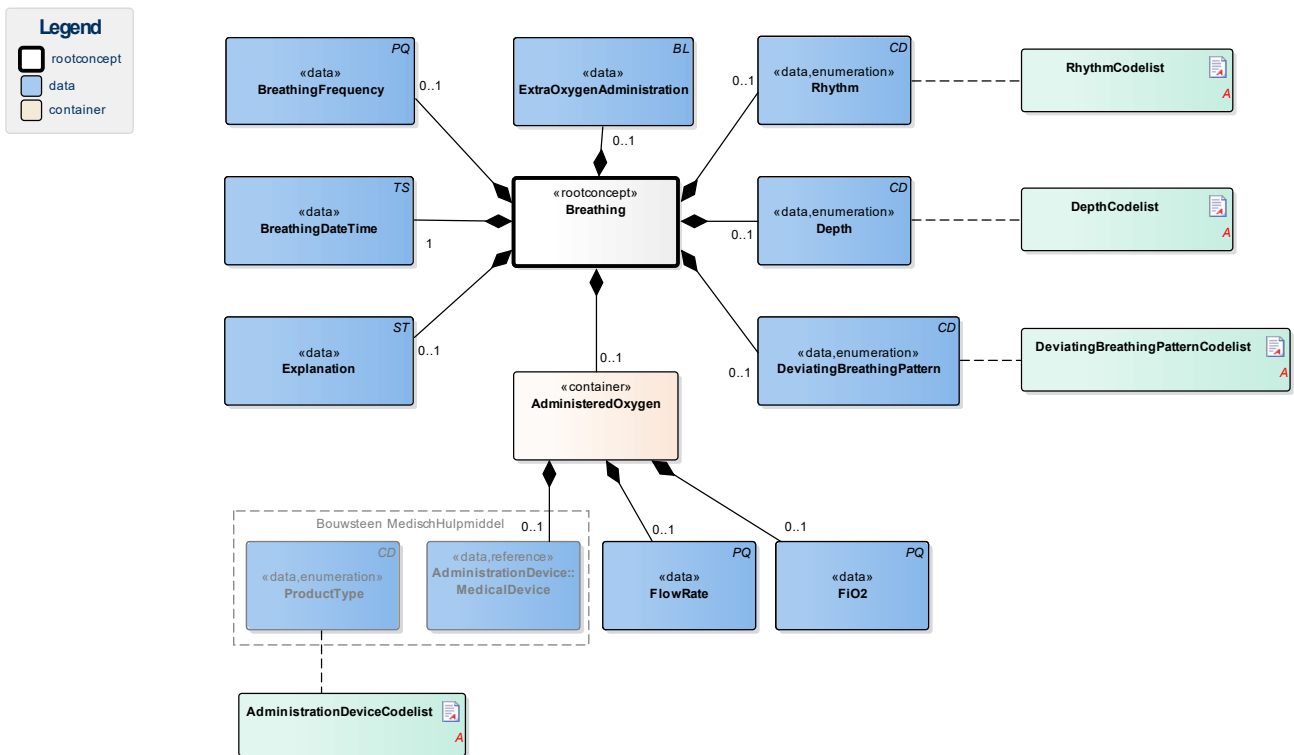
1.4 Purpose

Observing a person’s spontaneous breathing, including recording breathing frequency, depth and rhythm, is done to gain an indication of the health condition of the patient’s pulmonary system.

1.5 Patient Population

1.6 Evidence Base

1.7 Information Model



«rootconcept»	Breathing
Definitie	Root concept of the Breathing building block. This root concept contains all data elements of the Breathing building block.
Datatype	
DCM::ConceptId	NL-CM:12.5.1
Opties	

«data»	BreathingFrequency
Definitie	The value of the measured breathing frequency. The breathing frequency is the number of breaths per minute.
Datatype	PQ
DCM::ConceptId	NL-CM:12.5.2
DCM::DefinitionCode	SNOMED CT: 86290005 Respiratory rate (observable entity)
DCM::ExampleValue	15/min

Opties	
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«data»	BreathingDateTime
Definitie	Date and if possible time of measurement.
Datatype	TS
DCM::ConceptId	NL-CM:12.5.4
Opties	

«data»	Rhythm
Definitie	The rhythm or regularity of breathing.
Datatype	CD
DCM::ConceptId	NL-CM:12.5.5
DCM::DefinitionCode	SNOMED CT: 48064009 Respiratory rhythm
DCM::ValueSet	RhythmCodelist OID: 2.16.840.1.113883.2.4.3.11.60.40.2.12.5.1
Opties	

«data»	Depth
Definitie	The depth of the breaths.
Datatype	CD
DCM::ConceptId	NL-CM:12.5.6
DCM::DefinitionCode	SNOMED CT: 271626009 Depth of respiration
DCM::ValueSet	DepthCodelist OID: 2.16.840.1.113883.2.4.3.11.60.40.2.12.5.2
Opties	

«data»	DeviatingBreathingPattern
Definitie	Specific, abnormal breathing patterns.
Datatype	CD
DCM::ConceptId	NL-CM:12.5.7
DCM::DefinitionCode	SNOMED CT: 278907009 Respiratory pattern
DCM::ValueSet	DeviatingBreathingPatternCo delist OID: 2.16.840.1.113883.2.4.3.11.60.40.2.12.5.3
Opties	

«data»	ExtraOxygenAdministration
Definitie	An indication stating whether the patient is given extra oxygen. In that event, additional information can be recorded in the concepts that are part of the AdministeredOxygen container.
Datatype	BL
DCM::ConceptId	NL-CM:12.5.12
Opties	

«container»	AdministeredOxygen
Definitie	Container of the AdministeredOxygen concept. This container contains all data elements of the AdministeredOxygen concept.

Datatype		
DCM::ConceptId	NL-CM:12.5.8	
Opties		

«data»	FlowRate
Definitie	The amount of administered oxygen. The value is between 0.0 and 50.0 l/min.
Datatype	PQ
DCM::ConceptId	NL-CM:12.5.10
DCM::DefinitionCode	SNOMED CT: 165033004 Respiratory flow rate
Opties	

«data»	FiO2
Definitie	The fractional concentration of inspired oxygen. Value is between 0.0 and 1.0, with a normal value of 0.21 (no extra oxygen administered).
Datatype	PQ
DCM::ConceptId	NL-CM:12.5.9
DCM::DefinitionCode	SNOMED CT: 250774007 Inspired oxygen concentration
Opties	

«data»	Explanation
Definitie	Comment on additional factors that can influence breathing such as the extent of fear, pain, nutrition in the case of infants or a tracheostomy.
Datatype	ST
DCM::ConceptId	NL-CM:12.5.3
Opties	

«data»	AdministrationDevice::MedicalDevice
Definitie	Aid used for administering extra oxygen to the patient.
Datatype	
DCM::ConceptId	NL-CM:12.5.13
DCM::ReferencedConceptId	NL-CM:10.1.1 This is a reference to concept MedischHulpmiddel in information model MedischHulpmiddel.
Opties	

«data»	ProductType
Definitie	
Datatype	CD
DCM::ConceptId	NL-CM:10.1.3
DCM::ValueSet	AdministrationDeviceCodeList OID: 2.16.840.1.113883.2.4.3.11.60.40.2.12.5.4
Opties	

«document»	AdministrationDeviceCodelist
Definitie	

Datatype		
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.12.5.4	
Opties		

ToedieningHulpmiddelCodelijst		OID: 2.16.840.1.113883.2.4.3.11.60.40.2.12.5.4		
Concept Name	Concept Code	CodeSys. Name	CodeSystem OID	Description
Oxygen nasal cannula	336623009	SNOMED CT	2.16.840.1.113883.6.96	Neusbril
Venturi mask	428285009	SNOMED CT	2.16.840.1.113883.6.96	Venturi masker
Nonrebreather oxygen mask	427591007	SNOMED CT	2.16.840.1.113883.6.96	Non-rebreathing masker
Other	OTH	NullFlavor	2.16.840.1.113883.5.1008	Anders

«document»	DeviatingBreathingPatternCodelist	
Definitie		
Datatype		
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.12.5.3	
Opties		

AfwijkendAdemhalingspatroonCode lijst		OID: 2.16.840.1.113883.2.4.3.11.60.40.2.12.5.3		
Concept Name	Concept Code	CodeSys. Name	CodeSystem OID	Description
Kussmaul's respiration	414563008	SNOMED CT	2.16.840.1.113883.6.96	Ademhaling volgens Kussmaul
Cheyne-Stokes respiration	309155007	SNOMED CT	2.16.840.1.113883.6.96	Ademhaling volgens Cheyne-Stokes
Ataxic respiration	39106000	SNOMED CT	2.16.840.1.113883.6.96	Atactische ademhaling
Apneustic breathing	70185004	SNOMED CT	2.16.840.1.113883.6.96	Apneustische ademhaling
Cluster breathing	7013003	SNOMED CT	2.16.840.1.113883.6.96	Cluster ademhaling
Apnoea	1023001	SNOMED CT	2.16.840.1.113883.6.96	Apneu
Prolonged expiration	248586000	SNOMED CT	2.16.840.1.113883.6.96	Verlengde expiratoire fase
Gasping respiration	23141003	SNOMED CT	2.16.840.1.113883.6.96	Happende ademhaling
Other	OTH	NullFlavor	2.16.840.1.113883.5.1008	Anders

«document»	DepthCodelist	
Definitie		
Datatype		
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.12.5.2	

Opties				
DiepteCodelijst		OID: 2.16.840.1.113883.2.4.3.11.60.40.2.12.5.2		
Concept Name	Concept Code	CodeSys. Name	CodeSystem OID	Description
Normal depth of breathing	301284009	SNOMED CT	2.16.840.1.113883.6.96	Normale ademhalingsdiepte
Shallow breathing	386616007	SNOMED CT	2.16.840.1.113883.6.96	Oppervlakkige ademhaling
Deep breathing	289123006	SNOMED CT	2.16.840.1.113883.6.96	Diepe ademhaling
Depth of respiration varies	248587009	SNOMED CT	2.16.840.1.113883.6.96	Ademhalingsdiepte varieert

«document»		RhythmCodelist		
Definitie				
Datatype				
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.12.5.1			
Opties				
RitmeCodelijst		OID: 2.16.840.1.113883.2.4.3.11.60.40.2.12.5.1		
Concept Name	Concept Code	CodeSys. Name	CodeSystem OID	Description
Normal respiratory rhythm	5467003	SNOMED CT	2.16.840.1.113883.6.96	Normaal ademhalingsritme
Abnormal respiratory rhythm	85617008	SNOMED CT	2.16.840.1.113883.6.96	Abnormaal ademhalingsritme

1.8 Example Instances

Ademhaling	
Ritme	Normaal ademhalingsritme
Diepte	Normale ademhalingsdiepte
AfwijkendAdemhalingspatroon	-
Ademfrequentie	15/min
AdemhalingDatumTijd	11-03-2015 14:47
ExtraZuurstofToediening	Ja
Toelichting	-
ToegediendeZuurstof	
FlowRate	2 l/min
FI02	0,29l
ToedieningHulpmiddel	
ProductType	Neusbril

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. Parelsnoer DCM Ademhalingsfrequentie v0.4 [Online] Beschikbaar op: <http://www.nictiz.nl/uploaded/FILES/htmlcontent/dcm/parelsnoer/nl.parelsnoer.Ademhalingsfrequentie.v0.4.pdf> [Geraadpleegd: 23 februari 2015].
2. openEHR-EHR-OBSERVATION.respiration.v1 [Online] Beschikbaar op: <http://www.openehr.org/knowledge/> [Geraadpleegd: 23 februari 2015].

1.16 Functional Model

1.17 Traceability to other Standards

1.18 Disclaimer

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