

Health & Care Information Model:

nl.zorg.Refraction-v1.0

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1. nl.zorg.Refraction-v1.0

DCM::CoderList	*
DCM::ContactInformation.Address	*
DCM::ContactInformation.Name	*
DCM::ContactInformation.Telecom	*
DCM::ContentAuthorList	*
DCM::CreationDate	15/05/2020
DCM::DeprecatedDate	
DCM::DescriptionLanguage	nl
DCM::EndorsingAuthority.Address	
DCM::EndorsingAuthority.Name	*
DCM::EndorsingAuthority.Telecom	
DCM::Id	2.16.840.1.113883.2.4.3.11.60.40.3.12.20
DCM::KeywordList	
DCM::LifecycleStatus	Final
DCM::ModelerList	*
DCM::Name	nl.zorg.Refractie
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DCM::PublicationStatus	Published
DCM::ReviewerList	
DCM::RevisionDate	
DCM::Supersedes	*
DCM::Version	1.0
HCIM::PublicationLanguage	EN

1.1 Revision History

Publicatieversie 1.0 (01-09-2020)

1.2 Concept

The refraction measurement is a measurement with which the refractive error of the eye is determined. During the refraction measurement, the necessary correction is established: the spherical power (in diopter), the cylindrical power (in diopter), the axis direction (in degrees) for any cylindrical correction, the prism (in diopter) and any additional power of the reading area (in diopter), the so-called reading addition

1.3 Mindmap

1.4 Purpose

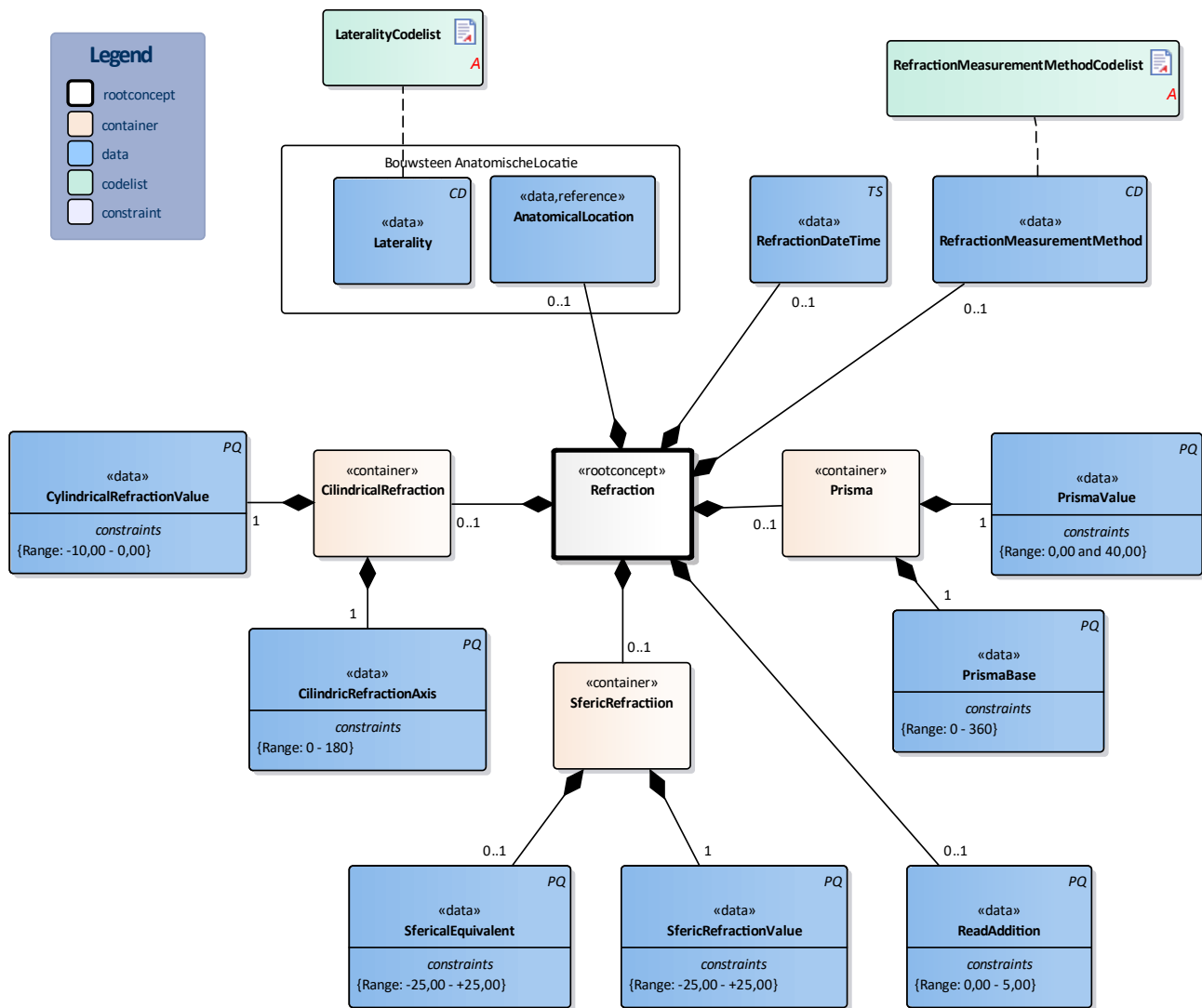
The purpose of a refraction measurement is to determine the correction (through glasses or lenses) with which the patient can see optimally.

1.5 Patient Population

Adults and children from the age that they can interpret a picture chart.

1.6 Evidence Base

1.7 Information Model



«rootconcept»	Refraction	
Definitie	Root concept of the Refractive information model. This root concept contains all data elements of the Refraction information model.	
Datatype		
DCM::ConceptId	NL-CM:12.20.1	
DCM::DefinitionCode	SNOMED CT: 251718005	Refractive power
Opties		

«data»	RefractionMeasurementMethod	
Definitie	The method used to measure the refraction.	
Datatype	CD	
DCM::ConceptId	NL-CM:12.20.4	
DCM::DefinitionCode	SNOMED CT: 251794006	Refraction
DCM::ValueSet	RefractionMeasurementMethodCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.12.20.1
Opties		

«data»	RefractionDateTime	
Definitie	The date and time when the refraction measurement was carried out.	
Datatype	TS	

DCM::ConceptId	NL-CM:12.20.3	
DCM::DefinitionCode	SNOMED CT: 439771001 Date of event	
Opties		

«container»	CilindricalRefraction
Definitie	Container of the CilindricalRefraction concept.This container contains all data elements of the CilindricalRefraction concept.
Datatype	
DCM::ConceptId	NL-CM:12.20.12
Opties	

«data»	CylindricalRefractionValue
Definitie	The power of the cylinder needed to correct the cylindrical error (astigmatism), expressed in diopters. When a cylindrical refraction is registered, the axis of the cylinder must also be specified.
Datatype	PQ
DCM::ConceptId	NL-CM:12.20.11
DCM::DefinitionCode	SNOMED CT: 251797004 Power of cylinder
DCM::ExampleValue	-0.75
Opties	
Constraint	Range: -10,00 - 0,00

«data»	CilindricRefractionAxis
Definitie	The axis direction of the cylindrical refraction value expressed in degrees.
Datatype	PQ
DCM::ConceptId	NL-CM:12.20.13
DCM::DefinitionCode	SNOMED CT: 251799001 Axis of cylinder
DCM::ExampleValue	18 graden
Opties	
Constraint	Range: 0 - 180

«container»	Prisma
Definitie	Container of the Prisma concept.This container contains all data elements of the Prisma containerl.
Datatype	
DCM::ConceptId	NL-CM:12.20.5
Opties	

«data»	PrismaValue
Definitie	The power of the prism, expressed in diopters.
Datatype	PQ
DCM::ConceptId	NL-CM:12.20.6
DCM::DefinitionCode	SNOMED CT: 251762001 Prism strength
DCM::ExampleValue	2.00
Opties	
Constraint	Range: 0,00 and 40,00

«data»	PrismaBase
Definitie	The base of the prism, expressed in degrees.

Datatype	PQ	
DCM::ConceptId	NL-CM:12.20.7	
DCM::DefinitionCode	SNOMED CT: 246223004 Prism base direction	
DCM::ExampleValue	90	
Opties		
Constraint	Range: 0 - 360	

«container»	SfericRefraction	
Definitie	Container of the SfericRefraction concept. This container contains all data elements of the SfericRefraction concept.	
Datatype		
DCM::ConceptId	NL-CM:12.20.14	
Opties		

«data»	SfericRefractionValue	
Definitie	The spherical spectacle strength power needed to correct myopia (myopia) or farsightedness (hyperopia), expressed in diopters, ascending by 0.25D.	
Datatype	PQ	
DCM::ConceptId	NL-CM:12.20.9	
DCM::DefinitionCode	SNOMED CT: 251795007 Power of sphere	
DCM::ExampleValue	+2 diopter	
Opties		
Constraint	Range: -25,00 - +25,00	

«data»	SfericalEquivalent	
Definitie	The spherical power added to half of the cylindrical power. Expressed in diopters, ascending by 0.1D. Some equipment automatically calculates the spherical equivalent automatically.	
Datatype	PQ	
DCM::ConceptId	NL-CM:12.20.10	
Opties		
Constraint	Range: -25,00 - +25,00	

«data»	ReadAddition	
Definitie	A supplement that is added to the refraction value to determine the strength of the reading glasses, expressed in diopters.	
Datatype	PQ	
DCM::ConceptId	NL-CM:12.20.8	
DCM::DefinitionCode	SNOMED CT: 251718005 Refractive power	
DCM::ExampleValue	1,25 diopter	
Opties		
Constraint	Range: 0,00 - 5,00	

«data»	AnatomicalLocation	
Definitie	The laterality of the eye whose of which the refraction has been measured.	
Datatype		
DCM::ConceptId	NL-CM:12.20.2	
DCM::DefinitionCode	SNOMED CT: 272741003 Laterality	
DCM::ExampleValue	Links	

DCM::ReferencedConceptId	NL-CM:20.7.1	This is a reference to the rootconcept of information model AnatomicalLocation.
Opties		

«data»	Laterality	
Definitie	Laterality adds information about body site to the anatomic location, e.g. left.	
Datatype	CD	
DCM::ConceptId	NL-CM:12.20.15	
DCM::ValueSet	LateralityCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.12.20.2
Opties		

«document»	LateralityCodelist	
Definitie		
Datatype		
DCM::ValueSetBinding	Required	
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.12.20.2	
Opties		

LateraleitCodelijst			OID: 2.16.840.1.113883.2.4.3.11.60.40.2.12.20.2	
Concept Name	Concept Code	Coding System Name	Coding System OID	Description
Left	7771000	SNOMED CT	2.16.840.1.113883.6.96	Links
Right	24028007	SNOMED CT	2.16.840.1.113883.6.96	Rechts

«document»	RefractionMeasurementMethodCodelist	
Definitie		
Datatype		
DCM::ValueSetBinding	Extensible	
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.12.20.1	
Opties		

RefractieMeetMethodeCodelijst			OID: 2.16.840.1.113883.2.4.3.11.60.40.2.12.20.1	
Concept Name	Concept Code	Coding System Name	Coding System OID	Description
Subjective refraction (procedure)	397277005	SNOMED CT	2.16.840.1.113883.6.96	Subjectieve refractie
Objective refraction (procedure)	397276001	SNOMED CT	2.16.840.1.113883.6.96	Objectieve refractie

	Legend	
Definitie		
Datatype		
Opties		

1.8 Example Instances

Refractie DatumTijd	Refractie Methode	Refractie Lateraliteit	Prisma		Cilindrische Refractie		Sferisch Equivalent		Lees Additie
			Waarde	Basis	Waarde	As	Equivalent	Waarde	
01-01-2020	Objectieve refractie	Rechts	2.00	90	-0.75	90 ⁰	+0.63	+1.00	+2.00
01-01-2020	Objectieve refractie	Links	1.50	45	-1.00	0 ⁰	0	+0.5	+2.00
12-01-2020	Subjectieve refractie	Rechts	--	--	--	--	--	+1.50	--
12-01-2020	Subjectieve refractie	Links	--	--	--	--	--	+2.00	--

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

1.16 Functional Model

1.17 Traceability to other Standards

1.18 Disclaimer

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