# Health & Care Information Mod

## nl.zorg.Refraction-v1.0

Status: Final
Release: 2020
Release status: Published

Managed by:

# Content

# 1. nl.zorg.Refraction-v1.0

| | |
|---|---|
| DCM::CoderList | * |
| DCM::ContactInformation.Address | * |
| DCM::ContactInformation.Name | * |
| DCM::ContactInformation.Telecom | * |
| DCM::ContentAuthorList | * |
| DCM::CreationDate | 17-5-2020 |
| 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 |
| DCM::PublicationDate | 01-09-2020 |
| 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)

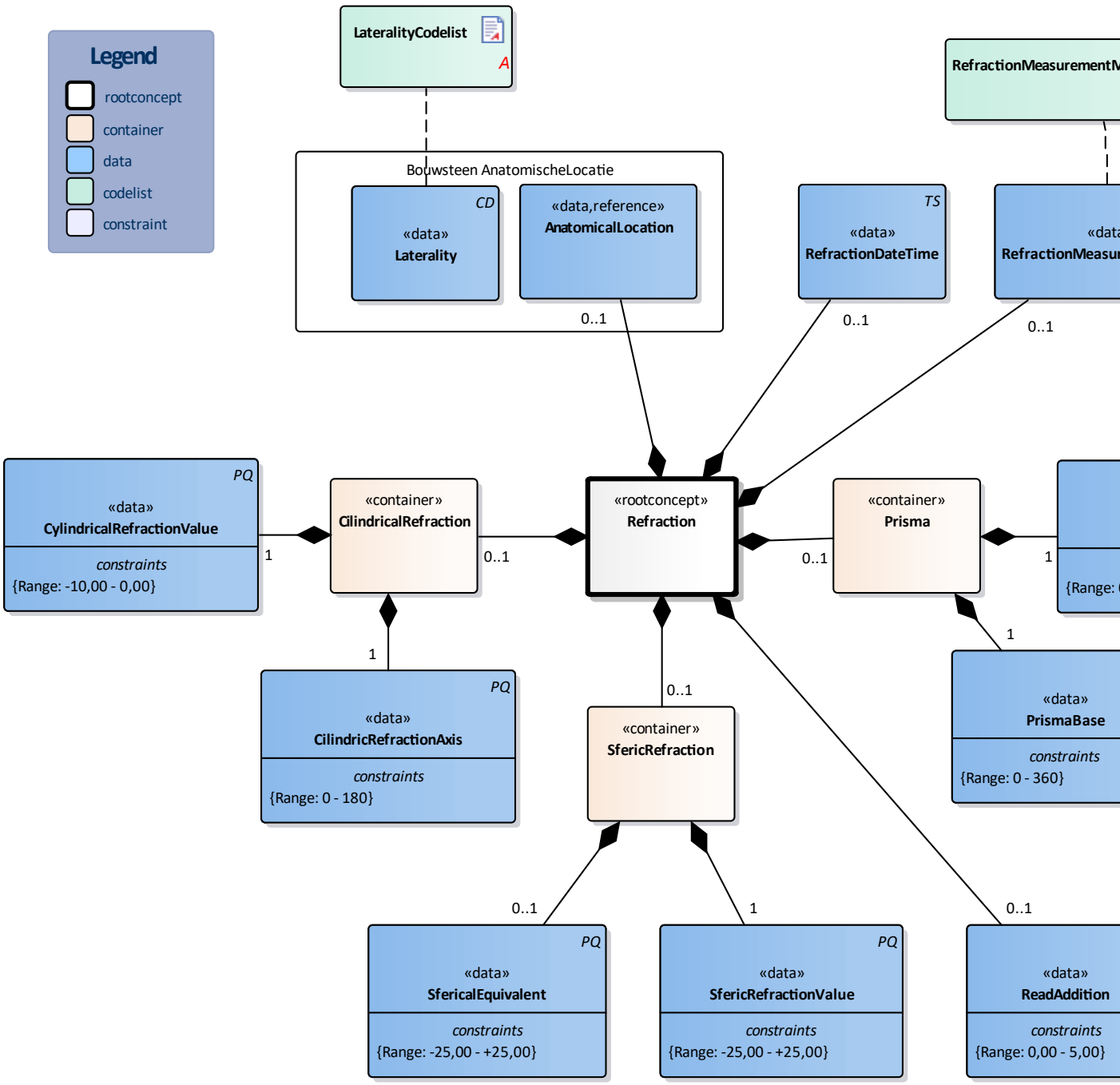
## 1.2 Concept

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

## 1.3 Mindmap

## 1.4 Purpose

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




| «rootconcept» | Refraction | |
|---|---|---|
| **Definitie** | Root concept of the Refractie 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<br>Refractive power | |
| **Opties** | | |

| «data» | RefractionMeasurementMethod | |
|---|---|---|
| **Definitie** | The method used to measure the refraction. | |
| **Datatype** | CD | |
| **DCM::ConceptId** | NL-CM:12.20.4 | |

| | | |
|---|---|---|
| **DCM::ConceptId** | NL-CM:12.20.3 | |
| **DCM::DefinitionCode** | SNOMED CT: 439771001<br>Date of event | |
| **Opties** | | |

| **«container»** | CilindricalRefraction |
|---|---|
| **Definitie** | Container of the CilindricalRefraction concept.This container contains a<br>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<br>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 degree |
| **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 eleme<br>of the Prisma container. |
| **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 |

| | | |
|---|---|---|
| **Datatype** | PQ | |
| **DCM::ConceptId** | NL-CM:12.20.7 | |
| **DCM::DefinitionCode** | SNOMED CT: 246223004<br>Prism base direction | |
| **DCM::ExampleValue** | 90 | |
| **Opties** | | |

| | | |
|---|---|---|
| **Constraint** | Range: 0 - 360 | |

| | |
|---|---|
| **«container»** | SfericRefraction |
| **Definitie** | Container of the SfericRefraction concept.This container contains all da<br>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 nearsightedr<br>(myopia) or farsightedness (hyperopia), expressed in diopters, ascendir<br>by 0.25D. |
| **Datatype** | PQ |
| **DCM::ConceptId** | NL-CM:12.20.9 |
| **DCM::DefinitionCode** | SNOMED CT: 251795007<br>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 i<br>diopters, ascending by 0.1D. Some equipment automatically calculates<br>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<br>strength of the reading glasses, expressed in diopters. |
| **Datatype** | PQ |
| **DCM::ConceptId** | NL-CM:12.20.8 |
| **DCM::DefinitionCode** | SNOMED CT: 251718005<br>Refractive power |
| **DCM::ExampleValue** | 1,25 diopter |
| **Opties** | |

| | | |
|---|---|---|
| **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 left. | |
| **Datatype** | CD | |
| **DCM::ConceptId** | NL-CM:12.20.15 | |
| **DCM::ValueSet** | LateralityCodelist | OID: 2.16.840.1.113883.2.4.3.11.60.40.2.12.2 |
| **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** | | |

| **LateraliteitCodelijst** | | | **OID: 2.16.840.1.113883.2.4.3.11.60.40.2.12.2** | |
|---|---|---|---|---|
| **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: 2.16.840.1.113883.2.4.3.11.60.40.2.12.2** | |
|---|---|---|---|---|
| **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 |

| Refractie DatumTijd | Refractie Methode | Refractie Lateraliteit | Prisma | | Cilindrische Refractie | | Sferisch Equivalent | |
|---|---|---|---|---|---|---|---|---|
| | | | Waarde | Basis | Waarde | As | Equivalent | Waard |
| 01-01-2020 | Objectieve refractie | Rechts | 2.00 | 90 | -0.75 | $90^0$ | +0.63 | +1.00 |
| 01-01-2020 | Objectieve refractie | Links | 1.50 | 45 | -1.00 | $0^0$ | 0 | +0.5 |
| 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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