Health & Care Information Model:

nl.zorg.DiagnosticInsight-v1.0

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Nictiz

Better health through
better information

Content

1. nl.zorg.DiagnosticInsight-v1.0

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1.1 Revision History

Publicatieversie 1.0 (15-04-2024)
Bevat: ZIB-628, ZIB-1146, ZIB-1286, ZIB-1394, ZIB-1520, ZIB-1795, ZIB-1916, ZIB-1934, ZIB-2087, ZIB-2170

1.2 Concept

Diagnostic insight is the interpretation of the condition by the care provider. This is based on known combinations of conditions and the symptoms with which these present themselves. It may involve a single diagnosis or a differential diagnosis with conditions that are under consideration.

1.3 Mindmap

1.4 Purpose

Diagnostic insight is the basis for the care plan and the activities of the health care providers that are involved in the patient's care. It is important for the application of evidence-based care and the evaluation of care provided, also in the form of comparative research on the basis of patients with similar conditions.

1.5 Patient Population

1.6 Evidence Base

Note on zib DiagnosticInsight
The diagnostic insight is the interpretation of a condition in the form of a (differential) diagnosis by the health professional. The DiagnosticInsightDate indicates the moment when the health professional acquired the insight. In the case of a differential diagnosis, the health professional specifies ≥ 2 diagnoses that he/she

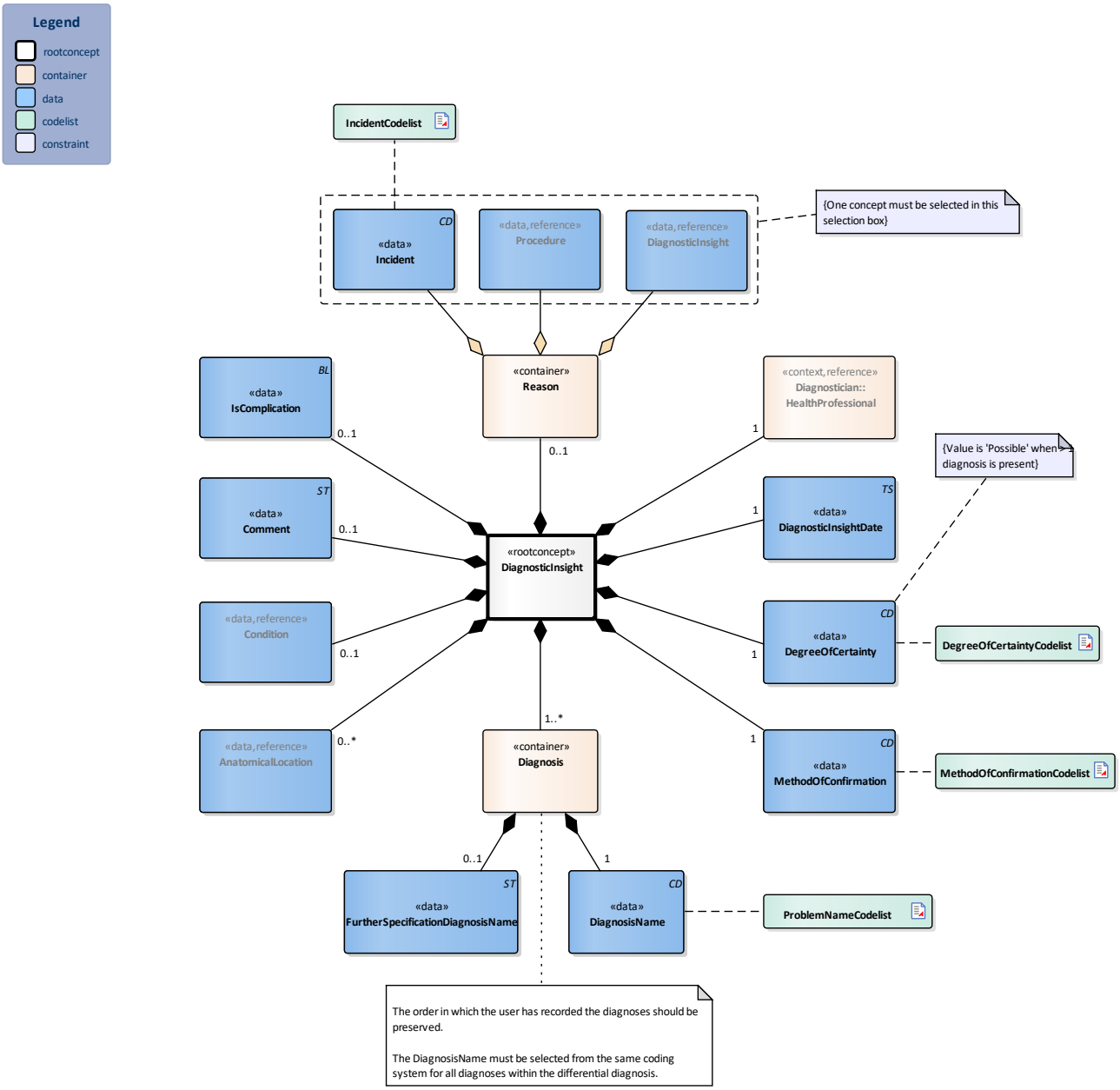
is currently considering. For all diagnoses within one differential diagnosis, CertaintyStatus has the value 'possible'.
At any given time, only one instance of DiagnosticInsight applies to a Condition. The presentation of advancing diagnostic insight then consists of a series of instances of DiagnosticInsight, all of which refer to the same Condition, and where the value of DiagnosticInsightDate represents the chronology. An instance of DiagnosticInsight with a more recent DiagnosticInsightDate therefore replaces the previous diagnostic insight.

A health professional may wish to record a reason for a diagnosis. You can argue that in fact the condition has a cause, but the specification of the cause is based on the insight into what kind of condition it is. That is why we see the reason as part of the diagnostic insight.
The reason for a diagnosis can be an incident (e.g. a hip fracture due to a fall), a procedure (e.g. a bowel perforation due to a colonoscopy) or another diagnosis (e.g. neuropathy due to diabetes).
Regardless of the diagnostic insight as specification of the nature of the condition, one may come to the conclusion that it is a complication. This can be represented separately using the IsComplication element. Whether there is a complication generally depends on the reason, but there are of course also reasons for which there is no complication in the sense of unintentional damage due to medical treatment or decisions.

The cardinality of the reference to Condition is 0..1, because when a diagnosis is denied there is no condition to which that diagnosis relates. To represent that a patient is not known to have, for example, diabetes type II or that diabetes type II has been excluded, one should use the Zib Exclusion with a reference to DiagnosticInsight. In this case, the instance of DiagnosticInsight does not refer to a Condition.

<SPAN style="TEXT-DECORATION: underline">Functionality (informative)
EHRs already offer the option to distinguish between recording a new diagnosis or changing a diagnosis. When recording a new (differential) diagnosis, the EHR must create a new Condition and have the new instance of DiagnosticInsight refer to it. When changing a diagnosis, the EHR must have the new instance of DiagnosticInsight refer to the same Condition as the previous instance of DiagnosticInsight.
It is highly desirable for the EHR to provide functionality to maintain the order of diagnoses within a differential diagnosis, as many health professionals then record diagnoses in order of descending probability.

1.7 Information Model



«rootconcept»	DiagnosticInsight	
Definitie	Root concept of the DiagnosticInsight information model.This root concept contains all data elements of the DiagnosticInsight information model.	
Datatype		
DCM::ConceptId	NL-CM:5.6.1	
DCM::DefinitionCode	SNOMED CT: 404684003 klinische bevinding	
Opties		

«context»	Diagnostician::HealthProfessional	
Definitie	The care professional that acquired the diagnostic insight. This can be a different individual than the person who recorded the diagnostic insight.	
Datatype		
DCM::ConceptId	NL-CM:5.6.2	
DCM::DefinitionCode	ParticipationType: PRF performer	
DCM::ReferencedConceptId	NL-CM:17.1.1	This is a reference to the rootconcept of information model HealthProfessional.
Opties		

«data»	DiagnosticInsightDate	
Definitie	Date (and time) at which the care professional obtained the diagnostic insight.	
Datatype	TS	
DCM::ConceptId	NL-CM:5.6.3	
DCM::DefinitionCode	SNOMED CT: 432213005 datum van diagnose	
Opties		

«data»	DegreeOfCertainty	
Definitie	Indicates the conviction of the care professional with respect to the diagnostic insight as interpretation of the condition.	
Datatype	CD	
DCM::ConceptId	NL-CM:5.6.4	
DCM::ValueSet	DegreeOfCertaintyCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.5.6.3
Opties		

«data»	MethodOfConfirmation	
Definitie	The method that the care professional used to diagnose the condition, such as history taking only, history taking and physical examination, additional diagnostic examination or information from other care professionals.	
Datatype	CD	
DCM::ConceptId	NL-CM:5.6.5	
DCM::DefinitionCode	SNOMED CT: 418775008 methode van bevinding	
DCM::ValueSet	MethodOfConfirmationCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.5.6.2
Opties		

«container»	Diagnosis
Definitie	Container of the Diagnosis concept. This container contains all data elements of the Diagnosis concept. Represents a disease or physiological condition as part of the diagnostic insight.
Datatype	
DCM::ConceptId	NL-CM:5.6.6
Opties	

«data»	DiagnosisName	
Definitie	The term with associated code that the care professional selects from the used code system with conditions.	
Datatype	CD	
DCM::ConceptId	NL-CM:5.6.7	
DCM::DefinitionCode	SNOMED CT: 439401001 diagnose	
DCM::ValueSet	ProblemNameCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.5.6.4
Opties		

«data»	FurtherSpecificationDiagnosisName
Definitie	A more detailed description of the DiagnosisName in free text, when this detail is not available in the used code list.
Datatype	ST

DCM::ConceptId	NL-CM:5.6.8	
DCM::DefinitionCode	SNOMED CT: 330341000146107 toelichting op diagnose	
Opties		

«data»	AnatomicalLocation	
Definitie	The location(s) on and/or in the body that is/are affected by the condition, conform the diagnostics.	
Datatype		
DCM::ConceptId	NL-CM:5.6.9	
DCM::DefinitionCode	SNOMED CT: 123037004 lichaamsstructuur	
DCM::ReferencedConceptId	NL-CM:20.7.1	This is a reference to the rootconcept of information model AnatomicalLocation.
Opties		

«data»	Condition	
Definitie	The Condition to which the DiagnosticInsight applies.	
Datatype		
DCM::ConceptId	NL-CM:5.6.10	
DCM::DefinitionCode	SNOMED CT: 365860008 bevinding betreffende algemene klinische toestand	
DCM::ReferencedConceptId	NL-CM:5.4.1	This is a reference to the rootconcept of information model Condition.
Opties		

«data»	Comment	
Definitie	A comment in free text with respect to the diagnostic insight, that is not represented by the other data elements in the information model.	
Datatype	ST	
DCM::ConceptId	NL-CM:5.6.11	
DCM::DefinitionCode	LOINC: 48767-8 Annotation comment	
Opties		

«data»	IsComplication	
Definitie	Indicates whether or not the diagnostic insight involves a complication.	
Datatype	BL	
DCM::ConceptId	NL-CM:5.6.12	
Opties		

«container»	Reason	
Definitie	Container of the Reason concept.This container contains all data elements of the Reason concept.	
Datatype		
DCM::ConceptId	NL-CM:5.6.13	
Opties		

«data»	Incident	
Definitie	The unintended event during the care process that has led, could have led or could (still) lead to harm to the patient.	
Datatype	CD	
DCM::ConceptId	NL-CM:5.6.14	

DCM::DefinitionCode	SNOMED CT: 418019003 onopzettelijke gebeurtenis	
DCM::ValueSet	IncidentCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.5.6.1
Opties		

«data»	Procedure	
Definitie	The procedure that gave rise to the condition to which the diagnostic insight relates.	
Datatype		
DCM::ConceptId	NL-CM:5.6.15	
DCM::DefinitionCode	SNOMED CT: 71388002 verrichting	
DCM::ReferencedConceptId	NL-CM:14.1.1	This is a reference to the rootconcept of information model Procedure.
Opties		

«data»	DiagnosticInsight	
Definitie	The diagnostic insight with regard to another condition that, based on that diagnostic insight, is seen as a reason for the condition with the current diagnostic insight.	
Datatype		
DCM::ConceptId	NL-CM:5.6.16	
DCM::DefinitionCode	SNOMED CT: 404684003 klinische bevinding	
DCM::ReferencedConceptId	NL-CM:5.6.1	This is a reference to the rootconcept of information model DiagnosticInsight.
Opties		

«document»	IncidentCodelist		
Definitie			
Datatype			
DCM::ValueSetBinding	Extensible		
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.5.6.1		
HCIM::ValueSetLanguage	--		
Opties			
IncidentCodelijst		**OID: 2.16.840.1.113883.2.4.3.11.60.40.2.5.6.1**	
Codes		**Coding Syst. Name**	**Coding System OID**
SNOMED CT: <269691005 |medisch ongeval bij patiënt tijdens operatieve en medische zorg (gebeurtenis)|		SNOMED CT	2.16.840.1.113883.6.96
OTH		NullFlavor	2.16.840.1.113883.5.1008

«document»	MethodOfConfirmationCodelist	
Definitie		
Datatype		
DCM::ValueSetBinding	Extensible	
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.5.6.2	
HCIM::ValueSetLanguage	--	
Opties		
WijzeVanVaststellenCodelijst	**OID: 2.16.840.1.113883.2.4.3.11.60.40.2.5.6.2**	

Concept Name	Concept Code	Coding Syst. Name	Coding System OID	Description
afnemen van anamnese	84100007	SNOMED CT	2.16.840.1.113883.6.96	Vastgesteld op basis van de anamnese
anamnese en lichamelijk onderzoek	63332003	SNOMED CT	2.16.840.1.113883.6.96	Vastgesteld op basis van het klinisch beeld
anamnese en lichamelijk onderzoek met evaluatie en management van patiënt	14736009	SNOMED CT	2.16.840.1.113883.6.96	Vastgesteld op basis van het klinisch beeld en aanvullend onderzoek
Vastgesteld op basis van aanvullend onderzoek	NTB	SNOMED CT	2.16.840.1.113883.6.96	Vastgesteld op basis van aanvullend onderzoek
verwerven van gezondheidsinformatie van eerdere behandelaar voor klinische afstemming	1171310001 46104	SNOMED CT	2.16.840.1.113883.6.96	Overgenomen uit betrouwbare rapportage
Other	OTH	NullFlavor	2.16.840.1.113883.5.1008	Anders

«document»	DegreeOfCertaintyCodelist
Definitie	
Datatype	
DCM::ValueSetBinding	Required
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.5.6.3
HCIM::ValueSetLanguage	--
Opties	

ZekerheidStatusCodelijst			OID: 2.16.840.1.113883.2.4.3.11.60.40.2.5.6.3	
Concept Name	**Concept Code**	**Coding Syst. Name**	**Coding System OID**	**Description**
Suspected	415684004	SNOMED CT	2.16.840.1.113883.6.96	Vermoedelijk
Known possible	410590009	SNOMED CT	2.16.840.1.113883.6.96	Mogelijk
Confirmed present	410605003	SNOMED CT	2.16.840.1.113883.6.96	Bevestigd
Probably not present	410593006	SNOMED CT	2.16.840.1.113883.6.96	Onwaarschijnlijk

«document»	ProblemNameCodelist
Definitie	
Datatype	
DCM::ValueSetBinding	Required
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.5.6.4
HCIM::ValueSetLanguage	--
Opties	

DiagnoseNaamCodelijst		OID: 2.16.840.1.113883.2.4.3.11.60.40.2.5.6.4
Codes	**Coding Syst. Name**	**Coding System OID**
Alle waarden	DHD Diagnosethesaurus	2.16.840.1.113883.2.4.3.120.5.1
Alle waarden	ICD-10, dutch translation	2.16.840.1.113883.6.3.2
SNOMED CT: ^11721000146100 | Dutch nursing problem simple reference set	SNOMED CT	2.16.840.1.113883.6.96
Alle waarden	ICF	2.16.840.1.113883.6.254

Alle waarden	ICPC-1 NL	2.16.840.1.113883.2.4.4.31.1
Alle waarden	DSM-IV	2.16.840.1.113883.6.126
Alle waarden	DSM-5	2.16.840.1.113883.6.344
Alle waarden [DEPRECATED]	GGZ Diagnoselijst	2.16.840.1.113883.3.3210.14.2.2.35
SNOMED CT: ^350401000146101 | Dutch mental health diagnoses simple reference set |	SNOMED CT	2.16.840.1.113883.6.96

	Legend
Definitie	
Datatype	
Opties	

	Constraint
Definitie	One concept must be selected in this selection box
Datatype	
Opties	

	Constraint
Definitie	Value is 'Possible' when > 1 diagnosis is present
Datatype	
Opties	

1.8 Example Instances

DiagnostischInzicht		
DiagnostischInzichtDatum	01-03-2023	05-03-2023
ZekerheidsStatus	In Overweging	Bevestigd
WijzeVanVaststellen	Vastgesteld op basis van het klinisch beeld	Vastgesteld op basis van het klinisch beeld en aanvullend onderzoek
IsComplicatie	Nee	Nee
Toelichting		
Diagnose		
DiagnoseNaam	Bronchitis	Longontsteking
Diagnosesteller::Zorgverlener		
Naam	Drs. L.J. Verhagen	Drs. L.J. Verhagen
Specialisme	Huisarts	Huisarts
AnatomischeLocatie		
Locatie		Long
Lateraliteit		Links
AandoeningOfGesteldheid		
PeriodeAanwezig		
StartDatumTijd	22-02-2023	22-02-2023
StatusDatum	01-03-2023	05-03-2023
Beloop		Verslechterd
Ernst	Mild	Matig

DiagnostischInzicht	
DiagnostischInzichtDatum	15-01-2023
ZekerheidsStatus	Bevestigd
WijzeVanVaststellen	Vastgesteld op basis van het klinisch beeld en aanvullend onderzoek
IsComplicatie	Nee
Toelichting	Val van fiets na aanrijding
Diagnose	
DiagnoseNaam	Radiusfractuur
NadereSpecificatieDiagnoseNaam	Distale radiusfractuur
Diagnosesteller::Zorgverlener	
Naam	C.A. van der Kamp
Specialisme	Algemene heelkunde
AnatomischeLocatie	
Locatie	Radius
Lateraliteit	Links
Aanleiding	
Incident	Val
AandoeningOfGesteldheid	
PeriodeAanwezig	
StartDatumTijd	15-01-2023
StatusDatum	15-01-2023
Beloop	

DiagnostischInzicht			
DiagnostischInzichtDatum	03-04-2023	03-04-2023	20-04-2023
ZekerheidsStatus	Mogelijk	Mogelijk	Bevestigd
WijzeVanVaststellen	Vastgesteld op basis van anamnese en klinisch beeld	Vastgesteld op basis van het klinisch beeld en aanvullend onderzoek	Vastgesteld op basis van het klinisch beeld en aanvullend onderzoek
IsComplicatie	Nee		
Toelichting			
Diagnose			
Diagnose 1			
DiagnoseNaam	Angina pectoris	Angina pectoris	Slokdarmspasme
Diagnose 2			
DiagnoseNaam	Longembolie	Slokdarmspasme	
Diagnose 3			
DiagnoseNaam	Slokdarmspasme		
Diagnosesteller::Zorgverlener			
Naam	Drs. L.J. Verhagen	H. verhoeven	G.A. de Jong
Specialisme	Huisarts	Inwendige geneeskunde	Inwendige geneeskunde
AnatomischeLocatie			
Locatie	Thorax	Thorax	Slokdarm
Lateraliteit			
AandoeningOfGesteldheid			
PeriodeAanwezig			
StartDatumTijd	03-04-2023	03-04-2023	03-04-2023
StatusDatum	03-04-2023	03-04-2023	20-04-2023
Beloop		Onveranderd	Verbeterd
Ernst	Matig		

DiagnostischInzicht			
DiagnostischInzichtDatum	08-09-2023	08-09-2023	09-09-2023
ZekerheidsStatus	Mogelijk	Uitgesloten	Bevestigd
WijzeVanVaststellen	Vastgesteld op basis van anamnese en klinisch beeld	Vastgesteld op basis van het klinisch beeld en aanvullend onderzoek	Vastgesteld op basis van het klinisch beeld en aanvullend onderzoek
IsComplicatie	Nee		Ja
Toelichting			
Diagnose			
DiagnoseNaam	Pneumothorax	Pneumothorax	Longembolie
Diagnosesteller::Zorgverlener			
Naam	Drs. L.J. Verhagen	H. verhoeven	G.A. de Jong
Specialisme	Huisarts	SEH-arts	Inwendige geneeskunde
AnatomischeLocatie			
Locatie	Thorax	Thorax	Long
Lateraliteit	links	links	links
AandoeningOfGesteldheid			
PeriodeAanwezig			
StartDatumTijd	08-09-2023	08-09-2023	08-09-2023
StatusDatum	08-09-2023	08-09-2023	09-09-2023
Beloop		Onveranderd	Onveranderd
Ernst	Ernstig		

1.9 Instructions

A diagnostic insight always refers to the condition of which it is the interpretation. If > 1 instance of diagnostic insight refers to the same condition, then the instantiation with the most recent diagnosis date represents the current diagnostic insight.

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

1.19 Terms of Use

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