Health & Care Information Model:

nl.zorg.ApgarScore-v1.0

Status:Final
Release:2018
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Managed by:

Nictiz

Better health through
better information

Content

1. nl.zorg.ApgarScore-v1.0

DCM::CoderList	Werkgroep RadB Verpleegkundige Gegevens
DCM::ContactInformation.Address	*
DCM::ContactInformation.Name	*
DCM::ContactInformation.Telecom	*
DCM::ContentAuthorList	Werkgroep RadB Verpleegkundige Gegevens
DCM::CreationDate	11-10-2016
DCM::DeprecatedDate	
DCM::DescriptionLanguage	nl
DCM::EndorsingAuthority.Address	
DCM::EndorsingAuthority.Name	
DCM::EndorsingAuthority.Telecom	
DCM::Id	2.16.840.1.113883.2.4.3.11.60.40.3.12.16
DCM::KeywordList	Apgar
DCM::LifecycleStatus	Final
DCM::ModelerList	Werkgroep RadB Verpleegkundige Gegevens
DCM::Name	nl.zorg.ApgarScore
DCM::PublicationDate	26-02-2019
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DCM::ReviewerList	Projectgroep RadB Verpleegkundige Gegevens & Kerngroep Registratie aan de Bron
DCM::RevisionDate	31-12-2017
DCM::Superseeds	
DCM::Version	1.0
HCIM::PublicationLanguage	EN

1.1 Revision History

Publicatieversie 1.0 (04-09-2017)

1.2 Concept

The Apgar score represents the overall clinical status of a newborn child. This is evaluated one, five and ten minutes after birth based on 5 parameters: Appearance, Pulse, Grimace, Activity, Respiration. If the score measured at 5 minutes is < 8, the Apgar score is measured again at 10, 15, 20 minutes etc. until the score = 8.

1.3 Mindmap

1.4 Purpose

The Apgar score is primarily meant to rapidly determine the clinical condition of the newborn child and whether extra care is required. A low Apgar score can be caused by developmental disorders, prenatal accidents or negative influences during birth. The Apgar score remains a snapshot in time and cannot be used to predict the locomotive or mental development of a child.
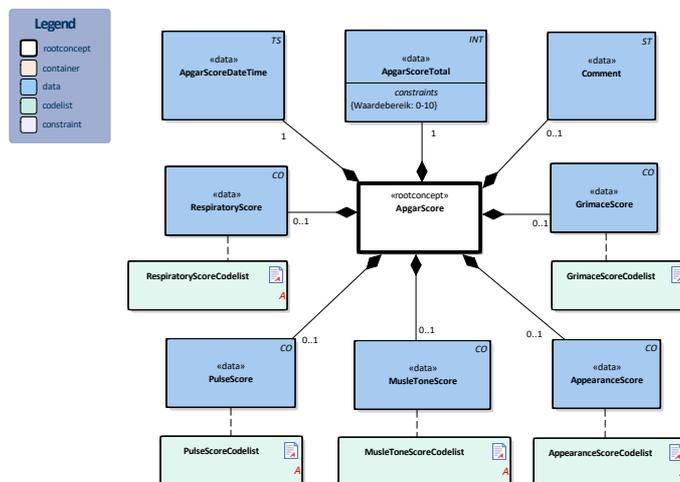
1.5 Patient Population

The ApgarScore information model is meant for children up to the age of 12 month.

1.6 Evidence Base

The definitions of the concepts are based on the Apgar score (as defined in Dutch by the KNOV), the

guidelines Fetal Monitoring of the NVOG and Reanimation of Newborn of the NVK.

1.7 Information Model

«rootconcept»	ApgarScore
Definitie	Root concept of the ApgarScore information model. This root concept contains all data elements of the ApgarScore information model.
Datatype	
DCM::ConceptId	NL-CM:12.16.1
Opties	

«data»	ApgarScoreDateTime
Definitie	The day and time at which the Apgar score is registered.
Datatype	TS
DCM::ConceptId	NL-CM:12.16.3
Opties	

«data»	ApgarScoreTotal
Definitie	Total of the Apgar score.
Datatype	INT
DCM::ConceptId	NL-CM:12.16.2
DCM::DefinitionCode	LOINC: 9272-6 1 minute Apgar Score
DCM::DefinitionCode	LOINC: 9274-2 5 minute Apgar Score
DCM::DefinitionCode	LOINC: 9271-8 10 minute Apgar Score
Opties	

Constraint	Waardebereik: 0-10

«data»	RespiratoryScore
Definitie	The Apgar subscore for respiration.
Datatype	CO
DCM::ConceptId	NL-CM:12.16.4
DCM::DefinitionCode	LOINC: 32405-3 10 minute Apgar Respiratory effort
DCM::DefinitionCode	LOINC: 32415-2 5 minute Apgar Respiratory effort

DCM::DefinitionCode	LOINC: 32410-3 1 minute Apgar Respiratory effort	
DCM::ValueSet	RespiratoryScoreCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.12.16.1
Opties		

«data»	AppearanceScore	
Definitie	The Apgar subscore for skin color/appearance.	
Datatype	CO	
DCM::ConceptId	NL-CM:12.16.7	
DCM::DefinitionCode	LOINC: 32411-1 5 minute Apgar Color	
DCM::DefinitionCode	LOINC: 32406-1 1 minute Apgar Color	
DCM::DefinitionCode	LOINC: 32401-2 10 minute Apgar Color	
DCM::ExampleValue	Hele lichaam roze	
DCM::ValueSet	AppearanceScoreCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.12.16.4
Opties		

«data»	PulseScore	
Definitie	The Apgar subscore for pulse.	
Datatype	CO	
DCM::ConceptId	NL-CM:12.16.5	
DCM::DefinitionCode	LOINC: 32402-0 10 minute Apgar Heart rate	
DCM::DefinitionCode	LOINC: 32407-9 1 minute Apgar Heart rate	
DCM::DefinitionCode	LOINC: 32412-9 5 minute Apgar Heart rate	
DCM::ExampleValue	Minstens 100/min	
DCM::ValueSet	PulseScoreCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.12.16.2
Opties		

«data»	GrimaceScore	
Definitie	The Apgar subscore for grimace.	
Datatype	CO	
DCM::ConceptId	NL-CM:12.16.8	
DCM::DefinitionCode	LOINC: 32404-6 10 minute Apgar Reflex irritability	
DCM::DefinitionCode	LOINC: 32409-5 1 minute Apgar Reflex irritability	
DCM::DefinitionCode	LOINC: 32414-5 5 minute Apgar Reflex irritability	
DCM::ExampleValue	Grimas bij het uitzuigen	
DCM::ValueSet	GrimaceScoreCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.12.16.5
Opties		

«data»	MusleToneScore	
Definitie	The Apgar subscore for activity/muscle tone.	
Datatype	CO	
DCM::ConceptId	NL-CM:12.16.6	

DCM::DefinitionCode	LOINC: 32413-7 5 minute Apgar Muscle tone	
DCM::DefinitionCode	LOINC: 32403-8 10 minute Apgar Muscle tone	
DCM::DefinitionCode	LOINC: 32408-7 1 minute Apgar Muscle tone	
DCM::ExampleValue	Enige flexie van de armen en benen	
DCM::ValueSet	MusleToneScoreCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.12.16.3
Opties		

«data»	Comment
Definitie	Comment on the Apgar score.
Datatype	ST
DCM::ConceptId	NL-CM:12.16.9
DCM::DefinitionCode	LOINC: 48767-8 Annotation comment
Opties	

«document»	RespiratoryScoreCodelist
Definitie	
Datatype	
DCM::ExampleValue	Zwak huilen
DCM::ValueSetBinding	Required
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.12.16.1
Opties	

AdemhalingScoreCodelijst			OID: 2.16.840.1.113883.2.4.3.11.60.40.2.12.16.1		
Concept Name	Concept Code	Concept Value	CodeSys. Name	CodeSystem OID	Description
Not breathing	LA6725-1	0	LOINC	2.16.840.1.113883.6.1	Niet op eigen kracht ademen
Weak cry; may sound like whimpering, slow or irregular breathing	LA6726-9	1	LOINC	2.16.840.1.113883.6.1	Zwak, onregelmatig of hijgerig ademhalen
Good, strong cry; normal rate and effort of breathing	LA6727-7	2	LOINC	2.16.840.1.113883.6.1	Flink huilen en goed doorademen

«document»	AppearanceScoreCodelist
Definitie	
Datatype	
DCM::ValueSetBinding	Required
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.12.16.4
Opties	

HuidskleurScoreCodelijst			OID: 2.16.840.1.113883.2.4.3.11.60.40.2.12.16.4		
Concept Name	Concept Code	Concept Value	CodeSys. Name	CodeSystem OID	Description
The baby's whole body is	LA6722-8	0	LOINC	2.16.840.1.113883.6.1	Een bleke of blauwe huidskleur

completely bluish-gray or pale					
Good color in body with bluish hands or feet	LA6723-6	1	LOINC	2.16.840.1.113883.6.1	Roze lijfje, maar blauwachtige armen en benen
Good color all over	LA6724-4	2	LOINC	2.16.840.1.113883.6.1	Mooie roze huidskleur

«document»	PulseScoreCodelist
Definitie	
Datatype	
DCM::ValueSetBinding	Required
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.12.16.2
Opties	

HartslagScoreCodelijst				OID: 2.16.840.1.113883.2.4.3.11.60.40.2.12.16.2	
Concept Name	**Concept Code**	**Concept Value**	**CodeSys. Name**	**CodeSystem OID**	**Description**
No heart rate	LA6716-0	0	LOINC	2.16.840.1.113883.6.1	Geen hartslag, of een onhoorbare hartslag
Fewer than 100 beats per minute	LA6717-8	1	LOINC	2.16.840.1.113883.6.1	Een hartslag van minder dan 100 slagen per minuut
At least 100 beats per minute	LA6718-6	2	LOINC	2.16.840.1.113883.6.1	Een hartslag van meer dan 100 slagen per minuut

«document»	GrimaceScoreCodelist
Definitie	
Datatype	
DCM::ValueSetBinding	Required
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.12.16.5
Opties	

ReflexenScoreCodelijst				OID: 2.16.840.1.113883.2.4.3.11.60.40.2.12.16.5	
Concept Name	**Concept Code**	**Concept Value**	**CodeSys. Name**	**CodeSystem OID**	**Description**
No response to airways being suctioned	LA6719-4	0	LOINC	2.16.840.1.113883.6.1	Reageert niet op prikkels/Geen reactie
Grimace during suctioning	LA6720-2	1	LOINC	2.16.840.1.113883.6.1	Reageert met kleine jammergeluidjes en zwakke bewegingen
Grimace and pulling away, cough, or sneeze during suctioning	LA6721-0	2	LOINC	2.16.840.1.113883.6.1	Reageert door te huilen, te hoesten of te niezen

«document»	MusleToneScoreCodelist				
Definitie					
Datatype					
DCM::ValueSetBinding	Required				
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.12.16.3				
Opties					

SpierspanningScoreCodelijst			OID: 2.16.840.1.113883.2.4.3.11.60.40.2.12.16.3		
Concept Name	Concept Code	Concept Value	CodeSys. Name	CodeSystem OID	Description
Limp; no movement	LA6713-7	0	LOINC	2.16.840.1.113883.6.1	Geen spierspanning aanwezig/slap
Some flexion of arms and legs	LA6714-5	1	LOINC	2.16.840.1.113883.6.1	Weinig bewegingen met armpjes en beentjes
Active motion	LA6715-2	2	LOINC	2.16.840.1.113883.6.1	Beweegt armpjes en beentjes goed

	Legend
Definitie	
Datatype	
Opties	

1.8 Example Instances

ApgarScore	
AdemhalingsScore	2 (Flink huilen en goed doorademen)
HartslagScore	1 (Een hartslag van minder dan 100 slagen per minuut)
SpierspanningScore	2 (Beweegt armpjes en beentjes goed)
HuidskleurScore	1 (Roze lijfje, maar blauwachtige armen en benen)
ReflexenScore	2 (Reageert door te huilen, te hoesten of te niezen)
ApgarScoreTotaal	8
ApgarScoreDatumTijd	19-12-2016 9:00
Toelichting	-

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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