

Health & Care Information Model: nl.zorg.BarthelADLIndex-v3.1

Status:Final

Release:2017

Release status: Published

Managed by:



Content

1. nl.zorg.BarthelADLIndex-v3.1	3
1.1 Revision History	3
1.2 Concept	3
1.3 Mindmap	4
1.4 Purpose	4
1.5 Patient Population	4
1.6 Evidence Base	4
1.7 Information Model	4
1.8 Example Instances	12
1.9 Instructions	12
1.10 Interpretation	13
1.11 Care Process	13
1.12 Example of the Instrument	13
1.13 Constraints	13
1.14 Issues	13
1.15 References	13
1.16 Functional Model	13
1.17 Traceability to other Standards	13
1.18 Disclaimer	13
1.19 Terms of Use	14
1.20 Copyrights	14

1. nl.zorg.BarthelADLIndex-v3.1

DCM::CoderList	Kerngroep Registratie aan de Bron
DCM::ContactInformation.Address	*
DCM::ContactInformation.Name	*
DCM::ContactInformation.Telecom	*
DCM::ContentAuthorList	Projectgroep Generieke Overdrachtsgegevens & Kerngroep Registratie aan de Bron
DCM::CreationDate	2-2-2013
DCM::DeprecatedDate	
DCM::DescriptionLanguage	nl
DCM::EndorsingAuthority.Address	
DCM::EndorsingAuthority.Name	PM
DCM::EndorsingAuthority.Telecom	
DCM::Id	2.16.840.1.113883.2.4.3.11.60.40.3.4.2
DCM::KeywordList	score, index, ADL, afhankelijkheid, barthel
DCM::LifecycleStatus	Final
DCM::ModelerList	Kerngroep Registratie aan de Bron
DCM::Name	nl.zorg.BarthelIndex
DCM::PublicationDate	31-12-2017
DCM::PublicationStatus	Published
DCM::ReviewerList	Projectgroep Generieke Overdrachtsgegevens & Kerngroep Registratie aan de Bron
DCM::RevisionDate	31-12-2017
DCM::Superseeds	nl.zorg.BarthelIndex-v3.0
DCM::Version	3.1
HCIM::PublicationLanguage	EN

1.1 Revision History

Publicatieversie 1.0 (15-02-2013)

-

Publicatieversie 1.1 (01-07-2013)

-

Publicatieversie 1.2 (01-04-2015)

Bevat: ZIB-166, ZIB-168, ZIB-208, ZIB-209, ZIB-210, ZIB-211, ZIB-212, ZIB-308.

Incl. algemene wijzigingsverzoeken:

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

Publicatieversie 1.2.1 (22-05-2015)

Bevat: ZIB-375.

Publicatieversie 3.0 (01-05-2016)

Bevat: ZIB-453.

Publicatieversie 3.1 (04-09-2017)

Bevat: ZIB-564.

1.2 Concept

The Barthel ADL index is a validated scale used to measure and track patients' activities of daily living (ADL) and indirectly, the extent to which they are dependent on help.

The list comprises 10 variables: bowels, bladder, grooming, toilet use, feeding, transfers (from chair to bed and vice versa), mobility, dressing, climbing stairs and bathing, which are all given a score.

The total score is the sum of the scores of the 10 variables.

1.3 Mindmap

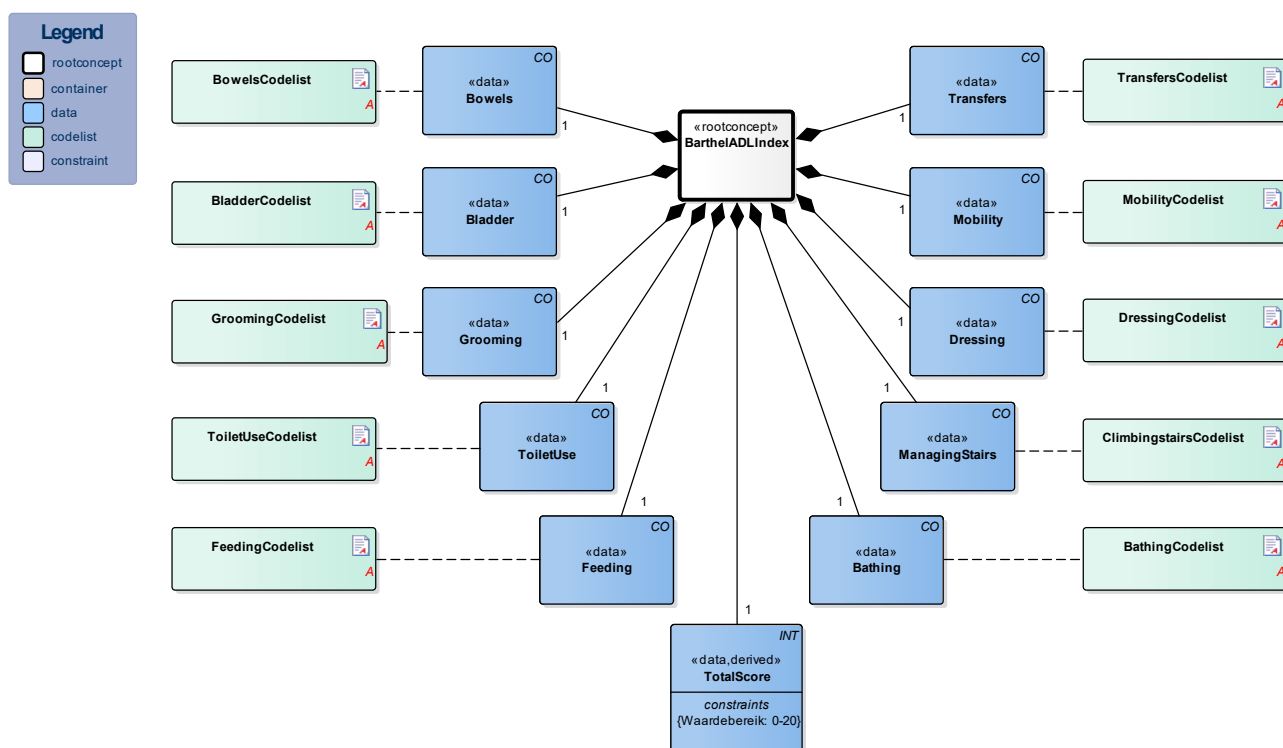
1.4 Purpose

Gaining insight into the dependence on healthcare for carrying out general daily activities by means of a validated score. This is done in order to adjust the care to meet the needs of the patient if necessary.

1.5 Patient Population

1.6 Evidence Base

1.7 Information Model



«rootconcept»	BarthelADLIndex	
Definitie	Root concept of the BarthelADLIndex information model. This root concept contains all data elements of the BarthelADLIndex information model.	
Datatype		
DCM::ConceptId	NL-CM:4.2.1	

DCM::DefinitionCode	SNOMED CT: 273302005 Barthel index (assessment scale)	
Opties		

«data»		Bowels
Definitie	<p>The bowel function describes the extent of fecal incontinence.</p> <p>The measurement takes the condition as measured in the preceding week. In this scale, the following interpretations are used:</p> <ul style="list-style-type: none"> • Incontinent: incontinent or enema required. • Accident: max. 1 accident per week. • Continent: continent for the entire week. 	
Datatype	CO	
DCM::ConceptId	NL-CM:4.2.4	FECAL
DCM::ValueSet	BowelsCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.4.2.1
Opties		

«data»		Bladder
Definitie	<p>The bladder function describes the extent of urinary incontinence.</p> <p>The measurement takes the condition as measured in the preceding week. In this scale, the following interpretations are used:</p> <ul style="list-style-type: none"> • Incontinent: incontinent or catheter required. • Accident: max. 1 accident per 24 hours. • Continent: continent for the entire week or patients who can attend to their own catheter. 	
Datatype	CO	
DCM::ConceptId	NL-CM:4.2.3	URIN
DCM::ValueSet	BladderCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.4.2.2
Opties		

«data»		Grooming
Definitie	<p>Grooming indicates the extent to which a patient is capable of maintaining their hygiene and appearance. This refers to personal hygiene such as brushing teeth, brushing hair, shaving and washing.</p> <p>The measurement takes the condition as measured in the preceding 24-48 hours. In this scale, the following interpretations are used:</p> <ul style="list-style-type: none"> • Dependent: not capable of grooming independently. • Independent: capable of brushing teeth, brushing hair, shaving and washing independently. 	
Datatype	CO	
DCM::ConceptId	NL-CM:4.2.5	GROOM

DCM::ValueSet	GroomingCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.4.2.3
Opties		

«data»	ToiletUse	
Definitie	<p>Toilet use indicates the extent to which a patient is capable of using the toilet independently.</p> <p>In this scale, the following interpretations are used:</p> <ul style="list-style-type: none"> • Dependent: dependent. • Help: needs some help but can do certain things themselves, like wiping. • Independent: capable of using the toilet, sufficiently undressing, cleaning, getting dressed and leaving. 	
Datatype	CO	
DCM::ConceptId	NL-CM:4.2.6	TOIL
DCM::ValueSet	ToiletUseCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.4.2.4
Opties		

«data»	Feeding	
Definitie	<p>Feeding indicates the extent to which a patient is capable of eating independently.</p> <p>In this scale, the following interpretations are used:</p> <ul style="list-style-type: none"> • Not independent: not capable of eating independently. • Help: food is puréed; patient does feed themselves, but needs help cutting food, spreading butter, et cetera. • Independent: capable of eating normal food (including hard food). The food can be cooked and served by others, but is not to be puréed. 	
Datatype	CO	
DCM::ConceptId	NL-CM:4.2.7	FEED
DCM::ValueSet	FeedingCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.4.2.5
Opties		

«data»	Transfers	
Definitie	<p>Transfers indicates the extent to which a patient is capable of independently getting from a chair to the bed and vice versa.</p> <p>In this scale, the following interpretations are used:</p> <ul style="list-style-type: none"> • Not independent: not capable of sitting up; the use of a patient hoist is required. • Major help: help from a strong, trained individual or 2 regular individuals, but the patient can sit up by themselves. • Minor help: a person to supervise or provide some help, either verbally or physically. • Independent: does not need help. 	

Datatype	CO	
DCM::ConceptId	NL-CM:4.2.8	TRANS
DCM::ValueSet	TransfersCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.4.2.6
Opties		

«data»	Mobility	
Definitie	<p>Mobility indicates the extent to which a patient is capable of moving independently.</p> <p>In this scale, the following interpretations are used:</p> <ul style="list-style-type: none"> • Dependent: cannot move themselves. • Independent with wheelchair: uses a wheelchair, with the ability to go around corners or open doors without help. • Assisted walking: help from one person, for example verbally or physically. • Independent: can move within the home or department; aids may be used. 	
Datatype	CO	
DCM::ConceptId	NL-CM:4.2.9	MOB
DCM::ValueSet	MobilityCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.4.2.7
Opties		

«data»	Dressing	
Definitie	<p>Dressing indicates the extent to which a patient is capable of dressing and undressing themselves independently.</p> <p>In this scale, the following interpretations are used:</p> <p>◆</p> <ul style="list-style-type: none"> • Dependent: dependent. • Help: needs help but can do about half themselves, such as only needing help with buttons and/or zippers. • Independent: capable of selecting and putting on clothes. 	
Datatype	CO	
DCM::ConceptId	NL-CM:4.2.10	DRESS
DCM::ValueSet	DressingCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.4.2.8
Opties		

«data»	ManagingStairs	
Definitie	<p>Managing stairs indicates the extent to which a patient is capable of going up and down stairs independently.</p> <p>In this scale, the following interpretations are used:</p> <ul style="list-style-type: none"> • Dependent: not capable of going up and down stairs. 	

	<ul style="list-style-type: none"> • Help: needs help, for example verbally, physically or in the form of an aid. • Independent: capable of going up and down stairs independently, and if necessary can carry their own aid. 	
Datatype	CO	
DCM::ConceptId	NL-CM:4.2.11	CLIMB
DCM::ValueSet	ClimbingstairsCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.4.2.9
Opties		

«data»	Bathing	
Definitie	<p>Bathing indicates the extent to which a patient is capable of independently taking a bath or shower.</p> <p>In this scale, the following interpretations are used:</p> <ul style="list-style-type: none"> • Dependent: not capable of bathing independently. • Independent: capable of getting in and out of the bath or shower and bathing without help or supervision. 	
Datatype	CO	
DCM::ConceptId	NL-CM:4.2.12	BATH
DCM::ValueSet	BathingCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.4.2.10
Opties		

«data»	TotalScore	
Definitie	<p>The Barthel ADL index is the sum of the scores of the individual variables. The interpretation of this total score is 0-9 for serious dependence, 10-19 for slight dependence and 20 for independence. Twenty is the maximum score.</p>	
Datatype	INT	
DCM::ConceptId	NL-CM:4.2.2	TOTSCORE
Opties		
Constraint	Waardebereik: 0-20	

«document»	DressingCodelist				
Definitie					
Datatype					
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.4.2.8				
Opties					
AanUitkledenCodelijst			OID: 2.16.840.1.113883.2.4.3.11.60.40.2.4.2.8		
Concept Name	Concept Code	Concept Value	Coding Syst. Name	Coding System OID	Description
Afhankelijk	DRESS0	0	BarthelAanUitkleden	2.16.840.1.113883.2.4.3.11.60.40.4.1.8	Afhankelijk

Hulp	DRESS1	1	BarthelAanUitkleden	2.16.840.1.113883.2.4.3.11.60.40.4.1.8	Heeft hulp nodig maar kan ongeveer de helft zelf
Onafhankelijk	DRESS2	2	BarthelAanUitkleden	2.16.840.1.113883.2.4.3.11.60.40.4.1.8	Onafhankelijk

«document»		BathingCodelist			
Definitie					
Datatype					
DCM::ValueSetId		2.16.840.1.113883.2.4.3.11.60.40.2.4.2.10			
Opties					
BadenDouchenCodelijst		OID: 2.16.840.1.113883.2.4.3.11.60.40.2.4.2.10			
Concept Name	Concept Code	Concept Value	Coding Syst. Name	Coding System OID	Description
Afhankelijk	BATH0	0	BarthelBadenDouchen	2.16.840.1.113883.2.4.3.11.60.40.4.1.10	Afhankelijk
Onafhankelijk	BATH1	1	BarthelBadenDouchen	2.16.840.1.113883.2.4.3.11.60.40.4.1.10	Onafhankelijk

«document»		BladderCodelist			
Definitie					
Datatype					
DCM::ValueSetId		2.16.840.1.113883.2.4.3.11.60.40.2.4.2.2			
Opties					
BlaasCodelijst		OID: 2.16.840.1.113883.2.4.3.11.60.40.2.4.2.2			
Concept Name	Concept Code	Concept Value	Coding Syst. Name	Coding System OID	Description
Incontinent	URIN0	0	BarthelBlaas	2.16.840.1.113883.2.4.3.11.60.40.4.1.2	Incontinent of katheter
Ongelukje	URIN1	1	BarthelBlaas	2.16.840.1.113883.2.4.3.11.60.40.4.1.2	Af en toe een ongelukje (max. 1 keer per 24 uur)
Continent	URIN2	2	BarthelBlaas	2.16.840.1.113883.2.4.3.11.60.40.4.1.2	Continent (gedurende meer dan 7 dagen)

«document»		BowelsCodelist			
Definitie					
Datatype					
DCM::ValueSetId		2.16.840.1.113883.2.4.3.11.60.40.2.4.2.1			
Opties					
DarmCodelijst		OID: 2.16.840.1.113883.2.4.3.11.60.40.2.4.2.1			
Concept Name	Concept Code	Concept Value	Coding Syst. Name	Coding System OID	Description

Incontinent	FECAL0	0	BarthelDarm	2.16.840.1.113883.2.4.3.11.60.40.4.1.1	Incontinent
Ongelukje	FECAL1	1	BarthelDarm	2.16.840.1.113883.2.4.3.11.60.40.4.1.1	Af en toe een ongelukje
Continent	FECAL2	2	BarthelDarm	2.16.840.1.113883.2.4.3.11.60.40.4.1.1	Continent

«document»		FeedingCodelist			
Definitie					
Datatype					
DCM::ValueSetId		2.16.840.1.113883.2.4.3.11.60.40.2.4.2.5			
Opties					
EtenCodelijst			OID: 2.16.840.1.113883.2.4.3.11.60.40.2.4.2.5		
Concept Name	Concept Code	Concept Value	Coding Syst. Name	Coding System OID	Description
Niet zelfstandig	FEED0	0	BarthelEten	2.16.840.1.113883.2.4.3.11.60.40.4.1.5	Niet in staat (niet zelfstandig)
Hulp	FEED1	1	BarthelEten	2.16.840.1.113883.2.4.3.11.60.40.4.1.5	Heeft hulp nodig bij snijden, smeren van boter, enz.
Onafhankelijk	FEED2	2	BarthelEten	2.16.840.1.113883.2.4.3.11.60.40.4.1.5	Onafhankelijk

«document»		MobilityCodelist			
Definitie					
Datatype					
DCM::ValueSetId		2.16.840.1.113883.2.4.3.11.60.40.2.4.2.7			
Opties					
MobiliteitCodelijst			OID: 2.16.840.1.113883.2.4.3.11.60.40.2.4.2.7		
Concept Name	Concept Code	Concept Value	Coding Syst. Name	Coding System OID	Description
Afhankelijk	MOBILO	0	BarthelMobiliteit	2.16.840.1.113883.2.4.3.11.60.40.4.1.7	Kan zich niet verplaatsen
Onafhankelijk met rolstoel	MOBIL1	1	BarthelMobiliteit	2.16.840.1.113883.2.4.3.11.60.40.4.1.7	Onafhankelijk, maar maakt gebruik van rolstoel, incl. het zonder hulp nemen van hoeken en deuren.
Loopt met hulp	MOBIL2	2	BarthelMobiliteit	2.16.840.1.113883.2.4.3.11.60.40.4.1.7	Loopt met hulp van 1 persoon (hulp van woorden of lichamelijk)
Onafhankelijk	MOBIL3	3	BarthelMobiliteit	2.16.840.1.113883.2.4.3.11.60.40.4.1.7	Onafhankelijk

«document»		ToiletUseCodelist			
Definitie					
Datatype					
DCM::ValueSetId		2.16.840.1.113883.2.4.3.11.60.40.2.4.2.4			
Opties					
ToiletgebruikCodelijst		OID: 2.16.840.1.113883.2.4.3.11.60.40.2.4.2.4			
Concept Name	Concept Code	Concept Value	Coding Syst. Name	Coding System OID	Description
Afhankelijk	TOILO	0	BarthelToiletgebruik	2.16.840.1.113883.2.4.3.11.60.40.4.1.4	Afhankelijk
Hulp	TOIL1	1	BarthelToiletgebruik	2.16.840.1.113883.2.4.3.11.60.40.4.1.4	Heeft enige hulp nodig maar kan sommige dingen zelf
Onafhankelijk	TOIL2	2	BarthelToiletgebruik	2.16.840.1.113883.2.4.3.11.60.40.4.1.4	Onafhankelijk (op en af, uit- en aankleden, afvegen)

«document»		TransfersCodelist			
Definitie					
Datatype					
DCM::ValueSetId		2.16.840.1.113883.2.4.3.11.60.40.2.4.2.6			
Opties					
TransfersCodelijst		OID: 2.16.840.1.113883.2.4.3.11.60.40.2.4.2.6			
Concept Name	Concept Code	Concept Value	Coding Syst. Name	Coding System OID	Description
Niet zelfstandig	TRANS0	0	BarthelTransfer	2.16.840.1.113883.2.4.3.11.60.40.4.1.6	Niet in staat (niet zelfstandig)
Veel hulp	TRANS1	1	BarthelTransfer	2.16.840.1.113883.2.4.3.11.60.40.4.1.6	Veel hulp (1-2 mensen lichamelijk)
Weinig hulp	TRANS2	2	BarthelTransfer	2.16.840.1.113883.2.4.3.11.60.40.4.1.6	Weinig hulp (met hulp van woorden of lichamelijk)
Onafhankelijk	TRANS3	3	BarthelTransfer	2.16.840.1.113883.2.4.3.11.60.40.4.1.6	Onafhankelijk

«document»		ClimbingstairsCodelist			
Definitie					
Datatype					
DCM::ValueSetId		2.16.840.1.113883.2.4.3.11.60.40.2.4.2.9			
Opties					
TrappenLopenCodelijst		OID: 2.16.840.1.113883.2.4.3.11.60.40.2.4.2.9			
Concept Name	Concept Code	Concept Value	Coding Syst. Name	Coding System OID	Description

Afhankelijk	CLIMB0	0	BarthelTrappenLopen	2.16.840.1.113883.2.4.3.11.60.40.4.1.9	Niet in staat
Hulp	CLIMB1	1	BarthelTrappenLopen	2.16.840.1.113883.2.4.3.11.60.40.4.1.9	Heeft hulp nodig (woorden, lichamelijk of hulpmiddel)
Onafhankelijk	CLIMB2	2	BarthelTrappenLopen	2.16.840.1.113883.2.4.3.11.60.40.4.1.9	Onafhankelijk naar boven en naar beneden

«document»		GroomingCodelist			
Definitie					
Datatype					
DCM::ValueSetId		2.16.840.1.113883.2.4.3.11.60.40.2.4.2.3			
Opties					
UiterlijkeVerzorgingCodelijst		OID: 2.16.840.1.113883.2.4.3.11.60.40.2.4.2.3			
Concept Name	Concept Code	Concept Value	Coding Syst. Name	Coding System OID	Description
Hulp	GROOM0	0	BarthelUiterlijkeVerzorging	2.16.840.1.113883.2.4.3.11.60.40.4.1.3	Heeft hulp nodig
Onafhankelijk	GROOM1	1	BarthelUiterlijkeVerzorging	2.16.840.1.113883.2.4.3.11.60.40.4.1.3	Onafhankelijk (gezicht, haar, tanden, scheren)

1.8 Example Instances

BarthelIndex	
Blaas	1
Darm	2
UiterlijkeVerzorging	1
Toiletgebruik	2
Eten	2
Transfers	1
Mobiliteit	1
AanUitkleden	1
TrappenLopen	2
BadenDouchen	1
TotaalScore	14

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. Barthel Index [Online] Beschikbaar op: http://www.zorginformatiemodel.nl/1_documentatie/Doc_Obs_Barthel_Index_R01_V1_3.pdf [Geraadpleegd: 23 februari 2015].
2. Barthel Index [Online] Beschikbaar op: <http://www.openehr.org/knowledge/> [Geraadpleegd: 18 februari 2013].
3. GOOSSEN, W.T.F. et al. (2004) *Specificaties CVA keteninformatiesysteem*. Versie 1.1. Leidschendam, Nictiz.
4. HAAN DE, R. et al. (1993) Klinimetrische evaluatie van de Barthel-index, een maat voor beperkingen in het dagelijks functioneren. *Nederlands Tijdschrift voor Geneeskunde*. 37 (18), p. 917-921.
5. MAHONY, F.I. et al. (1965) Functional Evaluation: The Barthel Index. *Maryland State Medical Journal*. 1965 (14), p .61-65.
6. PEPPEN VAN, R.P.S. et al. (2004) *Richtlijn Beroerte*. Amersfoort, Koninklijk Nederlands Genootschap voor Fysiotherapie (KNGF).

1.16 Functional Model

1.17 Traceability to other Standards

1.18 Disclaimer

This Health and Care Information Model (a.k.a Clinical Building Block) has been made in collaboration with several different parties in healthcare. These parties asked Nictiz to manage good maintenance and development of the information models. Hereafter, these parties and Nictiz are referred to as the collaborating parties. The collaborating parties paid utmost attention to the reliability and topicality of the data in these Health and Care Information Models. Omissions and inaccuracies may however occur. The collaborating parties are not liable for any damages resulting from omissions or inaccuracies in the information provided, nor are they liable for damages resulting from problems caused by or inherent to

distributing information on the internet, such as malfunctions, interruptions, errors or delays in information or services provide by the parties to you or by you to the parties via a website or via e-mail, or any other digital means. The collaborating parties will also not accept liability for any damages resulting from the use of data, advice or ideas provided by or on behalf of the parties by means of this Health and Care Information Model. The parties will not accept any liability for the content of information in this Health and Care Information Model to which or from which a hyperlink is referred. In the event of contradictions in mentioned Health and Care Information Model documents and files, the most recent and highest version of the listed order in the revisions will indicate the priority of the documents in question. If information included in the digital version of this Health and Care Information Model is also distributed in writing, the written version will be leading in case of textual differences. This will apply if both have the same version number and date. A definitive version has priority over a draft version. A revised version has priority over previous versions.

1.19 Terms of Use

The user may use the information in this Health and Care Information Model without limitations. The copyright provisions in the paragraph concerned apply to copying, distributing and passing on information from this Health and Care Information Model.

1.20 Copyrights

The user may copy, distribute and pass on the information in this Health and Care Information Model under the conditions that apply for Creative Commons license Attribution-NonCommercial-ShareAlike 3.0 Netherlands (CC BY-NC-SA-3.0). The content is available under Creative Commons Attribution-NonCommercial-ShareAlike 3.0 (see also <http://creativecommons.org/licenses/by-nc-sa/3.0/nl/>)