

Health & Care Information Model:

nl.zorg.BarthelADLIndex-v3.1

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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	12
1.11 Care Process	12
1.12 Example of the Instrument	12
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

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HCIM::PublicationLanguage	EN

1.1 Revision History

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-

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-

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Incl. algemene wijzigingsverzoeken:

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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

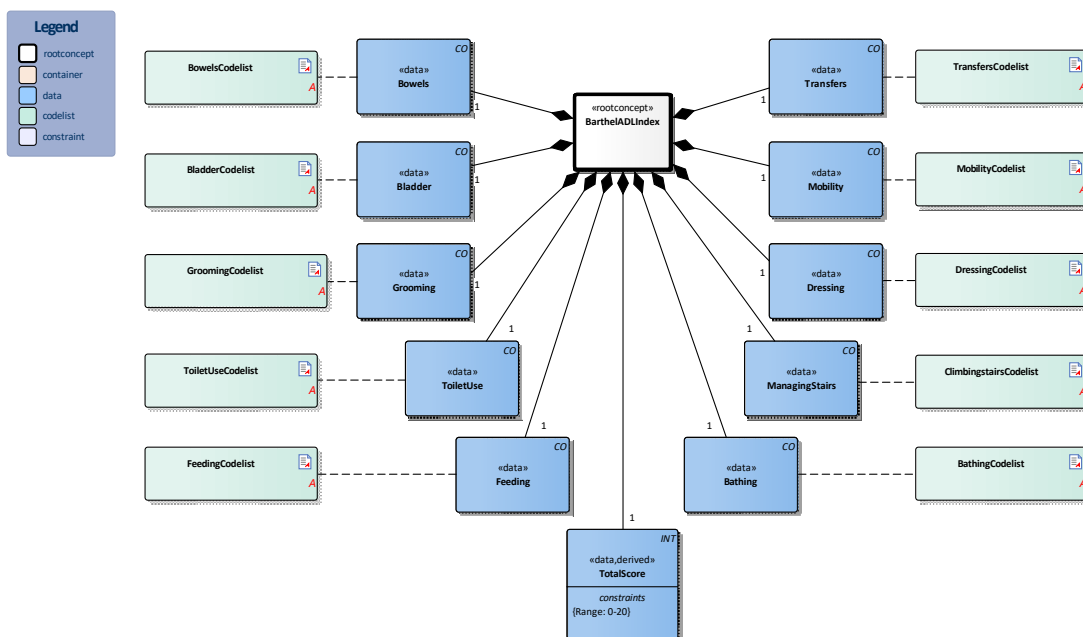
1.4 Purpose

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	The bowel function describes the extent of fecal incontinence.		
	<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			
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	The bladder function describes the extent of urinary incontinence.		
	<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			
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	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>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			
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	Toilet use indicates the extent to which a patient is capable of using the toilet independently.		
	<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		
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		
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		
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		
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> <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		
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. • 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		
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		
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		
DCM::ConceptId	NL-CM:4.2.2	TOTSCORE

Opties	
Constraint	Range: 0-20

«document»	DressingCodelist	
Definitie		
Datatype		
DCM::ValueSetBinding	Required	
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.4.2.8	
HCIM::ValueSetLanguage	NL	
Opties		

AanUitkledenCodelist			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::ValueSetBinding	Required	
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.4.2.10	
HCIM::ValueSetLanguage	NL	
Opties		

BadenDouchenCodelist			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::ValueSetBinding	Required	
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.4.2.2	

HCIM::ValueSetLanguage		NL			
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::ValueSetBinding		Required			
DCM::ValueSetId		2.16.840.1.113883.2.4.3.11.60.40.2.4.2.1			
HCIM::ValueSetLanguage		NL			
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::ValueSetBinding		Required			
DCM::ValueSetId		2.16.840.1.113883.2.4.3.11.60.40.2.4.2.5			
HCIM::ValueSetLanguage		NL			
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
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«document»		MobilityCodelist			
Definitie					
Datatype					
DCM::ValueSetBinding	Required				
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11. 60.40.2.4.2.7				
HCIM::ValueSetLanguage	NL				
Opties					

MobiliteitCodelist			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	MOBIL0	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::ValueSetBinding	Required				
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11. 60.40.2.4.2.4				
HCIM::ValueSetLanguage	NL				
Opties					

ToiletgebruikCodelist			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	TOIL0	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.	Onafhankelijk (op en

		ebruik	2.4.3.11.60.40.4.1.4	af, uit- en aankleden, afvegen)
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«document»	TransfersCodelist	
Definitie		
Datatype		
DCM::ValueSetBinding	Required	
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.4.2.6	
HCIM::ValueSetLanguage	NL	
Opties		

TransfersCodelijst			OID: 2.16.840.1.113883.2.4.3.11.60.40.2.4.2.6		
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Concept Name	Concept Code	Concept Value	Coding Syst. Name	Coding System OID	Description
Niet zelfstandig	TRANS0	0	BarthelTransfe r	2.16.840.1.113883.2.4.3.11.60.40.4.1.6	Niet in staat (niet zelfstandig)
Veel hulp	TRANS1	1	BarthelTransfe r	2.16.840.1.113883.2.4.3.11.60.40.4.1.6	Veel hulp (1-2 mensen lichamelijk)
Weinig hulp	TRANS2	2	BarthelTransfe r	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	BarthelTransfe r	2.16.840.1.113883.2.4.3.11.60.40.4.1.6	Onafhankelijk

«document»	ClimbingstairsCodelist	
Definitie		
Datatype		
DCM::ValueSetBinding	Required	
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.4.2.9	
HCIM::ValueSetLanguage	NL	
Opties		

TrappenLopenCodelijst			OID: 2.16.840.1.113883.2.4.3.11.60.40.2.4.2.9		
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Concept Name	Concept Code	Concept Value	Coding Syst. Name	Coding System OID	Description
Afhankelijk	CLIMB0	0	BarthelTrapp enLopen	2.16.840.1.113883.2.4.3.11.60.40.4.1.9	Niet in staat
Hulp	CLIMB1	1	BarthelTrapp enLopen	2.16.840.1.113883.2.4.3.11.60.40.4.1.9	Heeft hulp nodig (woorden, lichamelijk of hulpmiddel)
Onafhankelijk	CLIMB2	2	BarthelTrapp enLopen	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::ValueSetBinding	Required	

DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.60.40.2.4.2.3		
HCIM::ValueSetLanguage	NL		
Opties			
UiterlijkeVerzorgingCodelijst		OID: 2.16.840.1.113883.2.4.3.11.60.40.2.4.2.3	
Concept Name	Concept Code	Concept Value	Description
Hulp	GROOM0	0	BarthelUiterlijke Verzorging
Onafhankelijk	GROOM1	1	Onafhankelijk (gezicht, haar, tanden, scheren)

Legend	
Definitie	
Datatype	
Opties	

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

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