

# Health & Care Information Model:

nl.zorg.DOSScore-v1.2

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# Content

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## 1. nl.zorg.DOSScore-v1.2

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	2.16.840.1.113883.2.4.3.11.60.40.3.18.7
DCM::KeywordList	DOS, delier
DCM::LifecycleStatus	Final
DCM::ModelerList	Werkgroep RadB Verpleegkundige Gegevens
DCM::Name	nl.zorg.DOSScore
DCM::PublicationDate	17-04-2026
DCM::PublicationStatus	Prepublished
DCM::ReviewerList	Projectgroep RadB Verpleegkundige Gegevens & Kerngroep Registratie aan de Bron
DCM::RevisionDate	17-07-2023
DCM::Supersedes	nl.zorg.DOSScore-v1.1
DCM::Version	1.2
HCIM::PublicationLanguage	EN

### 1.1 Revision History

Publicatieversie 1.0 (04-09-2017)

Publicatieversie 1.1 (10-06-2022)

Bevat: ZIB-1674.

Publicatieversie 1.2 (15-10-2023)

Bevat: ZIB-1925, ZIB-1977, ZIB-1978.

### 1.2 Concept

The Delirium Observation Screening Scale is a tool to determine whether a patient has delirium. The DOSS includes 13 observations of behavior (verbal and non-verbal) which represent the symptoms of a delirium. These observations can be performed during regular contact with the patient.

### 1.3 Mindmap

### 1.4 Purpose

Delirium is one of the most forms of psychopathology among elderly patients and patients in the last phase of their lives. The main characteristic of delirium is the rapid onset and changing of symptoms. The DOSS is meant to qualify and quantify the nature and seriousness of delirium symptoms. This enables a quick start of treatment. The DOSS is used to signal risks and as an evaluation tool.

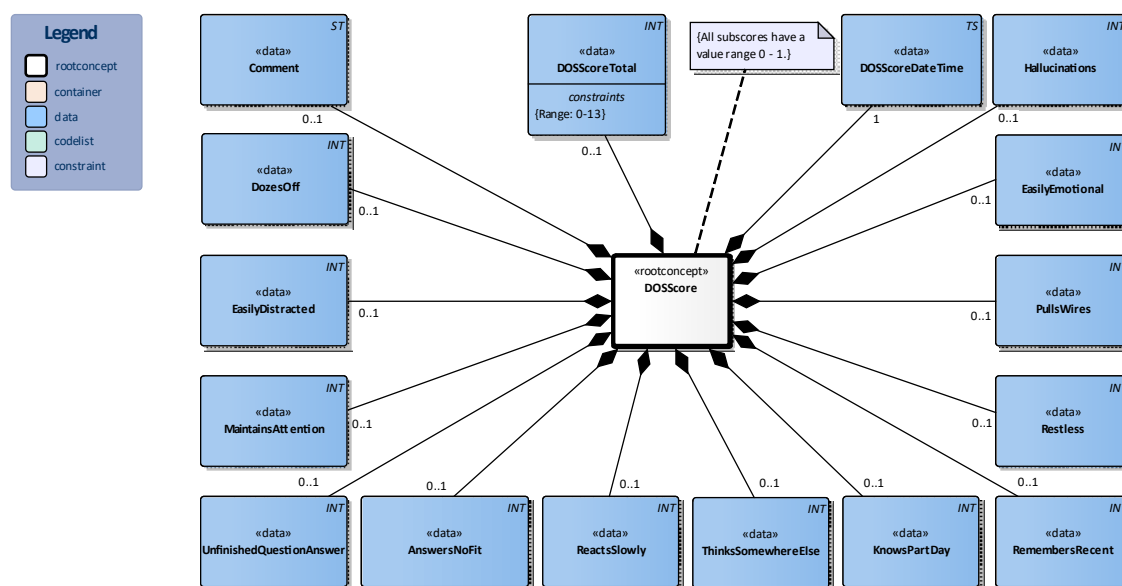
### 1.5 Patient Population

## 1.6 Evidence Base

The DOSS contains 13 observations of behaviour (verbal and non-verbal) that reflect the symptoms of delirium. These observations can be made during regular contacts with the patient. A total score is calculated per shift (minimum 0 and maximum 13). The total scores of three shifts (day, late and night shift) are added up to the total score of this day (minimum 0 and maximum 39). This HCIM defines the total score and underlying scores of one shift.

For a DOS scale final score, 3 instances of this HCIM, one for each shift, will have to be combined (DOS SCALE FINAL SCORE = TOTAL SCORE THIS DAY / 3). A DOS scale final score < 3 means that the patient is unlikely to be delirious. A DOS scale final score > 3 means the patient is likely to be delirious. DOS SCALE FINAL SCORE is not part of this concept and can be derived or calculated from the 3 HCIM instances.

## 1.7 Information Model



«rootconcept»	DOSScore	
Definitie	Root concept of the DOSScore information model. This root concept contains all data elements of the DOSScore information model.	
Datatype		
DCM::ConceptId	NL-CM:18.7.1	
DCM::DefinitionCode	SNOMED CT: 160591000146109 Delirium observation screening assessment scale	
Opties		

«data»	DOSScoreTotal	
Definitie	The total score for this shift (minimum 0 and maximum 13).	
Datatype	INT	
DCM::ConceptId	NL-CM:18.7.3	
DCM::DefinitionCode	SNOMED CT: 55681000146102 Delirium observation score	

<b>Opties</b>		
<b>Constraint</b>	Range: 0-13	

<b>«data»</b>	<b>DOSScoreDateTime</b>	
<b>Definitie</b>	The date on which the DOS score is registered.	
<b>Datatype</b>	TS	
<b>DCM::ConceptId</b>	NL-CM:18.7.5	
<b>Opties</b>		

<b>«data»</b>	<b>DozesOff</b>	
<b>Definitie</b>	DOS observation: patient dozes off during conversation or activities.  Score: 0: never 1: sometimes-always (is the answer "don't know" then don't instantiate this concept)	
<b>Datatype</b>	INT	
<b>DCM::ConceptId</b>	NL-CM:18.7.6	
<b>DCM::DefinitionCode</b>	ScoreObservaties: 18007006 DOSScore DozesOff	OID: 2.16.840.1.113883.2.4.3.11.60.40.4.0.1
<b>Opties</b>		

<b>«data»</b>	<b>EasilyDistracted</b>	
<b>Definitie</b>	DOS observation: patient is easily distracted by stimuli from the environment.  Someone is easily distracted by stimuli from the environment when he/she responds verbally or non-verbally to sounds or movements that have no relation to him/her and the nature of which does not make you expect a reaction from him/her.  Score: 0: never 1: sometimes-always (is the answer "don't know" then don't instantiate this concept)	
<b>Datatype</b>	INT	
<b>DCM::ConceptId</b>	NL-CM:18.7.7	
<b>DCM::DefinitionCode</b>	ScoreObservaties: 18007007 DOSScore EasilyDistracted	OID: 2.16.840.1.113883.2.4.3.11.60.40.4.0.1
<b>Opties</b>		

<b>«data»</b>	<b>MaintainsAttention</b>	
<b>Definitie</b>	DOS observation: patient maintains attention to conversation or action.  Someone is maintaining attention to a conversation or action if he/she verbally or non-verbally shows that they are following the conversation or action.  Score: 1: never 0: sometimes-always (is the answer "don't know" then don't instantiate this concept)	
<b>Datatype</b>	INT	
<b>DCM::ConceptId</b>	NL-CM:18.7.8	

<b>DCM::DefinitionCode</b>	ScoreObservaties: 18007008 DOSScore MaintainsAttention	OID: 2.16.840.1.113883.2.4.3.11.60.40.4.0.1
<b>Opties</b>		

«data»	UnfinishedQuestionAnswer	
<b>Definitie</b>	DOS observation: patient does not finish question or answer.  Score: 0: never 1: sometimes-always (is the answer "don't know" then don't instantiate this concept)	
<b>Datatype</b>	INT	
<b>DCM::ConceptId</b>	NL-CM:18.7.9	
<b>DCM::DefinitionCode</b>	ScoreObservaties: 18007009 DOSScore UnfinishedQuestionAnswer	OID: 2.16.840.1.113883.2.4.3.11.60.40.4.0.1
<b>Opties</b>		

«data»	AnswersNoFit	
<b>Definitie</b>	DOS observation: patient gives answers that do not fit the question.  Score: 0: never 1: sometimes-always (is the answer "don't know" then don't instantiate this concept)	
<b>Datatype</b>	INT	
<b>DCM::ConceptId</b>	NL-CM:18.7.10	
<b>DCM::DefinitionCode</b>	ScoreObservaties: 18007010 DOSScore AnswersNoFit	OID: 2.16.840.1.113883.2.4.3.11.60.40.4.0.1
<b>Opties</b>		

«data»	ReactsSlowly	
<b>Definitie</b>	DOS observation: patient reacts slowly to instructions.  Someone reacts slowly to instructions when acting is delayed and/or there are moments of stillness/inactivity before moving into action.  Score: 0: never 1: sometimes-always (is the answer "don't know" then don't instantiate this concept)	
<b>Datatype</b>	INT	
<b>DCM::ConceptId</b>	NL-CM:18.7.11	
<b>DCM::DefinitionCode</b>	ScoreObservaties: 18007011 DOSScore ReactsSlowly	OID: 2.16.840.1.113883.2.4.3.11.60.40.4.0.1
<b>Opties</b>		

«data»	ThinksSomewhereElse	
<b>Definitie</b>	DOS observation: patient thinks they are somewhere else.  Someone thinks they are somewhere else when he/she shows this in words or actions.  Score:	

	0: never 1: sometimes-always (is the answer "don't know" then don't instantiate this concept)	
<b>Datatype</b>	INT	
<b>DCM::ConceptId</b>	NL-CM:18.7.12	
<b>DCM::DefinitionCode</b>	ScoreObservaties: 18007012 DOSScore ThinksSomewhereElse	OID: 2.16.840.1.113883.2.4.3.11.60.40.4.0.1
<b>Opties</b>		

<b>«data»</b>	<b>KnowsPartDay</b>	
<b>Definitie</b>	DOS observation: patient knows which part of the day it is.  Someone knows what part of the day it is when he/she shows such in words or actions.  Score: 1: never 0: sometimes-always (is the answer "don't know" then don't instantiate this concept)	
<b>Datatype</b>	INT	
<b>DCM::ConceptId</b>	NL-CM:18.7.13	
<b>DCM::DefinitionCode</b>	ScoreObservaties: 18007013 DOSScore KnowsPartDay	OID: 2.16.840.1.113883.2.4.3.11.60.40.4.0.1
<b>Opties</b>		

<b>«data»</b>	<b>RemembersRecent</b>	
<b>Definitie</b>	DOS observation: patient remembers recent events.  Someone remembers recent events when he/she can for example tell whether they had visitors or what he/she ate.  Score: 1: never 0: sometimes-always (is the answer "don't know" then don't instantiate this concept)	
<b>Datatype</b>	INT	
<b>DCM::ConceptId</b>	NL-CM:18.7.14	
<b>DCM::DefinitionCode</b>	ScoreObservaties: 18007014 DOSScore RemembersRecent	OID: 2.16.840.1.113883.2.4.3.11.60.40.4.0.1
<b>Opties</b>		

<b>«data»</b>	<b>Restless</b>	
<b>Definitie</b>	DOS observation: patient is picking, disorderly, restless.  Score: 0: never 1: sometimes-always (is the answer "don't know" then don't instantiate this concept)	
<b>Datatype</b>	INT	
<b>DCM::ConceptId</b>	NL-CM:18.7.15	
<b>DCM::DefinitionCode</b>	ScoreObservaties: 18007015 DOSScore Restless	OID: 2.16.840.1.113883.2.4.3.11.60.40.4.0.1
<b>Opties</b>		

«data»	PullsWires	
Definitie	DOS observation: patient pulls IV tubing, feeding tubes, catheters, etc.  Score: 0: never 1: sometimes-always (is the answer "don't know" then don't instantiate this concept)	
Datatype	INT	
DCM::ConceptId	NL-CM:18.7.16	
DCM::DefinitionCode	ScoreObservaties: 18007016 DOSScore PullsWires	OID: 2.16.840.1.113883.2.4.3.11.60.40.4.0.1
Opties		

«data»	EasilyEmotional	
Definitie	DOS observation: patient is easily or suddenly emotional.  Someone is easily or suddenly emotional when he/she responds with a fierce emotion without provocation or when the fierceness of the emotion does not seem to match the provocation.  Score: 0: never 1: sometimes-always (is the answer "don't know" then don't instantiate this concept)	
Datatype	INT	
DCM::ConceptId	NL-CM:18.7.17	
DCM::DefinitionCode	ScoreObservaties: 18007017 DOSScore EasilyEmotional	OID: 2.16.840.1.113883.2.4.3.11.60.40.4.0.1
Opties		

«data»	Hallucinations	
Definitie	DOS observation: patient sees/hears things which are not there.  Someone sees/hears things which are not there when he/she shows this verbally (ask!) or non-verbally.  Score: 0: never 1: sometimes-always (is the answer "don't know" then don't instantiate this concept)	
Datatype	INT	
DCM::ConceptId	NL-CM:18.7.18	
DCM::DefinitionCode	ScoreObservaties: 18007018 DOSScore Hallucinations	OID: 2.16.840.1.113883.2.4.3.11.60.40.4.0.1
Opties		

«data»	Comment	
Definitie	Comment on the DOS score.	
Datatype	ST	
DCM::ConceptId	NL-CM:18.7.2	
DCM::DefinitionCode	LOINC: 48767-8 Annotation comment	
Opties		

	Legend
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<b>Definitie</b>	
<b>Datatype</b>	
<b>Opties</b>	

## 1.8 Example Instances

DOSScore	
ZaktWeg	1
SnelAfgeleid	1
HeeftAandacht	0
VraagAntwoordNietAf	-
AntwoordenNietPassend	1
ReageertTraag	-
DenktErgensAnders	0
BeseftDagdeel	0
HerinnertRecent	0
Rusteloos	0
TrektDraden	0
SnelGeemotioneerd	1
Hallucinaties	0
DOSScoreTotaal	4
DOSScoreDatumTijd	19-12-2016 10:35
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. DOS vragenlijst. Beschikbaar op:

<https://www.vmszorg.nl/wp-content/uploads/2017/07/DOSS-observatieschaal.pdf> [Geraadpleegd: 11 juli 2023].

2. Richtlijn Delier Volwassenen. Beschikbaar op: <https://www.venvn.nl/media/gteieurur/richtlijn-delier.pdf> [Geraadpleegd: 11 juli 2023].

## 1.16 Functional Model

## 1.17 Traceability to other Standards

## 1.18 Disclaimer

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