

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

Final

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# Content

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# 1. nl.zorg.Infusion-v3.1

DCM::CoderList	Werkgroep RadB Verpleegkundige Gegevens
DCM::ContactInformation.Address	*
DCM::ContactInformation.Name	*
DCM::ContactInformation.Telecom	*
DCM::ContentAuthorList	Werkgroep RadB Verpleegkundige Gegevens
DCM::CreationDate	3-4-2014
DCM::DeprecatedDate	
DCM::DescriptionLanguage	nl
DCM::EndorsingAuthority.Address	
DCM::EndorsingAuthority.Name	PM
DCM::EndorsingAuthority.Telecom	
DCM::Id	2.16.840.1.113883.2.4.3.11.60.40.3.10.2
DCM::KeywordList	Infuus, Katheter, Toedieningsysteem
DCM::LifecycleStatus	Final
DCM::ModelerList	Werkgroep RadB Verpleegkundige Gegevens
DCM::Name	nl.zorg.Infuus
DCM::PublicationDate	04-09-2017
DCM::PublicationStatus	Prepublished
DCM::ReviewerList	Projectgroep RadB Verpleegkundige Gegevens & Kerngroep Registratie aan de Bron
DCM::RevisionDate	04-09-2017
DCM::Superseeds	nl.zorg.Infuus-v3.0
DCM::Version	3.1
HCIM::PublicationLanguage	EN

## 1.1 Revision History

Publicatieversie 1.0 (01-07-2015)

Publicatieversie 3.0 (01-05-2016)

Bevat: ZIB-453

Publicatieversie 3.1 (04-09-2017)

Bevat: ZIB-433, ZIB-530, ZIB-534, ZIB-607.

## 1.2 Concept

An infusion is a device that slowly injects fluid into a blood vessel. The infusion has a number of components. The infusion contains:

- the (peripheral) cannula or the (central) catheter put into the patient peripherally or centrally;
- the administering system connected to the cannula/catheter allowing the administered fluid to run;
- the infusion bag containing the fluid.

Multiple administering systems may be connected to one cannula/catheter. Furthermore, a central venous catheter may have multiple lumens.

Arterial and epidural catheters also exist in addition to venous catheters.

## 1.3 Mindmap

## 1.4 Purpose

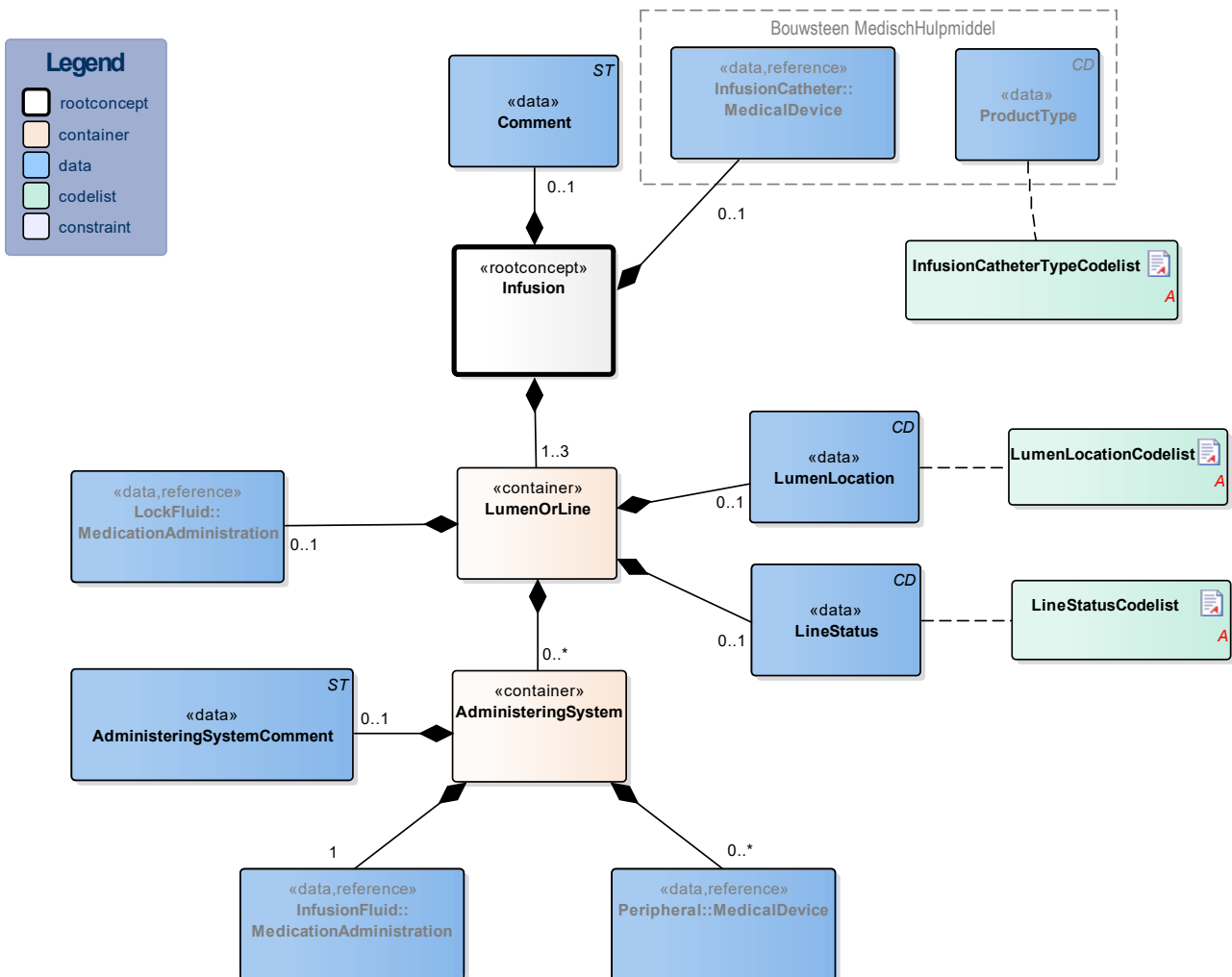
The purpose of an infusion is usually to administer fluid and/or medication.

Information on present infusions is recorded to inform other health professionals. This information is of importance in determining the care required for the patient and in safely administering medication. In a transfer situation, the information offers the option to realize continuity of care by organizing specific expertise and materials in advance, for example.

## 1.5 Patient Population

## 1.6 Evidence Base

## 1.7 Information Model



«rootconcept»	Infusion
Definitie	Root concept of the Infusion information model. This root concept contains all data elements of the infusion information model.
Datatype	

<b>DCM::ConceptId</b>	NL-CM:10.2.1	
<b>Opties</b>		

<b>«data»</b>	<b>InfusionCatheter::MedicalDevice</b>	
<b>Definitie</b>	InfusionCatheter describes the presence of an infusion catheter. If this is the case, the date of placement and insertion opening can be described in addition to the type of catheter. Furthermore, it offers the option to record identification information of the cannula/catheter if desired.	
<b>Datatype</b>		
<b>DCM::ConceptId</b>	NL-CM:10.2.3	
<b>DCM::ReferencedConceptId</b>	NL-CM:10.1.1	This is a reference to the rootconcept of information model MedicalDevice.
<b>Opties</b>		

<b>«data»</b>	<b>ProductType</b>	
<b>Definitie</b>	A description of the type of cannula/catheter.	
<b>Datatype</b>	CD	
<b>DCM::ConceptId</b>	NL-CM:10.1.3	
<b>DCM::ValueSet</b>	InfusionCatheterTypeCodeList	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.10.2.1
<b>Opties</b>		

<b>«data»</b>	<b>Comment</b>	
<b>Definitie</b>	A comment on the infusion.	
<b>Datatype</b>	ST	
<b>DCM::ConceptId</b>	NL-CM:10.2.8	
<b>DCM::DefinitionCode</b>	LOINC: 48767-8 Annotation comment	
<b>Opties</b>		

<b>«container»</b>	<b>LumenOrLine</b>	
<b>Definitie</b>	Container of the LumenOrLine concept. This container contains all data elements of the LumenOrLine concept. Central lines can contain one or more lumens; peripheral infusions do not have lumens and only have one line.	
<b>Datatype</b>		
<b>DCM::ConceptId</b>	NL-CM:10.2.10	
<b>Opties</b>		

<b>«data»</b>	<b>LineStatus</b>	
<b>Definitie</b>	LineStatus is used to indicate whether it is a running infusion, whether it has been capped, or has been fitted with a heparin lock, etc.	
<b>Datatype</b>	CD	
<b>DCM::ConceptId</b>	NL-CM:10.2.9	
<b>DCM::ValueSet</b>	LineStatusCodeList	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.10.2.3
<b>Opties</b>		

<b>«data»</b>	<b>LumenLocation</b>	
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<b>Definitie</b>	For central venous catheters with multiple lumens, LumenLocation indicates the relative position of the lumen with respect to the insertion opening.	
<b>Datatype</b>	CD	
<b>DCM::ConceptId</b>	NL-CM:10.2.11	
<b>DCM::ValueSet</b>	LumenLocationCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.10.2.2
<b>Opties</b>		

<b>«data»</b>	<b>LockFluid::MedicationAdministration</b>	
<b>Definitie</b>	The description of the fluid used as an anticoagulation lock, such as heparin.	
<b>Datatype</b>		
<b>DCM::ConceptId</b>	NL-CM:10.2.13	
<b>DCM::ReferencedConceptId</b>	NL-CM:9.13.20928	This is a reference to the rootconcept of information model MedicationAdministration2.
<b>Opties</b>		

<b>«container»</b>	<b>AdministeringSystem</b>	
<b>Definitie</b>	Container of the AdministeringSystem concept. This container contains all data elements of the AdministeringSystem concept. The administering system contains the entire system making the fluid run from the infusion bag via the cannula/catheter to the patient. This also includes any three-way valves/connecting joints used.	
<b>Datatype</b>		
<b>DCM::ConceptId</b>	NL-CM:10.2.7	
<b>Opties</b>		

<b>«data»</b>	<b>InfusionFluid::MedicationAdministration</b>	
<b>Definitie</b>	The description of the fluid administered through the infusion and the dose administered, as given in the medication prescription.	
<b>Datatype</b>		
<b>DCM::ConceptId</b>	NL-CM:10.2.2	
<b>DCM::DefinitionCode</b>	SNOMED CT: 440132002 Parenteral dosage form product	
<b>DCM::ExampleValue</b>	1 liter glucose 5% per 24 uur	
<b>DCM::ReferencedConceptId</b>	NL-CM:9.13.20928	This is a reference to the rootconcept of information model MedicationAdministration2.
<b>Opties</b>		

<b>«data»</b>	<b>Peripheral::MedicalDevice</b>	
<b>Definitie</b>	A description of medical devices required for administering the infusion fluid and placing the catheter, such as a volumetric infusion pump, syringe and infusion bag.	
<b>Datatype</b>		
<b>DCM::ConceptId</b>	NL-CM:10.2.6	

<b>DCM::ReferencedConceptId</b>	NL-CM:10.1.1	This is a reference to the rootconcept of information model MedicalDevice.
<b>Opties</b>		

<b>«data»</b>	<b>AdministeringSystemComment</b>	
<b>Definitie</b>	A comment on the administering system.	
<b>Datatype</b>	ST	
<b>DCM::ConceptId</b>	NL-CM:10.2.12	
<b>DCM::DefinitionCode</b>	LOINC: 48767-8 Annotation comment	
<b>Opties</b>		

<b>«document»</b>	<b>LineStyleCodelist</b>	
<b>Definitie</b>		
<b>Datatype</b>		
<b>DCM::ValueSetId</b>	2.16.840.1.113883.2.4.3.11.60.40.2.10.2.3	
<b>Opties</b>		

<b>LijnStatusCodelijst</b>		<b>OID: 2.16.840.1.113883.2.4.3.11.60.40.2.10.2.3</b>		
Concept Name	Concept Code	Coding Syst. Name	Coding System OID	Description
Lopend	LNP	LijnStatus	2.16.840.1.113883.2.4.3.11.60.40.4.12.1	Lopend
Afgedopt	DOP	LijnStatus	2.16.840.1.113883.2.4.3.11.60.40.4.12.1	Afgedopt
Other	OTH	NullFlavor	2.16.840.1.113883.5.1008	Anders

<b>«document»</b>	<b>LumenLocationCodelist</b>	
<b>Definitie</b>		
<b>Datatype</b>		
<b>DCM::ValueSetId</b>	2.16.840.1.113883.2.4.3.11.60.40.2.10.2.2	
<b>Opties</b>		

<b>LumenLocatieCodelijst</b>			<b>OID: 2.16.840.1.113883.2.4.3.11.60.40.2.10.2.2</b>	
Concept Name	Concept Code	Coding Syst. Name	Coding System OID	Description
Proximal	40415009	SNOMED CT	2.16.840.1.113883.6.96	Proximaal
Medial	255561001	SNOMED CT	2.16.840.1.113883.6.96	Mediaal
Distal	46053002	SNOMED CT	2.16.840.1.113883.6.96	Distaal

<b>«document»</b>	<b>InfusionCatheterTypeCodelist</b>	
<b>Definitie</b>		
<b>Datatype</b>		
<b>DCM::ValueSetId</b>	2.16.840.1.113883.2.4.3.11.60.40.2.10.2.1	

Opties				
InfuuskatheterTypeCodelijst		OID: 2.16.840.1.113883.2.4.3.11.60.40.2.10.2.1		
Concept Name	Concept Code	Coding Syst. Name	Coding System OID	Description
Peripheral intravenous catheter	82449006	SNOMED CT	2.16.840.1.113883.6.96	Perifeer intraveneus infuus
Central venous catheter	52124006	SNOMED CT	2.16.840.1.113883.6.96	Centraal veneuze katheter
Epidural catheter	30610008	SNOMED CT	2.16.840.1.113883.6.96	Epidurale katheter
Arterial catheter	303727009	SNOMED CT	2.16.840.1.113883.6.96	Arteriële katheter
Implantable venous catheter	102318003	SNOMED CT	2.16.840.1.113883.6.96	Port-a-cath
Haemodialysis catheter	450866001	SNOMED CT	2.16.840.1.113883.6.96	Hemodialyse katheter
Subcutaneous catheter	tbd	SNOMED CT	2.16.840.1.113883.6.96	Subcutaan infuus
Other	OTH	NullFlavor	2.16.840.1.113883.5.1008	Anders

## 1.8 Example Instances



Infuus	
Infuuskatheter	
ProductType	Centraal veneuze katheter
BeginDatum	30-11-2014
HulpmiddelAnatomischeLocatie	Vena subclavia links
LumenOfLijn	
LumenLocatie	Proximaal
LijnStatus	Lopend
ToedieningsSysteem	
ToedieningssysteemToelichting	-
Randapparaat	
ProductType	Infuuspomp
InfuusVloeistof	
ProductNaam	TPV
Inloopsnelheid	1 liter per 24 uur
LumenOfLijn	
Lumen locatie	Mediaal
LijnStatus	Afgedopt
SlotVloeistof	
ProductNaam	NaCl 0.9 %
Keerdosis	5ml
LumenOfLijn	
LumenLocatie	Distaal
LijnStatus	Lopend
ToedieningsSysteem	
ToedieningssysteemToelichting	-
Randapparaat	
ProductType	Infuuspomp
InfuusVloeistof	
ProductNaam	NaCl 0.9 %
Inloopsnelheid	500 ml per 24 uur
Toelichting	-

Infuus	
Infuuskatheter	
ProductType	Perifeer intraveneus infuus
BeginDatum	28-11-2014
HulpmiddelAnatomischeLocatie	Linker onderarm
VerpleegkundigeActie	
Activiteit	Insteekopening controleren.
GeplandeActie	
Activiteit	Op 2-12 systeem verschonen.
LumenOfLijn	
LumenLocatie	-
LijnStatus	Lopend
ToedieningsSysteem	
ToedieningssysteemToelichting	-
Randapparaat	
ProductType	Sputenpomp (perfusor)
InfuusVloeistof	
ProductNaam	NaCl 0,9% + medicatie 5000 E heparine (totaal 48ml)
Inloopsnelheid	2ml per uur
ToedieningsSysteem	
ToedieningssysteemToelichting	-
Randapparaat	
ProductType	Infuuspomp
InfuusVloeistof	
ProductNaam	NaCl/gluc
Inloopsnelheid	500 ml / 24 uur
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. Verpleegkundige Intensive Care Protocollen [Online] Beschikbaar op: <http://ic.venvn.nl/Downloads/Verpleegkundige-Intensive-Care-Protocollen> [Geraadpleegd: 13 februari 2015]

## **1.16 Functional Model**

## **1.17 Traceability to other Standards**

## **1.18 Disclaimer**

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