

Health & Care Information Model:

nl.zorg.Infusion-v3.5

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1. nl.zorg.Infusion-v3.5

DCM::CoderList	Werkgroep RadB Verpleegkundige Gegevens
DCM::ContactInformation.Address	*
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DCM::ContentAuthorList	Werkgroep RadB Verpleegkundige Gegevens
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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.

Publicatieversie 3.2 (31-12-2017)

Bevat: ZIB-646.

Publicatieversie 3.3 (06-07-2019)

Bevat: ZIB-845.

Publicatieversie 3.4 (01-12-2021)

Bevat: ZIB-1526.

Publicatieversie 3.5 (15-10-2023)

Bevat: ZIB-1718, ZIB-1968.

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

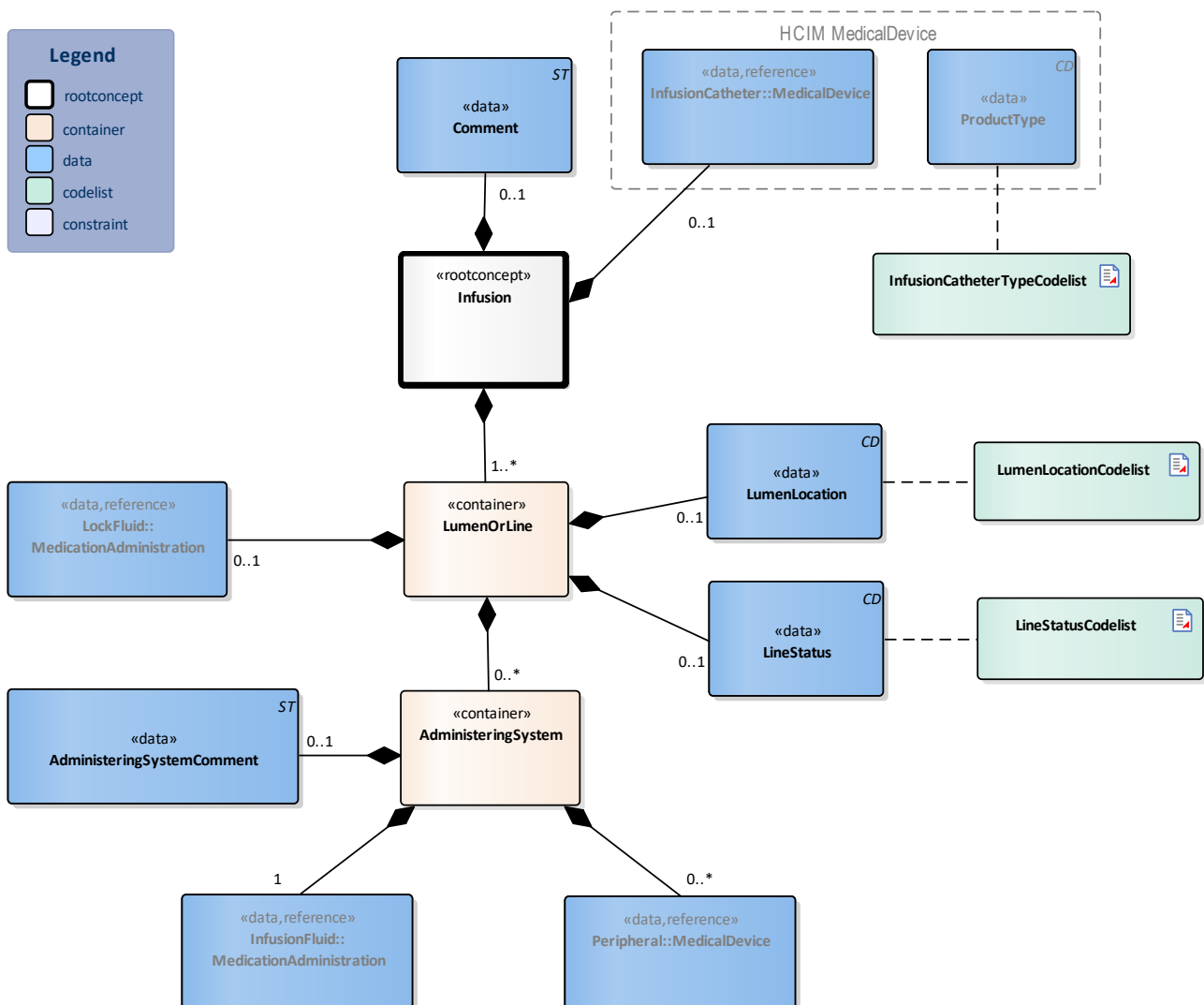
The purpose of an infusion is usually to administer fluid and/or medication.

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		
DCM::ConceptId	NL-CM:10.2.1	
DCM::DefinitionCode	SNOMED CT:19923001 Katheter	
Opties		

«data»	InfusionCatheter::MedicalDevice	
Definitie	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.	
Datatype		
DCM::ConceptId	NL-CM:10.2.3	
DCM::DefinitionCode	SNOMED CT: 424226004 Using device	
DCM::ReferencedConceptId	NL-CM:10.1.1	This is a reference to the rootconcept of information model MedicalDevice.
Opties		

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

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

«container»	LumenOrLine	
Definitie	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.	
Datatype		
DCM::ConceptId	NL-CM:10.2.10	
Opties		

«data»	LineStatus	
Definitie	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.	
Datatype	CD	
DCM::ConceptId	NL-CM:10.2.9	
DCM::ValueSet	LineStatusCodeList	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.10.2.3

Opties	
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«data»	LumenLocation	
Definitie	For central venous catheters with multiple lumens, LumenLocation indicates the relative position of the lumen with respect to the insertion opening. When multiple medial lumina are present, specify them in the comment field.	
Datatype	CD	
DCM::ConceptId	NL-CM:10.2.11	
DCM::ValueSet	LumenLocationCodelist	OID: 2.16.840.1.113883.2.4.3.11.60.40.2.10.2.2
Opties		

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

«container»	AdministeringSystem	
Definitie	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.	
Datatype		
DCM::ConceptId	NL-CM:10.2.7	
Opties		

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

«data»	Peripheral::MedicalDevice	
Definitie	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.	
Datatype		
DCM::ConceptId	NL-CM:10.2.6	
DCM::DefinitionCode	SNOMED CT:363710007 Indirect device	

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

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

«document»	LineStatusCodelist	
Definitie		
Datatype		
DCM::ValueSetBinding	Extensible	
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.6 0.40.2.10.2.3	
HCIM::ValueSetLanguage	NL	
Opties		

LijnStatusCodelijst		OID: 2.16.840.1.113883.2.4.3.11.60.40.2.10.2.3		
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

«document»	LumenLocationCodelist	
Definitie		
Datatype		
DCM::ValueSetBinding	Extensible	
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.6 0.40.2.10.2.2	
HCIM::ValueSetLanguage	--	
Opties		

LumenLocatieCodelijst			OID: 2.16.840.1.113883.2.4.3.11.60.40.2.10.2.2	
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

«document»		InfusionCatheterTypeCodelist		
Definitie				
Datatype				
DCM::ValueSetBinding	Extensible			
DCM::ValueSetId	2.16.840.1.113883.2.4.3.11.6 0.40.2.10.2.1			
HCIM::ValueSetLanguage	--			
Opties				
InfuskatheterTypeCodelijst			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
Hemodialysis catheter	450866001	SNOMED CT	2.16.840.1.113883.6.96	Hemodialyse katheter
Subcutaneous injection/infusion port needle	465504007	SNOMED CT	2.16.840.1.113883.6.96	Subcutaan infuus [DEPRECATED]
Subcutaneous infusion catheter	290181000146100	SNOMED CT	2.16.840.1.113883.6.96	Subcutane katheter
Other	OTH	NullFlavor	2.16.840.1.113883.5.1008	Anders

Legend	
Definitie	
Datatype	
Opties	

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
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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