

# **Cardiology: Inpatient Heparin Anticoagulation Protocol Rule KNART Validation Report**

## **Rule: Validation Report**

**Contract: VA118-16-D-1008, Task Order  
(TO): VA-118-16-F-1008-0007, CLIN0007CA**

**Department of Veterans Affairs**



**Knowledge Based Systems (KBS)  
Office of Informatics and Information Governance (OIIG)  
Clinical Decision Support (CDS)**

**Publication date 06/18/2018**

**Version: 1.0**

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# Cardiology: Inpatient Heparin Anticoagulation Protocol Rule KNART Validation Report: Rule: Validation Report

by Knowledge Based Systems (KBS), Office of Informatics and Information Governance (OIIG), and Clinical Decision Support (CDS)

Publication date 06/18/2018

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# Chapter 1. Basic File and Well-formedness Tests

**Table 1.1. Summary**

Information	Value
File name	CDSK_KRprt_ECA_O11IPHeparin.xml
File size	179.0 KB
Type	Rule
Publication Date	06/18/2018
File Modification Date	06/18/2018 14:34:50
Well-formed XML	YES
MD5	cbb201e630a4bd965b2fe3077cd70dc0

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# Chapter 2. XSD Schema Checks

**Table 2.1. KAS Schema Validation Summary**

Information	Value
KAS Schema Version	urn:hl7-org:knowledgeartifact:r1
Schema File	knowledgedocument.xsd
Validation Errors	0

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# Chapter 3. Schematron Checks

**Table 3.1. Editorial Convention Check**

Information	Value
Editorial Schematron Version	ISO Schematron 2016
Schema File	knart-L3-validation.sch, L3Validation.sch, KnartStyle.sch
Validation Errors	0
Validation Warnings	0

# Chapter 4. Terminology Checks via Ontoserver

**Table 4.1. Ontoserver Information**

Information		Value
Ontoserver URL		https://ontoserver.hspconsortium.org/fhir
Ontoserver Version		5.0
Date of Code Checks		06/18/2018 14:35:23
SNOMED	Version	http://snomed.info/sct/731000124108/version/20170901,http://snomed.info/sct/900000000000207008/version/20170731
	Codes	443237
LOINC	Version	2.61,2.63
	Codes	126207
RXNorm	Version	Does not exist
	Codes	0
v3 Code System EducationLevel	Version	2016-03-23
	Codes	9

**Table 4.2. Terminology and ANF Usage**

Terminology References			
Total Codes Used <sup>a</sup>		48	
Resolved <sup>b</sup>		43	
Unresolved <sup>c</sup>	5	TSR Requested Codes <sup>d</sup>	1
		SOLOR Placeholder Codes <sup>e</sup>	2
		Other Unresolved <sup>f</sup>	2
ANF Model Reference Information			
anf:ClinicalStatement		49	
anf:TSR-NoModel <sup>g</sup>		0	

<sup>a</sup>Total number of unique codes referenced in the KNART XML.

<sup>b</sup>Number of unique codes used in the KNART XML and present in ontoserver.

<sup>c</sup>Number of unique codes used in the KNART XML and not found in ontoserver.

<sup>d</sup>Number of unique code system and code pairs referenced in the KNART XML with a placeholder ('TSR-NoCode').

<sup>e</sup>Number of unique codes in uuid form referenced in the KNART XML.

<sup>f</sup>Number of other unique codes not found in ontoserver, e.g. RXNorm codes.

<sup>g</sup>KAS elements modeled as 'anf:TSR-NoModel' indicates they cannot be modeled in the current version of ANF.



**Table 4.3. TSR Requested Codes**

	Information	Value
1	FileName	CDSK_KRprt_ECA_O11IPHeparin.xml
	Line	1393
	Column	114
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_O11IPHeparin.xml#line=1393column=114]
2	FileName	CDSK_KRprt_ECA_O11IPHeparin.xml
	Line	1492
	Column	114
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_O11IPHeparin.xml#line=1492column=114]
3	FileName	CDSK_KRprt_ECA_O11IPHeparin.xml
	Line	1729
	Column	106
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_O11IPHeparin.xml#line=1729column=106]
4	FileName	CDSK_KRprt_ECA_O11IPHeparin.xml
	Line	1743
	Column	106
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_O11IPHeparin.xml#line=1743column=106]
5	FileName	CDSK_KRprt_ECA_O11IPHeparin.xml
	Line	1757
	Column	106
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_O11IPHeparin.xml#line=1757column=106]
6	FileName	CDSK_KRprt_ECA_O11IPHeparin.xml
	Line	1771
	Column	106
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode

	Information	Value
	Reference	KNART [file:CDSK_KRprt_ECA_O11IPHeparin.xml#line=1771column=106]
7	FileName	CDSK_KRprt_ECA_O11IPHeparin.xml
	Line	1785
	Column	106
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_O11IPHeparin.xml#line=1785column=106]
8	FileName	CDSK_KRprt_ECA_O11IPHeparin.xml
	Line	1799
	Column	106
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_O11IPHeparin.xml#line=1799column=106]
9	FileName	CDSK_KRprt_ECA_O11IPHeparin.xml
	Line	1813
	Column	106
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_O11IPHeparin.xml#line=1813column=106]
10	FileName	CDSK_KRprt_ECA_O11IPHeparin.xml
	Line	1827
	Column	106
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_O11IPHeparin.xml#line=1827column=106]
11	FileName	CDSK_KRprt_ECA_O11IPHeparin.xml
	Line	1841
	Column	106
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_O11IPHeparin.xml#line=1841column=106]

**Table 4.4. SOLOR Placeholders**

	Information	Value
1	FileName	CDSK_KRprt_ECA_O11IPHeparin.xml

	Information	Value
	Line	563
	Column	74
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_O11IPHeparin.xml#line=563column=74]
2	FileName	CDSK_KRprt_ECA_O11IPHeparin.xml
	Line	591
	Column	70
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_O11IPHeparin.xml#line=591column=70]
3	FileName	CDSK_KRprt_ECA_O11IPHeparin.xml
	Line	621
	Column	70
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_O11IPHeparin.xml#line=621column=70]
4	FileName	CDSK_KRprt_ECA_O11IPHeparin.xml
	Line	850
	Column	70
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_O11IPHeparin.xml#line=850column=70]
5	FileName	CDSK_KRprt_ECA_O11IPHeparin.xml
	Line	874
	Column	70
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_O11IPHeparin.xml#line=874column=70]
6	FileName	CDSK_KRprt_ECA_O11IPHeparin.xml
	Line	899
	Column	70
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_O11IPHeparin.xml#line=899column=70]

	Information	Value
7	FileName	CDSK_KRprt_ECA_O11IPHeparin.xml
	Line	925
	Column	70
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_O11IPHeparin.xml#line=925column=70]
8	FileName	CDSK_KRprt_ECA_O11IPHeparin.xml
	Line	959
	Column	70
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_O11IPHeparin.xml#line=959column=70]
9	FileName	CDSK_KRprt_ECA_O11IPHeparin.xml
	Line	994
	Column	70
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_O11IPHeparin.xml#line=994column=70]
10	FileName	CDSK_KRprt_ECA_O11IPHeparin.xml
	Line	1029
	Column	70
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_O11IPHeparin.xml#line=1029column=70]
11	FileName	CDSK_KRprt_ECA_O11IPHeparin.xml
	Line	1063
	Column	70
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_O11IPHeparin.xml#line=1063column=70]
12	FileName	CDSK_KRprt_ECA_O11IPHeparin.xml
	Line	1088
	Column	70
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a

	Information	Value
	Reference	KNART [file:CDSK_KRprt_ECA_O11IPHeparin.xml#line=1088column=70]
13	FileName	CDSK_KRprt_ECA_O11IPHeparin.xml
	Line	1117
	Column	70
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_O11IPHeparin.xml#line=1117column=70]
14	FileName	CDSK_KRprt_ECA_O11IPHeparin.xml
	Line	1143
	Column	70
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_O11IPHeparin.xml#line=1143column=70]
15	FileName	CDSK_KRprt_ECA_O11IPHeparin.xml
	Line	1172
	Column	70
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_O11IPHeparin.xml#line=1172column=70]
16	FileName	CDSK_KRprt_ECA_O11IPHeparin.xml
	Line	1201
	Column	70
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_O11IPHeparin.xml#line=1201column=70]
17	FileName	CDSK_KRprt_ECA_O11IPHeparin.xml
	Line	1227
	Column	70
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_O11IPHeparin.xml#line=1227column=70]
18	FileName	CDSK_KRprt_ECA_O11IPHeparin.xml
	Line	1227
	Column	70

	Information	Value
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: 7f601aca-6a66-4922-9a72-7e86a67b36e7
	Reference	KNART [file:CDSK_KRprt_ECA_O11IPHeparin.xml#line=1227column=70]
19	FileName	CDSK_KRprt_ECA_O11IPHeparin.xml
	Line	1256
	Column	70
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_O11IPHeparin.xml#line=1256column=70]
20	FileName	CDSK_KRprt_ECA_O11IPHeparin.xml
	Line	1285
	Column	70
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_O11IPHeparin.xml#line=1285column=70]
21	FileName	CDSK_KRprt_ECA_O11IPHeparin.xml
	Line	1313
	Column	70
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_O11IPHeparin.xml#line=1313column=70]
22	FileName	CDSK_KRprt_ECA_O11IPHeparin.xml
	Line	1341
	Column	70
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_O11IPHeparin.xml#line=1341column=70]
23	FileName	CDSK_KRprt_ECA_O11IPHeparin.xml
	Line	1368
	Column	70
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_O11IPHeparin.xml#line=1368column=70]
24	FileName	CDSK_KRprt_ECA_O11IPHeparin.xml
	Line	1418

	Information	Value
	Column	70
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_O11IPHeparin.xml#line=1418column=70]
25	FileName	CDSK_KRprt_ECA_O11IPHeparin.xml
	Line	1443
	Column	70
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_O11IPHeparin.xml#line=1443column=70]
26	FileName	CDSK_KRprt_ECA_O11IPHeparin.xml
	Line	1469
	Column	70
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_O11IPHeparin.xml#line=1469column=70]
27	FileName	CDSK_KRprt_ECA_O11IPHeparin.xml
	Line	1561
	Column	70
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_O11IPHeparin.xml#line=1561column=70]
28	FileName	CDSK_KRprt_ECA_O11IPHeparin.xml
	Line	1586
	Column	70
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_O11IPHeparin.xml#line=1586column=70]

**Table 4.5. Other Unresolved**

	Information	Value
1	FileName	CDSK_KRprt_ECA_O11IPHeparin.xml
	Line	621
	Column	70
	Message	Code 17+F15369002, codeSystem http://snomed.info/sct not found in Ontoserver.

	Information	Value
	Reference	KNART [file:CDSK_KRprt_ECA_O11IPHeparin.xml#line=621column=70]
2	FileName	CDSK_KRprt_ECA_O11IPHeparin.xml
	Line	621
	Column	70
	Message	Code 17+F15369002, codeSystem http://snomed.info/sct is an invalid code format.
	Reference	KNART [file:CDSK_KRprt_ECA_O11IPHeparin.xml#line=621column=70]
3	FileName	CDSK_KRprt_ECA_O11IPHeparin.xml
	Line	698
	Column	70
	Message	Code 737675000, codeSystem http://snomed.info/sct not found in Ontoserver.
	Reference	KNART [file:CDSK_KRprt_ECA_O11IPHeparin.xml#line=698column=70]