

# **Gastroenterology: Colorectal Cancer Risk Rule KNART Validation Report**

## **Rule: Validation Report**

**Contract: VA118-16-D-1008, Task Order  
(TO): VA-118-16-F-1008-0007, CLIN0003AH**

**Department of Veterans Affairs**



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

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# **Gastroenterology: Colorectal Cancer Risk 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 05/29/2018

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# Chapter 1. Basic File and Well-formedness Tests

**Table 1.1. Summary**

Information	Value
File name	CDSK_KRprt_ECA_B1ColoCanScr.xml
File size	148.0 KB
Type	Rule
Publication Date	05/29/2018
File Modification Date	05/29/2018 17:42:41
Well-formed XML	YES
MD5	7bf4686515e33f2193e207bad76bdc05

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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		05/29/2018 17:43:45
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>		32	
Resolved <sup>b</sup>		25	
Unresolved <sup>c</sup>	7	TSR Requested Codes <sup>d</sup>	1
		SOLOR Placeholder Codes <sup>e</sup>	4
		Other Unresolved <sup>f</sup>	2
ANF Model Reference Information			
anf:ClinicalStatement		NUM_CLINICAL_STATEMENTS	
anf:TSR-NoModel <sup>g</sup>		NUM_TSR_NOMODEL	

<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_B1ColoCanScr.xml
	Line	368
	Column	114
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_B1ColoCanScr.xml#line=368column=114]
2	FileName	CDSK_KRprt_ECA_B1ColoCanScr.xml
	Line	392
	Column	114
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_B1ColoCanScr.xml#line=392column=114]
3	FileName	CDSK_KRprt_ECA_B1ColoCanScr.xml
	Line	759
	Column	114
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_B1ColoCanScr.xml#line=759column=114]
4	FileName	CDSK_KRprt_ECA_B1ColoCanScr.xml
	Line	1812
	Column	118
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_B1ColoCanScr.xml#line=1812column=118]
5	FileName	CDSK_KRprt_ECA_B1ColoCanScr.xml
	Line	1830
	Column	118
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_B1ColoCanScr.xml#line=1830column=118]
6	FileName	CDSK_KRprt_ECA_B1ColoCanScr.xml
	Line	1848
	Column	118
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode

	Information	Value
	Reference	KNART [file:CDSK_KRprt_ECA_B1ColoCanScr.xml#line=1848column=118]
7	FileName	CDSK_KRprt_ECA_B1ColoCanScr.xml
	Line	2152
	Column	118
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_B1ColoCanScr.xml#line=2152column=118]
8	FileName	CDSK_KRprt_ECA_B1ColoCanScr.xml
	Line	2170
	Column	118
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_B1ColoCanScr.xml#line=2170column=118]
9	FileName	CDSK_KRprt_ECA_B1ColoCanScr.xml
	Line	2188
	Column	118
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_B1ColoCanScr.xml#line=2188column=118]
10	FileName	CDSK_KRprt_ECA_B1ColoCanScr.xml
	Line	2206
	Column	118
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_B1ColoCanScr.xml#line=2206column=118]
11	FileName	CDSK_KRprt_ECA_B1ColoCanScr.xml
	Line	2276
	Column	118
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_B1ColoCanScr.xml#line=2276column=118]
12	FileName	CDSK_KRprt_ECA_B1ColoCanScr.xml
	Line	2294
	Column	118

	Information	Value
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_B1ColoCanScr.xml#line=2294column=118]
13	FileName	CDSK_KRprt_ECA_B1ColoCanScr.xml
	Line	2312
	Column	118
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_B1ColoCanScr.xml#line=2312column=118]
14	FileName	CDSK_KRprt_ECA_B1ColoCanScr.xml
	Line	2330
	Column	118
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_B1ColoCanScr.xml#line=2330column=118]
15	FileName	CDSK_KRprt_ECA_B1ColoCanScr.xml
	Line	2389
	Column	118
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_B1ColoCanScr.xml#line=2389column=118]
16	FileName	CDSK_KRprt_ECA_B1ColoCanScr.xml
	Line	2407
	Column	118
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_B1ColoCanScr.xml#line=2407column=118]
17	FileName	CDSK_KRprt_ECA_B1ColoCanScr.xml
	Line	2425
	Column	118
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_B1ColoCanScr.xml#line=2425column=118]
18	FileName	CDSK_KRprt_ECA_B1ColoCanScr.xml
	Line	2443

	Information	Value
19	Column	118
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_B1ColoCanScr.xml#line=2443column=118]
	FileName	CDSK_KRprt_ECA_B1ColoCanScr.xml
	Line	2461
19	Column	118
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_B1ColoCanScr.xml#line=2461column=118]
	FileName	CDSK_KRprt_ECA_B1ColoCanScr.xml
	Line	2461

**Table 4.4. SOLOR Placeholders**

	Information	Value
1	FileName	CDSK_KRprt_ECA_B1ColoCanScr.xml
	Line	414
	Column	70
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_B1ColoCanScr.xml#line=414column=70]
2	FileName	CDSK_KRprt_ECA_B1ColoCanScr.xml
	Line	453
	Column	70
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_B1ColoCanScr.xml#line=453column=70]
3	FileName	CDSK_KRprt_ECA_B1ColoCanScr.xml
	Line	453
	Column	70
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: c27d79c3-544d-418d-92f3-0fe6e1a7f2f5
	Reference	KNART [file:CDSK_KRprt_ECA_B1ColoCanScr.xml#line=453column=70]
4	FileName	CDSK_KRprt_ECA_B1ColoCanScr.xml
	Line	492
	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_B1ColoCanScr.xml#line=492column=70]
5	FileName	CDSK_KRprt_ECA_B1ColoCanScr.xml
	Line	528
	Column	70
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_B1ColoCanScr.xml#line=528column=70]
6	FileName	CDSK_KRprt_ECA_B1ColoCanScr.xml
	Line	564
	Column	70
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_B1ColoCanScr.xml#line=564column=70]
7	FileName	CDSK_KRprt_ECA_B1ColoCanScr.xml
	Line	564
	Column	70
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: b1ad8fa9-668d-4191-930f-eebfdf13a914
	Reference	KNART [file:CDSK_KRprt_ECA_B1ColoCanScr.xml#line=564column=70]
8	FileName	CDSK_KRprt_ECA_B1ColoCanScr.xml
	Line	600
	Column	70
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_B1ColoCanScr.xml#line=600column=70]
9	FileName	CDSK_KRprt_ECA_B1ColoCanScr.xml
	Line	600
	Column	70
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: b1ad8fa9-668d-4191-930f-eebfdf13a914
	Reference	KNART [file:CDSK_KRprt_ECA_B1ColoCanScr.xml#line=600column=70]
10	FileName	CDSK_KRprt_ECA_B1ColoCanScr.xml
	Line	636
	Column	70

	Information	Value
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_B1ColoCanScr.xml#line=636column=70]
11	FileName	CDSK_KRprt_ECA_B1ColoCanScr.xml
	Line	672
	Column	70
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_B1ColoCanScr.xml#line=672column=70]
12	FileName	CDSK_KRprt_ECA_B1ColoCanScr.xml
	Line	672
	Column	70
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: c27d79c3-544d-418d-92f3-0fe6e1a7f2f5
	Reference	KNART [file:CDSK_KRprt_ECA_B1ColoCanScr.xml#line=672column=70]
13	FileName	CDSK_KRprt_ECA_B1ColoCanScr.xml
	Line	878
	Column	61
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: 163925a8-8c77-4832-8d57-00be4f5764d5
	Reference	KNART [file:CDSK_KRprt_ECA_B1ColoCanScr.xml#line=878column=61]
14	FileName	CDSK_KRprt_ECA_B1ColoCanScr.xml
	Line	904
	Column	70
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_B1ColoCanScr.xml#line=904column=70]
15	FileName	CDSK_KRprt_ECA_B1ColoCanScr.xml
	Line	940
	Column	70
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_B1ColoCanScr.xml#line=940column=70]
16	FileName	CDSK_KRprt_ECA_B1ColoCanScr.xml
	Line	976

	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_B1ColoCanScr.xml#line=976column=70]
17	FileName	CDSK_KRprt_ECA_B1ColoCanScr.xml
	Line	976
	Column	70
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: b1ad8fa9-668d-4191-930f-eebfdf13a914
	Reference	KNART [file:CDSK_KRprt_ECA_B1ColoCanScr.xml#line=976column=70]
18	FileName	CDSK_KRprt_ECA_B1ColoCanScr.xml
	Line	1012
	Column	70
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_B1ColoCanScr.xml#line=1012column=70]
19	FileName	CDSK_KRprt_ECA_B1ColoCanScr.xml
	Line	1203
	Column	69
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: 163925a8-8c77-4832-8d57-00be4f5764d5
	Reference	KNART [file:CDSK_KRprt_ECA_B1ColoCanScr.xml#line=1203column=69]
20	FileName	CDSK_KRprt_ECA_B1ColoCanScr.xml
	Line	1269
	Column	70
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_B1ColoCanScr.xml#line=1269column=70]
21	FileName	CDSK_KRprt_ECA_B1ColoCanScr.xml
	Line	1293
	Column	70
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_B1ColoCanScr.xml#line=1293column=70]
22	FileName	CDSK_KRprt_ECA_B1ColoCanScr.xml

	Information	Value
	Line	1336
	Column	70
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_B1ColoCanScr.xml#line=1336column=70]
	Reference	KNART [file:CDSK_KRprt_ECA_B1ColoCanScr.xml#line=1336column=70]
23	FileName	CDSK_KRprt_ECA_B1ColoCanScr.xml
	Line	1336
	Column	70
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: c27d79c3-544d-418d-92f3-0fe6e1a7f2f5
	Reference	KNART [file:CDSK_KRprt_ECA_B1ColoCanScr.xml#line=1336column=70]
24	FileName	CDSK_KRprt_ECA_B1ColoCanScr.xml
	Line	1404
	Column	74
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_B1ColoCanScr.xml#line=1404column=74]

**Table 4.5. Other Unresolved**

	Information	Value
1	FileName	CDSK_KRprt_ECA_B1ColoCanScr.xml
	Line	225
	Column	108
	Message	Code 453231000124104, codeSystem http://snomed.info/sct not found in Ontoserver.
	Reference	KNART [file:CDSK_KRprt_ECA_B1ColoCanScr.xml#line=225column=108]
2	FileName	CDSK_KRprt_ECA_B1ColoCanScr.xml
	Line	239
	Column	105
	Message	Code 5351000124100, codeSystem http://snomed.info/sct not found in Ontoserver.
	Reference	KNART [file:CDSK_KRprt_ECA_B1ColoCanScr.xml#line=239column=105]