Endocrinology: Hypoglycemia Rule KNART Validation Report

Rule: Validation Report

Contract: VA118-16-D-1008, Task Order (TO): VA-118-16-F-1008-0007, CLIN0003AG

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

Endocrinology: Hypoglycemia 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 Copyright © 2018 B3 Group, Inc. Copyright © 2018 Cognitive Medical Systems, Inc.

B3 Group, Inc.

NOTICE OF GOVERNMENT COPYRIGHT LICENSE AND UNLIMITED RIGHTS LICENSE

Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License.

You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

Portions of this content are derivative works from content produced by Cognitive Medical Systems, Inc. licensed under the Apache License, Version 2.0

Additional portions of this content are derivative works from content contributed by Motive Medical Intelligence Inc., under Creative Commons Attribution-ShareAlike 4.0.

Contributions from 2013-2018 were performed either by US Government employees, or under US Veterans Health Administration contracts.

US Veterans Health Administration contributions by government employees are work of the U.S. Government and are not subject to copyright protection in the United States. Portions contributed by government employees are USGovWork (17USC §105). Not subject to copyright.

 $See: \ https://www.usa.gov/government-works$

Contribution by contractors to the US Veterans Health Administration during this period are contractually contributed under the Apache License, Version 2.0 and US Government sponsorship is acknowledged under Contract VA118-16-D-1008, Task Order VA11817F10080007.

Cognitive Medical Systems, Inc.

Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License.

You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

This and related content produced by Cognitive Medical Systems, Inc. licensed under the Apache License, Version 2.0 is available at: https://bitbucket.org/cogmedsys/hl7-kas-examples

Additional portions of this content are derivative works from content contributed by Motive Medical Intelligence Inc., under Creative Commons Attribution-ShareAlike 4.0. https://bitbucket.org/cogmedsys/kas-source-material

Contributions from 2013-2018 were performed either by US Government employees, or under US Veterans Health Administration contracts.

US Veterans Health Administration contributions by government employees are work of the U.S. Government and are not subject to copyright protection in the United States. Portions contributed by government employees are USGovWork (17USC §105). Not subject to copyright. See: https://www.usa.gov/government-works

Contribution by contractors to the US Veterans Health Administration during this period are contractually contributed under the Apache License, Version 2.0 and US Government sponsorship is acknowledged under Contract VA118-16-D-1008-0007.

Table of Contents

1. Basic File and Well-formedness Tests	1
2. XSD Schema Checks	2
3. Schematron Checks	3
4. Terminology Checks via Ontoserver	4

List of Tables

1.1.	Summary	1
2.1.	KAS Schema Validation Summary	2
3.1.	Editorial Convention Check	3
	Ontoserver Information	
4.2.	Terminology and ANF Usage	4
	TSR Requested Codes	
	SOLOR Placeholders	

Chapter 1. Basic File and Well- formedness Tests

Table 1.1. Summary

Information	Value
File name	CDSK_KRprt_ECA_B3Hypogly.xml
File size	73.0 KB
Type	Rule
Publication Date	06/18/2018
File Modification Date	06/18/2018 16:12:03
Well-formed XML	YES
MD5	a3b103ec44b0d4356e9f8d19fad74269

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

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 Check	S	06/18/2018 16:12:33
SNOMED	Version	http://snomed.info/sct/731000124108/version/20170901,http://snomed.info/sct/9000000000000000000000000000000000000
	Codes	443237
LOINC	Version	2.61,2.63
	Codes	126207
RXNorm	Version	Does not exist
	Codes	0
v3 Code System	Version	2016-03-23
EducationLevel	Codes	9

Table 4.2. Terminology and ANF Usage

Terminology References				
Total Codes Used ^a		35		
Resolved b		31		
Unresolved ^c	4	TSR Requested Codes ^d	1	
		SOLOR Placeholder Codes e	3	
		Other Unresolved f	0	
ANF Model Reference Information				
anf:ClinicalStatement		36		
anf:TSR-NoModel g		0		

^aTotal number of unique codes referenced in the KNART XML.

^bNumber of unique codes used in the KNART XML and present in ontoserver.

^cNumber of unique codes used in the KNART XML and not found in ontoserver.

^dNumber of unique code system and code pairs referenced in the KNART XML with a placeholder ('TSR-NoCode').

^eNumber of unique codes in uuid form referenced in the KNART XML.

^fNumber of other unique codes not found in ontoserver, e.g. RXNorm codes.

gKAS 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_B3Hypogly.xml
	Line	625
	Column	112
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=625column=112]
2	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	640
	Column	112
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=640column=112]
3	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	655
	Column	112
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=655column=112]
4	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	669
	Column	112
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=669column=112]
5	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	684
	Column	112
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=684column=112]
6	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	698
	Column	112
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode

	Information	Value
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=698column=112]
7	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	712
	Column	112
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=712column=112]
8	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	726
	Column	112
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=726column=112]
9	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	815
	Column	118
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=815column=118]
10	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	830
	Column	118
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=830column=118]
11	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	846
	Column	118
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=846column=118]
12	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	861
	Column	118

	Information	Value
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=861column=118]
13	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	876
	Column	118
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=876column=118]
14	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	891
	Column	118
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=891column=118]
15	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	906
	Column	118
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=906column=118]
16	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	921
	Column	118
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=921column=118]
17	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	936
	Column	118
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=936column=118]
18	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	951

	Information	Value
	Column	118
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=951column=118]
19	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	1001
	Column	118
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=1001column=118]
20	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	1016
	Column	118
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=1016column=118]
21	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	1032
	Column	118
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=1032column=118]
22	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	1047
	Column	118
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=1047column=118]
23	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	1062
	Column	118
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=1062column=118]
24	FileName	CDSK_KRprt_ECA_B3Hypogly.xml

	Information	Value
	Line	1077
	Column	118
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=1077column=118]
25	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	1092
	Column	118
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=1092column=118]
26	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	1107
	Column	118
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=1107column=118]
27	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	1122
	Column	118
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=1122column=118]
28	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	1137
	Column	118
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=1137column=118]

Table 4.4. SOLOR Placeholders

	Information	Value
1	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	353
	Column	74

	Information	Value
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=353column=74]
2	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	371
	Column	62
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=371column=62]
3	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	376
	Column	62
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=376column=62]
4	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	396
	Column	70
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=396column=70]
5	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	396
	Column	70
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: 729d3508-98ba-4a1d-8334-9e024a0a760e
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=396column=70]
6	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	421
	Column	70
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=421column=70]
7	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	438
	Column	62
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=438column=62]
8	FileName	CDSK_KRprt_ECA_B3Hypogly.xml

	Information	Value
	Line	444
	Column	62
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=444column=62]
9	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	450
	Column	62
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=450column=62]
10	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	456
	Column	62
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=456column=62]
11	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	462
	Column	62
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=462column=62]
12	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	468
	Column	62
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=468column=62]
13	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	474
	Column	62
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=474column=62]
14	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	480
	Column	62
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a

	Information	Value
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=480column=62]
15	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	486
	Column	62
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=486column=62]
16	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	492
	Column	62
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=492column=62]
17	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	498
	Column	62
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=498column=62]
18	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	504
	Column	62
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=504column=62]
19	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	510
	Column	62
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=510column=62]
20	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	517
	Column	62
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=517column=62]
21	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	517

	Information	Value
	Column	62
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: 598fef10-35e6-4460-a507-d23cee99c9fa
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=517column=62]
22	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	523
	Column	62
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=523column=62]
23	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	529
	Column	62
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=529column=62]
24	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	604
	Column	62
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=604column=62]
25	FileName	CDSK_KRprt_ECA_B3Hypogly.xml
	Line	610
	Column	62
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: a997cc03-3e99-40eb-833a-6374c7750a3a
	Reference	KNART [file:CDSK_KRprt_ECA_B3Hypogly.xml#line=610column=62]