# Gastroenterology: Hepatitis C - Elbasvir/Grazoprevir Order Set KNART Validation Report

**Order Set: Validation Report** 

Contract: VA118-16-D-1008, Task Order (TO): VA-118-16-F-1008-0007, CLIN0004AM

#### **Department of Veterans Affairs**



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

Publication date 06/14/2018

Version: 1.0

# Gastroenterology: Hepatitis C - Elbasvir/Grazoprevir Order Set KNART Validation Report: Order Set: Validation Report

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

Publication date 06/14/2018 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
4.1. Ontoserver Information	4
4.2. Terminology and ANF Usage	4
4.3. TSR Requested Codes	5
4.4. SOLOR Placeholders	5
4.5. Other Unresolved	5

# **Chapter 1. Basic File and Well- formedness Tests**

**Table 1.1. Summary** 

Information	Value
File name	CDSK_KRprt_OS_B28HepCElbGraz.xml
File size	218.0 KB
Type	Order Set
Publication Date	06/14/2018
File Modification Date	06/14/2018 09:20:14
Well-formed XML	YES
MD5	4da2db2e4bc9c9336158eb722cc4f3dc

# **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	TS .	06/14/2018 09:20:43
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	Version	2016-03-23
EducationLevel	Codes	9

Table 4.2. Terminology and ANF Usage

Terminology References				
Total Codes Used <sup>a</sup>		32		
Resolved b		26		
Unresolved <sup>c</sup>	6	TSR Requested Codes <sup>d</sup>	1	
		SOLOR Placeholder Codes e	1	
		Other Unresolved f	4	
ANF Model Reference Information				
anf:ClinicalStatement		46		
anf:TSR-NoModel <sup>g</sup>		0		

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

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

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

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

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

<sup>&</sup>lt;sup>f</sup>Number 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_OS_B28HepCElbGraz.xml		CDSK_KRprt_OS_B28HepCElbGraz.xml
	Line	2916
	Column	126
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: TSR-NoCode
	Reference	KNART [file:CDSK_KRprt_OS_B28HepCElbGraz.xml#line=2916column=126]

#### **Table 4.4. SOLOR Placeholders**

	Information	Value
1	FileName	CDSK_KRprt_OS_B28HepCElbGraz.xml
	Line	680
	Column	222
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: 8671fdfe-53a5-4cae-91a3-61fd23f5bbd4
	Reference	KNART [file:CDSK_KRprt_OS_B28HepCElbGraz.xml#line=680column=222]
2	FileName	CDSK_KRprt_OS_B28HepCElbGraz.xml
	Line	2798
	Column	240
	Message	TSR requested for codeSystem: http://snomed.info/sct and code: 8671fdfe-53a5-4cae-91a3-61fd23f5bbd4
	Reference	KNART [file:CDSK_KRprt_OS_B28HepCElbGraz.xml#line=2798column=240]

**Table 4.5. Other Unresolved** 

	Information	Value
1	FileName	CDSK_KRprt_OS_B28HepCElbGraz.xml
	Line	294
	Column	108
	Message	Code 453231000124104, codeSystem http://snomed.info/sct not found in Ontoserver.
	Reference	KNART [file:CDSK_KRprt_OS_B28HepCElbGraz.xml#line=294column=108]
2	FileName	CDSK_KRprt_OS_B28HepCElbGraz.xml
	Line	757
	Column	82
	Message	Code 1734636, codeSystem http://www.nlm.nih.gov/research/umls/rxnorm not found in Ontoserver.

	Information	Value
	Reference	KNART [file:CDSK_KRprt_OS_B28HepCElbGraz.xml#line=757column=82]
3	FileName	CDSK_KRprt_OS_B28HepCElbGraz.xml
	Line	847
	Column	82
	Message	Code 1734636, codeSystem http://www.nlm.nih.gov/research/umls/rxnorm not found in Ontoserver.
	Reference	KNART [file:CDSK_KRprt_OS_B28HepCElbGraz.xml#line=847column=82]
4	FileName	CDSK_KRprt_OS_B28HepCElbGraz.xml
	Line	929
	Column	82
	Message	Code 312817, codeSystem http://www.nlm.nih.gov/research/umls/rxnorm not found in Ontoserver.
	Reference	KNART [file:CDSK_KRprt_OS_B28HepCElbGraz.xml#line=929column=82]
5	FileName	CDSK_KRprt_OS_B28HepCElbGraz.xml
	Line	983
	Column	82
	Message	Code 312817, codeSystem http://www.nlm.nih.gov/research/umls/rxnorm not found in Ontoserver.
	Reference	KNART [file:CDSK_KRprt_OS_B28HepCElbGraz.xml#line=983column=82]
6	FileName	CDSK_KRprt_OS_B28HepCElbGraz.xml
	Line	1074
	Column	82
	Message	Code 1734636, codeSystem http://www.nlm.nih.gov/research/umls/rxnorm not found in Ontoserver.
	Reference	KNART [file:CDSK_KRprt_OS_B28HepCElbGraz.xml#line=1074column=82]
7	FileName	CDSK_KRprt_OS_B28HepCElbGraz.xml
	Line	1156
	Column	82
	Message	Code 312817, codeSystem http://www.nlm.nih.gov/research/umls/rxnorm not found in Ontoserver.
	Reference	KNART [file:CDSK_KRprt_OS_B28HepCElbGraz.xml#line=1156column=82]
8	FileName	CDSK_KRprt_OS_B28HepCElbGraz.xml
	Line	1212
	Column	82

	Information	Value
	Message	Code 312817, codeSystem http://www.nlm.nih.gov/research/umls/rxnorm not found in Ontoserver.
	Reference	KNART [file:CDSK_KRprt_OS_B28HepCElbGraz.xml#line=1212column=82]
9	FileName	CDSK_KRprt_OS_B28HepCElbGraz.xml
	Line	1317
	Column	82
	Message	Code 312817, codeSystem http://www.nlm.nih.gov/research/umls/rxnorm not found in Ontoserver.
	Reference	KNART [file:CDSK_KRprt_OS_B28HepCElbGraz.xml#line=1317column=82]
10	FileName	CDSK_KRprt_OS_B28HepCElbGraz.xml
	Line	1399
	Column	82
	Message	Code 312817, codeSystem http://www.nlm.nih.gov/research/umls/rxnorm not found in Ontoserver.
	Reference	KNART [file:CDSK_KRprt_OS_B28HepCElbGraz.xml#line=1399column=82]
11	FileName	CDSK_KRprt_OS_B28HepCElbGraz.xml
	Line	1464
	Column	82
	Message	Code 312817, codeSystem http://www.nlm.nih.gov/research/umls/rxnorm not found in Ontoserver.
	Reference	KNART [file:CDSK_KRprt_OS_B28HepCElbGraz.xml#line=1464column=82]
12	FileName	CDSK_KRprt_OS_B28HepCElbGraz.xml
	Line	1554
	Column	82
	Message	Code 1734636, codeSystem http://www.nlm.nih.gov/research/umls/rxnorm not found in Ontoserver.
	Reference	KNART [file:CDSK_KRprt_OS_B28HepCElbGraz.xml#line=1554column=82]
13	FileName	CDSK_KRprt_OS_B28HepCElbGraz.xml
	Line	1644
	Column	82
	Message	Code 1734636, codeSystem http://www.nlm.nih.gov/research/umls/rxnorm not found in Ontoserver.
	Reference	KNART [file:CDSK_KRprt_OS_B28HepCElbGraz.xml#line=1644column=82]
14	FileName	CDSK_KRprt_OS_B28HepCElbGraz.xml
	Line	1721

	Information	Value
	Column	82
	Message	Code 312817, codeSystem http://www.nlm.nih.gov/research/umls/rxnorm not found in Ontoserver.
	Reference	KNART [file:CDSK_KRprt_OS_B28HepCElbGraz.xml#line=1721column=82]
15	FileName	CDSK_KRprt_OS_B28HepCElbGraz.xml
	Line	1759
	Column	82
	Message	Code 312817, codeSystem http://www.nlm.nih.gov/research/umls/rxnorm not found in Ontoserver.
	Reference	KNART [file:CDSK_KRprt_OS_B28HepCElbGraz.xml#line=1759column=82]
16	FileName	CDSK_KRprt_OS_B28HepCElbGraz.xml
	Line	1849
	Column	82
	Message	Code 1734636, codeSystem http://www.nlm.nih.gov/research/umls/rxnorm not found in Ontoserver.
	Reference	KNART [file:CDSK_KRprt_OS_B28HepCElbGraz.xml#line=1849column=82]
17	FileName	CDSK_KRprt_OS_B28HepCElbGraz.xml
	Line	1934
	Column	82
	Message	Code 1734636, codeSystem http://www.nlm.nih.gov/research/umls/rxnorm not found in Ontoserver.
	Reference	KNART [file:CDSK_KRprt_OS_B28HepCElbGraz.xml#line=1934column=82]
18	FileName	CDSK_KRprt_OS_B28HepCElbGraz.xml
	Line	2011
	Column	82
	Message	Code 312817, codeSystem http://www.nlm.nih.gov/research/umls/rxnorm not found in Ontoserver.
	Reference	KNART [file:CDSK_KRprt_OS_B28HepCElbGraz.xml#line=2011column=82]
19	FileName	CDSK_KRprt_OS_B28HepCElbGraz.xml
	Line	2054
	Column	82
	Message	Code 312817, codeSystem http://www.nlm.nih.gov/research/umls/rxnorm not found in Ontoserver.
	Reference	KNART [file:CDSK_KRprt_OS_B28HepCElbGraz.xml#line=2054column=82]
20	FileName	CDSK_KRprt_OS_B28HepCElbGraz.xml

	Information	Value
	Line	2145
	Column	82
	Message	Code 312817, codeSystem http://www.nlm.nih.gov/research/umls/rxnorm not found in Ontoserver.
	Reference	KNART [file:CDSK_KRprt_OS_B28HepCElbGraz.xml#line=2145column=82]
21	FileName	CDSK_KRprt_OS_B28HepCElbGraz.xml
	Line	2206
	Column	82
	Message	Code 312817, codeSystem http://www.nlm.nih.gov/research/umls/rxnorm not found in Ontoserver.
	Reference	KNART [file:CDSK_KRprt_OS_B28HepCElbGraz.xml#line=2206column=82]
22	FileName	CDSK_KRprt_OS_B28HepCElbGraz.xml
	Line	2274
	Column	82
	Message	Code 312817, codeSystem http://www.nlm.nih.gov/research/umls/rxnorm not found in Ontoserver.
	Reference	KNART [file:CDSK_KRprt_OS_B28HepCElbGraz.xml#line=2274column=82]
23	FileName	CDSK_KRprt_OS_B28HepCElbGraz.xml
	Line	2356
	Column	82
	Message	Code 312817, codeSystem http://www.nlm.nih.gov/research/umls/rxnorm not found in Ontoserver.
	Reference	KNART [file:CDSK_KRprt_OS_B28HepCElbGraz.xml#line=2356column=82]
24	FileName	CDSK_KRprt_OS_B28HepCElbGraz.xml
	Line	2506
	Column	164
	Message	Code 1421000205106, codeSystem http://snomed.info/sct not found in Ontoserver.
	Reference	KNART [file:CDSK_KRprt_OS_B28HepCElbGraz.xml#line=2506column=164]