

# **Mental Health: Positive Suicide Risk Screening Order Set**

## **Order Set: Conceptual Structure**

**Contract: VA118-16-D-1008, Task Order  
(TO): VA-118-16-F-1008-0007, CLIN0008BA**

**Department of Veterans Affairs (VA)**



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

**Publication date 06/18/2018**

**Version: 1.0**

---

# Mental Health: Positive Suicide Risk Screening Order Set: Order Set: Conceptual Structure

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

Preface .....	v
Artifact Applicability .....	vi
Models .....	vii
1. External Data Definitions .....	1
2. Expression Definitions .....	2
3. Consults .....	3
4. Follow up .....	4
5. Tabular List .....	5
6. Behavior Symbols .....	6
A. References .....	8

---

# List of Tables

- 1. Revision History ..... v
- 2. Clinical White Paper Contributors ..... v
- 3. Artifact Identifier ..... v
- 4. Applicability Foci, Description and Codes ..... vi
- 5. Model References ..... vii
- 5.1. Terminology Versions ..... 5
- 5.2. Terminology References ..... 5
- 6.1. Group Organizational Behavior ..... 6
- 6.2. Group Selection Behavior ..... 6
- 6.3. Required Behavior ..... 6
- 6.4. Precheck Behavior ..... 7
- 6.5. Cardinality Behavior ..... 7
- 6.6. Item Flags ..... 7
- 6.7. Read Only Behavior ..... 7

---

# Preface

**Table 1. Revision History**

Date	Life Cycle Event
June 18, 2018	Published
April 27, 2018	Published
April 27, 2018	Created
April 6, 2018	Created
April 6, 2018	Pre-published

**Table 2. Clinical White Paper Contributors**

Name	Role	Affiliation
Rani Hoff, PhD MPH	Reviewer	Director, Northeast Program Evaluation Center Office of Mental Health and Suicide Prevention (10NC5) VA Central Office; Professor of Psychiatry Yale University School of Medicine
Bridget Matarazzo	Reviewer	Director of Clinical Services Rocky Mountain Mental Illness Research, Education and Clinical Center (MIRECC) Denver, CO 80220
Ira Katz	Reviewer	Senior Consultant for Mental Health Program Analysis
Edd Post	Reviewer	VA HSR&D

**Table 3. Artifact Identifier**

Domain	Artifact ID	Name
urn:va.gov:kbs:knart:artifact:r1	88b26417-85e5-5de4-9267-2848aaf52e71	O20

---

# Artifact Applicability

**Table 4. Applicability Foci, Description and Codes**

Focus	Description	Code System	Code	Value Set	Value Set Version
TargetUser	Mental health providers; other physicians and nurses performing screening			N/A	N/A
ClinicalFocus	Patients identified as being at risk for suicide; members of patient cohorts identified for suicide risk screening			N/A	N/A
ClinicalVenue	Mental Health Primary Care			N/A	N/A
ClinicalVenue	Outpatient	SNOMED CT	33022008   Hospital-based outpatient department (environment)	N/A	N/A

---

# Models

**Table 5. Model References**

<b>Referenced Model</b>	<b>Description</b>
urn:solor.io:anf-model:1.0	VA Analysis Normal Form Model

---

# Chapter 1. External Data Definitions

No externalData expression definitions and no trigger definitions are present.



---

# Chapter 2. Expression Definitions

No expression definitions are present.

---

# Chapter 3. Consults

# Refer to mental health provider (routine)

actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]

statementType: Precoordinated Expression 385644000 |Requested (qualifier value)|

topic: Precoordinated Expression 390866009 |Referral to mental health team (procedure)|

priority: Precoordinated Expression 50811001 |Routine (qualifier value)|

# Refer to mental health provider now (same day)

actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]

statementType: Precoordinated Expression 385644000 |Requested (qualifier value)|

topic: Precoordinated Expression 390866009 |Referral to mental health team (procedure)|

---

# Chapter 4. Follow up

## Return Instructions

```
# Timeframe
# prompt: Enter number of time intervals
response: Integer (Single)
responseBinding: Property ("returnTimeFrame")
# prompt: Select time interval
response: EntityName (Single)
response range: EnumerationConstraint (List)
    item: Days(258703001 |day (qualifier value)|)
    item: Weeks(258705008 |week (qualifier value)|)
    item: Months(258706009 |month (qualifier value)|)
responseBinding: Property ("returnTimeFrameUnit")
# Details?
prompt:
response: String (Single)
# Return to clinic in a specified time frame
actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]
    statementType: Precoordinated Expression 385644000 |Requested (qualifier value)|
    topic: Precoordinated Expression 185389009 |Follow-up visit (procedure)|
    timing.lowerBound: returnTimeFrame
    timing.upperBound: returnTimeFrame
    timing.includeLowerBound: true
    timing.includeUpperBound: true
    timing.measureSemantic: returnTimeFrameUnit
```

---

# Chapter 5. Tabular List

## *Terminology Service Request (TSR) Mappings*

**Table 5.1. Terminology Versions**

Name	Identifier	Version
SNOMED CT	2.16.840.1.113883.6.96	United States Edition 20180301

**Table 5.2. Terminology References**

System	Code	Display Text <sup>a</sup>	References <sup>b</sup>
SNOMED CT	185389009  Follow-up visit (procedure)	Precoordinated Expression	1
SNOMED CT	258703001  day (qualifier value)	Days	1
SNOMED CT	258705008  week (qualifier value)	Weeks	1
SNOMED CT	258706009  month (qualifier value)	Months	1
SNOMED CT	33022008  Hospital-based outpatient department (environment)	Outpatient	1
SNOMED CT	385644000  Requested (qualifier value)	Precoordinated Expression	3
SNOMED CT	390866009  Referral to mental health team (procedure)	Precoordinated Expression	2
SNOMED CT	50811001  Routine (qualifier value)	Precoordinated Expression	1

<sup>a</sup>If a code is used multiple times in the KNART, only the display text of the first instance is shown.

<sup>b</sup>Count of the number of times the given code system and code pair is used in the KNART.

# Chapter 6. Behavior Symbols

**Table 6.1. Group Organizational Behavior**

Symbol	Name	Definition
#	Sentence Group	A group of related alternative actions is a sentence group if the item referenced by the action is the same in all the actions, and each action simply constitutes a different variation on how to specify the details for that item. For example, two actions that could be in a SentenceGroup are "aspirin, 500 mg, 2 times per day" and "aspirin, 300 mg, 3 times per day". In both cases, aspirin is the item referenced by the action, and the two actions represent two different options for how aspirin might be ordered for the patient. Note that a SentenceGroup would almost always have an associated selection behavior of "AtMostOne", unless it's a required action, in which case, it would be "ExactlyOne".
#	Logical Group	A group with this behavior logically groups its sub-elements, and may be shown as a visual group to the end user, but it is not required to do so.
▶	Visual Group	Any group marked with this behavior should be displayed as a visual group to the end user.

**Table 6.2. Group Selection Behavior**

Symbol	Name	Definition
#	Any	Any number of the items in the group may be chosen, from zero to all.
#	All	All the items in the group must be selected as a single unit.
#	AllOrNone	All the items in the group are meant to be chosen as a single unit: either all must be selected by the end user, or none may be selected.
#	ExactlyOne	The end user must choose one and only one of the selectable items in the group. The user may not choose none of the items in the group.
⊛	AtMostOne	The end user may choose zero or at most one of the items in the group.
*	OneOrMore	The end user must choose a minimum of one, and as many additional as desired.

**Table 6.3. Required Behavior**

Symbol	Name	Definition
◆	Must	An action with this behavior must be included in the actions processed by the end user; the end user may not choose not to include this action.
◇	Could	An action with this behavior may be included in the set of actions processed by the end user.

Symbol	Name	Definition
➤	MustUnlessDocumented	An action with this behavior must be included in the set of actions processed by the end user, unless the end user provides documentation as to why the action was not included.

**Table 6.4. Precheck Behavior**

Symbol	Name	Definition
▲	Yes	An action with this behavior is one of the most frequent actions that is, or should be, included by an end user, for the particular context in which the action occurs. The system displaying the action to the end user should consider "pre-checking" such an action as a convenience for the user.
#	No	An action with this behavior is one of the less frequent actions included by the end user, for the particular context in which the action occurs. The system displaying the actions to the end user would typically not "pre-check" such an action.

**Table 6.5. Cardinality Behavior**

Symbol	Name	Definition
◆	Single	An action with this behavior may only be completed once.
❖	Multiple	An action with this behavior may be repeated multiple times.

**Table 6.6. Item Flags**

Symbol	Name	Definition
☞	fillIn	This item, in a list entry, allows the user to enter a fill in value that is not present in the set of presented choices.

**Table 6.7. Read Only Behavior**

Symbol	Name	Definition
#	true	For a particular action or action group, specifies whether the elements are read only.

---

# Appendix A. References

This appendix contains the list of related resources and supporting documents used in creating this KNART.

## List of References

## Related Resources

[CCWP] *Mental Health: Suicidality Clinical Content White Paper*

[CSD] *Mental Health: Positive Suicide Risk Screening Order Set Conceptual Structure Document*

[KVRpt] *Mental Health: Positive Suicide Risk Screening Order Set KNART Validation Report*

## Supporting Evidence

[CLP 2017] *Columbia–Suicide Severity Rating Scale Screen Version – Recent. Columbia Lighthouse Project website. Accessed October 2017* (link [<https://cssrs.columbia.edu/the-columbia-scale-c-ssrs/cssrs-for-communities-and-healthcare/>])

[IOM 2013] *Committee on the Assessment of the Readjustment Needs of Military Personnel, Veterans, and Their Families, Board on the Health of Select Populations, Institute of Medicine. Returning Home from Iraq and Afghanistan: Assessment of Readjustment Needs of Veterans, Service Members, and Their Families. Washington (DC): National Academies Press (US); Mar 2013. Available from <https://www.ncbi.nlm.nih.gov/books/NBK206864/>.* (link [<https://www.ncbi.nlm.nih.gov/books/NBK206864/>])

[Kroenke 2001] *Kroenke K, Spitzer RL, Williams JB. The PHQ-9: validity of a brief depression severity measure. J Gen Intern Med. 2001;16(9):606-613.* (link [[J Gen Intern Med.](#)])

[OMHSP 2017] *Office of Mental Health and Suicide Prevention. Suicide Among Veterans and Other Americans 2001–2014. U.S. Department of Veterans Affairs Mental Health website. <https://www.mentalhealth.va.gov/docs/2016suicidedatareport.pdf>. Updated August 2017.* (link [<https://www.mentalhealth.va.gov/docs/2016suicidedatareport.pdf>])

[FedRegist 2012] *Title 42 - Public Health. Condition of participation: Patient's rights. 71 FedRegist 71426, Dec. 8, 2006, as amended at 75 FedRegist 70844, Nov. 19, 2010; 77 FedRegist 29074, May 16, 2012. 42 CFR §482.13.* (link [<https://www.federalregister.gov/>])

[TSWF 2017] *Tri-Service Workflow (TSWF). TSWF-CORE AIM Form Version Jan-Apr 2017. TSWF CORE Paper Backup Jan Apr 2017.pdf. (Veterans Administration, materials provided in Mental Health-20170921T220116Z-001.zip, September 21, 2017).* (link [[Mental Health-20170921T220116Z-001.zip](#) September 21, 2017])

[VA 2016] *U.S. Department of Veterans Affairs. VA Suicide Prevention Program Facts about Veteran Suicide. U.S. Department of Veterans Affairs Office of Public and Intergovernmental Affairs website. [https://www.va.gov/opa/publications/factsheets/Suicide\\_Prevention\\_FactSheet\\_New\\_VA\\_Stats\\_070616\\_1400.pdf](https://www.va.gov/opa/publications/factsheets/Suicide_Prevention_FactSheet_New_VA_Stats_070616_1400.pdf). Published July 2016.* (link [[https://www.va.gov/opa/publications/factsheets/Suicide\\_Prevention\\_FactSheet\\_New\\_VA\\_Stats\\_070616\\_1400.pdf](https://www.va.gov/opa/publications/factsheets/Suicide_Prevention_FactSheet_New_VA_Stats_070616_1400.pdf)])

[VADOD 2013] *U.S. Department of Veterans Affairs; U.S. Department of Defense (DoD). VA/DoD Clinical Practice Guideline for the Assessment and Management of Patients at Risk for Suicide. Version 1.0 – June 2013. VA/DoD Clinical Practice Guidelines website. [https://www.healthquality.va.gov/guidelines/MH/srb/VADODCP\\_SuicideRisk\\_Full.pdf](https://www.healthquality.va.gov/guidelines/MH/srb/VADODCP_SuicideRisk_Full.pdf). Published June 2013. (link [[https://www.healthquality.va.gov/guidelines/MH/srb/VADODCP\\_SuicideRisk\\_Full.pdf](https://www.healthquality.va.gov/guidelines/MH/srb/VADODCP_SuicideRisk_Full.pdf)])*

[VADOD 2016] *U.S. Department of Veterans Affairs; U.S. Department of Defense. VA/DoD Clinical Practice Guideline for the Management of Major Depressive Disorder. Version 3.0 – 2016. VA/DoD Clinical Practice Guidelines website. <https://www.healthquality.va.gov/guidelines/MH/mdd/VADoDMDDCPGFINAL82916.pdf>. Published April 2016. (link [<https://www.healthquality.va.gov/guidelines/MH/mdd/VADoDMDDCPGFINAL82916.pdf>])*