

Mental Health: Opioids and Chronic Noncancer Pain Opioid Therapy Risk Report (OTRR)/Stratification Tool for Opioid Risk Mitigation (STORM) Query Documentation Template

Documentation Tem- plate: Conceptual Structure

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

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

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Table of Contents

Preface	vi
Artifact Applicability	viii
Models	ix
1. External Data Definitions	1
2. Expression Definitions	2
3. Opioid Therapy Risk Report (OTTR) Query	3
4. Stratification Tool for Opioid Risk Mitigation (STORM) Query	5
5. Tabular List	6
6. Behavior Symbols	7
A. References	9

List of Tables

1. Revision History	vi
2. Clinical White Paper Contributors	vi
3. Artifact Identifier	vii
4. Applicability Foci, Description and Codes	viii
5. Model References	ix
5.1. Terminology Versions	6
5.2. Terminology References	6
6.1. Group Organizational Behavior	7
6.2. Group Selection Behavior	7
6.3. Required Behavior	7
6.4. Precheck Behavior	8
6.5. Cardinality Behavior	8
6.6. Item Flags	8
6.7. Read Only Behavior	8

Preface

Table 1. Revision History

Date	Life Cycle Event
June 6, 2018	Published
June 6, 2018	Reviewed
March 1, 2018	Pre-published
August 10, 2017	Created

Table 2. Clinical White Paper Contributors

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Table 3. Artifact Identifier

Domain	Artifact ID	Name
urn:va.gov:kbs:knart:artifact:rl	9e089171-3be9-5f50-9e04-fe8463a05f16	O29

Artifact Applicability

Table 4. Applicability Foci, Description and Codes

Focus	Description	Code System	Code	Value Set	Value Set Version
TargetUser	Primary Care Provider (PCP)	SNOMED CT	453231000124104 Primary care provider (occupation)	N/A	N/A
PatientAgeGroup	Adult	SNOMED CT	133936004 Adult (person)	N/A	N/A
ClinicalVenue	Outpatient	SNOMED CT	33022008 Hospital-based outpatient department (environment)	N/A	N/A

Models

Table 5. Model References

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

Chapter 1. External Data Definitions

No external data expression definitions and no trigger definitions are present.

Chapter 2. Expression Definitions

No expression definitions are present.

Chapter 3. Opioid Therapy Risk Report (OTTR) Query

Represented Concepts: 073a1b36-a013-4199-9d56-274cc3605908 |Opioid Therapy Risk Report (assessment scale)

◆ District – VA Integrated Service Network (VISN)

prompt:

response: String (Single)

◆ Parent Station

prompt:

response: String (Single)

◆ Provider Group

prompt:

response: Boolean (Single)

response EnumerationConstraint (List)

range:

item: Mental Health(TSR-NoCode)

item: Primary Care(TSR-NoCode)

item: Last opioid prescriber(TSR-NoCode)

item: Last benzodiazepine prescriber(TSR-NoCode)

◆ Team(s)

prompt:

response: String (Single)

◆ Provider(s)

prompt:

response: String (Single)

◆ Opioid Group(s)

prompt:

response: String (Single)

◆ Opioid Use Status

prompt:

response: Boolean (Multiple)

response EnumerationConstraint (List)

range:

item: Long-term opioid therapy (LTOT)(TSR-NoCode)

item: Active opioid prescription(TSR-NoCode)

item: Opioid prescription in past year(TSR-NoCode)

◆ Opioid use category

prompt:

response: Boolean (Single)

response EnumerationConstraint (List)

range:

Opioid Therapy Risk
Report (OTTR) Query

item: All opioids(TSR-NoCode)

item: Exclude buprenorphine/naloxone only patients(TSR-NoCode)

item: Exclude tramadol only patients(TSR-NoCode)

item: Exclude tramadol and buprenorphine/naloxone only patients(TSR-NoCode)

item: Buprenorphine/naloxone only patients(TSR-NoCode)

item: Tramadol only patients(TSR-NoCode)

Chapter 4. Stratification Tool for Opioid Risk Mitigation (STORM) Query

Represented Concepts: 2eab2687-6f77-4218-a5a7-01af4bc04ab1 |Stratification Tool for Opioid Risk Mitigation (assessment scale)

◆ Station

prompt:

response: String (Single)

◆ Prescriber

prompt:

response: String (Single)

◆ Risk group

prompt:

response: String (Single)

◆ Group type

prompt:

response: String (Single)

◆ Measures not met

prompt:

response: String (Single)

◆ STORM cohort

prompt:

response: String (Single)

◆ Social Security number (optional)

prompt:

response: String (Single)

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 ^a	References ^b
SNOMED CT	073a1b36-a013-4199-9d56-274c-c3605908 Opioid Therapy Risk Report (assessment scale)	Postcoordinated Expression	1
SNOMED CT	133936004 Adult (person)	Adult	1
SNOMED CT	2eab2687-6f77-4218-a5a7-01af4bc04ab1 Stratification Tool for Opioid Risk Mitigation (assessment scale)	Postcoordinated Expression	1
SNOMED CT	33022008 Hospital-based outpatient department (environment)	Outpatient	1
SNOMED CT	453231000124104 Primary care provider (occupation)	Primary Care Provider (PCP)	1
SNOMED CT	TSR-NoCode ^c	Mental Health	13

^aIf a code is used multiple times in the KNART, only the display text of the first instance is shown.

^bCount of the number of times the given code system and code pair is used in the KNART.

^cTSR-NoCode is a placeholder indicating a code was requested, but was not provided.

Chapter 6. Behavior Symbols

Table 6.1. Group Organizational Behavior

Sym- bol	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

Sym- bol	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

Sym- bol	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.

Sym- bol	Name	Definition
◇	Could	An action with this behavior may be included in the set of actions processed by the end user.
➤	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

Sym- bol	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

Sym- bol	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

Sym- bol	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

Sym- bol	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] *Opioids and Chronic Noncancer Pain*

[CSD] *Mental Health: Opioids and Chronic Noncancer Pain Opioid Therapy Risk Report (OTRR)/Stratification Tool for Opioid Risk Mitigation (STORM) Query Documentation Template Conceptual Structure Document*

[KVRpt] *Mental Health: Opioids and Chronic Noncancer Pain Opioid Therapy Risk Report (OTRR)/Stratification Tool for Opioid Risk Mitigation (STORM) Query Documentation Template KNART Validation Report*

Supporting Evidence

[Oliva 2017] Oliva EM, Bowe T, Tavakoli S, et al. Development and applications of the Veterans Health Administration's Stratification Tool for Opioid Risk Mitigation (STORM) to improve opioid safety and prevent overdose and suicide. *Psychol Serv.* 2017;14(1):34-49. (link [[https://www.ncbi.nlm.nih.gov/pubmed/?term=Development+and+applications+of+the+Veterans+Health+Administration%27s+Stratification+Tool+for+Opioid+Risk+Mitigation+\(STORM\)+to+improve+opioid+safety+and+prevent+overdose+and+suicide](https://www.ncbi.nlm.nih.gov/pubmed/?term=Development+and+applications+of+the+Veterans+Health+Administration%27s+Stratification+Tool+for+Opioid+Risk+Mitigation+(STORM)+to+improve+opioid+safety+and+prevent+overdose+and+suicide)])

[Trafton 2017a] J. Trafton. *Opioid risk stratification and mitigation tool: supporting targeted efforts to encourage and track use of recommended strategies for prevention of adverse events in patients with opioid prescriptions or opioid use disorders (AAPM December 2015 panel presentation for clearance2; materials provided by Jodie Trafton, December 12, 2017)*

[Sanders 2017] *Opioid Therapy Risk Report patient details (Office of Health Informatics - Opioid KNARTs Harmonization Project - OTRR Screenshots 20171222.docx; email communication and materials provided by William J. Sanders, December 22, 2017).*

[Robeck 2017a] *PBM CPPO pain PhARMD template: frequently asked questions (PBM PAIN PhARMD TEMPLATE FAQ DOCUMENT2.pptx; materials provided by Ilene R. Robeck, November 27, 2017)*

[Robeck 2017b] *PBM PhARMD pain documentation template version 1: installation instructions, 28AUG2017 (PhARMD Pain Mgmt Note Template_Install Screenshots_28AUG2017.pptx; materials provided by Ilene R. Robeck, November 27, 2017).*

[Trafton 2017b] *STORM: Patient Detail Dashboard: Stratification Tool for Opioid Risk Mitigation (STORMde-ided-screenshot.png; materials provided by Jodie Trafton, December 12, 2017).*

[Rosenberg 2017] Rosenberg JM, Bilka BM, Wilson SM, Spevak C. *Opioid Therapy for Chronic Pain: Overview of the 2017 US Department of Veterans Affairs and US Department of Defense Clinical Practice Guideline. Pain Med.* 2017 Sep 1 (link [<https://www.ncbi.nlm.nih.gov/pubmed/29025128>])

[VA 2016] *U.S. Department of Veterans Affairs; Veterans Health Administration. Querying State Prescription Drug Monitoring Programs (PDMP). VHA Directive 1306. VHA Publications website. <https://www.va.gov/vha->*

- publications/ViewPublication.asp?pub_ID=3283. Published October 19, 2016. Accessed February 8, 2018* (link [https://www.va.gov/vhapublications/ViewPublication.asp?pub_ID=3283])
- [VA 2014] *U.S. Department of Veterans Affairs; Veterans Health Administration. Informed Consent for Long-Term Opioid Therapy for Pain. VHA Directive 1005. VHA Publications website. https://www.va.gov/vhapublications/ViewPublication.asp?pub_ID=3005. Published May 6, 2014. Accessed February 8, 2018.* (link [https://www.va.gov/vhapublications/ViewPublication.asp?pub_ID=3005])
- [NLM 2016a] *U.S. National Library of Medicine. BENGAY GREASELESS PAIN RELIEVING- menthol, unspecified form and methyl salicylate cream [Johnson and Johnson Consumer Inc.]. DailyMed website. https://dailymed.nlm.nih.gov/dailymed/fda/fdaDrugXsl.cfm?setid=0d75b27f-496e-495d-b788-0dd3c0f5a32f. Revised April 2016* (link [<https://dailymed.nlm.nih.gov/dailymed/fda/fdaDrugXsl.cfm?setid=0d75b27f-496e-495d-b788-0dd3c0f5a32f>])
- [NLM 2015a] *U.S. National Library of Medicine. CAPSAICIN ARTHRITIS PAIN RELIEF CREAM-capsaicin cream. [McCure Health Solutions Inc.]. DailyMed website. https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=7c31736c-eda4-4390-a2fb-eab2fd495f7d. Revised April 2015.* (link [<https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=7c31736c-eda4-4390-a2fb-eab2fd495f7d>])
- [NLM 2017a] *U.S. National Library of Medicine. CELECOXIB - celecoxib capsule. [Jubilant Cadista Pharmaceuticals Inc.]. DailyMed website. https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=27d813ea-7798-09cb-734b-b970d7248f1f. Revised April 2017.* (link [<https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=27d813ea-7798-09cb-734b-b970d7248f1f>])
- [NLM 2017b] *U.S. National Library of Medicine. DICLOFENAC SODIUM-diclofenac gel. [Amneal Pharmaceuticals LLC]. DailyMed website. https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=f64b68a5-d6d2-4e92-87e7-90af04c1f9db. Revised January 2017* (link [<https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=f64b68a5-d6d2-4e92-87e7-90af04c1f9db>])
- [NLM 2016b] *U.S. National Library of Medicine. IBU-ibuprofen tablet. [Dr. Reddy's Laboratories Limited]. DailyMed website. https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=24731405-219c-79b4-ecf0-7d5fbfda94ba. Revised October 2016.* (link [<https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=24731405-219c-79b4-ecf0-7d5fbfda94ba>])
- [NLM 2015b] *U.S. National Library of Medicine. LIDODERM-lidocaine patch. [Endo Pharmaceuticals, Inc.]. DailyMed website. https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=f1c40164-4626-4290-9012-c00e33420a33. Revised January 2015.* (link [<https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=f1c40164-4626-4290-9012-c00e33420a33>])
- [NLM 2018] *U.S. National Library of Medicine. NAPROSYN-naproxen tablet; EC-NAPROSYN-naproxen tablet, delayed release; NAPROSYN-naproxen suspension; ANAPROX-naproxen sodium tablet; ANAPROX DS-naproxen sodium tablet. [Genentech, Inc.]. DailyMed website. https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=68848217-03c9-4377-9be6-6f567e629129. Revised January 2018.* (link [<https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=68848217-03c9-4377-9be6-6f567e629129>])
- [NLM 2017c] *U.S. National Library of Medicine. REDICARE IBUPROFEN- ibuprofen 200mg tablet, film coated. [Redicare LLC]. DailyMed website. https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=45e-b33f0-71e2-11d5-e054-00144ff88e88. Revised January 2017.* (link [<https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=45e-b33f0-71e2-11d5-e054-00144ff88e88>])
- [NLM 2016c] *U.S. National Library of Medicine. TYLENOL REGULAR STRENGTH- acetaminophen tablet [Johnson and Johnson Consumer Inc., McNeil Consumer Healthcare Division]. DailyMed Website. https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=1622f694-4d63-4c56-8737-fae31f0ecfb7. Revised October 2016.* (link [<https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=1622f694-4d63-4c56-8737-fae31f0ecfb7>])