

Mental Health: Chronic Noncancer Pain 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: Chronic Noncancer Pain 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	vii
Models	viii
1. External Data Definitions	1
2. Expression Definitions	2
3. Medications	3
4. Laboratory Tests	13
5. Consults and Referrals	14
6. Patient and Caregiver Education	19
7. Tabular List	20
8. Behavior Symbols	28
A. References	30

List of Tables

1. Revision History	v
2. Clinical White Paper Contributors	v
3. Artifact Identifier	vi
4. Applicability Foci, Description and Codes	vii
5. Model References	viii
7.1. Terminology Versions	20
7.2. Terminology References	20
8.1. Group Organizational Behavior	28
8.2. Group Selection Behavior	28
8.3. Required Behavior	28
8.4. Precheck Behavior	29
8.5. Cardinality Behavior	29
8.6. Item Flags	29
8.7. Read Only Behavior	29

Preface

Table 1. Revision History

Date	Life Cycle Event
June 18, 2018	Published
May 29, 2018	Published
May 29, 2018	Reviewed
March 1, 2018	Pre-published
August 10, 2017	Created

Table 2. Clinical White Paper Contributors

Name	Role	Affiliation
Ilene Robeck, Physician	Author	Physician, Richmond VA Medical Center (VAMC), Richmond, VA
Jodie Trafton, Director	Author	Director, VA Program Evaluation and Resource Center, VA Palo Alto Health Care System, Menlo Park, CA
Friedhelm Sandbrink, Acting Director of Pain Management Program Office	Author	Acting Director of Pain Management Program Office, Department of VA, Washington, DC
Elizabeth Oliva, OEND Coordinator	Author	VA National Opioid Overdose Education and Naloxone Distribution (OEND) Coordinator, VA Palo Alto Health Care System, Menlo Park, CA
Eleanor Lewis, Research Health Science Specialist	Author	Research Health Science Specialist, VA Palo Alto Health Care System, Menlo Park, CA
Kendall Browne, Clinical Psychologist	Author	Clinical Psychologist, Seattle Puget Sound Health Care System, Seattle, WA
Alicia Heapy, Mental Health	Author	Mental Health, VA New England Healthcare System, West Haven, CT
Karen Drexler, National Mental Health Program Director	Author	National Mental Health Program Director, Substance Use Disorders, VA Central Office, Atlanta, GA
Andrew Saxon, Physician	Author	Physician, Seattle Health Care System, Seattle, WA
Melissa Christopher, National Director	Author	National Director, Academic Detailing VACO Pharmacy Benefits Management (PBM), Mission Valley Annex VISN 22, San Diego, CA
Daina Wells	Author	United States

Name	Role	Affiliation
Lucille Burgo, Firm Chief, Primary Care	Author	Firm Chief, Primary Care, VA New England Healthcare System, West Haven, CT
Julianne Himstreet, Pharmacist	Author	Pharmacist, Eugene, OR

Table 3. Artifact Identifier

Domain	Artifact ID	Name
urn:va.gov:kbs:knart:artifact:r1	495c933d-52a6-5e02-98fd-9813222014cf	O21

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
WorkflowSetting	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

Referenced Model	Description
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. Medications

Oral Medications

```
# Ibuprofen 200 mg tablet oral every 4 to 6 hours as needed for pain 100 tablets 2 refills
actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]
    statementType: Precoordinated Expression 385644000 |
    Requested (qualifier value)|
    topic: Postcoordinated Expression [416118004 |Administration
    (procedure)] ->(260686004 |Method (attribute))->[129445006 |
    Administration - action (qualifier value)] ->(363701004 |Direct
    substance (attribute))->[Rx;310965 Ibuprofen 200 MG Oral
    Tablet] ->(410675002 |Route of administration (attribute))-
    >[26643006 |Oral route (qualifier value)]
    unstructured[0]: 100 tablets 2 refills
    unstructured[1]: as needed
    purpose[0]: Postcoordinated Expression [277132007 |
    Therapeutic procedure (procedure)] ->(363702006 |Has focus
    (attribute))->[22253000 |Pain (finding)]
    requestedResult.lowerBound: 1
    requestedResult.upperBound: 1
    requestedResult.includeLowerBound: true
    requestedResult.includeUpperBound: true
    requestedResult.measureSemantic: Precoordinated Expression
    421026006 |Oral tablet (qualifier value)|
    repetition[0].periodDuration.lowerBound: 1
    repetition[0].periodDuration.upperBound: 75
    repetition[0].periodDuration.includeLowerBound: true
    repetition[0].periodDuration.includeUpperBound: true
    repetition[0].periodDuration.measureSemantic: Precoordinated
    Expression 258703001 |day (qualifier value)|
    repetition[0].eventFrequency.lowerBound: 4
    repetition[0].eventFrequency.upperBound: 6
    repetition[0].eventFrequency.includeLowerBound: true
    repetition[0].eventFrequency.includeUpperBound: true
    repetition[0].eventFrequency.measureSemantic:
    Precoordinated Expression 258702006 |hour (qualifier value)|
# Naproxen 250 mg tablet oral 2 times daily as needed for pain 100 tablets 2 refills
actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]
    statementType: Precoordinated Expression 385644000 |
    Requested (qualifier value)|
    topic: Postcoordinated Expression [416118004 |Administration
    (procedure)] ->(260686004 |Method (attribute))->[129445006 |
```

Administration - action (qualifier value)] ->(363701004 |Direct substance (attribute))->[Rx;198013 Naproxen 250 MG Oral Tablet] ->(410675002 |Route of administration (attribute))->[26643006 |Oral route (qualifier value)]

unstructured[0]: 100 tablets 2 refills

unstructured[1]: as needed

purpose[0]: Postcoordinated Expression [277132007 |Therapeutic procedure (procedure)] ->(363702006 |Has focus (attribute))->[22253000 |Pain (finding)]

requestedResult.lowerBound: 1

requestedResult.upperBound: 1

requestedResult.includeLowerBound: true

requestedResult.includeUpperBound: true

requestedResult.measureSemantic: Precoordinated Expression 421026006 |Oral tablet (qualifier value)|

repetition[0].periodDuration.lowerBound: 1

repetition[0].periodDuration.upperBound: 150

repetition[0].periodDuration.includeLowerBound: true

repetition[0].periodDuration.includeUpperBound: true

repetition[0].periodDuration.measureSemantic: Precoordinated Expression 258703001 |day (qualifier value)|

repetition[0].eventFrequency.lowerBound: 2

repetition[0].eventFrequency.upperBound: 2

repetition[0].eventFrequency.includeLowerBound: true

repetition[0].eventFrequency.includeUpperBound: true

repetition[0].eventFrequency.measureSemantic: Precoordinated Expression 258703001 |day (qualifier value)|

Acetaminophen 325 mg tablet oral 2 tablets every 6 hours as needed for pain; may increase dose frequency to 2 tablets every 4 hours; do not take more than 10 tablets per day 100 tablets 2 refills

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

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

topic: Postcoordinated Expression [416118004 |Administration (procedure)] ->(260686004 |Method (attribute))->[129445006 |Administration - action (qualifier value)] ->(363701004 |Direct substance (attribute))->[Rx;313782 Acetaminophen 325 MG Oral Tablet] ->(410675002 |Route of administration (attribute))->[26643006 |Oral route (qualifier value)]

unstructured[0]: 100 tablets 2 refills

unstructured[1]: as needed; may increase dose frequency to 2 tablets every 4 hours; do not take more than 10 tablets per day

purpose[0]: Postcoordinated Expression [277132007 |Therapeutic procedure (procedure)] ->(363702006 |Has focus (attribute))->[22253000 |Pain (finding)]

```

requestedResult.lowerBound: 2
requestedResult.upperBound: 2
requestedResult.includeLowerBound: true
requestedResult.includeUpperBound: true
requestedResult.measureSemantic: Precoordinated Expression
421026006 |Oral tablet (qualifier value)|
repetition[0].periodDuration.lowerBound: 1
repetition[0].periodDuration.upperBound: 37.5
repetition[0].periodDuration.includeLowerBound: true
repetition[0].periodDuration.includeUpperBound: true
repetition[0].periodDuration.measureSemantic: Precoordinated
Expression 258703001 |day (qualifier value)|
repetition[0].eventFrequency.lowerBound: 4
repetition[0].eventFrequency.upperBound: 4
repetition[0].eventFrequency.includeLowerBound: true
repetition[0].eventFrequency.includeUpperBound: true
repetition[0].eventFrequency.measureSemantic:
Precoordinated Expression 258703001 |day (qualifier value)|
# Celecoxib 100 mg capsule oral 2 times a day 60 capsules 2 refills
actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]
statementType: Precoordinated Expression 385644000 |
Requested (qualifier value)|
topic: Postcoordinated Expression [416118004 |Administration
(procedure)] ->(260686004 |Method (attribute))->[129445006 |
Administration - action (qualifier value)] ->(363701004 |Direct
substance (attribute))->[Rx;205322 celecoxib 100 MG Oral
Capsule] ->(410675002 |Route of administration (attribute))-
>[26643006 |Oral route (qualifier value)]
unstructured[0]: 60 capsules 2 refills
requestedResult.lowerBound: 1
requestedResult.upperBound: 1
requestedResult.includeLowerBound: true
requestedResult.includeUpperBound: true
requestedResult.measureSemantic: Precoordinated Expression
420692007 |Conventional release oral capsule (dose form)|
repetition[0].periodDuration.lowerBound: 90
repetition[0].periodDuration.upperBound: 90
repetition[0].periodDuration.includeLowerBound: true
repetition[0].periodDuration.includeUpperBound: true
repetition[0].periodDuration.measureSemantic: Precoordinated
Expression 258703001 |day (qualifier value)|
repetition[0].eventFrequency.lowerBound: 2
repetition[0].eventFrequency.upperBound: 2

```

```

repetition[0].eventFrequency.includeLowerBound: true
repetition[0].eventFrequency.includeUpperBound: true
repetition[0].eventFrequency.measureSemantic:
Precoordinated Expression 258703001 |day (qualifier value)|
The following orders may be considered for patients who tolerate lower doses but whose pain
control remains inadequate on lower doses
# Ibuprofen 400 mg tablet oral every 4 to 6 hours as needed for pain 100 tablets 2 refills
actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]
statementType: Precoordinated Expression 385644000 |
Requested (qualifier value)|
topic: Postcoordinated Expression [416118004 |Administration
(procedure)] ->(260686004 |Method (attribute))->[129445006 |
Administration - action (qualifier value)] ->(363701004 |Direct
substance (attribute))->[Rx;197805 Ibuprofen 400 MG Oral
Tablet] ->(410675002 |Route of administration (attribute))-
>[26643006 |Oral route (qualifier value)]
unstructured[0]: 100 tablets 2 refills
unstructured[1]: as needed
purpose[0]: Postcoordinated Expression [277132007 |
Therapeutic procedure (procedure)] ->(363702006 |Has focus
(attribute))->[22253000 |Pain (finding)]
requestedResult.lowerBound: 1
requestedResult.upperBound: 1
requestedResult.includeLowerBound: true
requestedResult.includeUpperBound: true
requestedResult.measureSemantic: Precoordinated Expression
421026006 |Oral tablet (qualifier value)|
repetition[0].periodDuration.lowerBound: 1
repetition[0].periodDuration.upperBound: 75
repetition[0].periodDuration.includeLowerBound: true
repetition[0].periodDuration.includeUpperBound: true
repetition[0].periodDuration.measureSemantic: Precoordinated
Expression 258703001 |day (qualifier value)|
repetition[0].eventFrequency.lowerBound: 4
repetition[0].eventFrequency.upperBound: 6
repetition[0].eventFrequency.includeLowerBound: true
repetition[0].eventFrequency.includeUpperBound: true
repetition[0].eventFrequency.measureSemantic:
Precoordinated Expression 258702006 |hour (qualifier value)|
# Naproxen 375 mg tablet oral 2 times daily as needed for pain 100 tablets 2 refills
actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]
statementType: Precoordinated Expression 385644000 |
Requested (qualifier value)|

```

topic: Postcoordinated Expression [416118004 |Administration (procedure)] ->(260686004 |Method (attribute))->[129445006 |Administration - action (qualifier value)] ->(363701004 |Direct substance (attribute))->[Rx;198012 Naproxen 375 MG Oral Tablet] ->(410675002 |Route of administration (attribute))->[26643006 |Oral route (qualifier value)]
 unstructured[0]: 100 tablets 2 refills
 unstructured[1]: as needed
 purpose[0]: Postcoordinated Expression [277132007 |Therapeutic procedure (procedure)] ->(363702006 |Has focus (attribute))->[22253000 |Pain (finding)]
 requestedResult.lowerBound: 1
 requestedResult.upperBound: 1
 requestedResult.includeLowerBound: true
 requestedResult.includeUpperBound: true
 requestedResult.measureSemantic: Precoordinated Expression 421026006 |Oral tablet (qualifier value)|
 repetition[0].periodDuration.lowerBound: 1
 repetition[0].periodDuration.upperBound: 150
 repetition[0].periodDuration.includeLowerBound: true
 repetition[0].periodDuration.includeUpperBound: true
 repetition[0].periodDuration.measureSemantic: Precoordinated Expression 258703001 |day (qualifier value)|
 repetition[0].eventFrequency.lowerBound: 2
 repetition[0].eventFrequency.upperBound: 2
 repetition[0].eventFrequency.includeLowerBound: true
 repetition[0].eventFrequency.includeUpperBound: true
 repetition[0].eventFrequency.measureSemantic: Precoordinated Expression 258703001 |day (qualifier value)|
 # Celecoxib 200 mg capsule oral 2 times a day 60 capsules 2 refills
 actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]
 statementType: Precoordinated Expression 385644000 |Requested (qualifier value)|
 topic: Postcoordinated Expression [416118004 |Administration (procedure)] ->(260686004 |Method (attribute))->[129445006 |Administration - action (qualifier value)] ->(363701004 |Direct substance (attribute))->[Rx;205323 celecoxib 200 MG Oral Capsule] ->(410675002 |Route of administration (attribute))->[26643006 |Oral route (qualifier value)]
 unstructured[0]: 100 tablets 2 refills
 requestedResult.lowerBound: 1
 requestedResult.upperBound: 1
 requestedResult.includeLowerBound: true
 requestedResult.includeUpperBound: true

requestedResult.measureSemantic: Precoordinated Expression 420692007 |Conventional release oral capsule (dose form)|
 repetition[0].periodDuration.lowerBound: 90
 repetition[0].periodDuration.upperBound: 90
 repetition[0].periodDuration.includeLowerBound: true
 repetition[0].periodDuration.includeUpperBound: true
 repetition[0].periodDuration.measureSemantic: Precoordinated Expression 258703001 |day (qualifier value)|
 repetition[0].eventFrequency.lowerBound: 2
 repetition[0].eventFrequency.upperBound: 2
 repetition[0].eventFrequency.includeLowerBound: true
 repetition[0].eventFrequency.includeUpperBound: true
 repetition[0].eventFrequency.measureSemantic: Precoordinated Expression 258703001 |day (qualifier value)|

The following orders may be considered for patients who tolerate lower doses but whose pain control remains inadequate on lower doses

Ibuprofen 600 mg tablet oral every 6 hours as needed for pain 100 tablets 2 refills

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

statementType: Precoordinated Expression 385644000 | Requested (qualifier value)|
 topic: Postcoordinated Expression [416118004 |Administration (procedure)] ->(260686004 |Method (attribute))->[129445006 |Administration - action (qualifier value)] ->(363701004 |Direct substance (attribute))->[Rx;197806 Ibuprofen 600 MG Oral Tablet] ->(410675002 |Route of administration (attribute))->[26643006 |Oral route (qualifier value)]
 unstructured[0]: 100 tablets 2 refills
 unstructured[1]: as needed
 purpose[0]: Postcoordinated Expression [277132007 |Therapeutic procedure (procedure)] ->(363702006 |Has focus (attribute))->[22253000 |Pain (finding)]
 requestedResult.lowerBound: 1
 requestedResult.upperBound: 1
 requestedResult.includeLowerBound: true
 requestedResult.includeUpperBound: true
 requestedResult.measureSemantic: Precoordinated Expression 421026006 |Oral tablet (qualifier value)|
 repetition[0].periodDuration.lowerBound: 1
 repetition[0].periodDuration.upperBound: 75
 repetition[0].periodDuration.includeLowerBound: true
 repetition[0].periodDuration.includeUpperBound: true
 repetition[0].periodDuration.measureSemantic: Precoordinated Expression 258703001 |day (qualifier value)|


```

repetition[0].eventFrequency.lowerBound: 6
repetition[0].eventFrequency.upperBound: 6
repetition[0].eventFrequency.includeLowerBound: true
repetition[0].eventFrequency.includeUpperBound: true
repetition[0].eventFrequency.measureSemantic:
Precoordinated Expression 258702006 |hour (qualifier value)|
# Naproxen 500 mg tablet oral 2 times daily as needed for pain 100 tablets 2 refills
actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]
statementType: Precoordinated Expression 385644000 |
Requested (qualifier value)|
topic: Postcoordinated Expression [416118004 |Administration
(procedure)] ->(260686004 |Method (attribute))->[129445006 |
Administration - action (qualifier value)] ->(363701004 |Direct
substance (attribute))->[Rx;198014 Naproxen 500 MG Oral
Tablet] ->(410675002 |Route of administration (attribute))-
>[26643006 |Oral route (qualifier value)]
unstructured[0]: 100 tablets 2 refills
unstructured[1]: as needed
purpose[0]: Postcoordinated Expression [277132007 |
Therapeutic procedure (procedure)] ->(363702006 |Has focus
(attribute))->[22253000 |Pain (finding)]
requestedResult.lowerBound: 1
requestedResult.upperBound: 1
requestedResult.includeLowerBound: true
requestedResult.includeUpperBound: true
requestedResult.measureSemantic: Precoordinated Expression
421026006 |Oral tablet (qualifier value)|
repetition[0].periodDuration.lowerBound: 1
repetition[0].periodDuration.upperBound: 150
repetition[0].periodDuration.includeLowerBound: true
repetition[0].periodDuration.includeUpperBound: true
repetition[0].periodDuration.measureSemantic: Precoordinated
Expression 258703001 |day (qualifier value)|
repetition[0].eventFrequency.lowerBound: 2
repetition[0].eventFrequency.upperBound: 2
repetition[0].eventFrequency.includeLowerBound: true
repetition[0].eventFrequency.includeUpperBound: true
repetition[0].eventFrequency.measureSemantic:
Precoordinated Expression 258703001 |day (qualifier value)|

```

Topical Medications

```

# Capsaicin 0.1% cream topical 3 times a day apply to affected area 1 tube 0 refills routine
actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]

```

```

statementType: Precoordinated Expression 385644000 |
Requested (qualifier value)|
topic: Postcoordinated Expression [416118004 |Administration
(procedure)] ->(260686004 |Method (attribute))->[129445006
|Administration - action (qualifier value)] ->(363701004 |
Direct substance (attribute))->[Rx;646333 Capsaicin 1 MG/
ML Topical Cream] ->(410675002 |Route of administration
(attribute))->[6064005 |Topical route (qualifier value)]
unstructured[0]: 1 tube, 0 refills
unstructured[1]: apply to affected area
requestedResult.lowerBound: 1
requestedResult.upperBound: 1
requestedResult.includeLowerBound: true
requestedResult.includeUpperBound: true
requestedResult.measureSemantic: Precoordinated Expression
425753008 |Conventional release cutaneous ointment (dose
form)|
priority: Precoordinated Expression 50811001 |Routine
(qualifier value)|
repetition[0].eventFrequency.lowerBound: 3
repetition[0].eventFrequency.upperBound: 3
repetition[0].eventFrequency.includeLowerBound: true
repetition[0].eventFrequency.includeUpperBound: true
repetition[0].eventFrequency.measureSemantic:
Precoordinated Expression 258703001 |day (qualifier value)|
# Diclofenac sodium 1% 2 g gel topical 4 times a day apply to affected area 1 tube 0 refills
routine
actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]
statementType: Precoordinated Expression 385644000 |
Requested (qualifier value)|
topic: Postcoordinated Expression [416118004 |Administration
(procedure)] ->(260686004 |Method (attribute))->[129445006
|Administration - action (qualifier value)] ->(363701004
|Direct substance (attribute))->[Rx;1043479 Diclofenac
Sodium 10 MG/ML Topical Cream] ->(410675002 |Route of
administration (attribute))->[6064005 |Topical route (qualifier
value)]
unstructured[0]: 1 tube, 0 refills
unstructured[1]: apply to affected area
requestedResult.lowerBound: 1
requestedResult.upperBound: 1
requestedResult.includeLowerBound: true
requestedResult.includeUpperBound: true

```

requestedResult.measureSemantic: Precoordinated Expression 425753008 |Conventional release cutaneous ointment (dose form)|

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

repetition[0].eventFrequency.lowerBound: 4

repetition[0].eventFrequency.upperBound: 4

repetition[0].eventFrequency.includeLowerBound: true

repetition[0].eventFrequency.includeUpperBound: true

repetition[0].eventFrequency.measureSemantic: Precoordinated Expression 258703001 |day (qualifier value)|

Lidocaine 5% patch topical apply to intact skin to cover most painful area; apply prescribed number of patches (maximum of 3); apply only 1 time for a maximum of 12 hours within a 24-hour period 30 patches 0 refills routine

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

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

topic: Postcoordinated Expression [416118004 |Administration (procedure)] ->(260686004 |Method (attribute))->[129445006 |Administration - action (qualifier value)] ->(363701004 |Direct substance (attribute))->[Rx;1745091 Lidocaine 0.05 MG/ MG Medicated Patch] ->(410675002 |Route of administration (attribute))->[6064005 |Topical route (qualifier value)]

unstructured[0]: 30 patches, 0 refills

unstructured[1]: apply to intact skin to cover most painful area; apply prescribed number of patches (maximum of 3); apply only 1 time for a maximum of 12 hours within a 24-hour period

requestedResult.lowerBound: 1

requestedResult.upperBound: 3

requestedResult.includeLowerBound: true

requestedResult.includeUpperBound: true

requestedResult.measureSemantic: Precoordinated Expression 739003001 |Patch (basic dose form)|

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

repetition[0].eventFrequency.lowerBound: 24

repetition[0].eventFrequency.upperBound: 24

repetition[0].eventFrequency.includeLowerBound: true

repetition[0].eventFrequency.includeUpperBound: true

repetition[0].eventFrequency.measureSemantic: Precoordinated Expression 258702006 |hour (qualifier value)|

Menthol 10%/methyl salicylate 15% cream topical 3 times a day apply to affected area 1 tube 0 refills routine

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

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

topic: Postcoordinated Expression [416118004 |Administration (procedure)] ->(260686004 |Method (attribute))->[129445006 |Administration - action (qualifier value)] ->(363701004 |Direct substance (attribute))->[Rx;311498 Menthol 100 MG/ML / methyl salicylate 150 MG/ML Topical Cream] ->(410675002 |Route of administration (attribute))->[6064005 |Topical route (qualifier value)]

unstructured[0]: 1 tube, 0 refills

unstructured[1]: apply to affected area

requestedResult.lowerBound: 1

requestedResult.upperBound: 1

requestedResult.includeLowerBound: true

requestedResult.includeUpperBound: true

requestedResult.measureSemantic: Precoordinated Expression 425753008 |Conventional release cutaneous ointment (dose form)|

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

repetition[0].eventFrequency.lowerBound: 3

repetition[0].eventFrequency.upperBound: 3

repetition[0].eventFrequency.includeLowerBound: true

repetition[0].eventFrequency.includeUpperBound: true

repetition[0].eventFrequency.measureSemantic: Precoordinated Expression 258703001 |day (qualifier value)|

Chapter 4. Laboratory Tests

Complete blood count 1 time routine

```
actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]
    statementType: Precoordinated Expression 385644000 |Requested (qualifier value)|
    topic: Precoordinated Expression 26604007 |Complete blood count (procedure)|
```

Comprehensive metabolic panel 1 time routine

```
actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]
    statementType: Precoordinated Expression 385644000 |Requested (qualifier value)|
    topic: Precoordinated Expression 85acf077-d744-48bc-b57a-fa3b5ce12d97 |Comprehensive
    metabolic panel (procedure)|
```

Hemoglobin A1c 1 time routine

```
actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]
    statementType: Precoordinated Expression 385644000 |Requested (qualifier value)|
    topic: Precoordinated Expression 43396009 |Hemoglobin A1c measurement (procedure)|
```

Toxicology screen 1 time routine

```
actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]
    statementType: Precoordinated Expression 385644000 |Requested (qualifier value)|
    topic: Precoordinated Expression 314076009 |Toxicology screening test (procedure)|
```

25-hydroxyvitamin D 1 time routine

```
actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]
    statementType: Precoordinated Expression 385644000 |Requested (qualifier value)|
    topic: Precoordinated Expression 12199005 |Vitamin D, 25-hydroxy measurement
    (procedure)|
```

Erythrocyte sedimentation rate 1 time routine

```
actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]
    statementType: Precoordinated Expression 385644000 |Requested (qualifier value)|
    topic: Precoordinated Expression 416838001 |Erythrocyte sedimentation rate measurement
    (procedure)|
```

C-reactive protein 1 time routine

```
actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]
    statementType: Precoordinated Expression 385644000 |Requested (qualifier value)|
    topic: Postcoordinated Expression [3457005 |Patient referral (procedure)] ->(363702006 |
    Has focus (attribute))->[392134007 |Care regimes management (procedure)]
```

Chapter 5. Consults and Referrals

Specify consults required for this patient

Referral care management services evaluate needs related to chronic pain routine

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

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

topic: Precoordinated Expression 306238000 |Referral to
Social Services (procedure)|

purpose[0]: Postcoordinated Expression [386053000 |
Evaluation procedure (procedure)] -(363702006 |Has focus
(attribute))-[408954001 |Chronic pain control (procedure)]

Referral social services evaluate for needs related to chronic pain routine

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

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

topic: Precoordinated Expression 306238000 |Referral to
Social Services (procedure)|

purpose[0]: Postcoordinated Expression [386053000 |
Evaluation procedure (procedure)] -(363702006 |Has focus
(attribute))-[408954001 |Chronic pain control (procedure)]

Referral clinical nurse specialist evaluate for chronic pain routine

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

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

topic: Precoordinated Expression 306320001 |Referral to
clinical nurse specialist (procedure)|

purpose[0]: Postcoordinated Expression [386053000 |
Evaluation procedure (procedure)] -(363702006 |Has focus
(attribute))-[408954001 |Chronic pain control (procedure)]

Referral mental health evaluate for mental health interventions related to chronic pain 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)|

purpose[0]: Postcoordinated Expression [386053000 |
Evaluation procedure (procedure)] -(363702006 |Has focus
(attribute))-[408954001 |Chronic pain control (procedure)]

Referral mental health evaluate for psychotherapy related to chronic pain routine

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

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

topic: Postcoordinated Expression [390866009 |Referral to mental health team (procedure)] ->(363702006 |Has focus (attribute))->[45392008 |Psychologic evaluation or test procedure (procedure)]

purpose[0]: Postcoordinated Expression [386053000 | Evaluation procedure (procedure)] ->(363702006 |Has focus (attribute))->[408954001 |Chronic pain control (procedure)]

Referral mental health evaluate for cognitive behavioral therapy related to chronic pain routine

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

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

topic: Postcoordinated Expression [390866009 |Referral to mental health team (procedure)] ->(363702006 |Has focus (attribute))->[704072009 |Cognitive behavior therapy care management (procedure)]

purpose[0]: Postcoordinated Expression [386053000 | Evaluation procedure (procedure)] ->(363702006 |Has focus (attribute))->[408954001 |Chronic pain control (procedure)]

Referral mental health evaluate for acceptance and commitment therapy related to chronic pain routine

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

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

topic: Postcoordinated Expression [390866009 |Referral to mental health team (procedure)] ->(363702006 |Has focus (attribute))->[710137005 |Promotion of acceptance of health status (procedure)]

purpose[0]: Postcoordinated Expression [386053000 | Evaluation procedure (procedure)] ->(363702006 |Has focus (attribute))->[408954001 |Chronic pain control (procedure)]

Referral addiction evaluate for substance use disorder with chronic pain routine

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

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

topic: Postcoordinated Expression [3457005 |Patient referral (procedure)] ->(363702006 |Has focus (attribute))->[266707007 |Drug addiction therapy (regime/therapy)]

purpose[0]: Postcoordinated Expression [386053000 | Evaluation procedure (procedure)] ->(363702006 |Has focus (attribute))->[408954001 |Chronic pain control (procedure)]

Referral addiction evaluate for tobacco cessation with chronic pain routine

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

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

topic: Precoordinated Expression 449861000124107 |Referral to tobacco use cessation counseling program (procedure)|

```

        purpose[0]: Postcoordinated Expression [386053000 |
        Evaluation procedure (procedure)] ->(363702006 |Has focus
        (attribute))->[408954001 |Chronic pain control (procedure)]
# Referral pain management evaluate for chronic pain routine
actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]
        statementType: Precoordinated Expression 385644000 |
        Requested (qualifier value)|
        topic: Precoordinated Expression 306109009 |Referral to pain
        management service (procedure)|
        purpose[0]: Postcoordinated Expression [386053000 |
        Evaluation procedure (procedure)] ->(363702006 |Has focus
        (attribute))->[408954001 |Chronic pain control (procedure)]
# Referral pain management evaluate for opioid management with chronic pain routine
actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]
        statementType: Precoordinated Expression 385644000 |
        Requested (qualifier value)|
        topic: Postcoordinated Expression [306109009 |Referral to
        pain management service (procedure)] ->(363702006 |Has
        focus (attribute))->[b6216dfc-5b5f-4823-9bc8-ce9c79d67709 |
        Management of opioid therapy (procedure)]
        purpose[0]: Postcoordinated Expression [386053000 |
        Evaluation procedure (procedure)] ->(363702006 |Has focus
        (attribute))->[408954001 |Chronic pain control (procedure)]
# Referral pharmacy evaluate for needs related to chronic pain routine
actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]
        statementType: Precoordinated Expression 385644000 |
        Requested (qualifier value)|
        topic: Precoordinated Expression 306179008 |Referral to
        pharmacy service (procedure)|
        purpose[0]: Postcoordinated Expression [386053000 |
        Evaluation procedure (procedure)] ->(363702006 |Has focus
        (attribute))->[408954001 |Chronic pain control (procedure)]
# Referral physical therapy evaluate for chronic pain routine
actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]
        statementType: Precoordinated Expression 385644000 |
        Requested (qualifier value)|
        topic: Precoordinated Expression 444831000124102 |Referral
        for physical therapy (procedure)|
        purpose[0]: Postcoordinated Expression [386053000 |
        Evaluation procedure (procedure)] ->(363702006 |Has focus
        (attribute))->[408954001 |Chronic pain control (procedure)]
# Referral acupuncture evaluate for chronic pain routine
actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]
        statementType: Precoordinated Expression 385644000 |
        Requested (qualifier value)|

```



```

topic: Postcoordinated Expression [3457005 |Patient referral
(procedure)] ->(363702006 |Has focus (attribute))->[44868003
|Acupuncture (procedure)]
purpose[0]: Postcoordinated Expression [386053000 |
Evaluation procedure (procedure)] ->(363702006 |Has focus
(attribute))->[408954001 |Chronic pain control (procedure)]
# Referral tai chi evaluate for chronic pain routine
# Referral yoga evaluate for chronic pain routine
actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]
statementType: Precoordinated Expression 385644000 |
Requested (qualifier value)|
topic: Postcoordinated Expression [3457005 |Patient
referral (procedure)] ->(363702006 |Has focus (attribute))-
>[229223006 |Participation in Tai Chi (regime/therapy)]
purpose[0]: Postcoordinated Expression [386053000 |
Evaluation procedure (procedure)] ->(363702006 |Has focus
(attribute))->[408954001 |Chronic pain control (procedure)]
# Referral mindfulness evaluate for chronic pain routine
actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]
statementType: Precoordinated Expression 385644000 |
Requested (qualifier value)|
topic: Postcoordinated Expression [3457005 |Patient
referral (procedure)] ->(363702006 |Has focus (attribute))-
>[05257e84-e247-4f2e-bb83-dccd395d56a8 |Mindfulness
therapy (procedure)]
purpose[0]: Postcoordinated Expression [386053000 |
Evaluation procedure (procedure)] ->(363702006 |Has focus
(attribute))->[408954001 |Chronic pain control (procedure)]
# Referral meditation evaluate for chronic pain routine
actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]
statementType: Precoordinated Expression 385644000 |
Requested (qualifier value)|
topic: Postcoordinated Expression [3457005 |Patient
referral (procedure)] ->(363702006 |Has focus (attribute))-
>[386365008 |Meditation facilitation (procedure)]
purpose[0]: Postcoordinated Expression [386053000 |
Evaluation procedure (procedure)] ->(363702006 |Has focus
(attribute))->[408954001 |Chronic pain control (procedure)]
# Referral guided imagery evaluate for chronic pain routine
actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]
statementType: Precoordinated Expression 385644000 |
Requested (qualifier value)|
topic: Postcoordinated Expression [3457005 |Patient
referral (procedure)] ->(363702006 |Has focus (attribute))-
>[228565006 |Imagery technique (regime/therapy)]

```

```

        purpose[0]: Postcoordinated Expression [386053000 |
        Evaluation procedure (procedure)] ->(363702006 |Has focus
        (attribute))->[408954001 |Chronic pain control (procedure)]
# Referral hypnotherapy evaluate for chronic pain routine
actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]
        statementType: Precoordinated Expression 385644000 |
        Requested (qualifier value)|
        topic: Postcoordinated Expression [3457005 |Patient referral
        (procedure)] ->(363702006 |Has focus (attribute))->[19997007
        |Hypnotherapy (regime/therapy)]
        purpose[0]: Postcoordinated Expression [386053000 |
        Evaluation procedure (procedure)] ->(363702006 |Has focus
        (attribute))->[408954001 |Chronic pain control (procedure)]
# Referral biofeedback evaluate for chronic pain routine
actionSentence[type=elm:Instance, classType=anf:ClinicalStatement]
        statementType: Precoordinated Expression 385644000 |
        Requested (qualifier value)|
        topic: Postcoordinated Expression [3457005 |Patient referral
        (procedure)] ->(363702006 |Has focus (attribute))->[28150003
        |Biofeedback procedure (regime/therapy)]
        purpose[0]: Postcoordinated Expression [386053000 |
        Evaluation procedure (procedure)] ->(363702006 |Has focus
        (attribute))->[408954001 |Chronic pain control (procedure)]
Only applicable if referring to an outside facility. To inform appropriate opioid and chronic
non-cancer pain treatment for this patient, please provide the following information
# prompt: Goal of Consult
response: String (Single)
# prompt: Clinical Findings
response: String (Single)
# prompt: Priority (specify Routine or otherwise)
response: String (Single)
# prompt: Referring Physician Name
response: String (Single)
# prompt: Referring Physician Contact Details
response: String (Single)

```

Chapter 6. Patient and Caregiver Education

Chronic pain management education routine

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

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

topic: Precoordinated Expression 408956004 |Chronic pain control education (procedure)|

Chapter 7. Tabular List

Terminology Service Request (TSR) Mappings

Table 7.1. Terminology Versions

Name	Identifier	Version
SNOMED CT	2.16.840.1.113883.6.96	United States Edition 20180301

Table 7.2. Terminology References

System	Code	Display Text ^a	References ^b
SNOMED CT	12199005 Vitamin D, 25-hydroxy measurement (procedure)	Precoordinated Expression	1
SNOMED CT	133936004 Adult (person)	Adult	1
SNOMED CT	258702006 hour (qualifier value)	Precoordinated Expression	4
SNOMED CT	258703001 day (qualifier value)	Precoordinated Expression	18
SNOMED CT	26604007 Complete blood count (procedure)	Precoordinated Expression	1
SNOMED CT	306109009 Referral to pain management service (procedure)	Precoordinated Expression	1
SNOMED CT	306179008 Referral to pharmacy service (procedure)	Precoordinated Expression	1
SNOMED CT	306238000 Referral to Social Services (procedure)	Precoordinated Expression	2
SNOMED CT	306320001 Referral to clinical nurse specialist (procedure)	Precoordinated Expression	1
SNOMED CT	314076009 Toxicology screening test (procedure)	Precoordinated Expression	1
SNOMED CT	33022008 Hospital-based outpatient department (environment)	Outpatient	1
SNOMED CT	385644000 Requested (qualifier value)	Precoordinated Expression	41
SNOMED CT	390866009 Referral to mental health team (procedure)	Precoordinated Expression	1

System	Code	Display Text ^a	References ^b
SNOMED CT	408956004 Chronic pain control education (procedure)	Precoordinated Expression	1
SNOMED CT	416838001 Erythrocyte sedimentation rate measurement (procedure)	Precoordinated Expression	1
SNOMED CT	420692007 Conventional release oral capsule (dose form)	Precoordinated Expression	2
SNOMED CT	421026006 Oral tablet (qualifier value)	Precoordinated Expression	7
SNOMED CT	425753008 Conventional release cutaneous ointment (dose form)	Precoordinated Expression	3
SNOMED CT	43396009 Hemoglobin A1c measurement (procedure)	Precoordinated Expression	1
SNOMED CT	444831000124102 Referral for physical therapy (procedure)	Precoordinated Expression	1
SNOMED CT	449861000124107 Referral to tobacco use cessation counseling program (procedure)	Precoordinated Expression	1
SNOMED CT	453231000124104 Primary care provider (occupation)	Primary Care Provider (PCP)	1
SNOMED CT	50811001 Routine (qualifier value)	Precoordinated Expression	4
SNOMED CT	739003001 Patch (basic dose form)	Precoordinated Expression	1
SNOMED CT	85acf077-d744-48bc-b57a-fa3b5ce12d97 Comprehensive metabolic panel (procedure)	Precoordinated Expression	1
SNOMED CT	[277132007 Therapeutic procedure (procedure)] ->(363702006 Has focus (attribute))->[22253000 Pain (finding)]	Postcoordinated Expression	7
SNOMED CT	[306109009 Referral to pain management service (procedure)] ->(363702006 Has focus (attribute))->[b6216dfc-5b5f-4823-9bc8-ce9c79d67709	Postcoordinated Expression	1

System	Code	Display Text ^a	References ^b
	Management of opioid therapy (procedure)]		
SNOMED CT	[3457005 Patient referral (procedure)] ->(363702006 Has focus (attribute))->[05257e84-e247-4f2e-bb83-dccd395d56a8 Mindfulness therapy (procedure)]	Postcoordinated Expression	1
SNOMED CT	[3457005 Patient referral (procedure)] ->(363702006 Has focus (attribute))->[19997007 Hypnotherapy (regime/therapy)]	Postcoordinated Expression	1
SNOMED CT	[3457005 Patient referral (procedure)] ->(363702006 Has focus (attribute))->[228565006 Imagery technique (regime/therapy)]	Postcoordinated Expression	1
SNOMED CT	[3457005 Patient referral (procedure)] ->(363702006 Has focus (attribute))->[229223006 Participation in Tai Chi (regime/therapy)]	Postcoordinated Expression	1
SNOMED CT	[3457005 Patient referral (procedure)] ->(363702006 Has focus (attribute))->[266707007 Drug addiction therapy (regime/therapy)]	Postcoordinated Expression	1
SNOMED CT	[3457005 Patient referral (procedure)] ->(363702006 Has focus (attribute))->[28150003 Biofeedback procedure (regime/therapy)]	Postcoordinated Expression	1
SNOMED CT	[3457005 Patient referral (procedure)] ->(363702006 Has focus (attribute))->[386365008 Meditation facilitation (procedure)]	Postcoordinated Expression	1
SNOMED CT	[3457005 Patient referral (procedure)] ->(363702006 Has focus (attribute))->[392134007 Care	Postcoordinated Expression	1

System	Code	Display Text ^a	References ^b
	regimes management (procedure)]		
SNOMED CT	[3457005 Patient referral (procedure)] ->(363702006 Has focus (attribute))->[44868003 Acupuncture (procedure)]	Postcoordinated Expression	1
SNOMED CT	[386053000 Evaluation procedure (procedure)] ->(363702006 Has focus (attribute))->[408954001 Chronic pain control (procedure)]	Postcoordinated Expression	20
SNOMED CT	[390866009 Referral to mental health team (procedure)] ->(363702006 Has focus (attribute))->[45392008 Psychologic evaluation or test procedure (procedure)]	Postcoordinated Expression	1
SNOMED CT	[390866009 Referral to mental health team (procedure)] ->(363702006 Has focus (attribute))->[704072009 Cognitive behavior therapy care management (procedure)]	Postcoordinated Expression	1
SNOMED CT	[390866009 Referral to mental health team (procedure)] ->(363702006 Has focus (attribute))->[710137005 Promotion of acceptance of health status (procedure)]	Postcoordinated Expression	1
SNOMED CT	[416118004 Administration (procedure)] ->(260686004 Method (attribute))->[129445006 Administration - action (qualifier value)] ->(363701004 Direct substance (attribute))->[Rx;1043479 Diclofenac Sodium 10 MG/ML Topical Cream] ->(410675002 Route of administration (attribute))->[6064005 Topical route (qualifier value)]	Postcoordinated Expression	1

System	Code	Display Text ^a	References ^b
SNOMED CT	[416118004 Administration (procedure)] ->(260686004 Method (attribute))->[129445006 Administration - action (qualifier value)] ->(363701004 Direct substance (attribute))->[Rx;1745091 Lidocaine 0.05 MG/MG Medicated Patch] ->(410675002 Route of administration (attribute))->[6064005 Topical route (qualifier value)]	Postcoordinated Expression	1
SNOMED CT	[416118004 Administration (procedure)] ->(260686004 Method (attribute))->[129445006 Administration - action (qualifier value)] ->(363701004 Direct substance (attribute))->[Rx;197805 Ibuprofen 400 MG Oral Tablet] ->(410675002 Route of administration (attribute))->[26643006 Oral route (qualifier value)]	Postcoordinated Expression	1
SNOMED CT	[416118004 Administration (procedure)] ->(260686004 Method (attribute))->[129445006 Administration - action (qualifier value)] ->(363701004 Direct substance (attribute))->[Rx;197806 Ibuprofen 600 MG Oral Tablet] ->(410675002 Route of administration (attribute))->[26643006 Oral route (qualifier value)]	Postcoordinated Expression	1
SNOMED CT	[416118004 Administration (procedure)] ->(260686004 Method (attribute))->[129445006	Postcoordinated Expression	1

System	Code	Display Text ^a	References ^b
	Administration - action (qualifier value)] - >(363701004 Direct substance (attribute))- >[Rx;198012 Naproxen 375 MG Oral Tablet] - >(410675002 Route of administration (attribute))- >[26643006 Oral route (qualifier value)]		
SNOMED CT	[416118004 Administration (procedure)] ->(260686004 Method (attribute))- >[129445006 Administration - action (qualifier value)] - >(363701004 Direct substance (attribute))- >[Rx;198013 Naproxen 250 MG Oral Tablet] - >(410675002 Route of administration (attribute))- >[26643006 Oral route (qualifier value)]	Postcoordinated Expression	1
SNOMED CT	[416118004 Administration (procedure)] ->(260686004 Method (attribute))- >[129445006 Administration - action (qualifier value)] - >(363701004 Direct substance (attribute))- >[Rx;198014 Naproxen 500 MG Oral Tablet] - >(410675002 Route of administration (attribute))- >[26643006 Oral route (qualifier value)]	Postcoordinated Expression	1
SNOMED CT	[416118004 Administration (procedure)] ->(260686004 Method (attribute))- >[129445006 Administration - action (qualifier value)] - >(363701004 Direct substance (attribute))- >[Rx;205322 celecoxib 100 MG Oral Capsule] -	Postcoordinated Expression	1

System	Code	Display Text ^a	References ^b
	>(410675002 Route of administration (attribute))->[26643006 Oral route (qualifier value)]		
SNOMED CT	[416118004 Administration (procedure)] ->(260686004 Method (attribute))->[129445006 Administration - action (qualifier value)] ->(363701004 Direct substance (attribute))->[Rx;205323 celecoxib 200 MG Oral Capsule] ->(410675002 Route of administration (attribute))->[26643006 Oral route (qualifier value)]	Postcoordinated Expression	1
SNOMED CT	[416118004 Administration (procedure)] ->(260686004 Method (attribute))->[129445006 Administration - action (qualifier value)] ->(363701004 Direct substance (attribute))->[Rx;310965 Ibuprofen 200 MG Oral Tablet] ->(410675002 Route of administration (attribute))->[26643006 Oral route (qualifier value)]	Postcoordinated Expression	1
SNOMED CT	[416118004 Administration (procedure)] ->(260686004 Method (attribute))->[129445006 Administration - action (qualifier value)] ->(363701004 Direct substance (attribute))->[Rx;311498 Menthol 100 MG/ML / methyl salicylate 150 MG/ML Topical Cream] ->(410675002 Route of administration (attribute))->[6064005 Topical route (qualifier value)]	Postcoordinated Expression	1

System	Code	Display Text ^a	References ^b
SNOMED CT	[416118004 Administration (procedure)] ->(260686004 Method (attribute))->[129445006 Administration - action (qualifier value)] ->(363701004 Direct substance (attribute))->[Rx;313782 Acetaminophen 325 MG Oral Tablet] ->(410675002 Route of administration (attribute))->[26643006 Oral route (qualifier value)]	Postcoordinated Expression	1
SNOMED CT	[416118004 Administration (procedure)] ->(260686004 Method (attribute))->[129445006 Administration - action (qualifier value)] ->(363701004 Direct substance (attribute))->[Rx;646333 Capsaicin 1 MG/ML Topical Cream] ->(410675002 Route of administration (attribute))->[6064005 Topical route (qualifier value)]	Postcoordinated Expression	1

^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.

Chapter 8. Behavior Symbols

Table 8.1. 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 8.2. 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 8.3. 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 8.4. 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 8.5. 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 8.6. 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 8.7. 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: Opioids and Chronic Noncancer Pain Clinical Content White Paper*

[CSD] *Mental Health: Chronic Noncancer Pain Order Set Conceptual Structure Document*

[KVRpt] *Mental Health: Chronic Noncancer Pain Order Set 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://doi.org/10.1037/ser0000099>])

[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

[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-idedscreenshot.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/vhapublications/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=45eb33f0-71e2-11d5-e054-00144ff88e88>. Revised January 2017. (link [<https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=45eb33f0-71e2-11d5-e054-00144ff88e88>])
- [NLM 2016c] U.S. National Library of Medicine. *REDICARE IBUPROFEN- ibuprofen 200mg tablet, film coated* [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>])