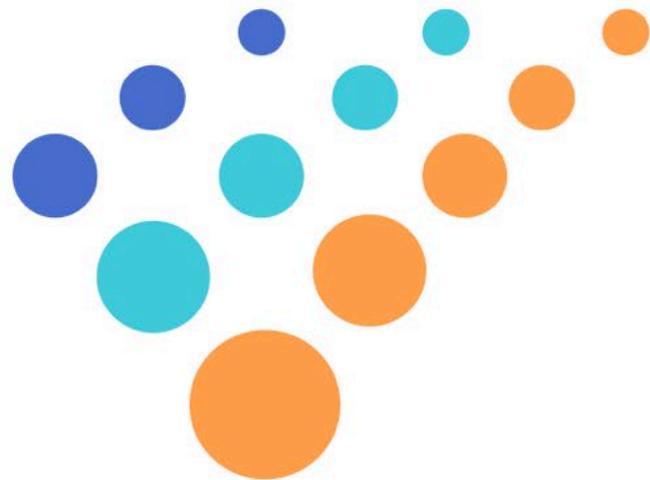




AGENCY FOR HEALTHCARE RESEARCH AND QUALITY



May 2020 CDS Connect Work Group Call



CDS Connect

Agenda

Schedule	Topic
• 3:00 – 3:02	• Roll Call, Michelle Lenox (MITRE)
• 3:02 – 3:05	• Review of the Agenda, Maria Michaels (CDC)
• 3:05 – 3:50	• CDS Artifact Review and Update across CDS Connect (MITRE)
• 3:50– 3:55	• What's New with CDS Connect This Month (MITRE)
• 3:55 – 4:00	• Open Discussion, Announcements, and Close Out, Maria Michaels (CDC)

Objectives



- Discuss and select CDS artifact review and update processes across CDS Connect that support trust
- Share new features and resources available for CDS Connect
- Hear from members on topics of interest relating to opportunities for CDS Connect

CDS ARTIFACT REVIEW AND UPDATE ACROSS CDS CONNECT

Lacy Fabian, MITRE

Current and Planned Approaches to Review and Update



Current Approach for Other and AHRQ Contributed CDS Artifacts

- 79% of other contributed artifacts in the repository (non-AHRQ stewarded)
 - ▶ No specific review and update approach
 - By the end of this project year (9/20)
 - 16% with date >2 years
 - By 9/21
 - All will have a date >2 years
- 21% of AHRQ stewarded artifacts in the repository
 - ▶ Reviewed annually by the CDS Connect project team and receive updated evidence, metadata, value sets, and documentation, as needed

Planned Approach for Other Contributed CDS Artifacts

- By mid-Summer
 - ▶ Work with existing contributors to update the status of existing artifacts
- By end-of-Summer
 - ▶ Establish terms and conditions for new contributions
- Ongoing
 - ▶ Monitor and evaluate content management needs to tailor to varied uses of artifacts

Input Needed

- Help qualify specific elements of the process
 - ▶ Timing
 - Alert design
 - ▶ Status
 - ▶ Achieving a ‘reviewed’ status

Timing for Review and Update

- Timing

- ▶ How often should the CDS Artifact be reviewed/updated?
 - NGC required evidence updates every five years
 - Quality measures are reviewed annually with full updates every three years
 - AHRQ/MITRE CDS Artifacts reviewed annually
 - Up to date medical textbooks updated every six months
- ▶ INPUT!
 - Review and update, as needed, annually, every two years, other?

Alert Design for Review and Update

- Alerts across three areas
 - ▶ Search Result
 - ▶ Title and Summary
 - ▶ CPG-on-FHIR Section
- Let's review...

Alert in Search Results

Dec 30
2016

Factors to Consider in Managing Chronic Pain: A Pain Management Summary

🕒 DATA SUMMARY

Publisher: The MITRE Corporation

✔ Pain Management

✔ Analgesics, Opioid

✔ Narcotics

Created: 2016-03-04

Reviewed: 2016-12-30 ⚠

This artifact has not been reviewed in the last 2 years

Alerts in Title and Summary

← Factors to Consider in Managing Chronic Pain: A Pain Management Summary  [Subscribe](#)

This artifact has not been reviewed in the last 2 years

Knowledge Level:

Narrative (L1)

Semi-Structured (L2)

Structured (L3)

Executable (L4)

 Narrative text created by a guideline or CQM developer

Summary

Summary

Source #1

Source

Description

References

Factors to Consider in Managing Chronic Pain: A Pain Management Summary

This artifact provides relevant information (i.e., factors) to inform decision-making when managing a patient's chronic pain. The information is presented to the clinician as a Pain Management Summary dashboard. The key factors include:

- **Pertinent Medical History** (i.e., Conditions associated with chronic pain and Risk factors for opioid-related harm)
- **Pain Assessments** (responses and scores)
- **Historical Treatments** (i.e., Opioid and non-opioid pain medications, Non-pharmacologic treatments, and Stool softeners and laxatives)
- **Risk Considerations** (i.e., Morphine milligram equivalent [MME] amount, Urine drug screen results, Benzodiazepine medications, Naloxone medications, and Risk assessments relevant to pain management)

Artifact Tags: **Version 0.1** **Active**  Data Summary **CPG: 91%**

MeSH Topics:  Pain Management  Analgesics, Opioid  Narcotics

 Created 4 years ago (2016-06-01 - 12:00)

 **Publisher** [The MITRE Corporation](#)

 Approved 3 years ago (2016-10-02)

 **Endorser** [Agency for Healthcare Research and Quality](#)

 Published 3 years ago (2016-10-02)

 **Status** Active

 **Last Reviewed** 3 years ago (2016-12-30)  This artifact has not been reviewed in the last 2 years

Alert in CPG-on-FHIR Section

CPG-on-FHIR

Clinical Practice Guidelines on FHIR (CPG-on-FHIR) is a standards-based standardized approach serving as a framework for shareable, interoperable, computable guidelines with the goal of connecting research and evidence swiftly and accurately to those who need it most, including clinicians and patients.

REQUIRED ELEMENTS

91%

CPG URL	https://cds.ahrq.gov/cdsconnect/artifact/factors-consider-managing-chronic-pain-pain-management-summary
CPG Version	0.1
CPG Name	none
CPG Title	Factors to Consider in Managing Chronic Pain: A Pain Management Summary
CPG Type	Data Summary
CPG Status	Active
CPG Experimental	False
CPG Revision Date	2016-10-02
CPG Publisher	The MITRE Corporation
CPG Description	Summary
CPG Actions	Actions

OPTIONAL ELEMENTS

Use Context	Usage
Jurisdiction	United States of America
Purpose	Background
Usage	Usage
Copyright	Federal Government Unlimited Rights License
Approval Date	2016-10-02
Last Review Date	2016-12-30  This artifact has not been reviewed in the last 2 years.
Related Artifacts	Recommendation #4 - Opioid Release Rate When Starting Opioid Therapy Recommendation #5 - Lowest Effective Dose Recommendation #7 - Opioid Therapy Risk Assessment Recommendation #8: Naloxone Consideration Recommendation #10 - Urine Drug Testing Recommendation #11: Concurrent Use of Opioids and Benzodiazepines
Library	Library

Discussion: Alert Design for Review and Update



- Alerts across three areas
 - ▶ Search Result
 - ▶ Title and Summary
 - ▶ CPG-on-FHIR Section
 - INPUT! Support design and placement?
- INPUT!
 - ▶ Alerts to CDS Authors
 - Six months, one month, and the day the status changes?
- Consider options to positively flag current content?
 - ▶ Specific author

Status options for a CDS Artifact

Required

- [Date](#) - Date last changed
- [Approved](#) - When the *artifact* was approved by publisher
- [Reviewed](#) - When the *artifact* was last reviewed. Review happens periodically after approval but does not change the original approval date.
- [Status](#) – The status of the *artifact*, taken from [this value set](#).
 - ▶ Draft: under development, not ready for normal use
 - ▶ Active: ready for normal use
 - New subcategory! Indicate use at clinical site
 - ▶ Retired: withdrawn or superseded, no longer of use
 - New subcategory! Indicate openness for new ownership
 - ▶ Unknown: status unclear
 - Use if was active but not updated/reviewed
- [Version](#) – The version of an artifact. Follows [major].[minor].[revision] format and adheres to the Clinical Decision Support Service specification (Section 6.4.1.2). Must update when status changed to “Draft” and is required for non-experimental artifacts.
- [Experimental](#) - A Boolean value to indicate that this *artifact* is authored for testing purposes (or education/evaluation/marketing) and is not intended to be used for genuine usage.
 - ▶ New subcategory! Theoretical: this CDS exists only in the minds of its developers and should only be used in imaginary EHRs
 - ▶ New subcategory! Partial: this is an incomplete CDS artifact published on CDS connect for comment or other purpose
 - ▶ New subcategory! Informational: support collaborations, but may not be updated or implementable

INPUT! Support for sub-categories to allow specificity, while maintaining CPG-on-FHIR alignment?

Terms and Conditions for Review and Update



- Terms and Conditions
 - ▶ Include the processes for timing, alerts and status
 - ▶ Presented for review and acceptance as part of author account creation
 - ▶ INPUT!
 - Review and update expectations
 - Evidence
 - Metadata
 - Clinical concept representation
 - Documentation
 - » 508 Accessibility

Achieve a 'reviewed' status (Slide 1 of 4)

- Evidence

- ▶ Determine whether primary evidence-based source is updated since last 'Reviewed'
 - If not, consult guideline authors for possible update timeline
- ▶ Collaborate with development team to perform a detailed analysis of CDS
 - Decision logs, clinical definitions, logic, documentation, etc.
- ▶ Identify which metadata fields in the existing artifact entry on CDS Connect are impacted by any changes in the evidence

INPUT! More or fewer expectations for the evidence component?

Achieve a 'reviewed' status (Slide 2 of 4)

- Metadata
 - ▶ Update all metadata fields impacted by changes in underlying evidence (see previous slide)
 - ▶ Review all aspects of artifact metadata for currency, spelling/typos, check hyperlinks, and for opportunities to enhance
 - ▶ Update the version number if appropriate

INPUT! More or fewer expectations for the metadata component?

Achieve a 'reviewed' status (Slide 3 of 4)

- Clinical concept representation
 - ▶ Determine if there are new value sets or codes that define a clinical concept in the logic (old/existing value sets do not need to be reconsidered)
 - ▶ If so, assess for best fit and update the artifact metadata accordingly
 - E.g., change the OID referencing an old value set to one referencing a new one
 - ▶ Update any structured logic files accordingly

INPUT! More or fewer expectations for the clinical concept representation component?

Achieve a 'reviewed' status (Slide 4 of 4)

- Documentation
 - ▶ Based on evidence, metadata and value set reviews, update artifact documentation accordingly, including change logs
 - All supporting documentation files meant to be human readable
 - ▶ Prepare documents as 508-compliant PDFs

INPUT! More or fewer expectations for the documentation component?

Next Steps

- Integrate input into review and update process for roll-out over Summer
 - ▶ Timing
 - Alert design
 - ▶ Status
 - ▶ Achieving a ‘reviewed’ status

DISCUSSION:
WHAT ARE OTHER ASPECTS OF CDS
ARTIFACT MAINTENANCE FOR FUTURE
CONSIDERATION?

WHAT'S NEW WITH CDS CONNECT

David Winters and Chris Moesel, MITRE

Updates and New Features



- **Authoring Tool**
 - ▶ Support for providing user comments on recommendations
 - ▶ Minor usability enhancements and bug fixes
 - ▶ Continued work on CPG-on-FHIR metadata support (not yet released)
- **Prototype Tools**
 - ▶ [CQL Testing Framework](#)
 - Version 2.1.0: Support for CQL using FHIR URL or URN representation of VSAC value sets
 - ▶ [CQL Services](#)
 - Version 1.6.0: Support for CQL using FHIR URL or URN representation of VSAC value sets
- **Repository**
 - ▶ Routine updates to underlying software (security patches, bug fixes, etc.)
 - ▶ Developing a prototype implementation for CDS artifacts based on CPG-on-FHIR
 - ▶ User interface improvements (design phase) account landing page to highlight account options for authoring, contributing and community members
 - ▶ User process improvements for login and account sign up
- **Artifacts**
 - ▶ [Factors to Consider in Managing Chronic Pain: A Pain Management Summary](#)
 - Updated implementation guide

Link to CDS Connect: <https://cds.ahrq.gov/cdsconnect>

ANNOUNCEMENTS, OPEN DISCUSSION AND CLOSE-OUT

Maria Michaels

Office of Public Health Scientific Services
Centers for Disease Control and Prevention