AGENCY FOR HEALTHCARE RESEARCH AND QUALITY

March 2022 CDS Connect Work Group Call

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 Versioning (MITRE/CDC/Alphora)
3:50 - 3:55	What's New with CDS Connect (MITRE)
3:55 - 4:00	Open Discussion and Close Out, Maria Michaels (CDC) • Open discussion and announcements • Concluding comments, review next steps and adjourn

Objectives

- Share new features and resources available for CDS Connect

- Review the current state of determining the version of a CDS Artifact and consider challenges and opportunities for the future of determining CDS Artifact versioning

- Discuss topics of interest to members relating to opportunities for CDS Connect

CDS ARTIFACT VERSIONING

MITRE/CDC/Alphora

What do we mean by 'CDS Artifact Version'?

Versioning is a transparent way for users to know how the CDS Artifact is changing overtime

Major. Minor. Revision*. (e.g., 1.0.0) Semantic Version Numbering, see http://semver.org/

- Use 1.0.0 for the initial public posting of the artifact.
- There are two uses of "versions:" 1) is the version metadata field discussed here that is manually updated and 2) is the version saved in Drupal each time an artifact is updated
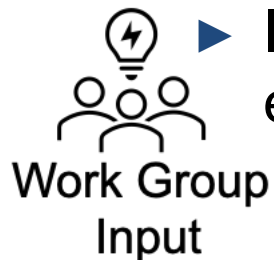
Subsequent updates to version numbers should be coordinated with the CDS Connect project team, with these considerations:

- Updates that warrant a Major number change:
  - ► Updated value set based on evidence change
  - ► Update to clinical logic based on evidence change

- Updates that warrant a Minor number change:
  - ► Implementation guide update
  - ► Value set additions without OID (object identifier) changes

- Updates that warrant a Revision number change:
  - ► Update to artifact metadata fields
  - ► Correction of typos or errors in implementation guide

*"Revision" is used instead of "Patch"

When to consider a new CDS artifact vs. a new version?

- You **should** consider a new artifact if…
  - ► The intent of the artifact has significantly changed since the last version
  - ► You do not own the original and the owner won't accept your changes

- You **may** consider a new artifact if…
  - ► The intent of the artifact has expanded (while retaining original intent)
  - ► The underlying evidence has significantly changed or been replaced

- Discussion considerations
  - ► What are the impacts of changing knowledge levels?
  - ► If the implementation of the artifact changes, should that trigger a new artifact if it eases understanding of its use?

Work Group Input

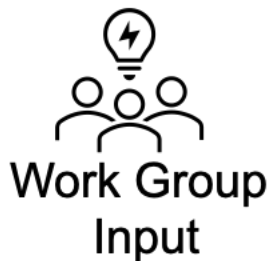# Do you want to build on an open-source CDS artifact?

- Connect with the existing author

- Existing author releases a new version if the author agrees to take your changes (or they could add you to their group)
  - ► CPG-on-FHIR view will allow for easier views across versions (e.g., when a prior version is ready for use, while an updated version is still draft)

- Create a new artifact if the author will not accept your changes
  - ► First, ensure that the original artifact's licensing allows for this
  - ► The relationship to original artifact could be reflected in "Related Artifacts"

Why publish and continue to update your CDS Artifact, *even if it is Experimental or Draft with no expectation for regular maintenance*?

- To get your work out there – dissemination
- To spark interest in collaboration
- To gather feedback
- To provide a resource others might use, modify and implement in their own use case
- To maintain alignment with the latest and best evidence
- To leverage advancements in related technologies and standards
- To address feedback from implementors and users
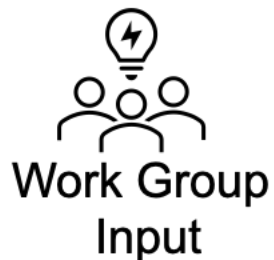- To give implementors confidence in the relevance and accuracy of the artifact

DISCUSSION:
WHAT'S YOUR EXPERIENCE WITH CDS ARTIFACT VERSIONING?

Work Group Input

Incorporation of new Grade D evidence, "discourage the use of this service"

- New logic, but highly related to existing CDS artifact [Aspirin Therapy for Primary Prevention of CVD and Colorectal Cancer](#), reflective of other elements of U.S. Preventative Services Task Force (USPSTF) guideline

  - It triggers on a prescribe action instead of on patient view, so will adding a new workflow necessarily create a different CDS artifact?
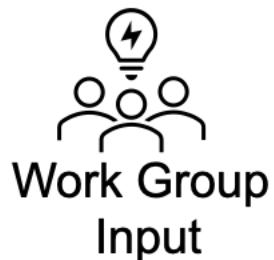
Work Group Input

Abnormal Blood Glucose and Type 2 Diabetes Mellitus: Screening

- Original based on 2015 USPSTF *Recommendation for Abnormal Blood Glucose and Type 2 Diabetes Mellitus: Screening*

- 2021 USPSTF Recommendation is now called *Prediabetes and Type 2 Diabetes: Screening and lowers age range from 40 to 35*
  - ► Screening WITH the same glucose tests FOR the same abnormalities AMONG a different age range with different pre-existing status IN ORDER TO give the patient information which is now different because they're different patients
    - − Not considering CVD risk factors in who it screens nor screening "as part of a CV risk assessment"

Work Group Input

Pain Manager

- Provider-facing application based on Pain Management Summary artifact, but adds shared-decision making capabilities and system requirements, fits in a larger workflow, and targets a different audience

- Proposed minor refactor of core Pain Management Summary library to allow more reuse
  - ► Extracted "concepts" into a separate library to allow terminologies to be configured
  - ► Consider refactor of "display content"
    - − Extract "views" into widgets driven by the shape of the CQL summary output

Work Group Input

WHAT'S NEW WITH CDS CONNECT

Matt Coarr and Chris Moesel, MITRE

Updates and New Features

- Authoring Tool
  - ► Added support to download, upload, and test CQL based on FHIR 4.0.1
  - ► Ongoing preparation for migration to a new server environment
  - ► Ongoing refactoring to improve maintainability and reusability

- Prototype Tools
  - ► Updated dependency libraries
    (for CQL Services, CQL Testing Framework, and Pain Management Summary)

- Repository/Website
  - ► Security updates
  - ► Working with CDSiC and CEDAR teams on site changes and development
  - ► Added memory to Drupal cloud environment and working to make system more memory efficient
  - ► Addressing spam issue on web form submissions

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

ANNOUNCEMENTS, OPEN DISCUSSION AND CLOSE-OUT

Maria Michaels

Centers for Disease Control and Prevention