



CDS (Clinical Decision Support) Connect Work Group
Meeting Summary
June 18, 2020
3:00 - 4:00 pm ET

Attendees: 41 people including 6 phone dial-ins (47 total)

Organization	Attendee Names
AHRQ Members	Steve Bernstein, Roland Gamache, Ed Lomotan, James Swiger, Mario Terán (5)
Work Group (WG) Members	Yvette Apura, Rachel Berger, Edna Boone, Joe Bormel, Chris d’Autremont, Rina Dhopeshwarkar, Anthony Gerardi, Alex Gerwer, Dwayne Hoelscher, Bryan Kim, Lisa Lang, Danny van Leeuwen, Sandra Zelman Lewis , Maria Michaels (MM), Ryan Mullins, Patrick O’Connir, Neeraj Ojha, Becca Rasky, Joshua Richardson (JR), Syed Sameemuddin, Andrey Soares, Matt Storer, Linda Wedemeyer, randy (username) (24) 6 dial-ins
MITRE CDS Connect Members	John Boiney, Noranda Brown, Matt Coarr, Eileen Chang, Lacy Fabian, Susan Haas, Michelle Lenox, Dylan Mahalingam, Rob McCready, Chris Moesel, David Winters, Tom Read (12)

MEETING OBJECTIVES

- Hear lessons learned from a member developing CDS Artifacts using the CDS Authoring Tool (AT)
- View demonstrations on implementation to support and align with Clinical Practice Guidelines on Fast Healthcare Interoperability Resources (CPG on FHIR®) within CDS Connect’s Repository and CDS Authoring Tool
- Share new features and resources available for CDS Connect

ACTION ITEMS

- Share feedback and use cases for additional expressions in AT with Chris Moesel (All WG members)
- Coordinate a future WG meeting on versioning of collections and artifacts with RTI International as a case study (MITRE, JR)

MEETING SUMMARY

Following roll call and review of agenda, Christopher d’Autremont and Matthew Storer, both from Oregon Health & Science University (OHSU), Care Management Plus Team, gave a lessons learned presentation on their experience with developing CDS artifacts for hypertension using the CDS Authoring Tool. This was followed by demonstrations by the MITRE team on the current development efforts underway in supporting CPG on FHIR® in the Authoring Tool and the Repository.



Developing CDS Artifacts for Hypertension

Mr. d'Autremont and Mr. Storer described their use of the Authoring Tool in their development of a hypertension Fast Healthcare Interoperability Resource (FHIR®) App. Mr. Storer found the AT extremely useful, especially as a non-coder, and had recommendations for future development effort, based on his authoring experience. These included adding more commonly used expressions such as First(), Last(), Min(), Max(), and better support for uploading newer versions of external libraries, so users do not have to delete/reconstruct AT elements during the update process.

Discussion

- MITRE team appreciated the feedback and the recommendations and requested that if there is additional feedback, especially on limited set of expressions currently supported, please reach out to team and share.
- The OHSU team is in early stages of testing and development. The second phase will include physicians. A long-term goal is to incorporate the ability to enter in treatment and practice preferences. The link to research grant was shared in chat: <https://digital.ahrq.gov/ahrq-funded-projects/translating-hypertension-guidelines-practice-development-interoperable-clinical#h=dorr%20u18>
- Though PlanDefinition authoring was not difficult in this case, OHSU team did think it would be a nice feature to be able to create a PlanDefinition with a CDS tool.
- Experience with AT exporting to Clinical Quality Language (CQL) and its compatibility with CQF (Clinical Quality Framework) Ruler was good. OHSU team did have to ensure the references in PlanDefinition mapped correctly and do a bit of manual tooling, but this was not seen as burdensome.
- It was clarified that CQF Ruler is a HAPI (HAPI is an open source implementation of HL7® application programming interface) based server system, that can be populated with FHIR® artifacts and can execute CQL. The Opioid Prescribing Guideline Quick Start is helpful in setting up something quickly to see this demonstrated.

CPG-on-FHIR Updates: CDS Connect Repository

The MITRE team did a demo of the CPG on FHIR® related features under development for the Repository. This demonstration included the updated public facing artifact page view which supports artifacts at multiple knowledge levels as well as the author view being enhanced to support creation of artifacts collections. The backend JavaScript Object Notion (JSON) representation is being built out to use CPG on FHIR® fields.

Discussion

- A WG member asked how artifact collections might appear in topical search results and if it would be seen higher in results (compared to plain artifacts). The team is open to feedback on if this would be useful or how members would expect it to behave.



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- A WG member asked if an artifact can be mapped to more than one guideline. The team discussed current use cases supported and how versioning is currently supported by current paradigm.
 - The team raised the issue of ownership of collections, and how this is still under development as a concept. A WG member shared that the ability to see all the evidence behind these individual artifacts within a collection can help build trust in an artifact.
 - A WG member questioned who would define a collection and how multiple organizations might contribute under that collection. The team saw this as being something that governance needs to address, as the current development effort started with support for individual contributors generating a collection. It was clarified that in the current model, both versions and collections have their own unique identifiers, and reference one another. This led WG members and team to discuss the GitHub model, forking and “breaking the fork”, terminology and version updates, where it was decided there was enough interest to have another WG meeting on this topic.

CPG-on-FHIR Updates: Authoring Tool

The MITRE team did a demo of the CPG on FHIR® related features currently implemented and those under development for the AT. Current implementation includes 1) AT now guides authors towards using the full CPG on FHIR® versioning format and 2) exported CQL now includes the Value Set Authority Center (VSAC) FHIR® URL to specify value sets, rather than the object identifier (OID). Under development features demonstrated how authors would be able to specify CPG on FHIR® metadata, which in turn will then be included in the library export. A long-term idea being considered is a bi-directional functionality where authoring CPG on FHIR® metadata in AT could be used by a CDS Connect Repository entry, and vice versa, saving the authors from entering this information twice.

Discussion

- A WG member appreciated the presentation overall and noted that the ability to export FHIR Library resources will be a very helpful feature in the AT.

What’s New with CDS Connect

The MITRE team shared information about updates and new features for the prototype tools, repository, authoring tool and artifacts.

Announcements / Other Questions

No announcements or other questions.

Closing