



**CDS (Clinical Decision Support) Connect Work Group
Meeting Summary
July 17, 2020
3:00 - 4:00 pm ET**

Attendees: 40 people including 3 phone dial-ins (43 total)

Organization	Attendee Names
AHRQ Members	Roland Gamache, Ed Lomotan, Mario Terán, Steve Bernstein, (4)
Work Group (WG) Members	Rachel Berger, Edna Boone, Chris d’Autremont, Anthony Gerardi, Maria Michaels (MM), Ryan Mullins, Joshua Richardson, Syed Sameemuddin, Andrey Soares, Linda Wedemeyer, Lee Preston, Rebecca Rasky, Nancy Nurthen (NN), Scott Hugh, Maggie Dorr, Randolph Barrows, Apurva Desai, Sai Simhardi (SS), Jeremy Michel, Raj Hemadri (RH), Joe Bormel, Bryn Rhodes, Julie Gervais, Bill Lober, Sandra Zelman Lewis, Vojtech Huser, Jing Wang (27) 3 dial-ins
MITRE CDS Connect Members	Noranda Brown, Matt Coarr, Eileen Chang, Lacy Fabian, Michelle Lenox, Dylan Mahalingam, Chris Moesel, David Winters, Tom Read (9)

MEETING OBJECTIVES

- Share lessons learned for use of CDS Connect
- Share new features and resources available for CDS Connect
- Discuss topics of interest to members relating to opportunities for CDS Connect

ACTION ITEMS

- Engage with work group member to discuss and address 508 compliance questions regarding their prior contributions

MEETING SUMMARY

Following roll call and review of agenda, Sai Simardi, a colleague of Nancy Nurthen’s at Digital Infuzion, presented their work on their innovative use of the authoring tool as unified query builder for clinicians within



their clinical environment. Following their Lessons Learned presentation, there was discussion on recommendations the Digital Infuzion team (SS, NN, RH) had shared.

Sharing Lessons Learned with CDS: CDS Authoring Tool as a Unified Query Builder within the Clinical Environment

Ms. Simardi described the components of the common data model harmonization efforts required by their project. Via a secure pipeline, Data Partners provide data to a cloud-based repository. Phase I of their work identified a need for solutions to help overcome writing different queries for each relational database system at the differing sites. After identifying Fast Healthcare Interoperability Resource (FHIR®) as a potential solution, they recognized that Clinical Quality Language (CQL) could be the bridge they needed between clinical researcher and the FHIR®API within their system. Ms. Simardi then described how a key component of their Phase II system was their re-use of the CDS Authoring tool graphical user interface (GUI), as a way to implement a portal for researchers who are new to using Clinical Quality Language (CQL). The resulting unified query builder allowed clinicians to manage their own queries, have ready access to a dictionary service of required code systems and value sets, validate their code and fix syntax, and download CQL queries as starter templates. After describing the tailoring done to CDS Connect Authoring Tool (AT) and next steps in their project, she closed with recommendations for the team, as is customary for this style of working group presentation. Recommendations included continuous updates to FHIR versions, code dependencies with FHIR version being modular, database migrations, and adding FHIRSql capabilities when they become available.

Discussion

- MITRE team appreciated the presentation and congratulated the team on some great work. The unified query builder highlighted a very different use case than the team first envisioned, so it was exciting to see how the work is being extended in ways they had not anticipated.
- The MITRE team shared thoughts and answered questions raised by the recommendations. These included:
 - The need for the described modularity was never anticipated. It is something to track as projects extend beyond the initial use cases.
 - Migrations are scripts that are run to change the shape of the existing database to reflect the new formats and shape required when new features are introduced.
- FHIRSql was not well known by the overall WG. RH described how FHIRSql would be anticipated to improve performance by reducing 2 CQL queries to one FHIRSql query. WG member noted that CQL could do this also, but that the optimization question is one of where the query is being run. RH noted FHIRSql was only in the working specification stages. There was a request for links or public materials on the topic to be shared with the greater working group and the MITRE team.

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.

- In response to new artifact page design, a WG member asked about the general growth of the repository. In particular, was there functionality to analyze repository artifact numbers, over time, as



well as look at the artifacts required metadata across the entire repository? The MITRE team responded this is of growing interest to members, but this is not current functionality of the repository. The MITRE team described potential ways to satisfy WG member's use case via a more manual process and expressed interest in the use case for future improvement. WG member clarified their motivation for the information with the example of year of birth, which as a data element in an electronic health record, is more important for its ability to calculate other fields, than a field like occupation. For this reason, understanding which artifacts had this metadata as a required field would be of interest.

Announcements / Other Questions

- Digital Quality Summit (<https://www.ncqa.org/about-ncqa/sponsorship-events/digital-quality-summit/>) is next week and some working group members will be presenting.
- There was a request by a working group member to discuss 508 compliance issues they are having with their artifact update. This can be raised via email and at the next meeting, if needed.

Closing