CDS (Clinical Decision Support) Connect Work Group
Meeting Summary
October 15, 2020
3:00 – 4:00 pm ET

Attendees: 39 people (32 attendees + 7 call-ins)

<table>
<thead>
<tr>
<th>Organization</th>
<th>Attendee Names</th>
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<tbody>
<tr>
<td>AHRQ Members</td>
<td>Roland Gamache, Ed Lomotan, Mary Nix, James Swiger, Mario Terán (5)</td>
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<td>Work Group (WG) Members</td>
<td>Najid Afshar, Yvette Apura, Randolph Barrows, Chris d’Autremont, Melanie</td>
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<td>Combs-Dye, Dwayne Hoelscher, Bryan Kim, Dan Malone, Jeremy Michels, Maria</td>
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<td>Micheals, Diane Montella, Ryan Mullins, Neeraj Ojha, Bryn Rhodes, Matthew</td>
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<td>Storer, Rhonda Schwartz, Danny van Leeuwan, Jing Wang, Sandra Zelman Lewis</td>
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<td>(19)</td>
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<td>Call-ins (7)</td>
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<td>MITRE CDS Connect Members</td>
<td>Noranda Brown, Matt Coarr, Lacy Fabian, Michelle Lenox, Dylan Mahalingam,</td>
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<td>Chris Moesel, Tom Read, David Winters (8)</td>
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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

- Email the MITRE team with suggestions for 1) user groups to target future education efforts, 2) webinars, or 3) other ideas regarding expanding the use of artifacts.
- Reach out to governance organization of guideline development community to suggest a future CDS Connect webinar (Maria M.).
- Email MITRE team to provide additional comments on themes or trust attributes.
- Email MITRE team with additional thoughts on measuring/assessing the degree to which artifacts/CDS Connect are achieving the prioritized themes or trust attributes.
MEETING SUMMARY

Following roll call and review of agenda, Lacy Fabian (MITRE) led a discussion on prioritization for the upcoming option year of CDS Connect.

Share and Discuss CDS Connect Priorities Through Sept 2021 (MITRE)

Lacy Fabian went through a series of slides with an overview of last year’s prioritization results and the project’s 2020 accomplishments. After a brief review of the MoSCow\(^1\) prioritization approach, the six general themes (with representative user stories), and the trust attributes, the work group was asked to share how they would rank the general themes and trust attributes.

General Themes

1. Enforce Standards Compliance (Artifacts)
2. Enforce Standards Compliance (Repository)
3. Ensure Artifact Currency
4. Expand the Repository
5. Expand the Use of Existing Artifacts
6. Increase Trust

Discussion

Three work group members identified Theme 1 (Enforce Standards Compliance – Artifacts) as their highest priority. Efforts to support clinical quality language (CQL), along with tools and testing frameworks, was deemed a high priority. Export of and handling external CQL (as one of the representative user stories listed) ranked highest within the set.

Another work group member shared that Theme 4 (Expand the Repository) and Theme 6 (Increase Trust) were important. He would like to see a shift from clinical practice guidelines to efforts that support public health, patient safety, and the more ordinary “getting through life” decision making faced by laypersons navigating their own health conditions. In terms of trust, familiarizing laypersons with the existence of those artifacts with a strong patient-facing component is important.

A work group member who worked closely with organizations involved with implementation emphasized that trust issues, especially trust around application programming interfaces (API), could be especially problematic. Convincing a hospital system to adopt an artifact is hard if that API is not supported by the electronic health record (EHR) vendor. This lack of support can add to the existing challenges faced when obtaining Chief Medical Information Officer approval on the use of the API.

Another work group member prioritized reaching out to the guideline development community to share CDS Connect. She believed that this user group is simply not aware of the effort. The guideline development community could come to see the value of CDS Connect to distribute and raise awareness of their own guidelines and, in turn, might be willing to help with development. Going on an education tour of important user groups could be a valuable effort to Expand the Use of Existing CDS Connect (Theme 5).

\(^1\) The sentiment data collected during the discussions was analyzed using the Must Have, Should Have, Could Have, Won’t Have (MoSCoW) prioritization method, which is a method commonly used in software development and business analysis to identify the priorities of a diverse group of stakeholders.
A second work group member shared three requests for “must have/should have” features that came from the barriers he has encountered working with guideline groups. These included 1) removing the restriction of Value Set Authoring Center (VSAC) and allowing a configurable terminology to work with any Fast Healthcare Interoperability Resources (FHIR)® terminology server, 2) providing a means of artifact validation for developers while authoring, perhaps in the form of a CDS Hooks sandbox, and 3) identifying a means to reference library resources (e.g., a node package manager [NPM]) which in turn could be distributable as part of a package list for an implementation guide.

The MITRE team invited the work group member to share more detail about these use cases offline, especially with respect to the terminology server. Although the terminology server use case had been previously investigated, the team had been unable at that time to find users to identify requirements. A second work group member offered to share his requirements on a FHIR® compliant terminology server from a vendor perspective, along with the challenges he faced using dates and ranges with VSAC. Additionally, a work group member shared that, in his work with guideline developers, international users cannot access VSAC, so it becomes a non-starter to use CDS Connect tools; a terminology server could help alleviate that pain point.

The MITRE team recapped the themes discussion. Enforcing Standards Compliance (Themes 1 and 2) and Expanding the Use of Existing Artifacts (Theme 5) emerged as the top themes, followed closely by Increasing Trust (Theme 6). Ensure Artifacts Currency (Theme 3) was not a top theme this year.

Asked about the trust attributes list, members agreed it was comprehensive. One member shared he felt “Feedback and Updating” was important; he shared an example of how the use of hydroxychloroquine, now used in some COVID treatments, was triggering results in older implementation of tools. This demonstrated the importance of keeping artifacts timely and current for some organizations.

A work group member asked if and how progress was being tracked, and to what degree the themes and trust attributes were being achieved. The MITRE team clarified that specific user stories are tracked and tagged with the appropriate theme(s) in Jira. Those tags, along with the trust attributes, shape the prioritization used in creating the specific work plan. Work group members were invited to share other thoughts on measuring/assessing how CDS Connect is performing, which the MITRE team can take into account in prioritization.

What’s New with CDS Connect

The MITRE Team discussed updates and features that have recently been implemented or are in progress. The Authoring Tool (AT) in-progress efforts include Clinical Practice Guidelines (CPG)-on-FHIR® Library export functionality and external CQL function support. The Repository team has deployed a new combination sign up form and has entered the early stages of user testing on the CPG-on-FHIR® work.

A work group member asked if there were any further plans to break the AT down further, such as translations into NPM packages, that could be re-used by others. The MITRE team shared that they are investigating re-usability of AT components, with a focus on creating React components of some AT components. This approach would permit element builder re-use in tools for building clinical pathways or for filtering databases in real-time. The work group member was pleased to hear this and hoped that re-usability would extend to the testing framework.
Announcements / Other Questions

- The meeting was closed with a viewing of the new CDS Connect video, which is available at two locations:
  - [https://cds.ahrq.gov/cdsconnect](https://cds.ahrq.gov/cdsconnect)
  - [https://www.youtube.com/watch?v=xjbYTBaycs8](https://www.youtube.com/watch?v=xjbYTBaycs8)

Closing