

November 27, 2018 CDS Connect Work Group Call



CDS Connect

AGENDA

3:00 – 3:05	Roll Call, Ginny Meadows (MITRE)
3:05 – 3:10	Review of the Agenda, Maria Michaels (CDC)
3:10– 3:45	CDS Connect OY2 Environmental Scan Key Findings and Potential CDS Approaches, Sharon Pacchiana (MITRE) <ul style="list-style-type: none"> • Discuss Environmental Scan key findings and potential approaches to artifact development • Question and answer period
3:45 – 4:15	CDS Connect Sustainability Project, Lacy Fabian (MITRE) <ul style="list-style-type: none"> • Discuss the project for ongoing sustainability of the CDS Connect Repository and Authoring Tool. • Question and answer period
4:15 – 4:25	Other Announcements <ul style="list-style-type: none"> • CDS Connect Patient Perspective Blog Postings, Danny Van Leeuwen • CDS Connect at AMIA 2018, Sharon Sebastian (MITRE)
4:25 – 4:30	Open Discussion and Close Out, Maria Michaels (CDC) <ul style="list-style-type: none"> • Open discussion and announcements • Concluding comments, review next steps and adjourn

- *CDS = Clinical Decision Support*
- *OY2 = Option Year 2*
- *CQL = Clinical Quality Language*
- *AMIA = American Medical Informatics Association*

OY2 Environmental Scan Key Findings & Potential CDS Approaches

Key Findings from Environmental Scan

The Environmental Scan included research in published and grey materials; interviews and informal discussions; and insights from this Work Group.

- The USPSTF “A” and “B” recommendations are mandated by law to be covered by insurance plans
- The USPSTF published 31 new or revised recommendations (nine are “A” or “B”) between January - November 2018.
- The recommendations are used as the evidence-based source for 12 electronic clinical quality measures (eCQMs) and 2 NCQA electronically-specified HEDIS measures

Key Findings (cont.)

- Most major vendors and several health care organizations have implemented CDS specific to the recommendations
- The ePSS is used primarily by clinical students, not practicing clinicians
- ePSS app and API users desire recommendations filtered to individual patient characteristics and prioritized
- As the cost of employee health insurance coverage and chronic disease care escalates, employers are focusing more on the health and wellness of their employees
- Mobile device use and medical/health apps designed for clinicians and patients has expanded rapidly in health care

Top recommendations (1 of 5)

- **Create patient/consumer-facing CDS that could be used with either a patient portal, a personal health record, an employer or health plan wellness web site, or an employee health web site.**
 - Benefits:
 - Addresses growth in employee health/wellness and patient/consumer engagement with their healthcare
 - Constraints:
 - Data availability. Would have to develop so it can be integrated with a data source
 - Most health and wellness vendors already have some kind of health maintenance tool.
 - Would have to modify the recommendations to include patient friendly language addressing the health literacy of the patients/consumers.
 - Increased IRB scrutiny with patient involvement.
 - Maintenance issue every time the recommendations are modified.
 - Patient recruitment, engagement and ability to gain feedback on the CDS.

Top recommendations (2 of 5)

- **Convert 1 or more eCQM specifications to a CDS intervention**
 - Benefits:
 - Value sets and logic already created
 - Although many EHRs have created CDS based on these, feedback indicated that the CDS implementation may not be an accurate representation of the recommendation(s)
 - Constraints:
 - Most EHR vendors include this CDS, so may be seen as redundant
 - Maintenance issues whenever the recommendations or eCQMs are modified (eCQMs are updated every year)

Top recommendations (3 of 5)

- **Convert 1 or more of the newest USPSTF A, B, or D recommendations to a CDS intervention**
 - Benefits:
 - As new or updated recommendations have been released in 2018 in the “A”, “B” or “D” categories, most vendors have likely not yet implemented them as CDS
 - Reduces individual resource use plus likely to improve the accuracy, validity and reliability of the CDS
 - Select the one(s) that provide the most benefit to the pilot organization
 - Constraints:
 - Some EHR vendors may have already converted these, so may be seen as redundant
 - Maintenance issues whenever the recommendations are modified

Top recommendations (4 of 5)

- **Create a clinician-facing SMART on FHIR app similar to the ePSS but integrated with an EHR, with development efforts constrained to updating the user interface and usability**
 - Benefits:
 - Provides a more user friendly and usable view of the recommendations
 - Constraints:
 - Most EHR vendors already have CDS created, as well as some kind of health maintenance tool, so may be seen as redundant
 - Maintenance issues whenever the recommendations are modified
 - Does not address the request for more patient-specific filtering

Top recommendations (5 of 5)

- **Create a clinician-facing SMART on FHIR app similar to the ePSS but integrated with an EHR, with development efforts constrained to updating the user interface and usability AND removes any recently performed screenings from the results**
 - Benefits:
 - Provides a more user friendly and usable view of the recommendations
 - Addresses most common request for the ePSS
 - Constraints:
 - Data availability as well as LOE for implementing logic for all recommendations
 - Most EHR vendors already have CDS created, as well as some kind of health maintenance tool, so may be seen as redundant
 - Maintenance issues whenever the recommendations are modified

Recommendations not considered feasible

- **Creation of a clinician-facing SMART on FHIR app similar to the ePSS but integrated with an EHR, with development efforts constrained to updating the user interface and usability that removes any recently performed screenings from the results AND prioritizes the display based on research**
- **Creation of a new mobile app**, either clinician or patient-facing, with any level of development (UI only; patient-specific; and/or prioritized)
- **Update the user interface of the web-based ePSS**
- **Modify the API** to be more patient-specific

Next Steps

- Investigate patient facing CDS including design, patient engagement, and privacy and security considerations
- Explore the 12 eCQMs for developing into a CDS artifact (level of effort, feasibility, impact)
- Explore the 2018 USPSTF “A”, “B”, and “D” recommendations for development into a CDS artifact (level of effort, feasibility, impact)
- Engage in discussions with pilot partners to determine interests and needs

CDS Connect Sustainability Project

CDS Connect—Current State

The CDS Connect project (2016-present)

- **Sponsored by ARHQ using PCORI funds**
 - 3 year effort; just kicked off the 3rd year of performance
 - Objectives:
 - Establish a CDS community that collaborates and shares CDS resources
 - Establish systems that ease the development of standards-based, interoperable CDS artifacts AND supports the sharing of CDS artifacts aligned with evidence-based research
- **AHRQ and MITRE are identifying approaches to sustain CDS Connect beyond the current period of performance**

CDS Connect Sustainability Project Overview

- **In July 2018, the National Guidelines Clearinghouse (NGC) was closed due to the loss of funds to continue AHRQ support.**
- **To move to a proactive posture, AHRQ has begun to identify new models and innovative approaches to help ensure sustainment for other evidence-based systems.**
- **The CDS Connect Sustainability Project is engaging with the CDS Connect Community including this Work Group to help identify sustainability paths.**

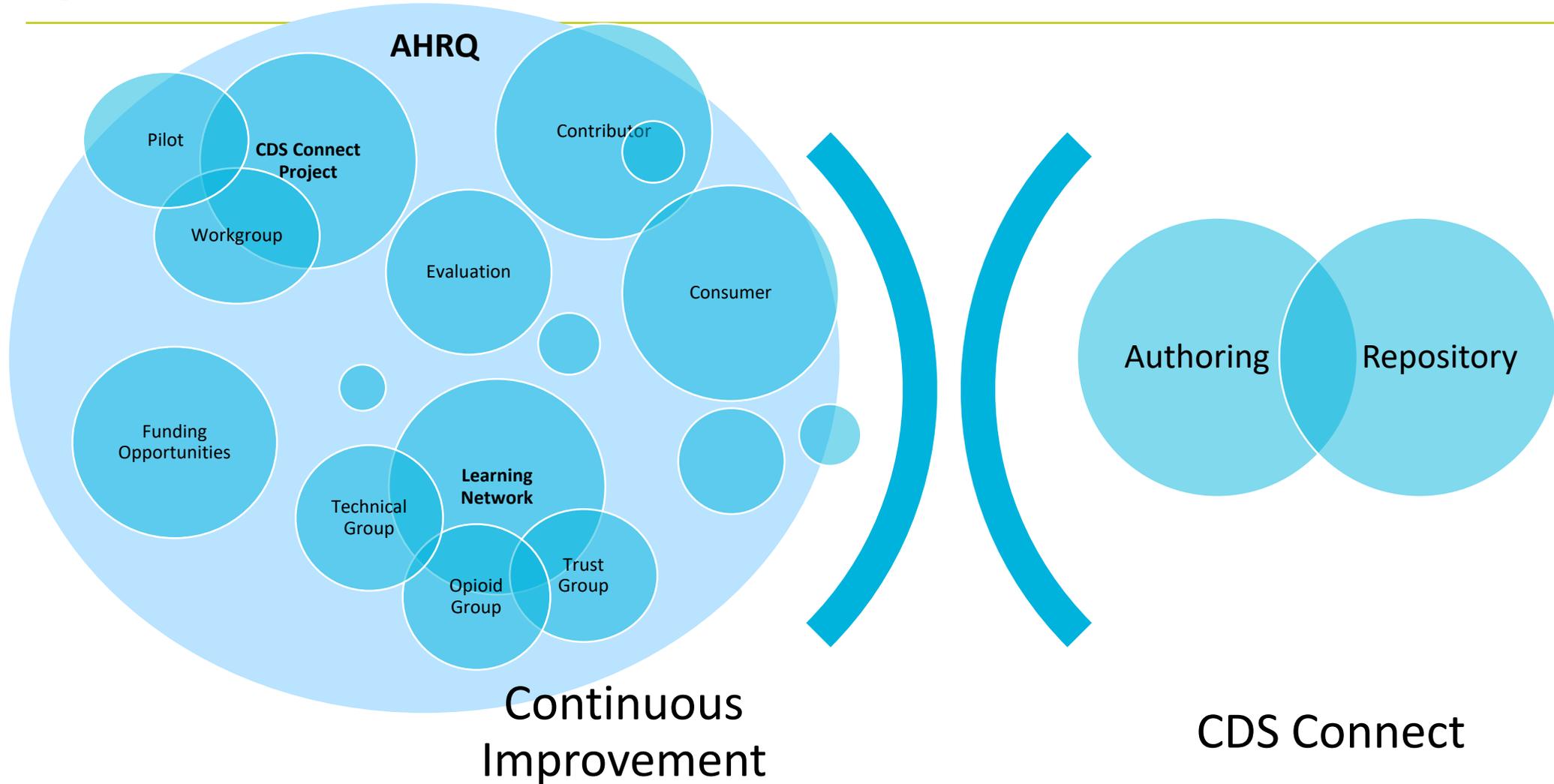
CDS Connect Sustainability Project Milestones and Timeline

CDS Connect Sustainability project (September 2018- September 2019)

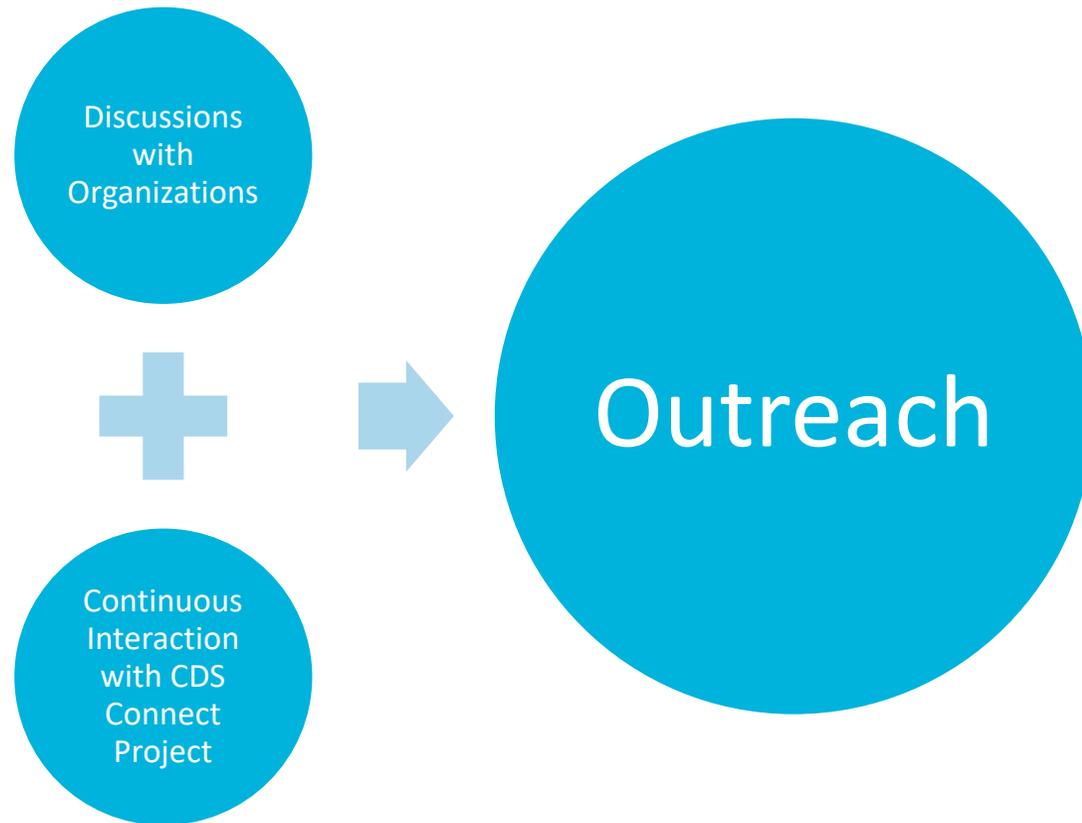
■ How the work is being framed

- Analysis of CDS Connect sustainability options
 - Current State of CDS Connect (delivered by mid-January 2019)
 - Environmental scan (delivered by mid-March 2019)
 - Discussions with organizations (by end of April 2019)
 - Report of Detailed discussions with organizations (delivered by mid-June 2019)
 - Analysis and recommendations (delivered by mid-July 2019)
- CDS Connect transition plan (delivered by early-September 2019)
- Capture lessons learned (at project closeout)

CDS Connect Sustainability Project – Roles in CDS Connect



CDS Connect Sustainability Project – Identifying Options



- **Connecting with CDS Connect Project**
 - Leverage continuous interaction with CDS Connect Project
 - Use of key performance indicators to assess sustainability paths
 - Use of principles

CDS Connect Sustainability Project – Identifying Options (cont.)

- **Key Performance Indicator Example**
 - Promoting a business model that allows **innovation** in dissemination and resource use
- **Signs of progress**
 - Organizational capacity to design and implement systems that effectively and efficiently meet the end users' needs
- **Measures**
 - Experience developing/maintaining systems
 - Realizing returns on investment
 - Conducting usability analyses
- **CDS Connect Principles**
 - Key attributes expected by AHRQ and Users
 - Such as:
 - Ad-free content
 - Propels clinical decision support
 - Respect copyrights
 - Current content

CDS Connect Sustainability Project – Discussions with Organizations

- **Qualifying criteria**
 - Typical use
 - Experience with components of CDS Connect (e.g., Authoring Tool)
 - Size and resources of the organization
 - Funding paths
- **Initial sources for identification**
 - Workgroups
 - Membership organizations
 - Organizations/affiliate users of CDS Connect
- **Lessons learned from NGC outreach: Discussion framing**
 - Proactive approach considering possible paths

CDS Connect Sustainability Project – Discussion Framing

- **CDS Connect is currently on a path to...**
 - Demonstrate how evidence-based research can be more rapidly incorporated into clinical practice through interoperable decision support by developing systems to:
 - 1) ease the creation of CDS artifacts expressed using interoperable data standards (the CDS Authoring Tool)
 - 2) facilitate the sharing of CDS artifacts via an accessible, web-based tool (the CDS Connect Repository).
- **To enable CDS Connect to continue its current mission, potential future state paths are being researched**

CDS Connect Sustainability Project – Discussion Questions

- What value is there in having CDS Connect principles? What approach resonates for developing them?
- What are other considerations for identifying organizations?
- What are key points for discussion framing (i.e., what sets CDS Connect apart)?
- What are key considerations for the possible future paths? Are there others?
- How can the work group continue to be engaged with the sustainability project?

Announcements, Open Discussion, and Close-out

CDS Connect Patient Perspective Blog Postings

Welcome About Governance Artifacts Authoring Tool **Community** FAQ

Workgroup Reports **Patient Perspectives**

Welcome / Community / Patient Perspectives

Putting the Patient at the Center of Clinical Decision Support

About **Blog Posts**



2018-11-01

Putting Patients and Clinicians at the Center of CDS Development and Implementation

Danny van Leeuwen

Clinical decision support researchers, developers, and implementers this is for you. Clinical decision support (CDS) technology can maximize trust and engagement during informed decision-making if used to its full potential. Or NOT.

Announcements and Open Discussion

- **CDS Connect at AMIA 2018, Sharon Sebastian (MITRE)**
- **Other announcements?**

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