

CDS Connect: Using Clinical Decision Support To Move Evidence Into Practice

CDS Connect is a key component of AHRQ's recently launched initiative on clinical decision support (CDS) to move evidence into practice and to make CDS more patient centered. This initiative has four components:



Patient-Centered
Clinical Decision Support
Learning Network

1. Engaging a stakeholder community. The Patient-Centered Learning Network is building a community of patients, clinicians, health information technology (IT) developers, and many others to advance the concept of patient-centered CDS. Its

second annual meeting will be held in nearby Crystal City, VA on October 3, 2017. For more information and to register, visit <https://pccds-ln.org/annual-conference>.

2. Creating prototype infrastructure for sharing and developing CDS. This is the CDS Connect project. More information on this project is below.



3. Advancing CDS through demonstration and dissemination research.

AHRQ released two funding opportunity announcements:

- Scaling Established Clinical Decision Support to Facilitate the Dissemination and Implementation of Evidence-Based Research Findings (R18)
<https://grants.nih.gov/grants/guide/pa-files/PA-17-260.html>
- Developing New Clinical Decision Support to Disseminate and Implement Evidence-Based Research Findings (R18)
<https://grants.nih.gov/grants/guide/pa-files/PA-17-261.html>

4. Evaluating the overall initiative. AHRQ has plans underway to evaluate the initiative.

CDS Connect

CDS Connect is a cutting-edge, digital platform for sharing CDS and for making the process of developing and implementing CDS more efficient, systematic, and replicable. More than just computerized alerts and reminders, CDS is a **process** that weaves together people and technology and aims to bring the right information, to the right people, using the right technology and format, at the right time during workflow to improve the quality of care (sometimes known as the "Five Rights" of CDS).¹

As a proof of concept, CDS Connect translated guidelines for cholesterol management into shareable, interoperable CDS, implemented the CDS as interactive screens in the electronic health record for shared decision making between clinicians and patients, and piloted the CDS in a rural community health center. Further, CDS Connect developed an online platform to disseminate CDS and to serve as a publicly available, national repository of CDS resources or "artifacts." These artifacts include standards-based CDS code, implementation guidance, and tools for sharing and authoring CDS (e.g., application programming interfaces and a CDS authoring tool).

¹ Osheroff JA, Pifer EA, Teich JM, et al. Improving outcomes with clinical decision support: an implementer's guide. Boca Raton: Productivity Press; 2005.

The CDS is available in a standards-based format, together with detailed implementation guidance, for others to use. The project continues to grow with plans to develop additional CDS and to collaborate with our Federal and external partners to make CDS Connect the home for publicly available CDS.

Goals

CDS Connect has two primary goals:

1. To advance evidence into practice through CDS
2. To make CDS more shareable, standards-based, and publicly available.

Process

CDS Connect operates as a contract between AHRQ and the MITRE Corporation, which serves as the Health Federally Funded Research and Development Center for the Department of Health and Human Services. Two workgroups have guided the project thus far: one clinically focused on cholesterol management and the other focused on the design of the CDS repository. More than 30 organizations are represented, including other Federal agencies, health IT developers, provider organizations, patient advocates, academic institutions, and many others.

Results

CDS Connect has already developed interoperable CDS artifacts for cholesterol management that are ready for reuse and local adaptation. Continued success of the project will depend on a community of users who actively engage as CDS implementers, contributors, and participants who can provide feedback on the tools and usefulness of the resources.

Promoting Learning Health System Capabilities

CDS Connect extends an organization's capacity to use decision support as a means of turning knowledge into practice. The knowledge can be external, research-based scientific evidence or internal, based on learning from an organization's own practice and data. Translating that knowledge into actionable, technology-enabled CDS is time consuming and expensive. CDS Connect provides the platform for sharing the building blocks of CDS so that organizations can reuse and adapt what others have developed, build on others' experiences, and improve the quality of care in their own settings.

For More Information

<http://cds.ahrq.gov>