CLINICAL DECISION SUPPORT DEVELOPMENT, IMPLEMENTATION, AND DISSEMINATION

Clinical decision support (CDS) seeks to deliver the right information at the right time in an easily digestible format to assist clinical decision-making. It helps to optimize treatment plans, improve the safety of prescribing, and provide personalized care by enabling providers and patients to make informed decisions. CDS is typically thought of as software embedded in electronic health record (EHR) systems, but it is more than just a technology intervention—it also involves policy considerations and process changes that impact organizations, providers, and patients. Implementing CDS requires operational and behavioral changes to incorporate the best available clinical evidence into decision-making.

The CDS marketplace is dynamic and involves stakeholders—such as technologists, policymakers, providers, and patient advocates—all working to consider the ways guidelines and evidence, coupled with reliable data, can better inform health decisions. However, there are challenges to developing key processes that promote the shareability and interoperability of CDS. Obtaining agreement about governance and intellectual property policies while finding ways to deliver recommendations that promote engagement without burdening users can be difficult.

The CDS experts at RTI International are ready to help you address these challenges. We provide guidance and technical support to develop software that engages patients and providers in design and delivery, and we also identify and advance areas for standards development. We implement solutions in real-world environments and design strategies for incorporating CDS into learning health systems.

Let Us Help You

- Conduct needs assessments for new or expanded CDS implementation.

- Design tools and resources to assist organizations/providers implementing CDS.

- Evaluate and monitor CDS to support continuous improvement.

- Develop usable, tailored patient-centered and patient-facing CDS solutions.

- Review outcomes from your current CDS implementation and suggest improvements for ongoing use.

- Integrate solutions that meet the needs of your organization and stakeholders.

- Translate written guidelines and evidence into computable resources.

- Identify and select CDS pilots to demonstrate value in your organization.

- Identify policy impacts of CDS implementation and use.

Government, Commercial, and Nonprofit Entities Are Investing in Clinical Decision Support Activities

RTI's experts have planned, implemented, and evaluated CDS programs across the United States, including

- Engaging patients and patient advocates in CDS design and development
- Identifying and collaborating with key partners in designing, developing, and implementing scalable CDS solutions
- Conducting CDS-focused environmental scans and gap analyses
- Implementing solutions in real-world environments and designing strategies for incorporating CDS into learning health systems
- Introducing care processes for chronic diseases, chronic pain, and opioid management

- Recommending and evaluating tailored CDS solutions for pediatric care settings
- Developing real-world frameworks for promoting trust in shareable CDS
- Identifying ways to make best practices and clinical evidence more accessible
- Strategizing systems-level solutions that promote sustainable interoperability
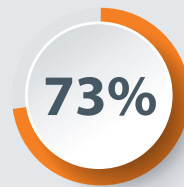- Improving reliability and shareability of evidence for CDS

Project: Patient-Centered Clinical Decision Support Learning Network

Every day, millions of patients balance health-related concerns that affect their lives. As a result, both patients and providers would benefit from information that helps them make informed decisions. This can include balancing issues of trust for the use of scalable CDS artifacts, considering all stakeholders involved, understanding the existing landscape, and establishing a future with sustainable CDS solutions.

RTI collaborated with the Agency for Healthcare Research and Quality to design and implement the Patient-Centered Clinical Decision Support (PCCDS) Learning Network in order to connect PCCDS stakeholders. Additionally, the network has advanced activities aimed at improving evidence-based care decisions for patients, their clinicians, and their caregivers. For example, promoting smartphone apps that enable patients and their care teams to more easily identify and implement effective options for chronic conditions, such as chronic kidney disease. By bringing patients to the center of care, the network established a foundation for further work in areas across multiple disciplines.

96%

96% of nonfederal acute care hospitals have EHRs that contain a CDS component.

73%

73% of U.S. hospitals have EHRs with CDS components that support clinical quality measures.

80%

80% of ambulatory clinics have EHRs that contain a CDS component.

$6.4 billion in spending is projected for the CDS marketplace by 2024.

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