The Clinical Decision Support Innovation Collaborative

Making clinical decision support more valuable and meaningful to patients, clinicians, and healthcare systems

Project Overview and Goals

The Clinical Decision Support Innovation Collaborative (CDSiC) was part of AHRQ's Patient-Centered Outcomes Research (PCOR) Clinical Decision Support (CDS) Initiative. The CDSiC aimed to advance patient-centered clinical decision support (PC CDS) to improve health outcomes for all patients. Through its three Centers (Operations, Stakeholder Community & Outreach, and Innovation), the CDSiC:



Examined the use of CDS to transform the adoption and use of PCOR evidence in clinical practice



Defined, coordinated, and informed short- and long-term goals related to PC CDS that respond to the current state of the healthcare ecosystem and patient demands



Engaged stakeholders to develop resources to advance PC CDS, define and recommend CDS measurement concepts, and test or evaluate PC CDS via demonstration projects

Putting Patients in the Center of CDS

From its launch in 2021 to its conclusion in 2025, the CDSiC was at the forefront of advancing the field of PC CDS. To address persistent challenges and drive meaningful progress, the CDSiC developed and disseminated innovative resources and implemented pilot projects across the **PC CDS lifecycle**.

The CDSiC shaped the field of PC CDS through its longstanding focus on cutting-edge topics and deep commitment to centering the perspectives and experiences of patients. Together, the **CDSiC's many resources and projects** have:



Promoted patient engagement, empowerment, and shared decision making through PC CDS



Identified measures, tools, and strategies to assess the impact and value of PC CDS



Provided resources

to guide the effective development and implementation of PC CDS, particularly patientfacing PC CDS challenges and opportunities related to patient-facing PC CDS



Explored the transparent and trustworthy use of artificial intelligence (AI) in PC CDS



Conducted real-world PC CDS pilots that involved the use of large language models, chatbots, and remote monitoring

Key Accomplishments



The CDSiC has engaged 200+ CDS stakeholders in discussions about the current state and future promise of PC CDS



The CDSiC has synthesized over 2,400 peer-reviewed and gray literature resources



The CDSiC has developed 71 resources that help advance the development, implementation, standardization, and measurement of PC CDS



The CDSiC led 27 conference presentations, including panels, podiums, and posters



The CDSiC website has over 86,000 views

Read more about our accomplishments in our prior reports.





Summary of CDSiC Products by Topic Area and Type



Standards

Understanding PC CDS standards and priorities for future standards development

REPORTS & MANUSCRIPTS

- Standards and Regulatory Frameworks Environmental Scan
- Advancing Standardized Representations for Patient Preferences to Support PC CDS
- Prioritizing Patient Preferences for Standardization to Support PC CDS
- Improving Interoperability of Patient Apps with the Health IT Ecosystem
- · Approaches to Standardizing Override Reasons for PC CDS



Patient Trust, Engagement, and Preferences

Exploring factors contributing to trust in PC CDS, patient engagement throughout its lifecycle, and integration of patient preferences

REPORTS & MANUSCRIPTS

- · Improving the Source Credibility of PC CDS Tools
- · Integration of PC CDS Into Shared Decision Making
- Taxonomy of Patient Preferences
- Capturing Patient Preferences for PC CDS Within Clinician Workflows and Patient Lifeflows
- Considerations for Minimizing Respondent Burden in Collecting Data for PC CDS

GUIDES & TOOLS

- Methods for Involving End Users in PC CDS Co-Design
- · An Introductory Handbook for Patient Engagement Throughout the PC CDS Lifecycle



Measurement

Examining measures to assess the impact of PC CDS on processes and outcomes

REPORTS & MANUSCRIPTS

- Patient-Focused Outcome Measures for PC CDS
- \cdot Approaches to Measuring PC CDS Workflow and Lifeflow Impact
- · Patient Prioritization of Measurement Areas for PC CDS
- · Framework and Inventory of Patient Engagement Measures for PC CDS
- · Measuring Patient Experience of PC CDS
- · New Performance Measurement Framework for Realizing PC CDS: Qualitative Development Study

- · PC CDS Performance Measurement Inventory and User Guide
- · Inventory of Patient Preference Measurement Tools for PC CDS and Report



PC CDS **Implementation**

Providing resources and guidance that inform the implementation of PC CDS

REPORTS & MANUSCRIPTS

- Exploring Challenges and Opportunities for Patient Engagement, Implementation, Adoption, and Scaling Through PC CDS Case Studies
- · An Initial Taxonomy of Override Reasons for PC CDS Recommendations
- Key Factors and Considerations for Assessing the Value of PC CDS
- · Action Plan to Collect and Use Social Determinants of Health Data in PC CDS
- · Text Message-Facilitated PC CDS Implementation: Key Considerations and Promising Practices
- Advancing PC CDS in Today's Healthcare Ecosystem: Key Themes from the Clinical Decision Support Innovation Collaborative's 2023 Annual Meeting
- · PC CDS Challenges and Opportunities Identified from Workflow Execution Models

GUIDES & TOOLS

- PC CDS Planning, Implementation, and Reporting Checklist and User Guide
- · PC CDS Planning and Reporting Tool and User Guide



Use of Al in PC CDS

Exploring the use of Alin transparent ways to scale PC CDS

REPORTS & MANUSCRIPTS

- · Patient and Caregiver Perspectives on Generative Al in PC CDS
- · Landscape Assessment on the Use of AI to Scale PC CDS



PC CDS Pilot Projects

Providing information about PC CDS pilot development, assessment, and implementation

PROTOTYPES

- · Quartz App to Support Medication Adherence: Usability and Feasibility Assessment
- · PAIGE Chatbot for Patient-Clinician Communication: Usability and Utility Assessment
- · Hypertensive Disorders of Pregnancy Symptom Monitoring App: Feasibility Assessment
- · Prototype PC CDS and PRO Performance Dashboard
- · Prototype That Implements Best Practices for Presentation and Analysis of Selected Types of Patient-Generated Health Data

Legend

REPORTS & MANUSCRIPTS: Key findings from environmental scans and qualitative data collection in a report format or published manuscript

GUIDES & TOOLS: Practical guides or tools that support design, implementation, or measurement of PC CDS PROTOTYPES: Design specifications, requirements, and evaluation of PC CDS prototype applications developed

Access CDSiC products here





