Community & Clinical Data Initiative: Maryland Pilot



THE ISSUE

THE IMPORTANCE OF HEALTH-RELATED SOCIAL NEEDS

Older adults experience higher rates of health-related social needs (HRSNs; includes food insecurity, unaffordable utilities, lack of transportation, housing instability, and more)¹ compared to individuals under 60 years of age. These needs can impede an individual's ability to get needed health care and adhere to provider-recommended care plans, contributing to poor health outcomes. Individuals often rely on services provided through community-based organizations (CBOs) and government programs (e.g., Supplemental Nutrition Assistance Program, or SNAP) to address their unique HSRN(s).



A DATA SHARING OPPORTUNITY

CBOs conduct social needs screenings and assessments and record relevant data, including data regarding service eligibility, enrollment, and delivery; however, these data are often siloed in information systems that cannot easily share data with other entities. Exchanging data allows for the linkage of data about social needs and services with clinical data to measure how social services impact clinical and quality of life outcomes. Outcome data for individuals receiving social services help CBOs advocate for resources and strengthen partnerships with payers and health care providers.

THE SOLUTION

The Community and Clinical Data Initiative (CODI), originally developed by the Centers for Disease Control and Prevention (CDC), is an open-source technology and partnership model that aims to improve programs, care, services, and outcomes by connecting clinical and community data.² CODI brings together people (local organizations), processes (business processes and data sharing and normalization) and technology (data models and reporting infrastructure) to build a locally owned infrastructure that supports communities to improve health.

The Administration for Community Living (ACL) is supporting a CODI implementation in Maryland (CODI Maryland) to apply the CODI model to older adults and accelerate their goals to enable sustainable partnerships between community care hubs (CCHs)³ and health care organizations. Maryland implementing partners include MAC, an area agency on aging and CCH; Meals on Wheels of Central Maryland; and Chesapeake



Regional Information System for our Patients (CRISP), Maryland's statewide health information exchange.

¹ Addressing Health-Related Social Needs in Communities across the Nation:

https://aspe.hhs.gov/sites/default/files/documents/3e2f6140d0087435cc6832bf8cf32618/hhs-call-to-action-health-related-social-needs.pdf

² CDC supported two CODI pilots in Colorado (2018-2021) and North Carolina (2021-2023); more information available at: https://www.cdc.gov/obesity/initiatives/codi/community-and-clinical-data-initiative.html

³ A community-centered entity that organizes and supports a network of CBOs providing services to address HRSN. A CCH centralizes administrative functions and operational infrastructure, including, but not limited to, contracting with healthcare organizations, payment operations, referral management, service delivery fidelity and compliance, technology, information security, data collection, and reporting.

CODI MARYLAND PILOT IMPLEMENTATION

Informed by a comprehensive needs assessment, the CODI Maryland pilot design (Figure 1) is centered around the health information exchange (HIE), where CBOs provide social needs and services data to the HIE, the HIE processes and links the CBO data with clinical data already stored by the HIE, computes outcomes, and provides tools to visualize the impact of social services. This HIE-centered model leverages existing HIE infrastructure to reduce technology redundancy and limit long-term maintenance and cost to partners.

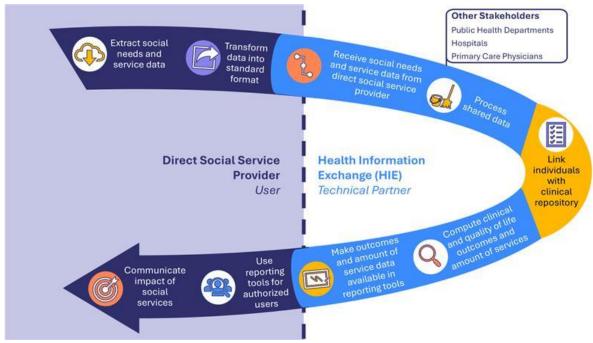


Figure 1. CODI Maryland Pilot Design

The CODI Maryland implementation will occur over 24 months during 2023-2025. This project will advance social service outcome measurement by:

- Defining a common data model to store social needs, social service, and clinical data.
- Developing a set of clinical outcome measures to quantify the impact of social services.
- Creating reporting tools to visualize the impact of social services on clinical outcomes.

Maryland partners will implement and test the pilot design on two use cases focused on food needs and services:

- **Use Case 1** aims to examine food services provided after hospital discharge, including the types of food needs and the receipt of appropriate services among individuals navigating a hospital to home transition.
- Use Case 2 seeks to understand the impact of food services on clinical outcomes.

Though the CODI Maryland work is initially focused on food needs and services, the pilot design and resources to support implementation are intended to scale to reflect other HRSNs, organizations, and communities. The resources for CODI are open-source to promote widespread adoption.

This and other CODI resources are available at https://mitre.github.io/CODI/.