Community & Clinical Data Initiative (CODI): Maryland

CODI | Food Insecurity

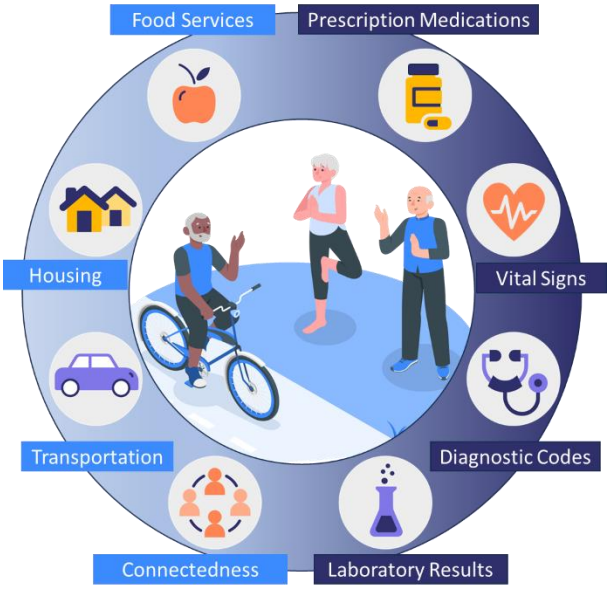
THE ISSUE

Older adults experience more non-medical drivers of health (e.g. food insecurity, lack of transportation, housing instability) 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 needs.

CBOs conduct screenings and assessments to identify individuals' social service needs and determine which available programs or services best address those needs. As part of this work, CBOs record relevant data, including data about service eligibility, enrollment, and delivery; however, these data are often siloed in information systems that cannot easily share data with other organizations.

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. CODI brings together people (local organizations), processes (workflows and data sharing) and technology (data models and reporting infrastructure) to create a locally owned infrastructure that supports communities to improve health.



The CODI Model was implemented in Maryland from September 2023 through August 2025 with support from the Administration for Community Living (ACL). The Maryland CODI implementation aimed to improve older adult health by connecting community data about individual needs and the programs or services that address those needs with clinical data. Connecting community and clinical data enabled CBOs to gain insights about diabetes and hypertension among their clients in aggregate, while protecting individual-level privacy, for the first time by leveraging the integrated social and clinical data. This information helped CBOs advocate for resources and strengthen partnerships with payers and health care providers.

Maryland implementing partners included MAC, an area agency on aging; Meals on Wheels of Central Maryland, a home-delivered meals provider; and Chesapeake Regional Information System for our Patients (CRISP), Maryland's statewide health information exchange (HIE).

CODI MARYLAND IMPLEMENTATION

Informed by a comprehensive needs assessment, the CODI Maryland implementation was centered around CRISP, Maryland's HIE (Figure 1). In this HIE-centric model, CBOs provided social needs and services data to the HIE, and the HIE processed and linked the CBO data with clinical data already stored by the HIE, computed outcomes, and provided tools to visualize the impact of social services. The HIE-centric CODI model leveraged existing HIE tools and infrastructure to avoid creating redundant technology, accelerated project implementation, and promoted sustainability.

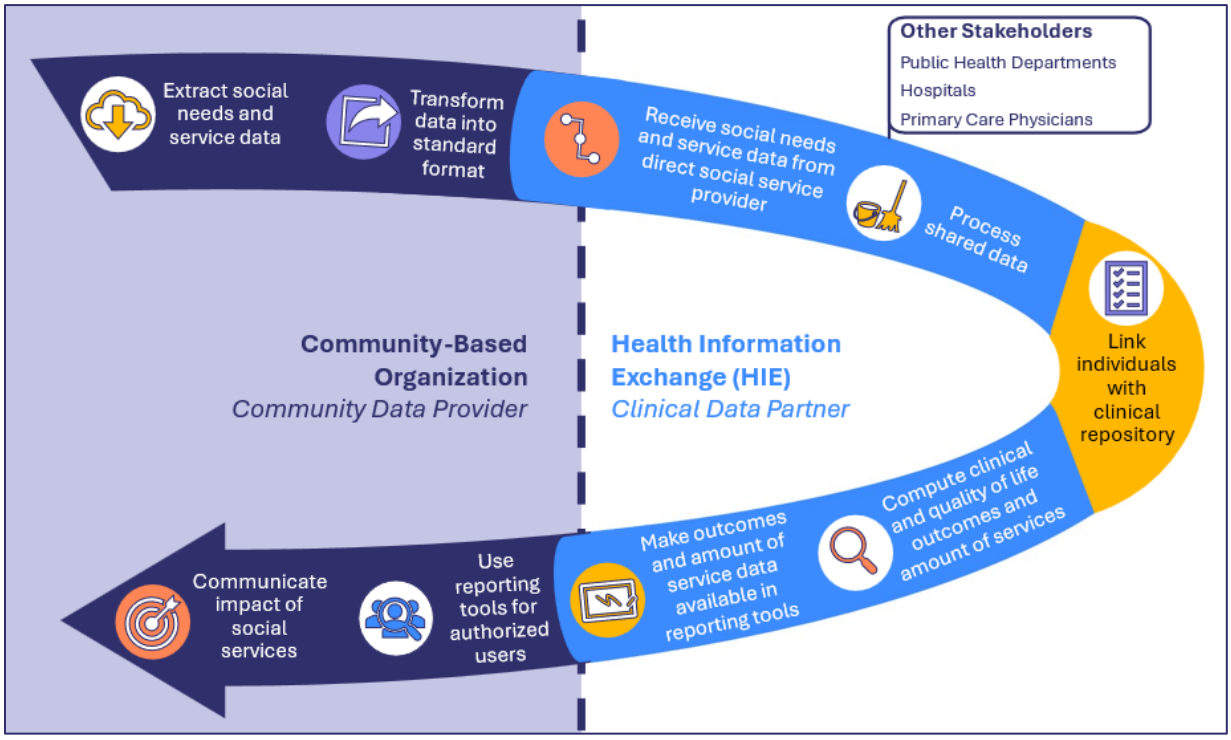


Figure 1: High-level Process to Connect and Use Data in Maryland

The impact of the CODI implementation in Maryland can be summarized by three key themes:

1. Increased CBO data sharing enabled innovative analyses to measure clinical impact of programs and services provided by CBOs.
2. CBOs gained meaningful insights about people served.
3. Implementing organizations completed CODI with stronger partnerships and increased technical readiness.

Though the CODI Maryland implementation initially focused on food insecurity and nutrition services, data about evidence-based programs and care-transitions were also securely exchanged. This is because the approach and resources to support CODI implementation were designed to include data about other non-medical drivers of health and scale to other organizations and communities. The resources for CODI are open-source to promote widespread adoption and are available at https://mitre.github.io/codi.