Maryland CODI Impact Report

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

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For further information, please contact The MITRE Corporation, Contracts Management Office, 7515 Colshire Drive, McLean, VA 22102-7539, (703) 983-6000.

Authors

The MITRE Corporation, McLean, VA

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Executive Summary

This report summarizes how organizations participating in the Community and Clinical Data Initiative (CODI) model implementation in Maryland were directly impacted and describes the likely future value that will result due to the continuation of this work beyond the implementation phase. 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 social needs and the programs or services that address those needs with clinical data. The Maryland implementing partners were MAC, a Maryland agency on aging; Meals on Wheels of Central Maryland (MOWCM); and Chesapeake Regional Information System for our Patients (CRISP), Maryland's statewide health information exchange. A team from the MITRE Corporation supported the implementation by providing technical support, project management, and resource development. The Maryland Department of Aging (MDoA) also participated in the implementation in a supportive role by sharing information to align CODI work with other statewide initiatives.

The primary audience for this report is Maryland clinical, government, and community-based organizations (CBOs) working to improve the health of Marylanders who can use this report to communicate the value of participating in CODI. The secondary audience include organizations outside of Maryland who want to understand the potential value of implementing CODI in their own community. A visual summary of the impact of the Maryland CODI implementation is available in Appendix B.

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.** CBOs implemented new data extraction and transformation processes and cultivated data quality and sharing capabilities which allowed for CBO services from over 30,000 Marylanders to be securely shared with CRISP, who successfully matched approximately 75% of individuals with their clinical data.
2. **CBOs gained meaningful insights about people served.** CRISP's expanded collection and use of community data enabled the calculation of outcome measures; this 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 integrated demographic, social, and clinical data.
3. **Implementing organizations completed CODI with stronger partnerships and increased technical readiness.** The data sharing and use of connected community and clinical data and strengthened partnerships facilitated by CODI will endure. All Maryland implementing partners confirmed their intent to continue the CODI work, including data exchange, maintaining their partnerships, and using outcome measures to demonstrate the value of CBO programs and services.

While the achievements during the initial implementation are commendable, the impact of CODI in Maryland over time is likely to compound as the work is leveraged by CBOs, CRISP, healthcare providers, and government agencies to improve health for Maryland communities. The value of CODI will grow as more CBOs participate and share data with CRISP, and as partners work to include more types of programs, services, and outcome measures to help CBOs show the impact of their work on the people they serve.

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1 Background

The Community and Clinical Data Initiative (CODI) is a model to harmonize clinical and community data for research, evaluation, quality improvement, and public health. CODI was originally pioneered by the Centers for Disease Control and Prevention and has been implemented in three communities across the United States since 2018: Colorado, North Carolina, and Maryland. CODI implementations occur at a community level by bringing together people, processes, and technology by way of local partner organizations, business and data sharing processes, and data models and reporting infrastructure, respectively. The CODI Model is open source and free to use; resources to support implementers and outputs from these implementations have been published to support other communities interested in learning more about or implementing CODI.[1]

The CODI Model was initially 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 social service needs (e.g., food insecurity, transportation, housing) and the programs or services that address those needs with clinical data. The Maryland implementing partners included:

- Chesapeake Regional Information System for our Patients (CRISP), Maryland's Health Information Exchange (HIE)
- MAC, an area agency on aging (AAA) on Maryland's Eastern Shore (comprised of four counties) who also acts as a community care hub for the AAAs across the state and provides a variety of programs and services that support older adults
- Meals on Wheels of Central Maryland (MOWCM), a home-delivered meals provider for five counties in the greater Baltimore area

Partners that supported the Maryland implementation included:

- ACL, an operating division of the U.S. Department of Health and Human Services, who provided sponsorship, funding, and overall direction on strategic alignment at the federal level
- The MITRE Corporation, an operator of federally funded research and development centers who had supported the prior two CODI implementations and provided technical support, project management, and resource development
- The Maryland Department of Aging (MDoA) which shared information to help align CODI work with other statewide initiatives

The Maryland partners worked together to 1) establish and implement a common data model for data about clinical services, social service needs (e.g., food insecurity, transportation, housing) and the programs or services that address those needs; 2) share data from MAC and MOWCM with CRISP; 3) design and implement measure definitions for prioritized clinical outcomes; and 4) design reporting tools that visualize change in outcome measures over time among individuals receiving programs and services that address social needs. Maryland partners prioritized sharing data about nutrition services, care transitions programs, and evidence-based programs.

[1] Resources and outputs from the Maryland CODI implementation are published here: https://mitre.github.io/codi

2 Purpose

This report summarizes how organizations participating in the Maryland implementation were directly impacted and describes the likely future value that will result due to the continuation of this work beyond the implementation phase. The primary audience for this report is Maryland clinical, government, and community-based organizations (CBOs) working to improve the health of Marylanders who can use this report to communicate the value of participating in CODI Maryland. The secondary audience include organizations outside of Maryland who want to understand the potential value of implementing CODI in their own community. Findings from this report can help current or future implementers recruit additional partner organizations and the organizational champions needed for successful implementation.

3 Methodology

The MITRE team used a mixed methods approach to evaluate impact by gathering both qualitative and quantitative data from implementing partners as described below.

3.1 Qualitative Analysis

The MITRE team conducted semi-structured interviews with MAC, MOWCM, CRISP, MDoA, and ACL. During the five one-hour interviews, attendees were asked up to 16 questions about their experience during the Maryland CODI implementation. Questions were organized into four categories: what they liked, what they learned, what they thought was lackluster, and their thoughts on the longevity of the program. Some questions were only relevant to certain organizations and the MITRE team customized the interview questions prior to each session. The full list of questions is in Appendix A.

Following the interviews, the MITRE team identified common themes across organizations. The MITRE team presented the first iteration of themes at a meeting of the ACL CODI Working Group (ACWG) on May 13, 2025.[2] Work group members shared their feedback and whether they supported each theme. At the conclusion of the meeting, each work group member indicated the top three themes most important to them to inform further development. MITRE used feedback to refine the themes that are presented in Section 4 below.

3.2 Quantitative Analysis

Quantitative analysis was conducted on data provided by MAC and MOWCM to answer the following questions:

1. What data about the programs or services that address identified social needs were shared with CRISP by MAC and MOWCM?
2. What amount of service or program delivery did clients receive?
3. How many individuals from the MAC and MOWCM datasets could be linked with clinical data through CRISP?
4. What were the selected clinical outcomes among those linked individuals?

To assess questions 1 and 2, MOWCM and MAC generated fully anonymized datasets of individuals enrolled in or receiving home-delivered meals, and individuals enrolled in or

[2] The ACWG is a monthly all partner meeting to discuss the project's progress and share updates.

participating in a care transitions program, congregate meal program, or evidence-based program between January 1, 2022 through December 31, 2024 (3 years).[3] The MOWCM and MAC datasets analyzed were anonymized versions of the data shared with CRISP. The MITRE team analyzed the anonymized datasets to quantify the number of individuals that received services or programs and to characterize the amount of home-delivered meals provided by each organization in terms of total meals, number of participants, and selected descriptive statistics.

To assess question 3, CRISP summarized the number and percentage of participants from the MAC and MOWCM datasets that were successfully matched with their respective clinical data at CRISP. To assess question 4, CRISP applied CODI measure definitions for diabetes prevalence, diabetes control, and hypertension prevalence.[4]

4 Results

Overall, the key impacts of the CODI implementation in Maryland can be summarized by three themes:

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

These themes are further supported by the five key data points presented in Figure .

Figure 1: Summary Data Points from the Maryland CODI Implementation

Each theme is described in more detail with a dedicated section below; each section includes selected data points and references Appendix C that holds supporting data tables and descriptions of the analyses. A visual summary of the impact of the Maryland CODI implementation is available in Appendix B.

[3] Data gathered before CODI's implementation (2022) was used as a baseline to assess the impact of CODI.

[4] Measure definitions are available at: https://mitre.github.io/codi/docs/codi-resources-by-phase/; hypertension control was not assessed due to insufficient data availability.

4.1 Increased CBO data sharing enabled innovative analyses to measure clinical impact of programs and services provided by CBOs

The Maryland CODI implementation significantly enhanced data sharing capabilities among community-based organizations (CBOs) and the state's health information exchange, CRISP, paving the way for innovative analyses aimed at measuring the clinical impact of programs and services provided by CBOs. This impact is supported by the following accomplishments.

- **CBOs implemented new data extraction and transformation processes and cultivated data quality and sharing capabilities.**

  Before CODI, MOWCM had never shared data with CRISP and MAC was sharing limited data with CRISP. Through the Maryland CODI implementation, both CBOs established new extraction processes, cultivated data transformation skills, and initiated sharing individual-level data about their programs and services that address individuals' needs with CRISP. Using the CODI Data Quality Assurance Script, CBOs began curating their own data quality and identifying opportunities to improve.

- **Individual-level data were securely shared about CBO services and programs provided to more than 30,000 Marylanders.**

  After establishing data extraction and transformation processes, MAC and MOWCM shared service and program data with CRISP for more than 30,000 individuals going back to 2017 and 2021, respectively. Data were shared for nine total programs and services, including home-delivered and congregate meal programs, a care transitions program, and four evidence-based programs (diabetes self-management program, chronic disease self-management program, falls prevention program, and chronic pain self-management program). For the time period of January 1, 2022 and December 31, 2024, which was the focus of subsequent analysis, CRISP received data on over 10,000 people receiving at least one instance of these services or programs (Table C-1).

  Receiving more granular service and program data from CBOs was progress for CRISP as well. While CRISP had received some CBO data in the past, for example panels of individuals who had received a specific service, the CODI implementation marked an important increase in volume and granularity of data about the programs or services that CBOs provide. For example, data from over 3.5 million home-delivered meals was shared with CRISP (Table C-2). The new data available enabled new analyses by CRISP.

- **CRISP matched approximately 75% of individuals who had received CBO services and programs with their clinical data.**
  As the state designated HIE and health data utility for Maryland, CRISP used its master patient index to successfully match a majority of individuals from the MAC and MOWCM datasets with their respective clinical data. Among the approximately 9,000 individuals who received CBO services and programs from 2022 through 2024, 6,518 were matched with clinical data (Table C-3). Individuals who did not 'match' with CRISP clinical data may reflect individuals whose identifiers were not sufficiently documented for linkage, those who did not receive any clinical care from 2022 through 2024, or those who received care during that time but were not reported to CRISP. CRISP believes this match rate will increase once additional matching procedures are applied.

4.2 CBOs gained meaningful insights about people served while protecting individual-level privacy

CRISP's expanded collection and use of community data enabled the calculation of new demographic information and outcome measures; this enabled CBOs to gain insights about diabetes and hypertension among their clients for the first time by leveraging the integrated social and clinical data. This impact is supported by the following achievements.

- **The HIE gained five outcome measures and a capability to develop and implement outcome measures designed for CBOs users.**

  Prior to the CODI implementation, CRISP focused on patient-level reporting from clinical data and more extensive reporting from claims data. While participant CBOs had access to some CRISP claims-based reporting tools, they were unable to access information about clinical outcome measures for their client populations.[5] CRISP's clinical committee approved a use case to allow aggregated clinical reporting information to be shared with non-health insurance portability and accountability act (HIPAA) organizations. Through CODI, CRISP adopted a user-centered design approach and developed five outcome measure definitions that reflected the user (CBOs) needs. CBOs valued outcome measures where the fewest individuals from their client population are excluded; this differs from the approach to outcome measures for clinical quality which aim to more precisely define eligible populations. Outcome measures for the amount of services, diabetes prevalence, diabetes control, hypertension prevalence, and hypertension control (Table C-4) were validated by CRISP and four are implemented at CRISP and available for use today.

- **CBOs gained access to aggregate data about the burden of hypertension and diabetes among their participant population.**

  Prior to CODI, MAC and MOWCM did not know the prevalence of chronic conditions in the population that they served. Connecting CBO program and service recipient data with clinical data gave CBOs access to data about the prevalence of diabetes and hypertension among their clients. Between January 1, 2022 and December 31, 2024, of individuals who received services or programs from MAC and MOWCM, over 80% were managing hypertension and about half were managing diabetes (Table C-5). Building on diabetes prevalence, MAC and MOWCM were able to see the rates of diabetes control among their clients with diabetes for the first time. Among those with at least one A1C result during 2022, 2023, or 2024, over 90% were controlled (A1C<9%) at both organizations and 52% (MAC) and 61% (MOWCM) were well controlled (A1C<7%) (Table C-6).

- **CRISP piloted a measurement approach to evaluate change in chronic disease control following initiation of CBO programs and services.**

  Both MAC and MOWCM were keen to demonstrate the impact of their programs and services by calculating the change in chronic disease control following service activation or program delivery. Before CODI, CBOs had access to CRISP tools to assess change in cost and hospitalizations but not change in intermediate clinical outcome measures that partner healthcare organizations and grant-making organizations are interested in.

[5] "Participant CBOs" are organizations that have been onboarded at CRISP

Through CODI, CRISP built and implemented a technical approach to calculate change in diabetes control by comparing A1C results during a time period after programs or services started to a baseline time period. Initial estimates of change in diabetes control showed that roughly 25% of participants' A1C improved, 25% A1C worsened, and about 50% stayed about the same during the measurement period (Table C-7). These initial findings demonstrate a meaningful advance in the ability to quantify impact, especially as subsequent cross-sectional estimates over time can establish trends for impact analysis but require further validation.

4.3 Implementing organizations completed CODI with stronger partnerships and increased technical readiness

The Maryland CODI implementation not only advanced data integration efforts in Maryland but also fostered stronger partnerships and increased technical readiness among participating organizations. Importantly, these partnership and technical gains have strengthened the foundation for ongoing data sharing and partnership, ensuring that the benefits of CODI will extend beyond the initial implementation period. This is supported by the following observations.

- **Maryland partners built and strengthened relationships.**

  MAC, MOWCM, CRISP, ACL and MDoA consistently reported that deeper, more collaborative relationships were the most valuable outcome of CODI. During the CODI implementation, existing inter- and intra-organizational relationships grew. For instance, although CRISP and the CBOs had previously worked together, the CRISP CODI team worked for the first time with the MAC nutrition services team and MAC and MOWCM were introduced to the CRISP reporting services team. CBOs felt that new and stronger connections with CRISP, ACL, and MDoA would empower them to engage more proactively with all three organizations on future initiatives. Through CODI engagements, partners aligned CODI with other important work in Maryland (i.e., AHEAD[6] and the State Health Improvement Plan).

- **Maryland partners strengthened technical readiness for data exchange.**

  CODI significantly enhanced Maryland partners' understanding of their own and their partners' data and information systems. For example, by studying the data they transmitted to CRISP, CBOs identified critical gaps in their data collection processes—such as incomplete identifiers and inconsistent consent documentation—and implemented targeted improvement efforts. Data and information system exploration had a secondary benefit of nurturing a common data and system vocabulary that helped CBOs and CRISP communicate more clearly and precisely about data exchange content, in CODI and for future collaborations. One partner shared that participating in CODI pushed the organizations to "speak the same data language." This collective learning positioned Maryland partners to more effectively harmonize and exchange data.

Potentially the most significant impact of the CODI implementation is that the data sharing and use of connected community and clinical data and strengthened partnerships will endure. All Maryland implementing partners confirmed their intent to continue the CODI work, including data exchange, maintaining their partnerships, and using outcome measures to demonstrate the value of CBO programs and services.

[6] https://hscrc.maryland.gov/Pages/ahead-model.aspx

5 Conclusion and Next Steps

The CODI implementation resulted in a meaningful addition to the health information technology ecosystem in Maryland by building out processes and tools to help CBOs share detailed data about the programs and services they provide with CRISP, expanding CRISP's capability to receive, process, and link data from CBOs to clinical data at the person level, and developing outcome measures and reporting tools for CBOs at the aggregate level to use connected data to demonstrate the value of their programs and services on important chronic disease outcomes. The implementation fostered collaboration among CBOs, CRISP, and government entities, laying the groundwork for future initiatives and streamlined partnerships.

While the achievements during the initial implementation were significant, the impact of CODI in Maryland over time is likely to compound as the work is leveraged by CBOs, CRISP, healthcare providers, and government to improve health for Maryland communities. The value of CODI will grow as more CBOs participate and share data with CRISP, and as partners work to include more types of programs, services, and outcome measures to help CBOs show the impact of their work on the people they serve. CODI's open-source resources are available (https://mitre.github.io/codi) to support future implementations.

Appendix A Interview Questions

The following questions were used to guide conversation with each organization.

Liked

- What are your favorite parts of CODI?
- What elements of the pilot are going well?
- What breakthrough or "a-ha" moments stand out to you?

Learned

- What have you learned during the pilot?
- What insights about your organization have you gained from the pilot?
- What have you learned that could benefit other organizations like yours?
- How has participating in CODI impacted your relationships with other organizations?
- Has your organization been able to identify new opportunities because of your participation in CODI?

Lackluster

- What areas needed improvement?
- What challenges did you encounter?
- What could have improved your experience?
- What resources could help you implement CODI?

Longevity

- What do you want to see in future CODI implementations?
- What do you see as the future of CODI?
- Will you continue to implement CODI?
- Do you have what you need to expand CODI in Maryland?
- How would you describe the impact of the CODI pilot?

Appendix B Impact Summary

Figure B-1 summarizes the impact of CODI in Maryland.

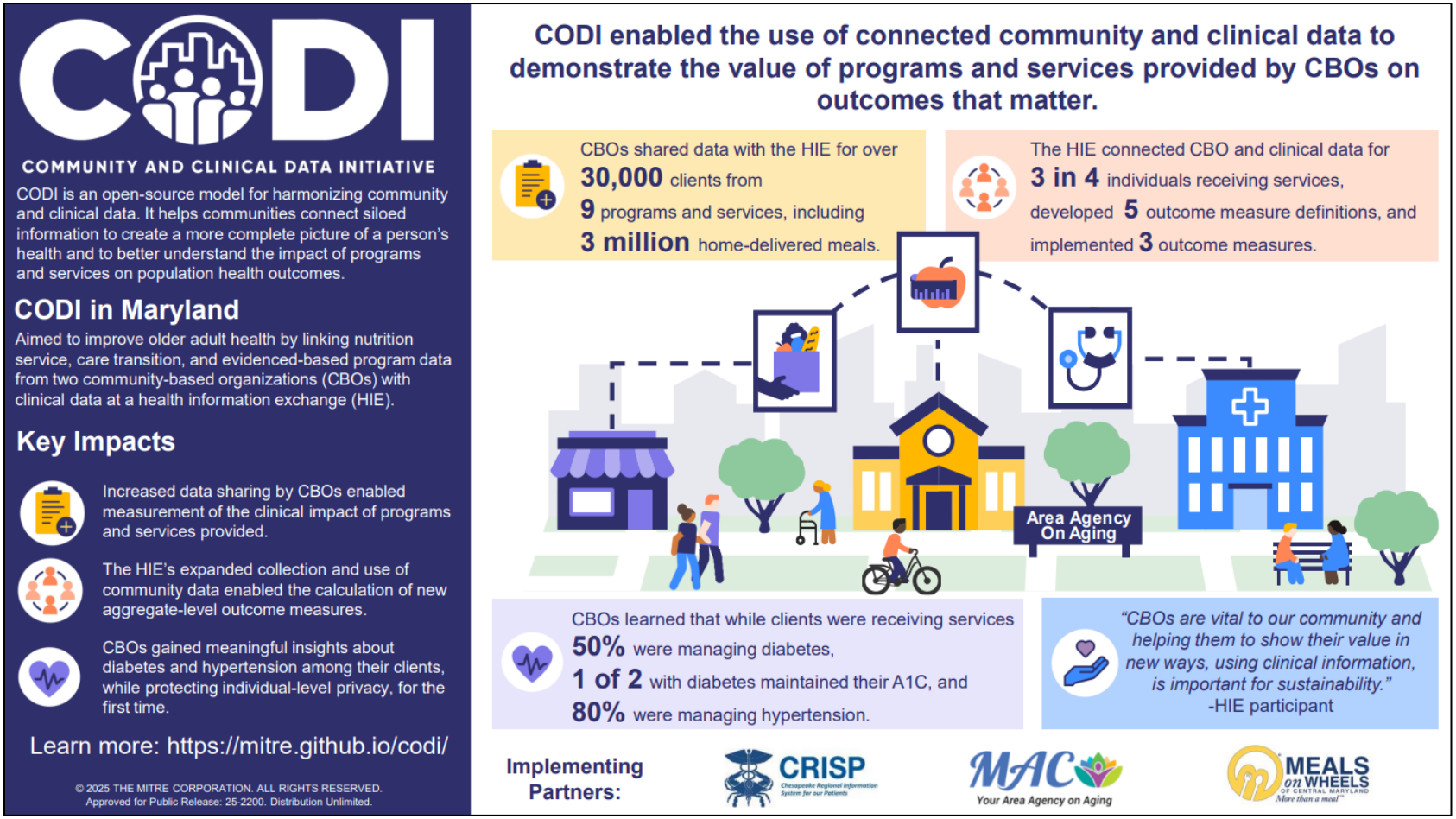

Figure B-1. Maryland CODI Impact Summary

Appendix C Data Tables and Analysis

This appendix includes additional supporting information for the key impacts described in Section 4 Results.

C.1 Section 4.1 Supporting Information

C.1.1 Data Sharing Summary

MAC and MOWCM shared program and services data with CRISP that had not been shared previously. Table C-1 displays the number of participants who received programs and services between January 1, 2022 and December 31, 2024 whose data were transmitted to CRISP. Please note that the data presented below are not representative of all services delivered or clients served by MAC or MOWCM during this time period, only the data shared with CRISP for the purpose of the CODI implementation. By sharing this data, CRISP gained visibility into over 10,000 individuals receiving home-delivered meals or participating in congregated meals, care transitions (i.e., Connections Program), dementia programming (i.e., Life Bridges), and four evidence-based programs from 2022 through 2024.

Table C-1. Participants Receiving Programs or Services from MAC or MOWCM (January 1, 2022 to December 31, 2024)

Category	Organization	Number of Individuals[a]
Received at Least 1 **Home-Delivered Meal**	MOWCM	9,456
Received at Least 1 **Home-Delivered Meal**	MAC	1,369
Received at Least 1 **Congregate Meal** through Connections Program	MAC	240
Received at Least 1 **Congregate Meal** through Life Bridges Program	MAC	70
Enrolled in the **Care Transition Program**	MAC	97
Enrolled in the **Evidence-based Programs**[b]	MAC	336

[a] Because these counts reflect data from one information system at MOWCM and multiple information systems from MAC, the counts cannot be summed for a total count.
[b] Evidence-based programs include falls prevention, chronic disease self-management, diabetes self-management, and chronic pain management.

The data shared with CRISP represents many delivered services and programs in three years. For home-delivered meals, the CODI dose outcome measure was applied to calculate the amount of meals received.

Table C-2 details the amount of meals delivered by MAC and MOWCM over a period of three years. MAC participants received an average of 253 meals and MOWCM participants received an average of 340 meals. The most common number of meals received by each participant at MAC and MOWCM was 171 and 140, respectively, during this time period. Programmatic differences primarily explain the difference in magnitude seen in the table. While MAC and MOWCM both deliver meals to individuals' homes, their programs are customized to their

communities and have different geographic service areas. MAC delivers meals in Maryland's mostly rural Eastern Shore while MOWCM delivers meals across five counties in the greater Baltimore area. In addition, MOWCM generally signs clients up for 90 days while MAC delivers meals indefinitely until the client's case is redetermined to access need.

Table C-2. Amount of Home-Delivered Meals Provided by MAC or MOWCM (January 1, 2022 to December 31, 2024)

Indicator	MAC	MOWCM
Total Meals Delivered	345,723	3,212,048
Participants Who Received at Least One Home-Delivered Meal	1,369	9,456
Average Meals per Participant	253	340
Median Meals per Participant	171	140
Range of Meals per Participant	1-1,553	1-2,731

C.1.2 Match Rate

As the state designated HIE and health data utility for Maryland, CRISP was able to successfully match participants from the MAC and MOWCM datasets with their respective clinical data at an individual level at a high rate. Table C-3 presents the number of participants from the MAC and MOWCM datasets who had corresponding clinical data in CRISP's system, demonstrating the successful connection of CBO program and service data with clinical data through the HIE.

Table C-3. Match Rate Among Participants Enrolled In or Receiving Programs or Services from MAC or MOWCM (January 1, 2022 to December 31, 2024)[a]

Indicator	MAC	MOWCM
Total Participants	1,306	7,615
Participants with matching clinical data	989	5,529
Match rate	76%	73%

[a] MAC counts include people enrolled in evidence-based or care transition programs or receiving nutrition services. MOWCM counts include people receiving home-delivered meals.

Of 1,306 individuals who enrolled in programs or started receiving meal services from MAC, 76% also had clinical data within CRISP. For MOWCM, of the 7,615 individuals who started receiving meals in 2022, 2023, or 2024, 73% were able to be matched to their clinical data at CRISP. Individuals who did not 'match' with any CRISP clinical data cannot be included when calculating outcome measures; this may include individuals whose identifiers were not sufficient for linkage, those who did not receive any care from 2022 through 2024, or those who received care during that time but was not reported to CRISP.

C.2 Section 4.2 Supporting Information

C.2.1 New Outcome Measure Definitions

Table C-4 describes the five outcome measures that were developed during Maryland CODI to support CBOs. Detailed outcome measure definition documentation is available at: https://mitre.github.io/codi/docs/codi-resources-by-phase/.

Table C-4.Outcome Measures Developed During Maryland CODI Implementation

Measure	Description
Dose of Services	A measure to quantify the amount of programs or services that an individual or population receive in a defined time period. Essential when creating a cohort based on how much of a program or service was received.
Diabetes Prevalence	A measure to estimate the proportion of a population diagnosed with diabetes in a defined time period. Identifies diabetes population for assessing diabetes control.
Diabetes Control	A measure to estimate the proportion of a population with diabetes whose disease is controlled, moderately controlled, or not controlled in a defined time period. Control assessed based on hemoglobin A1C. Identified as the highest priority indicator by CBOs.
Hypertension Prevalence	A measure to estimate the proportion of a population diagnosed with essential hypertension in a defined time period. Identifies a hypertension population for assessing hypertension control.
Hypertension Control	A measure to estimate the proportion of a population with hypertension whose disease is controlled in a defined time period. Control assessed based on most recent blood pressure.

C.2.2 Understanding Burden of Diabetes and Hypertension

Connecting program and service data with clinical data gave CBOs an understanding of how diabetes and hypertension impact their clients and how their work may be impacting diabetes control. Diabetes and hypertension are especially important for nutrition services as proper nutrition can improve control of these conditions. Table C-5 presents the prevalence outcome measures CRISP calculated for MOWCM and MAC clients.[1] Hypertension is very common in the MAC and MOWCM population; 85% of MAC clients and 80% of MOWCM clients were managing hypertension while receiving services and programs. These prevalence estimates are higher than the national average. According to the 2023 Behavioral Risk Factor Surveillance System (BRFSS), 34% of adults nationwide and 33%[2] of Maryland adults self-reported having high blood pressure.[3] This discrepancy is partially explained by the older population that MAC and MOWCM serve and increasing hypertension prevalence with age.

[1] Measure definitions available at https://mitre.github.io/codi/

[2] Prevalence estimate is age adjusted.

[3] BRFSS Estimates from https://www.cdc.gov/brfss/brfssprevalence/index.html

Table C-5. Hypertension Prevalence and Diabetes Prevalence Among Participants Enrolled In or Receiving Programs or Services from MAC or MOWCM (January 1, 2022 to December 31, 2024)[a]

Indicator	MAC	MOWCM
Hypertension Prevalence		
Participants with an indication of hypertension	839	4,428
Hypertension prevalence (percent of participants)	85%	80%
Diabetes Prevalence	**n (%)**	**n (%)**
Participants with an indication of diabetes	419	2,544
Diabetes prevalence (percent of participants)	50%	46%

[a] MAC counts include people enrolled in evidence-based or care transition programs or receiving nutrition services. MOWCM counts include people receiving home-delivered meals.

For diabetes, MAC and MOWCM learned that roughly half of their client populations (50% and 46% respectively) had a diagnosis of diabetes in 2022, 2023, or 2024. These prevalence estimates are substantially higher than the national average. According to the 2023 BRFSS, approximately 12% of US adults self-reported having been diagnosed with diabetes. Similar to hypertension, diabetes prevalence is known to increase with age and this difference is at least partially explained by the older MOWCM and MAC populations served.

Building on diabetes prevalence, MAC and MOWCM were able to see the rates of diabetes control among their clients with diabetes for the first time. Among those with at least one A1C result during 2022, 2023, or 2024, over 90% were controlled (A1C<9%) at both organizations and 52% (MAC) and 61% (MOWCM) were well controlled (A1C<7%) (Table C-6).

Table C-6. Diabetes Control Status Among Participants with Diabetes Enrolled In or Receiving Programs or Services from MAC or MOWCM (January 1, 2022 to December 31, 2024)[a]

Indicator	MAC	MOWCM
Diabetes Control Status	**n (%)**	**n (%)**
Participants with an indication of diabetes and required A1C results[b]	405	2,093
Any Control (Moderately Controlled or Well Controlled)	373 (92%)	1896 (91%)
Well Controlled (A1C<7%)	211 (52%)	1269 (61%)
Moderately Controlled (7%≤A1C<9%)	162 (40%)	627 (30%)
Not Controlled (A1C≥9%)	32 (8%)	197 (9%)

[a] MAC counts include people enrolled in evidence-based or care transition programs or receiving nutrition services. MOWCM counts include people receiving home-delivered meals.
[b] Individuals must have had at least 1 A1C result between January 1, 2022 and December 31, 2024 to calculate diabetes control

C.2.3 Change in Diabetes Control

CRISP was also able to demonstrate how one of the diabetes control metrics allows MOWCM and MAC to compare diabetes control before and after the start of programs or services. Table C-7 shows the change in diabetes control status among 172 MAC clients and 466 MOWCM clients. Pre/Post diabetes control requires two A1C measures separated by the start of a program or services such that a significant number of individuals from Table C-5 were excluded.

Table C-7. Change in A1C Following Initiation of Programs or Services from MAC or MOWCM[a]

Indicator	MAC	MOWCM
Diabetes Control: Pre/Post Change in Individual A1C	**n (%)**	**n (%)**
Participants with an indication of diabetes and required A1C results[b]	172	466
Improved A1C Control	51 (30%)	123 (26%)
No Change in A1C Control	86 (50%)	223 (48%)
Degraded A1C Control	35 (20%)	120 (26%)

[a] MAC counts include people enrolled in evidence-based or care transition programs or receiving nutrition services. MOWCM counts include people receiving home-delivered meals.
[b] Individuals must have had at least 1 A1C result during January 1, 2022 - December 31, 2024 and at least 1 A1C results in the 12-month look-back period. Look-back period defined as the 12 months preceding the earliest date of enrollment or service delivery between Jan 1, 2022-December 31, 2024.

This table demonstrates that CRISP successfully calculated change in diabetes control for individuals near the start of their community-based program or service. Overall, about half of participants had no change in their A1C control. As these estimates reflect a small population size of individuals receiving different amounts and duration of services, the implications of these numbers require further investigation and users should also recognize that individuals with diabetes are receiving many interventions that could influence A1C and diabetes control.

The ability to quantify the burden of chronic disease and potential impact of community-based services and programs deepened CBOs' understanding of client health challenges and provided tangible evidence to support their programs and advocate for future innovations.