



Direct registration

Case work

General population

Montgomery County, Maryland, United States

Montgomery County platform, the Enterprise Case Management System (eICM): a CMIS for the improvement of the integration in the delivery of social programs and services

Information system description

The Enterprise Integrated Case Management (eICM) system is an operational data warehouse that shares data across more than 70 of Montgomery County's Department of Health and Human Services (DHHS) program. The system aims at encouraging and facilitating coordinated care for all clients and provides staff with concurrent and historical information about each client. The system houses both county and state-administered services as they requested or received than staff previously had access to, allowing staff to better understand their client, and more efficiently serve them across multiple services improving their outcomes.

Initial challenge

Montgomery County's determination to integrate health and human services began in 1996 when four different county departments were merged to form the Department of Health and Human Services to better able to address the growing variety of needs of the county's most vulnerable residents. Implementation of the eICM in 2017 provided the tool needed to share data across services while supporting the County's strategic vision and several of the Department's policies and including: - Collaborating with community partners; - Truly integrated services with a "No Wrong Door" approach to access services; - Addressing drivers of inter-generational poverty; - Ensuring equity in services and outcomes; - Building self-sufficiency, mitigating risks, and improving health and well-being; - Achieving and maintaining health accreditation; - Data-driven decision-making and advanced analytics.

Results

The eICM provides a technical solution for DHHS to fully integrate coordinated care for its clients who are now over 100K users. A single profile of all clients which has all demographic information – the profile is universal and aligned with the more detailed work case workers do with the clients – that reflect case information, such as fiscal benefits, case notes, assessments, service plans, etc. The system is interfaced with the Electronic Health Record (eHR) system to provide controlled visibility into the services in public and behavioral health programs. State programs operating through the department are housed in a state-mandated system – hence the eICM has an interface to provide case workers with information about the state system through a nightly batch update. A reporting platform for planning and analytics – and easily downloadable queried information.

INTAKE POINT: Direct registration

The Montgomery County platform was developed for the integration of services and programs at the Montgomery County Department of Health and Human Services (DHHS) in Maryland, United States. Individuals are registered on the Montgomery County platform directly when they access any social or health service and an operator records their data. Once the data is collected the individuals are informed of all the benefits, services, programs, and institutions available to them.

LEVEL OF CASE MANAGEMENT: Case work

The Enterprise Case Management System (eICM) accommodates the whole case processing approach from screening and intake; through assessment, case management, and case outcomes; to case closures.

POPULATION GROUP SERVED: Most vulnerable population

The platform supports case management for the general population, from assessment of needs and conditions to referrals, case dispensation and case outcome.

CMIS existing and active?	Yes
Year of launch:	
Tenants:	
Registered operators (all unique users):	800 (200-300 social workers)
Beneficiaries supported by the CMIS:	
Beneficiaries covered by the program:	
URL:	

I. CONTEXT ON THE INTRODUCTION OF THE MONTGOMERY COUNTY PLATFORM

Institutional context

The Montgomery County platform, known as the Enterprise Case Management System (eICM), was introduced by the county's Department of Health and Human Services (with support of the County Executive) with the objective of integrating the provision of social services and programs.

¹ The DHHS administers, delivers, and implements 134 federal, state, and county programs (services and benefits) in six major service areas:

- i. children, youth, and family programs (including food stamps, TANF cash assistance, social services, etc.),
- ii. aging and disability,
- iii. behavioral health crisis services,

¹ NB: Labor and employment programs are not included in this

- iv. public health services (including Medicaid and Affordable Care Act health insurance),
- v. homeless services, and
- vi. community affairs.



Figure 1

Developing the eICM took approximately three years. During that time, the team cycled its focus through four main categories, as shown in the picture above (Fig. 1). Throughout the process, the team maintained a human-centered approach to learning and an agile approach to implementation. While focus shifted often, this was necessary for integrating learnings across categories. As the team learned more about one, they could improve their understanding of the others. The team was made up of a procured system development vendor and subject matter experts from each department.

Focusing on policy meant reviewing privacy, legislative, and auditing protocols. Understanding policy meant the team could provide guidance and protocols about client data storage and worker-level access. It also exposed areas for improvement. For example, reviewing policy made it clear that the department’s privacy practices needed updating for the new system. Therefore, the department created a new Notice of Privacy Practice document that covered all departments and client data within the system.

Operations meant exploring current program policies, infrastructure challenges, and business process. As the team developed the system, it reviewed and documented business processes, and eventually mapped them to the eICM system. Auditing infrastructure challenges additionally made clear where the team would need to manage changes, for instance where some programs used Excel spreadsheets instead of a digital system like the eICM.

The business process review then influenced the system’s design protocol and production. The team implemented business requirements in an agile process. That means implementation was highly iterative. Instead of working for a long time to implement a requirement, the team would work in shorter bursts of work, test to see if the solution worked, then iterate based on what the team learned. The team documented the system requirements throughout, based on the business process documentation already performed. During this category of work, the team also established protocol for all external systems that the eICM would interface with. For example, CARES (Client Automated Resource Eligibility System, an application developed by the state of Maryland for eligibility and benefit disbursement [see section “Provision of case management”]) was the main system of record for client data and all others were secondary in the interface or direct entry. This meant that if the client record was stored based on the data in CARES any changes to the client record would need to be made in the CARES system since a bi-directional feed does not exist between the eICM and external systems.

The final category the team worked through was people: taking into consideration the role of various human capital needs and resources. Early on, the team established a subject-matter expert group made up of a representative from all areas of the department. This group collaborated on the rules governing the system. They helped keep the integrated equity and integrated service delivery perspective. The members committed fully to the whole process, and current duties were suspended to help them make time to work on the system. The team working directly on the system also made use of people by asking program staff to create use cases that could be used to improve the system. For example, charting existing end-to-end services path for each program migrating to the system. Later in the process, focusing on people also meant training staff in the new system. For some staff, the transition meant a transition from paper-based social work to IT-based work. For others already familiar with using case management tools, the transition involved less upheaval. The team designed training materials for beginners, intermediates, and those already familiar with CMISes. The team also placed a great focus on ensuring leadership supported staff throughout the transition.

Provision of social, labor (and other) benefits and services

The provision of social services in United States can be made at federal level, state level or county/local level. The degree of decentralization in the different states leads to a substantial variation in the provision and redistribution of social services and programs across the country. Therefore the information contained in this case study is highly specific to Maryland and Montgomery County, and not indicative of problems or solutions encountered across the United States.

At the time of the introduction of the Montgomery County platform, separated systems such as the state program used the CARES; school base and adult services programs used AIF; and some programs used spreadsheets and other access databases to house client information. When the eICM platform was built, all such systems built by the county were sunset, and data migrated to the eICM system during development.

Provision of case management services

The Department has been doing case management since before 1996. Prior to integration of the now combined department, separate agencies provided services for the vulnerable population for health, children and family, housing, and the elderly. These departments were integrated in 1996. That same year, assessment tools and intake forms were established and created for processing cases. Since the Department processed cases for the state of Maryland across multiple service areas, there were foundational case management protocols developed by the state and administered by the Department.

Before implementation of the CMIS, each service had its own system, which existed independently of the others. For example, state-level programs used the Client Automated Resource Eligibility System (CARES); school-based and adult services programs used the in-house built Application Integrated Framework (AIF). The AIF system was a MS Access-type/mainframe application that accommodated basic case management work by providing summaries of client/case manager activities and client demographic information. Other, more detailed case management work, such as assessments and case plans, was completed on paper. The Client Automated Resource and Eligibility System (CARES) component of the Department of Human Resources Information System (DHRIS) is an application hosted on a mainframe that maintains individual and case-level information, determines technical and financial eligibility for public assistance programs calculates and initiates benefits issuance, produces necessary management reports, and interfaces with the Department of Health and Mental Hygiene's (DHMH) Medicaid Management Information System (MMIS II). CARES and AIF represented some of the

more advanced service systems. Some programs did not have such advanced systems and used spreadsheets and other Access databases to house client information.

It has long been a practice that in Montgomery County, providers of case management services must be licensed social workers. Social worker classification for the county has three levels (I, II, III; increasing in level of proficiency), all requiring a master's-level degree and licensure. Social workers are classified into one of the three levels based on their experience, hours of professional experience rendering social work, and demonstrable skills.

One social worker "owns" each case – that is, one social worker is responsible for a case and the collaborative effort around integrated teaming cases. Nevertheless, multiple case workers may have access to a technical module within the system called the case ownership module. In this way, even though a case worker may not "own" a case, he or she can document their participation in cases. For example, the main person is a "case owner" but other workers could be provided access to the case as "case contributors". In circumstance where other individuals are associated with the case and a part of the case process (but not a county employee) such as a doctor or nurse, these individual details are added to the cases for reference only – but these individuals do not have access to our system – even if they are providing services based on a need in the case plan.

Eligibility for case management

Anyone who approaches the county for benefits or services, and is eligible for a benefit or service, would be assessed for case management if that benefit or service has a case management component. The eligibility of the individuals is based on program policies and/or state guidelines. For instance, if a person has a child enrolled in a school where the Department provides case management, and a need for case management is established, that person would receive case management. However, if that person went to a regional office for cash assistance, he or she would not receive case management, since case management is not part of the benefit for which the person applied.

The Department employs a "no-wrong door" approach to client services. This means that a client can approach (virtually or in-person) the Department for one service, and during that intake be referred to another program for other services. The client is first assessed for their current needs that the program can address, and then a referral to other programs for other services is made. This structure means the client experience will differ depending on which "door" the client enters through. For instance, if a client approaches the Department for food stamps, a social worker will screen the client for that program. If a client or client family approaches the Department through the school system, a social worker will perform a more in-depth screening, through which the client may be referred to the food stamps program. Geography can also affect client experience

A more common approach is that once the individuals are determined eligible for different services and programs, they are referred to these programs and a worker is assigned to each individual. This worker then completes a program-specific assessment of the conditions of the individuals, and a service strategy with the client. The supervisor reviews and approves the service strategy, after which the client signs a copy of the plan agreeing to the assigned tasks. Based on program policies, the cases are tracked and re-evaluated on a six-month timeframe. At this time the client is re-assessed for continued case management (service strategy modified) or the case closes because of lack of client participation. In some instances, after the referral of cases if there is any service type of conflict, provider jurisdiction conflict or provider capacity conflict the case either will be closed, the service transaction will continue, or the service strategy will be modified.

Supporting tools for case management services and IT infrastructure

Before the introduction of eICM, various programs that performed case management work relied on different systems. Some of these systems were CMISes, and some amounted to the combined use of paper and desktop applications like Excel.

For those programs with a CMIS, there were three different systems depending on the program. Case managers working with state Family Investment Administration's (FIA) Programs cases used Client Automated Resource Eligibility System (CARES). Child Welfare services uniquely used Maryland Children Electronic Social Services Information Exchange (MD CHESSIE). Programs (school- and community-based and adult services) that administered case management for county-based services used AIF, an in-house system.

Other programs used a variety of home-grown Access databases and Excel spreadsheets. Assessments across all these other programs were paper-based and results were logged either in the spreadsheets or Access databases. This preponderance of paper-based assessments proved a challenge when implementing eICM. Indeed, to date there is no common assessment for the department or even common department-wide questions added to program assessment. Assessments continue to be distributed based on program-specific inquiries or state and federal determined domains.

The Montgomery County Department of Health and Human Services use eICM as a CMIS for the provision of the different social and health services. In the case of eICM the registration of individuals in the system are direct and indirect (feeds from other social systems such as the state systems), they are registered (or uploaded) in the Montgomery County platform when they access any social or health service and an operator records their data.

The procedure compliance (time frame(s), service plan and eICM participation), performance goals (number served, end condition and case budget) and client goals (behaviors changed, obligations met, and functionality improved) will be analyzed prior to closing the case.

One of the innovative tools implemented in Montgomery County is QLess, a system for managing, triaging, and monitoring client flows in the front office. QLess is a lobby management system that seeks to improve customer service, eliminate long lines, reduce walk-aways, and reduce customer complaints. For social workers and staff, the system helps boost staff productivity and operational efficiencies. The system also allows the County to gain valuable insights through tracking and reporting, and enhance communication and customer engagement.

Collaboration mechanisms

Integration efforts in Montgomery County occurred at the policy and institutional level, in integrated case management, in personnel management, and in information technology infrastructure.

Before the introduction of eICM there was no unified CMIS for any social program. The introduction of the CMIS has spurred collaboration and integration within the Department beyond just IT system integration. Some key aspects of this progressive integration are:

- **A single director.** All six service areas (Child Youth and Family Services, Office of Community Affairs, Behavioral Health Services, Aging and Disability Services, Services to End and Prevent Homelessness, and Public Health Services) report to the same director.
- **Centralized administrative functions.** The first step in the reorganization was the centralization of all administrative functions (budget, finance, contracts and accountability), and the centralization of programs and services.
- **Collaboration among case management services, as now the agencies have direct access to staff from other programs.** Further improvements were seen with the implementation of the Intensive Team for case management efforts. These teaming meetings coalesced

around customers that were extremely vulnerable and receiving multiple services from the county. These collaborative efforts were further enhanced with the development of the CMIS.

The objective of integrating the departments was to provide integrated, coordinated and comprehensive service delivery.

Information and technology

All county systems (mainframe, Access databases, and spreadsheet processes) were sunset when the eICM system was built. These systems' data were uploaded into the eICM system to accommodate a seamless transition for case managers and to ensure the continuation of services. The architecture of the hosted environments is designed to support the current business processes. The CMIS was designed to include the requirements from the legacy systems, application installations, and database architecture to support processing all cases in the county, regardless of program policy, from intake to case closures. Other legacy applications (either those from third-party vendors or those built by the county) such as the state-level CARES and Homeless Management Information System (HMIS) interface with the CMIS. While the county migrated all county-based case management services to eICM, there were state-provided services that required proprietary platforms. Hence, to accommodate visibility for coordinated care, an interface between these state systems and eICM was established for a daily upload of client information.

The county has a central user registration system operated and maintained by the Department of Technology services. A single sign on functionality is used to enable and disable users in the system.

II. THE MONTGOMERY COUNTY PLATFORM AND ITS CORE MODULES (SCREENING – DIFFERENT PART OF THE SYSTEM)

System Architecture

eICM is based on an Oracle Siebel system, modified for the county's needs. The team aligned these modifications with program requirements for intake, case management, event management, and financial management.

Scope

The County's eICM Technical Architecture activities encompassed the following general areas:

- Establishing baseline architecture for the 7 identified environments to be used during the implementation of the Siebel Public Sector Case Management application.
 - Development (DEV)
 - System/Integration Test (TST)
 - Pre-Production (PREPROD)
 - Training (TRN)
 - Prod-Fix (PRODFX)
 - Production (PROD)
 - Disaster Recovery (DR)
- Identifying the external systems with which the eICM system would interact
- Defining the high-level activities associated with the planned environments

Software and technologies

Oracle Siebel CRM application suite is deployed to eICM Montgomery County users for performing case management.

Technical architecture

The Architecture of the hosted environments are designed to support new business processes. The design includes application installations and database architecture to support processing cases across all programs in the county (a.k.a. enterprise processing). Other legacy applications (third-party vendor or County-built), that have any degree of automated interface to the legacy County and State systems remain in the architecture and an integration point was created.

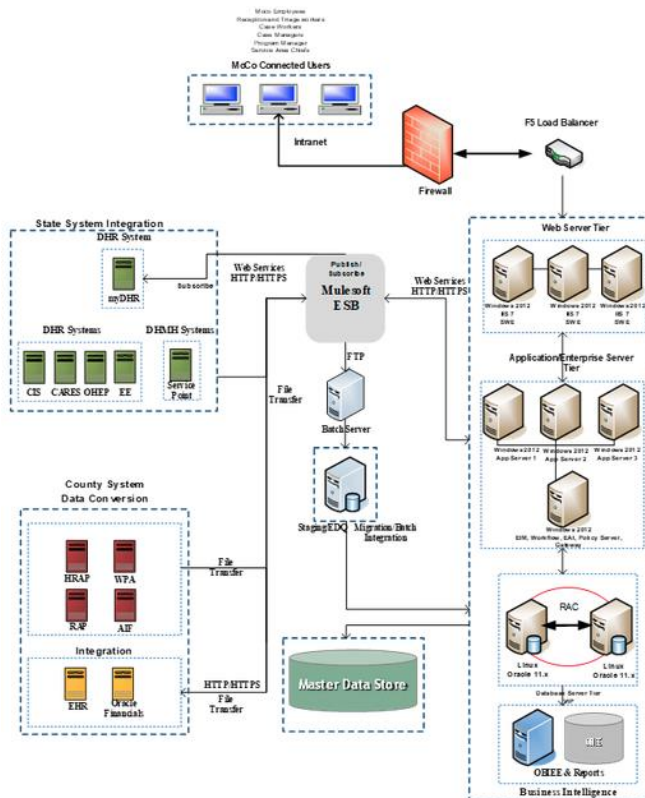


Figure 2

Core features of the Montgomery County platform

eICM is an integrated case management information system in Montgomery County that supports:

- vii. prescreening
- viii. intake and registration
- ix. assessment of needs and conditions
- x. Eligibility
- xi. Enrollment
- xii. benefits/ service management
- xiii. case dispensation of social programs and services

This case management process is visualized in Figure 3.

Figure 4 shows all the modules in eICM on the lefthand side. The center of the graph shows processes that take place within each module. Arrows point through the entire case management process from screening to case outcomes.

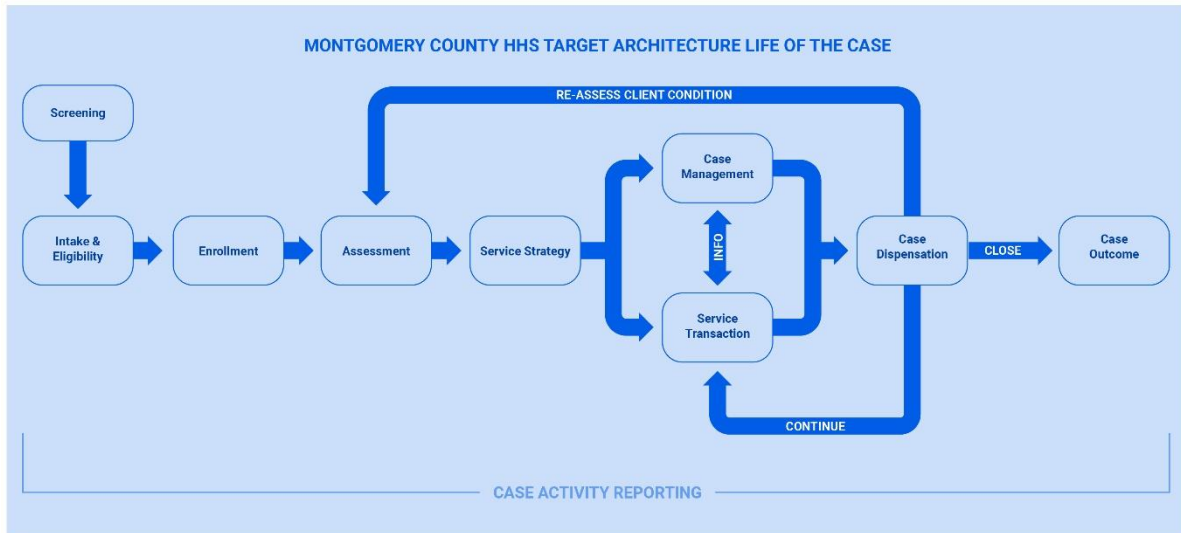


Figure 3

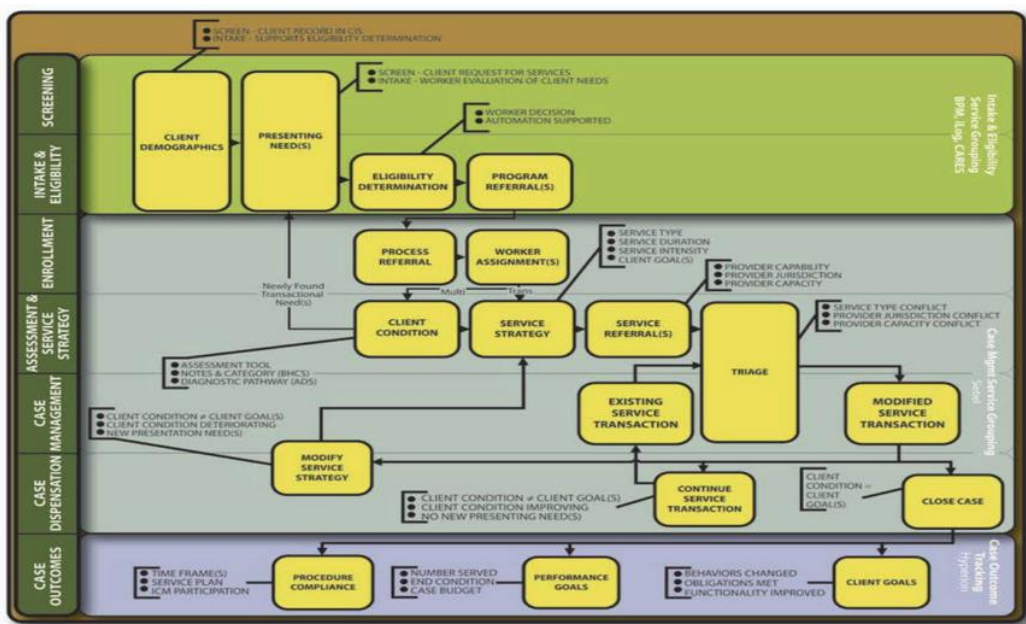


Figure 4

1. Establishing a case owner

The case process type and case management structure determine the type and number of case contributors that may be assigned to a case. An authorized user can access a drop-down menu in the eICM that includes the names of individuals available to be selected as case contributors.

Case contributors are managed through an eICM administrative function that records all individuals authorized to provide case monitoring and management for DHHS programs, organized by service area, program and case contribution type. Such organization ensures that

records case contributors make to a case remain associated with that case, and available for other contributors. eICM establishes a default case owner by the individual who originally establishes the case. The case owner:

- Establishes lines of authority and responsibility,
- Selects provider organizations
- Establishes case activity alerts and notifications, case dispensation and case outcomes

Notifications generated in eICM enable an authorized eICM user to navigate and view the following information:

- The unique case ID assigned to the case by the eICM
- If the master case has a sub-case management structure, the sub-case ID for the contributor assigned to the sub-case
- Client demographic information
- Client presenting needs
- Information used to determine program eligibility for client (only if contributor has appropriate user rights to access this information)
- Case notes recorded by the authorized eICM user to the case contributor

When the case contributor accesses the enrollment notification in his/her work queue, the eICM allows the contributor to perform specific actions that conform to his/her contribution type throughout the case. All information recorded by the contributor in the eICM is associated with the unique case ID, enabling compilation of a case record.

Primary	Work Phone #	Role	Position	Assigned To Date	Unassigned Date	Supervisor	Last Modified Date
<input checked="" type="checkbox"/>	(249) 777-3180	Owner	EICM Case Supervisor 59	2/29/2017 03:06:47 PM		EICM HHS Position 665	10/29/2022

Screenshot 1

2. Client program enrollment (Intake and eligibility process)

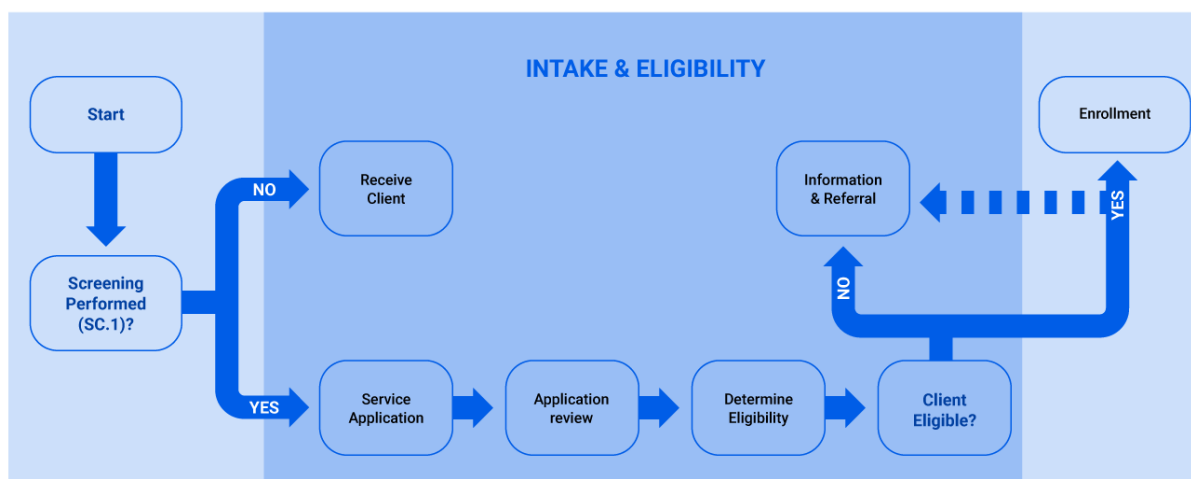


Figure 5

Intake

The Intake and Eligibility's processes and sub-processes can vary based on program, but in general the eICM flow follows some basic steps:

1. Receive client – During this step, the client is screened for their emergent need, and others needs if process or time allows.

2. Service application (for transactional intake) - Here, a full application is completed on the potential client.
3. Application review – The client’s presenting needs are assessed; all qualifying programs and services that correlate with presenting needs are identified.
4. Determine eligibility – eligibility decisions are finalized.
5. Information and referral (I&R) – determined to be not eligible for any DHHS services, refer client to other agencies, document the referral and close the case.

Case managers can refer eligible clients to the I&R process for services provided by agencies outside DHHS. Whenever a client is determined to be potentially eligible or determined to be eligible for a service, a service request record is created. The record is then pushed to the relevant department’s work queue. The system can also create a service referral record. This document is for the client so that he or she can receive services:

- From one department program to another department program
- From program to program within a department
- To contracted providers
- To non-contracted providers

Intake 1: Receive Client

A potential client who enters a DHHS facility may proceed through a screening process. A potential client must complete the Receive Client process only if the initial Screening Phase has not yet been accomplished. Potential clients can be “received” through several referral methods, such as:

- Service Referral
- Walk-in
- Telephone
- Mail
- Fax
- Website

After entering the client’s information, the case manager may generate a needs record that identifies programs for which the client is potentially eligible. The user then creates service referrals to other departments/programs. These service referrals are accepted by the appropriate department’s case manager and a case is created for each program. The system restricts the duplicate cases by only allowing that a client to one program within a case and which contains all the activities within a single program (services provided, assessments, case plan, etc.).

Intake 2: Service Application

The Service Application process consists of three sub-processes: **Collect presenting needs data**

The potential client’s presenting needs are compared to the eligibility criteria of all the services for which the client is potentially eligible. The case manager collects any additional information and verifications so eligibility can be established. The type of demographics and information may include:

- Type and reason for the contact
- Additional household information

- Address or address update
- Income
- Other

Collect client demographics

Data for the service application section may be entered manually or if the individual is already receiving benefits from DHHS, the data is displayed. If the potential client receives benefits only from the state Department of Human Resources (DHR), data populates automatically. The potential client's demographic data contributes to full eligibility determination.

Define service recipients

During this sub-process, a case manager compares a program's minimum data criteria to the potential client's data to determine eligibility. The outcomes

- *Application Complete: Proceed* – Client application proceeds to the Application Review process.
- *Application Incomplete: Proceed* – All of the threshold data requirements were not captured on the application; however, the information that was provided indicates that the client is potentially eligible for specific services. The client application proceeds to the Application Review process where remaining data is captured.
- *Application Incomplete: Hold/Pending* – An insufficient amount of information was captured on the application. The client application cannot proceed to the Application Review process until the minimum data requirements are satisfied.

The eICM application display is organized to capture all the information required to determine a potential client's eligibility for a program. A case manager makes eligibility determination. The application display is common for all Department. Each department uses only those fields applicable to its own programs. For this process the eICM application supports the following three categories of information: client demographics, ability to capture verifications, and notes.

Intake 3: Application Review

During the review process, the client's information from the Service Application process is compared to program(s) eligibility criteria to determine if a fit can be established. eICM captures the results of the eligibility determinations made by DHHS or state representatives or systems.

The Application Review process can be executed in one of three ways:

- Automated, when eICM displays the results of the eligibility determination made by the mandated state systems.
- User-driven, for programs where the case managers make the eligibility determination based on professional opinion and/or worksheets outside of eICM. Here eICM provides the case managers with the ability to record a decision, decision reason and narrative.
- Combined, for programs that use both demographics-driven criteria and professional opinion to determine program eligibility. In this case, eICM captures the eligibility determination.

During the Application Review process, the case manager can determine and record if the client is:

- Eligible for services within the program, in which case the client proceeds to the Determine Eligibility process.
- Not eligible for services within the program but possibly eligible for another program, in which case the client proceeds to the Determine Eligibility process.

- Not eligible for any services within DHHS, in which case the client proceeds to the I&R process.

Intake 4: Determine Eligibility

The Determine Eligibility process can result in one of three possible outcomes:

- Eligible – Client is determined eligible for the program(s) requested – proceed to the Enrollment phase for case establishment.
- Pending – The case manager determines the client is not eligible for the program(s) requested. The case manager may generate a service request record to another department.
- Ineligible – Client is determined not eligible for any services; in this case they proceed to the Information & Referral phase.

Enrollment

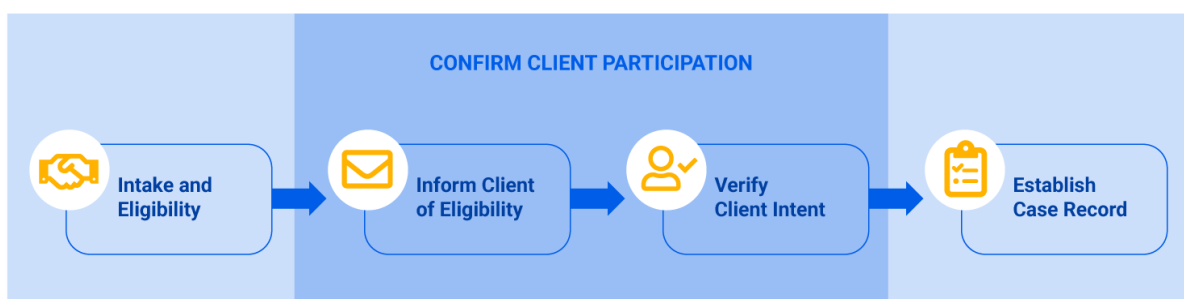


Figure 6

When a client is determined to be eligible for a program or service, the case manager then must confirm client participation. During this step, a client transitions from applicant to participant. The case manager can then take either of two actions:

1. Inform the client of his/her eligibility
2. Verify that the client intends to participate in the program(s) that will deliver the service

In the instance that a case manager needs to verify client intent, the case manager attempts to get verbal or written confirmation that the client intends to participate in the program or programs. When the case manager can't immediately get verification, they can either continue pursuing the client through additional notifications, hold off on the engagement, or reject the enrollment request. The course of action will depend on program requirements.

Once the case manager verifies that a program-eligible client intends to participate in the program or service and enters this information into the client's enrollment request record, the case manager can establish a case record. Establishing a case record creates a unique case identification number and associates all case management activities with this ID.

The unique case ID created by eICM for the client's presenting need is associated with the program and the client. Based upon the case process type and case management structure of the program creating the case, the eICM allows a case manager to assign case contributors.

Screenshot 2

3. Create an assessment

Screenshot 3

In the Assessment phase, case managers document client conditions and determine client outcomes. This step is required by the Department.

To determine client condition, a case manager establishes baseline documentation by using measures of the client's level of functioning, resiliency, exposure to risk and other program-specific measures. The client's baseline condition record is necessary to develop a service plan.

The case manager can use different assessment tools to enter client assessment results into eICM. These assessments come as templates in the system. Assessment results consist of factors that affect client condition, such as behavior or environment, as well as measures for each of these factors. For each program a client is eligible for, a case manager defines the factors for his or her assessment tool which are needed to record information about a client's condition. The case manager can then enter results directly or select factors from a pre-determined list.

To determine client outcomes, goals and measures are identified which can be used to improve the client's condition. Measures indicate the expected outcome of the goal. The case manager creates a client expected outcomes record by selecting one or more goals from a pre-defined list and an applicable measure for each goal. The case manager uses the case notes function to record expectations or other information about each outcome.

The case manager can make changes to the client's expected outcomes record in an open case, thereby changing the client's goals and, potentially, the required contents of the service plan. If changes to a client's expected outcomes record are authorized while the case is active, eICM allows the case manager to make appropriate changes to the service plan and record an explanation.

Then, a person selects assessment attributes...

Order #	Attribute Name	Value	Attribute Description
1	Type of Assessment	Initial	
2	Who connected the parent/caregiver with the team	Principal	
3	Did the parent/caregivers(s) participate in the Multi-A meeting (either in person ... Yes		
4	At what point in the life of the case did the parent/caregiver(s) become involved? More than 60 days		Involvement with the team is defined as: a parent/caregiver(s) who is actively involved in the plan
5	If parent/child withdrew from services prior to the 6 month review, please indic...	Moved out of the area / school	
6	Family Safety	Moderate risk	This refers to the degree to which family members are safe from being physically injured in the ho
7	Family conflict	Significant conflict	This item refers to how much conflict (may be physical, emotional, or verbal) occurs between fam
8	Residential status	Moderate difficulties	This item refers to the stability of the family's housing.
9	Involvement with Multi-Agency Team	Poor involvement	This item refers to the family's involvement in the team process and subsequent action plan
10	Financial Resources	Mild difficulties	This refers to the income and other sources of money available to family members (particularly c
11	Employment	Fair functioning	This refers to the adult's work effectiveness including, but not limited to, attendance, productivity,
12	Family Mental Health and Substance Abuse	Moderate issues	This item refers to mental health needs, problems with alcohol, illegal drugs and/or prescription d
13	Health Status	Significant health challenges	This item is used to describe the current physical health of family members.

Screenshot 4

4. Create case/service plan

Goal Category	Goal Sub Category	Assessment Name	Goal Revision Re	Final Condition	Goal Measure	Initial Condition/	Strengths	Challenges / Barriers	St
Housing / Living Situation	Evict/Foreclosure Prevention	CYF KCP and WM...			3			Single Parent	10
Community Participation		CYF KCP and WM...			1				10
Education and Literacy (Adult)	English Proficiency	CYF KCP and WM...			2				10
Childcare									10
Access to Care	Care for Kids								10

Objectives	Status	Planned Start	Planned End	Referral Number	Referral Status	Referral Sub-Status	Actual Start
Process Eviction Letter	Draft	10/29/2022	10/29/2023				

Screenshot 5

After the assessment has been processed for the client, the case manager documents service requirements.

During the service requirements process, the case manager captures information about the baseline condition factors and their measurements, objectives, goals, and the expected outcome measures. When the case manager selects one or more services for a service plan sequence, he or she also identifies the duration and intensity of a client's participation in a service. Duration refers to the length of time a client is expected to participate in a service, while intensity refers to the degree of service intervention required to improve client condition.

5. Printed case plan

CASE SERVICE PLAN					
CASE INFORMATION					
Date	6/13/2021	First Name	Test 1-597275	Application Received Date	
Case Name	Created from SR: 1-2175297	Last Name	Test	Intake Date	02/28/2017
Case Number	1-2175113	Contact Id	1-CSVE	Next Assessment/Re-Cert. Due Date	06/30/2021
SSN	*****9995	Program		Last Assessment/Cert. Date	06/13/2021
Case Status	On Hold	Created by		Case Sub Status	
SERVICE PLAN					
Plan Name	Test 1-597275 Test	Plan Status	Pending	Start Date	06/13/2021
				End Date	06/30/2021
				Contact First Name	Test 1-597275
				Contact Last Name	Test
SERVICE PLAN GOAL					
Initial Condition/Problem	Goal Category	Challenges	Strengths	Goal	Planned Start
	Access to Care			Test 1-597275 Test, Access to Care	06/13/2021
					Planned End
					06/30/2021
SERVICE PLAN ACTIVITY					
Objectives	Status	Planned Start	Planned End	Intervention/Task Task Owner	Person responsible
					Provider/Vendor

Screenshot 6

The client gets the next appointment

Next Appointment Date and Time:

And also signs

Client

Date

Screenshot 7

Case plan review is a discussion between the case manager and supervisor regarding client service plan and sign-off from the supervisor using case note module. The plan can be fully downloaded and printed from the system and acts as a binding document between the case manager and client.

6. Service plan milestones and progress tracking

Goal Milestones							
Name	Status	Milestone Due Date	Milestone Completed Date	Comment	Type	Alarm	Goal Name
Eviction Avoidance	Draft	10/29/2022		Homeless Prevention	Milestone	<input checked="" type="checkbox"/>	Test 1-597275 Test, Housing / Living Situation

Screenshot 8

During this stage, the case manager establishes a service plan. During this process, the case manager assigns providers to specific services in each service plan sequence. The case manager selects a list of options from the drop-down menus for each service within a service plan sequence. Case managers can select, for instance, authorized providers. Based on the provider, the case manager can also assign a contact from the provider.

7. Client interactions and activities

Case Demographics							
Number of Active Benefits: 1		Number of Completed Benefits: 0		Number of Waitlisted Be			
Involved Parties	More Info	Household	Coverage Team	Case Activities	Plans	Income/Expenses/Assets	Case Documents
Activities							
Type	Sub Type	Duration	Planned Start	Description	Due	Status	
Alert	Reassess Case	60	4/22/2023 12:00:00 AM	This case has to be re-assessed and service plan reviewed within 5 days	4/27/2023 12:00:00 AM	Open	
Alert	Review Case	45	1/22/2023 12:00:00 AM	This case must be reviewed within the next 5 days	1/27/2023 12:00:00 AM	Open	
Alert	Review Case	60	11/23/2022 12:00:00 AM	This case must be reviewed within the next 5 days	11/28/2022 12:00:00 AM	Open	
Milestone			10/29/2022 12:00:00 AM	Eviction Avoidance		Draft	
Appointment		0	3/23/2017 08:15:13 PM		3/23/2017 08:15:13 PM	Open	

Screenshot 9

For client interactions, the case manager uses information from the provider during the interaction and monitoring process to help monitor case activity. This information includes data like:

- **Service Schedule** – The case manager can schedule events for internal providers through the eICM calendaring functionality.
- **Service Occurrence Records** – eICM supports the creation of service events for clients. These events can either be pre-scheduled or unique events for a specific client.
- **Service Transaction Conflict Management:** Execution of the service plan can lead to conflicts among case contributors. Here a case manager can resolve issues such as two or more providers scheduling service events at overlapping times.

To help manage service transaction conflicts, the eICM supports conflict mediation, escalation, and resolution structure based on the best practices of integrated case management.

8. Document management

The screenshot shows a web interface for 'Case Demographics'. At the top, there are two input fields: 'Number of Active Benefits: 1' and 'Number of Completed Benefits: 0'. Below these are several tabs: 'Involved Parties', 'More Info', 'Household', 'Coverage Team', 'Case Activities', 'Plans', 'Income/Expenses/Assets', 'Case Documents', 'Case Forms', and 'Assessments Tool'. The 'Case Documents' tab is selected. Underneath, there are sub-tabs: 'Associate Contact Documents', 'Add Case Documents', and 'Case BIPs'. A 'New File' button is visible. Below the navigation is a table with the following data:

Document Name	Size (In Bytes)	Type	Created	Category	Sub-Category	Status	Expiry Date	Modified
EARP Stats	455,302	pptx	10/29/2022 08:...	Housing/Property	Lease	Active		10/29/2022 08:...

Screenshot 10

This module captures various categories of paperwork that should be associated with a person's case. This helps ensure clients do not need to take same documents to multiple programs. On the other hand, clients' general documents such as driver license are housed within the client profile not the case profile.

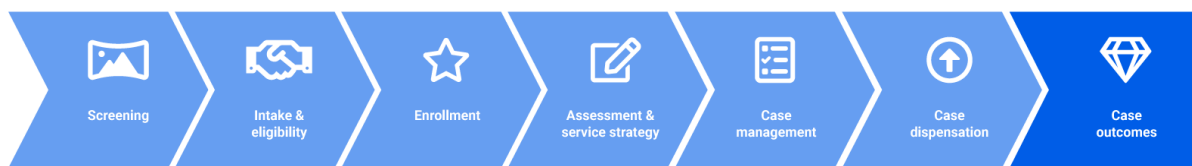


Figure 7 – A simplified Case Management workflow

Data warehouse

Montgomery County platform is connected to a data warehouse, the Demo Oracle Business Intelligence Enterprise Edition (OBIEE). The data is sent to the data warehouse for the formation of the Demographics Dashboard and the Program Services Dashboard.

Dashboard(s)

Montgomery County data, via the data warehouse, feeds two dashboards:

- i. the Demographics Dashboard
- ii. the Program Services Dashboard

The Demographics Dashboard provides information on the number of clients registered on the CMIS based on: age range, gender, citizenship, race, ethnicity and marital status. However, the Program Services Dashboard provides information on the number of clients receiving benefits or services and the specific program who is providing the benefit.

What does the CMIS not cover

1. Messaging mechanism
2. Dashboards for clear case managing
3. Does not accommodate external referral

Montgomery County does not cover meetings management, messaging mechanism and external referrals.

Glossary

CARES

AIF

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Acknowledgments

This report was produced by [insert names] under the supervision of Alessandra Marini, with guidance from Cem Mete and Loli Arribas-Banos. It was edited by [insert names], Francesco Cenedese and Alessandra Marini. Graphic design support was provided by Andrea Jambor and Bernadette Herkner. The team sincerely thanks [insert names] for their time and availability.

The authors acknowledge the generous support of the Rapid Social Response Program (RSR)²



RAPID SOCIAL RESPONSE

² The Social Protection and Jobs team wishes to recognize the generous award of a grant from the World Bank's Rapid Social Response Adaptive and Dynamic Social Protection (RSR-ADSP) Umbrella Trust Fund Program, which is supported by the Russian Federation, United Kingdom, Norway, Sweden, Australia, Denmark, the Bill and Melinda Gates Foundation, USAID, GHR Foundation and UBS Optimus Foundation without which this work would not have been possible.