



COMMONWEALTH of VIRGINIA

Department of Medical Assistance Services

KAREN KIMSEY
DIRECTOR

September 30, 2021

SUITE 1300
600 EAST BROAD STREET
RICHMOND, VA 23219
804/786-7933
804/343-0634 (TDD)
www.dmas.virginia.gov

MEMORANDUM

TO: The Honorable Janet D. Howell
Chairman, Senate Finance and Appropriations Committee

The Honorable Luke E. Torian
Chairman, House Appropriations Committee

Daniel Timberlake
Director, Department of Planning and Budget

FROM: Karen Kimsey
Director, Virginia Department of Medical Assistance Services

SUBJECT: Annual Progress Report on the Replacement of the Medicaid Management Information System due October 1, 2021

This report is submitted in compliance with Item 317.Q.3. of the 2021 Appropriation Act, which states:

“Beginning July 1, 2016, the Department of Medical Assistance Services shall provide annual progress reports that must include a current project summary, implementation status, accounting of project expenditures and future milestones. All reports shall be submitted to the Chairmen of House Appropriations and Senate Finance Committees, and Director, Department of Planning and Budget.”

Should you have any questions or need additional information, please feel free to contact me at (804) 786-8099.

KEK/
Enclosure

pc: The Honorable Daniel Carey, M.D., Secretary of Health and Human Resources

Annual Progress Report on the Replacement of the Medicaid Management Information System

A Report to the Virginia General Assembly

October 1, 2021

Report Mandate:

Item 317 Q(3) of the 2021 Appropriations Act states, “Beginning July 1, 2016, the Department of Medical Assistance Services shall provide annual progress reports that must include a current project summary, implementation status, accounting of project expenditures and future milestones. All reports shall be submitted to the Chairmen of House Appropriations and Senate Finance Committees, and Director, Department of Planning and Budget.”

Executive Summary

In 2016, the Virginia Department of Medical Assistance Services (DMAS) embarked on a path to replace its aging Medicaid Management Information System (MMIS) with a modern, modular Medicaid Enterprise Solution (MES), pursuant to new standards set forth by the Centers for Medicare and Medicaid Services (CMS).¹ For the last five years DMAS has worked aggressively to implement the new MES, seeking to improve the Commonwealth’s development agility while meeting the rising demand for new services and increased access for its citizens.

In 2020, however, the MES program underwent radical transformation. A months-long effort to realign the program’s scope, redefine program costs, and carve out a methodical, calculated new plan for implementing and integrating the program was completed. The result of this effort was a newly minted Integrated Master Schedule, or IMS, that intensified the necessary rigor to manage multiple co-dependent work-streams. DMAS worked in concert with CMS throughout this effort to ensure compliance with regulatory requirements and secure the necessary federal funding to continue on. With the scope fully realized, new costs understood, and individual work plans tied together, the MES program is now marching toward an April 4, 2022 implementation.

Further cementing the success of the program’s fully realized re-baselining efforts is the program’s “GREEN” rating from our partners at the Virginia Information Technologies Agency (VITA) Project Management Directorate (PMD). As of the writing of this report, the program is **on schedule**.

To date, five modules have been successfully implemented in the DMAS production environment, further increasing the program’s ability to provide

About DMAS and Medicaid

DMAS’s mission is to improve the health and well-being of Virginians through access to high-quality health care coverage.

DMAS administers Virginia’s Medicaid and CHIP programs for more than 1.8 million Virginians. Members have access to primary and specialty health services, inpatient care, dental, behavioral health as well as addiction and recovery treatment services. In addition, Medicaid long-term services and supports enable thousands of Virginians to remain in their homes or to access residential and nursing home care.

Medicaid members historically have included children, pregnant women, parents and caretakers, older adults, and individuals with disabilities. In 2019, Virginia expanded the Medicaid eligibility rules to make health care coverage available to more than 500,000 newly eligible, low-income adults.

Medicaid and CHIP (known in Virginia as Family Access to Medical Insurance Security, or FAMIS) are jointly funded by Virginia and the federal government under Title XIX and Title XXI of the Social Security Act. Virginia generally receives a dollar-for-dollar federal spending match in the Medicaid program. Medicaid expansion qualifies the Commonwealth for a federal funding match of no less than 90 percent for newly eligible adults, generating cost savings that benefit the overall state budget.

¹ The standards and conditions for implementing Medicaid information technology (IT) require states to use a modular approach for systems development. Reference: CMS Final Rule, 80 FR 75817 - Medicaid Program; Mechanized Claims Processing and Information Retrieval Systems.

Virginians with access to high-quality health care coverage. The others, three in total, are actively being developed and will be deployed when the MES program goes live in April of next year.

As previously reported to the General Assembly, DMAS will integrate the current MMIS into the MES modular framework. As such, the following modules will make up the MES system, along with MMIS: Encounter Processing Solution (EPS); Pharmacy Benefit Management Solution (PBMS); Enterprise Data Warehouse Solution (EDWS); Integration Services Solution (ISS); Provider Services Solution (PRSS); Care Management Solution (CRMS); and Appeals Information Management System (AIMS).

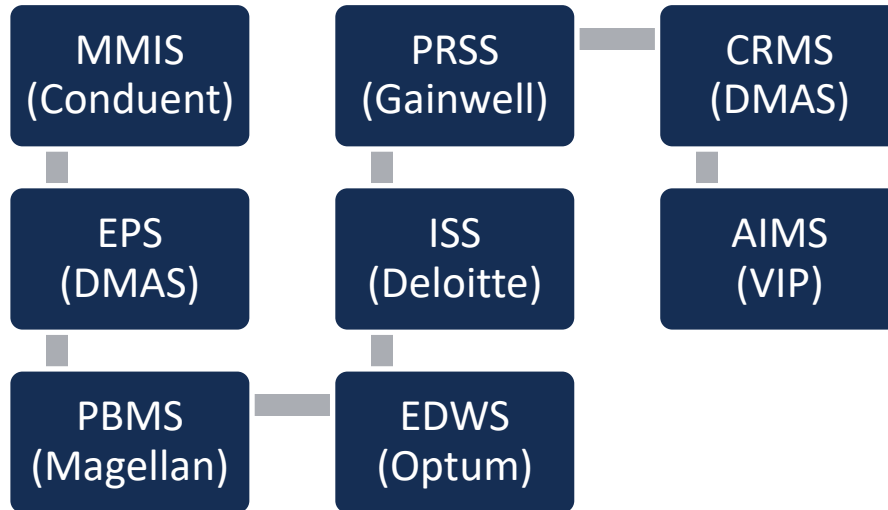


Figure 1: MES modules and corresponding vendor leads. EPS and CRMS developed "in-house" by DMAS.

Implementation Status

As the MES program is developed, each module's work is split into a Design, Development, and Implementation (DDI) phase and an Operations and Maintenance (O&M) phase once in production. Five modules are currently in the O&M phase, having already gone live in their respective production environments. These include: EPS, PBMS, ISS, EDWS, and AIMS. Three others are actively being steered to completion, and are currently in the DDI phase of the Software Development Life Cycle (SDLC).² These include: MMIS, CRMS, and PRSS. At go-live, all modules will be integrated into the modular MES framework.

Operational Modules

The **EPS** module launched in September 2017 and was certified by CMS the following year.³ Developed internally by DMAS, EPS enables the agency to improve oversight of Medicaid Managed Care Plans, which help provide services to

² Comprising the agency's Project Management Life Cycle (PMLC).

³ The CMS certification process contains four life cycle phases and three types of certification milestone reviews. It ensures that applicable Medicaid Information Technology (IT) initiatives meet all federal requirements and satisfy objectives set forth in the state's Advanced Planning Documents (APDs).



Figure 2: MES modules currently in the O&M phase.

the majority of Medicaid members. As of July 2021, over 231 million encounters have been processed using EPS.⁴ Recently, VITA and DMAS jointly determined that the EPS module is complete and no further oversight is needed. The EPS project team will continue to operate and maintain the product and provide testing support for sister MES modules as DMAS works toward the final MES implementation next April.

PBMS, the module responsible for providing comprehensive pharmacy services including pharmacy claims adjudication, drug rebate invoicing, and drug utilization reviews, went live in October 2017 and was certified by CMS in December 2018. Since then, the PBMS vendor, Magellan, has expanded the module’s functionality to include electronic “Prior Authorizations” submissions for medications, access to laboratory data, and transparent real time quality monitoring. The PBMS module is a highly configurable, rules-based, table-driven system, which enables complex Medicaid plan benefit changes to be made quickly without major coding changes. This feature was evident in its ability to accommodate changes as a result of Medicaid Expansion in January 2019.

The **EDWS** concluded several successful staggered implementations in 2019. First, 10-years’ worth of MMIS data for Provider, Claims, Member, and Reference materials were made available for analytics. Additionally, the Fraud and Abuse Detection System (FADS) was implemented with Single Sign-On (SSO) capability in April 2019. In October 2019, Phase 1 of EDWS was fully implemented in production, beginning the Operational phase of the contract, and is now in the second year of Operations. EDWS Phase 3 – Advanced Analytics, which includes dedicated data marts and integration of additional data sources, has been completed and implemented as of June 2020. DMAS is working with Optum to prioritize Phase 3 ahead of Phase 2 due to the change in the overall MES timelines. Currently, EDWS is adding on additional capabilities and is working with the ISS vendor to complete the MES Integration which will conclude the EDWS Phase 2. Major near-term milestones for EDWS include the future incorporation of the Transformed Medicaid Statistical Information System (TMSIS) and the Management Administrative Reporting System (MARS), which will boost reporting and analytical capabilities to meet state/federal requirements.

ISS is the backbone of the MES environment, and can be thought of as the central coordinator for all the information flowing through MES. In the future state of MES, data will flow from module to module with ISS directing the traffic to the right place. ISS entered into its operational phase in September 2020. Key activities falling within the ISS are Standardized Data Exchanges between MES modules, SSO capabilities, Enterprise Governance and Change Control, and an Electronic Data Interchange (EDI) gateway for all healthcare business-to-business transactions. ISS also includes the MES Portal, where users are able to connect to any module they are approved for right from a web browser. The MES Portal is also the first stop for users when looking for resources they need, including user guides and training materials. The ISS vendor, Deloitte, is now working with all the MES vendors to complete the remaining MES Integration activities.

AIMS is the most recent module to go live, having been in production since May 2021. AIMS has replaced a mostly paper-based Medicaid appeals process with a robust electronic appeals case management system. The system allows members and providers to submit and manage appeals electronically and provide the DMAS Appeals Division with an

⁴ An encounter refers to any episode of care in which a Medicaid member sees a qualified provider and submits a claim for that visit.

automated workflow. Recently, AIMS passed the CMS operational milestone review, a key marker for obtaining CMS certification, which DMAS looks to secure in the coming months.

Modules in Development

As previously mentioned, DMAS will integrate the current **MMIS** into the MES modular framework, as part of the program's modular strategy. Conduent's contract has been extended through June 2023, and they will continue to manage Claims Processing, Member Management, Financial Processing and Management, and handling of the Reference system. Conduent has been supporting the MES integration work with other vendors as well.

In an effort to create a more stable environment from which to launch MES, DMAS has already arranged for a "soft freeze" of the MMIS system. The soft freeze, which will continue through October 31, 2021, was enacted in order to limit the number of system development activities to only necessary, vetted items. For instance, during the soft freeze, all system development tickets require an assessment for impact to the MES program. All submitted changes will be reviewed/ considered by the agency's Change Control Board (CCB).⁵ Items such as cyclical/recurring software updates and maintenance service requests not requiring system development (e.g., rate updates) are generally permitted during the soft freeze. Other items, such as enhancements and/or change requests are considered by the CCB on a case-by-case basis. A "hard freeze" of the MMIS, which is slated to run from November 1, 2021 through May 31, 2022, will eliminate any changes that require development to the current MMIS with few exceptions. During the hard freeze, the CCB will be suspended and will reconvene after MES is implemented.

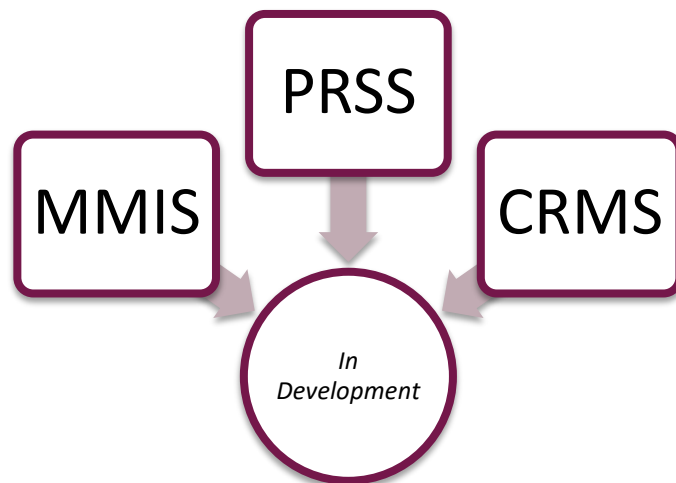


Figure 3: MES modules currently in development.

DMAS awarded the **PRSS** contract to "DXC Technology" in May 2018 (as of October 2020 DXC Technology is "Gainwell Technologies"). The PRSS solution will provide DMAS with overall management capabilities for provider-related activities, including provider eligibility, screening, and enrollment. When MES goes live, the provider portal will allow for providers' self-service access to various provider resources and information. PRSS implementation is progressing well and will launch as MES is implemented in April of next year.

The **CRMS** module is being developed "in-house" utilizing VITA's Application Integration Services (AIS) infrastructure. CRMS will allow for the exchange of data between DMAS and the Managed Care Plans which will provide for better communication, and streamline the provisioning of services for members transitioning between Plans. Certain components of the CRMS solution have already been implemented, such as the Inbound Interdisciplinary Care Plans (ICP), Health Risk Assessments (HRA), as well as Medical and Pharmacy Service Authorizations (SA). Outbound Member Transition Records (MTRs) are currently in the testing phase, while reengineered web portals, such as the Electronic Medicaid Long Term Services and Supports (eMLS), Level of Care Eligibility Review Instrument (LOCERI), and Program of All-Inclusive Care for the Elderly (PACE) are actively being designed and developed.

At the conclusion of the remaining modular DDI, Deloitte will continue collaborating with all MES vendors to complete the pending MES integration activities for ISS. Although much work lies ahead to complete development and integration activities, the agency has made substantial progress and navigated through numerous challenges since the path to MES began in 2016.

⁵ The CCB is comprised of technical subject matter experts and leaders within the agency's Information Management division.

Project Expenditures

CMS and the Commonwealth share in the funding of MES-related development and operational expenditures for each of the identified modules. For instance, DDI activities qualify for enhanced funding from CMS at a rate of ninety percent (90%).⁶ Once a component is fully operational and has been certified by CMS, O&M expenditures are funded at seventy-five percent (75%).⁷

Since 2017, the General Assembly has provided DMAS with annual funding to implement MES. As shown in Figure 4, total expenses in State Fiscal Year (SFY) 2021 for the DDI phase of the project totaled \$43,773,198 (\$5,739,260 general funds and \$38,033,937 federal funds). The majority of DDI work will be completed by the end of SFY 2022 followed by a shift into the operational phase.

Currently, DMAS has secured federal funding through SFY 2022 for all MES program activities. DMAS anticipates expenditures for SFY22 to be approximately \$56,973,077 (\$10,698,033 State General Funds and \$46,275,044 Federal Funds). The agency is currently working with CMS on securing funding for SFY 2023 and beyond. When the agency implements MES in April of next year, a greater share of funding will come from State General Funds, as the program will be considered operational.

Future Milestones

The MES program's IMS contains key milestones, dependencies, activity sequencing, and critical path tasks and milestones. The IMS was the fruit of a comprehensive impact assessment that aimed to develop a phased programmatic implementation approach, which included drafting modular plans, identifying/negotiating dependencies, and integrating individual work plans into a unique, multi-pronged management tool. As the calendar year-end approaches, DMAS is increasing its energies on testing and implementation readiness as its key near-term performance markers.

End-to-End testing (which aims to assess the behavioral flow of the overall program) and User Acceptance Testing (UAT) (among the final stages of the SDLC) are two key milestones for the program in the near term. Additionally, built into the IMS are two "phase gates," or "pulse checks" for assisting agency leadership to further assess our readiness for the target April 4, 2022 implementation date. These "Go/No Go" decision points help our leadership determine if we are to continue on as planned or retreat/triage issues that may have arisen. The first of these phase gates will occur in December 2021, and the second in February 2022 as shown in **Table 1** below.

In addition to upcoming testing efforts, MES program leadership is preparing the agency for cutover to MES with robust communications/outreach and training. As the agency's business operations brace for changes in both technology and processes with the advent of MES, implementation readiness will be a key success factor. DMAS has already begun communicating expectations to stakeholders across the agency and vendor communities. Brilljent, a firm specializing in training content development and delivery, has been brought in to help DMAS deliver a vast training curriculum spanning all MES modules in a variety of modalities, including "train the trainer," computer-based on-demand learning, as well as instructor-led courseware. DMAS is adhering to change management best practices and utilizing its in-house communication and training resources to ensure a smooth rollout.

SFY21 MES Funding

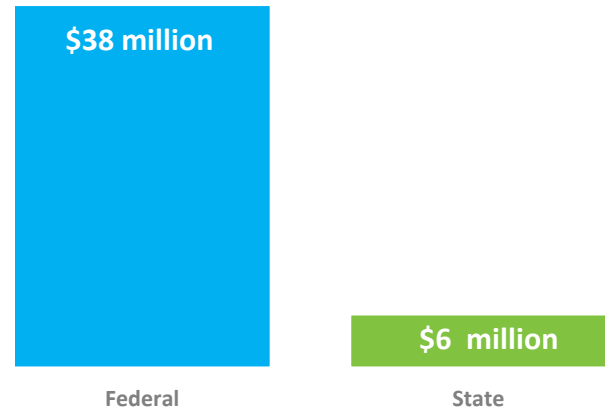


Figure 4: SFY21 DDI expenses across Federal Funds and State General Funds. Source: Cardinal Financial Management

⁶ DDI Training costs are funded at seventy-five percent (75%)

⁷ The O&M pre-certified costs qualify for a fifty percent (50%) federal match rate until certification when the federal match rate is approved retroactively to seventy-five percent (75%).

Over the next several months, the Commonwealth, along with its suppliers and external partners, will work aggressively with the common pursuit of delivering a successful, fully functional MES that supports the DMAS mission to improve the health and well-being of Virginians through access to high quality health care coverage.

Table 1: IMS Key Remaining Tasks and Milestones, as of August 30, 2021.

Task Name	Start	Finish	% Work Complete
IMS Week of Aug 16, 2021	Mon 9/21/20	Mon 4/4/22	67%
Requirements and Design	Mon 9/21/20	Fri 10/29/21	91%
Solution Development/INT ⁸ /SIT ⁹	Wed 9/30/20	Wed 2/2/22	77%
CRMS Development/INT/SIT	Wed 9/30/20	Tue 11/30/21	80%
ISS Development/INT/SIT	Fri 4/9/21	Thu 10/14/21	39%
PBMS Development/INT/SIT	Wed 9/30/20	Fri 9/10/21	95%
MMIS Development/INT/SIT	Fri 1/8/21	Wed 2/2/22	86%
Module UAT	Tue 1/19/21	Thu 3/31/22	18%
CRMS Module UAT	Mon 2/22/21	Mon 1/31/22	45%
EDWS Module UAT	Tue 1/19/21	Tue 3/22/22	18%
ISS Module UAT	Wed 7/21/21	Mon 1/31/22	2%
PRSS Module UAT	Fri 5/21/21	Fri 10/1/21	72%
MMIS Module UAT	Mon 9/27/21	Wed 3/2/22	0%
Execute TPT ¹⁰	Mon 8/2/21	Tue 3/8/22	7%
MES End to End Testing	Fri 10/1/21	Thu 3/31/22	0%
Go/No-Go Decision Point 1	Wed 12/8/21	Thu 12/9/21	0%
Go/No-Go Decision Point 2	Tue 2/8/22	Wed 2/9/22	0%
MMIS Go Live	Mon 2/28/22	Mon 4/4/22	0%

⁸ Integration (INT) activities.

⁹ Systems Integration Testing (SIT).

¹⁰ Trading Partner Testing (TPT) (i.e., with Managed Care Plans).