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MEMORANDUM

TO: The Honorable Thomas K. Norment, Jr.
Co-Chairman, Senate Finance Committee

The Honorable Emmett W. Hanger, Jr.
Co-Chairman, Senate Finance Committee

The Honorable S. Chris Jones
Chairman, House Appropriations Committee

Daniel Timberlake
Director, Department of Planning and Budget

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

SUBJECT: Progress Report on the Replacement of the Medicaid Management
Information System due October 1, 2019

This report is submitted in compliance with Item 307 P3 of the 2019 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.

KK/

Enclosure

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

Report Mandate:

Item 307 P3 of the 2019 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."

Background

The Virginia Department of Medical Assistance Services (DMAS) embarked on replacing its Medicaid Management Information System (MMIS) with a Medicaid Enterprise System (MES) in 2016.   The standards and conditions for Medicaid information technology (IT) require that states use a modular approach to systems development. In the final rule 80 FR 75817, CMS has defined an MMIS module as "a group of MMIS business processes that can be implemented through a collection of IT functionality." The Federal Funds Participation (FFP) process (75 CFR 66319) allows funding for MMIS in modular increments, and CMS certifies modules.

As MMIS contracts expire, states shall transition to a Medicaid Enterprise System consisting of a modular approach to systems development.   It is the Agency's goal to establish mutually beneficial partnerships with healthcare business suppliers who can provide solutions to achieve the ongoing mission and dynamic goals of the Agency.

The current MMIS system is limited by several significant constraints, which includes a general lack of development agility, increasing operational costs, and the growing consumption of technical resources necessary to incorporate changes on this dated development platform. At the same time, increasing demands for new programs and services have grown. Virginia citizens expect more access to these services and to the information related to obtaining the services.

In 2016, DMAS began the procurement process in search of technology leaders to collaborate with the Agency and other partners in this transitional journey to a more modern Medicaid business and

About DMAS and Medicaid

DMAS' 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. Through the Medallion 4.0 and Commonwealth Coordinated Care (CCC) Plus managed care programs, more than 1 million Virginians access primary and specialty health services, inpatient care, behavioral health, and 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 close to 400,000 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.

technical environment. Throughout 2017 and 2018 DMAS finalized most of the procurement for the new MES. The procurement cycle that started in 2016 is ending shortly, with two procurements (Appeals case management and Oracle Financials to Cloud migration) outstanding and multiple projects that have been initiated or implemented.

The Centers for Medicare and Medicaid Services (CMS) and the Commonwealth share in the funding of MMIS development and operational expenditures. Design, Development and Implementation activities qualify for enhanced funding ranging from ninety percent (90%) to seventy-five percent (75%) enhanced federal funding participation. Operations and maintenance expenditures are funded at seventy-five percent (75%) once operational.

In order for DMAS to continue to receive the enhanced funding for transformation to the MES, DMAS had to align the Agency's Information Technology Road Map with CMS' Medicaid Information Technical Architecture (MITA) layers, including Business, Technical, and Data requirements.

DMAS has been actively involved in CMS sponsored workgroups to assist the Agency in proactively aligning with CMS goals toward certification of the new MES solutions - an enhanced funding requirement.

Transformation to a Modern Medicaid Program
The technology platform to support MES collaboration requires a more modern Medicaid business and technical environment to address the Agency's healthcare-related business opportunities and challenges, which include:

- Providing services to populations that are shifting from Fee-For-Service model to a Managed Care model, including Medicaid Expansion enrollments

- Providing a customer-centric services environment that is easily accessible

- Creating the ability to measure performance of health care programs in order to adjust for better results and quality

- Creating environments that can be monitored for fraud and abuse incidents through advanced algorithms and analytics

- Promoting an environment that fosters DMAS' focus on servicing customers rather than overcoming technological development hurdles

- Creating an environment that leverages state and federal opportunities to improve healthcare on both a national and statewide basis

- Providing solutions that fulfill federal and state reporting requirements on a timely and accurate basis

- Utilizing an Integration Services vendor to keep solutions loosely coupled for easier disengagement at the end of contracts; this allows for modular replacements without having to replace the entire Medicaid Enterprise System.

MES Implemented Solutions Summary
The MMIS system is made up of five key areas: *Claims processing, Reference, Provider, and Member*. The transformation to a Medicaid Enterprise System, requires states to define separate modules to conduct Medicaid business functions based on market availability of solutions. DMAS has identified, the following modules that define the Medicaid Enterprise System: Encounter Processing, Operations (Claims and member processing), Plan Management (reference), Pharmacy Benefit Management, Financial Management, Data Warehouse, Provider Services, Care Management, and Payment Processing solution. The business functional modules exchange data and single sign-on security through an Integration module. All business functional modules will undergo a CMS certification process. This process requires DMAS to work with an Independent Verification and Validation (IV&V) vendor to present system artifacts that meet CMS checklists related to ten (10) business areas. The certification occurs six (6) to twelve (12) months after a system is implemented. Certification approval is required for states to received enhanced federal funding for Operations.

The first module, the *Encounter Processing Solution (EPS)*, was implemented on September 6, 2017. As of July 24, 2019, over 111,225,000 claims have been processed using EPS. Virginia applied for CMS Certification in September 2018. The EPS module was certified by CMS on December 7, 2018. CMS is requiring states that use federal funding to seek opportunities to share solutions that utilized enhanced funding with other states. Virginia has delivered this very successful solution to the State of North Carolina in the CMS spirit of "reuse". North Carolina has leveraged Virginia's development and is implementing the solution quicker and more cost effectively than if they started without any solution.

EPS will begin processing Consumer-Directed encounters from the new Fiscal Employer Agent (F/EA) for services beginning January 1, 2019. In compliance with the H.R. 34 -21st Century Cures Act (Cures Act), EPS will also implement Electronic Visit Verification in October 2019. EPS will start accepting the Electronic Visit Verifications (EVV) data for all Medicaid personal care services (PCS) that require an in-home visit by a provider per the mandate Cures Act beginning October 1, 2019.

The Pharmacy Benefits Management Solution (PBMS) is the MES module responsible for providing comprehensive pharmacy services including pharmacy claims adjudication, drug rebate invoicing and drug utilization review (DUR). The module went live October 2017. The PBMS module was certified by CMS on December 7, 2018. PBMS has expanded functionality to include electronic Prior Authorizations submission for medications, access to laboratory data, and transparent real time quality monitoring. The PBMS 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 accommodating Medicaid Expansion in January 2019.

Another solution under MES and part of the Financial Services module was the *Oracle Financials* upgrade to version 12.2 implemented in November 2017. The upgrade allowed the *Third Party Liability Recovery System* (TPLRS) to be upgraded to the new Oracle forms. The Oracle upgrade allows for the latest product functional capabilities and eliminates some past customizations. The on premise (CESC hosted) Oracle Financials solution will undergo a migration to the Oracle Cloud platform at some point this fall.

Enterprise Data Warehouse System (EDWS) had several successful staggered implementations in 2019. First, 10-years' worth of MMIS data for Provider, Claims, Member and Reference were made available for analytics. Next, the Fraud and Abuse Detection System (FADS) was implemented with Single Sign-on capability in April 2019. Currently, the EDWS is in User Acceptance Testing for production dashboards and federal reporting targeting an October 2019 implementation.

MES Active Projects Summary

In September of 2018, DMAS awarded the *Enterprise Data Warehouse Solution (EDWS)* to Optum. The EDWS will provide for Agency data analytics across all data sources, Fraud and Abuse reporting, as well as Federal Reporting to CMS. The EDWS is implementing the Optum dashboard and reporting product in September 2019. Federal Reporting is in development with a 4th quarter target implementation. All other MES modules are testing, providing regular data exchanges to the EDWS for reporting purposes to replace the MMIS data.

In January 2018, DMAS awarded the *Operations Services Solution and the Plan Management Services Solution* (OPSS/PLMS) to Accenture, LLC. These solutions are combined to offer claims processing and managed care payments based on reference items like program member eligibility. The OPSS rules-based claims engine utilizes the PLMS parameters to process claims and per member per month payments.   OPSS/PLMS has started System Integration Testing. Accenture's Public Health Platform (APHP) modular product is new to the market. Modularity has resulted in the Accenture product having to accommodate state specific functionality (like Medicaid Expansion), new exchanges of data to other modules, and interfaces. This scope and the newness of the product have added some complexities to the project and the MES schedule. DMAS and Accenture have established a June 2020 implementation date.

The *Integration Services Solution(ISS)* was awarded to Deloitte, Inc. and began in March of 2018. ISS is the backbone of the MES environment and key responsibilities are Standardized Data Exchanges between MES modules, Single Sign-on for MES modules, Enterprise Governance and Change Control, and Electronic Data Interchange (EDI) gateway for all healthcare business to business transactions. The ISS Vendor has established integrations between MES modules. The ISS vendor also manages the MES Program Integrated Master Schedule (IMS). Centralization of the schedule, risks, actions, issues and decisions are provided to the oversight governing bodies of Ernst & Young, Centers for Medicare and Medicaid Services (CMS) and Virginia Information Technologies Agency (VITA) project management division.

DMAS awarded the *Provider Services Solution (PRSS)* to DXC in June of 2018. Provider Services includes Provider screening and enrollment capabilities as well as Provider maintenance capabilities. A provider portal will allow for self

service and data access. Provider Services implementation is progressing with User Acceptance Testing scheduled for August 2019.   A target date for Implementation of PRSS is July 2020.

DMAS pursued a Payment Processing module in the market. The result was that there was not a Medicaid Payment Solution that was mature enough to meet DMAS needs. After discussions with the current fiscal agent, it was agreed that Conduent would provide their current payment processing as a carved out module to Virginia. Virginia presented the approach to CMS and received approval to pursue this strategy. The *Payment Processing Management Solution (PPMS)* is currently undergoing integration into the new MES environment.

DMAS leadership identified a new direction for creating a *Care Management Solution (CRMS)*. DMAS initiated an in-house developed project utilizing the EPS service bus platform and rules engine. Care Management will allow for the exchange of data between DMAS and the Managed Care Plans. Sharing data will provide for better communications between DMAS and the Manage Care Plans. In addition, DMAS will have more robust analytics for conducting quality oversight of the Plans.

MES Procurements Summary

DMAS has awarded the RFPs for Data Warehouse, Integration Services, Provider Services, Operation Services, Plan Management, Pharmacy Benefit Management and Payment Processing modules. The remaining procurements include an Appeals case management solution and migration of the Oracle Financials to a Cloud-based platform. Once procured, a formal project will be initiated. DMAS has been in discussions with an Appeals offeror on a state contract. The Oracle Financial procurement will be pursued in the fall of 2019. VITA is finalizing adjustments to the contract vehicle to procure the use of vendor Cloud solutions for Oracle.

MES Independent Verification and Validation (IV&V) Activities

As required by CMS, DMAS has engaged an IV&V contractor, Ernst & Young (EY), to conduct MES Program Governance oversight through quarterly Progress Reports and Certification Milestone Reviews.   EPS and PBMS have completed certification. The remaining modules will be required to go through two more reviews after the original program review. In a modular certification process, an R2 Operational Readiness Milestone Report for each module will be conducted shortly after implementation. A third review, the R3 Certification Milestone Report will be conducted 9 months after implementation. In addition to the milestone reviews, EY produces independent Quarterly Progress Reports on the MES program based on artifacts provided by DMAS (Program and Project schedules, risks, project status reports, decisions, and project recommendations). These Progress Reports are provided to CMS, DMAS Agency Director and Virginia Information Technologies Agency simultaneously.

Virginia's Medicaid Enterprise System Strategy

The Virginia MES will still consist of a modular architecture, pertaining to major business areas. The ISS vendor incorporates these loosely coupled modular systems into a cohesive MES. An Enterprise environment uses the secure integration vehicle through which all communication and data exchanges flow. The loosely coupled design will allow DMAS easier adaptability to future innovations. The table below reflects the business process areas supported by the MES.

MES Project Milestones Summary Update

MES PROJECT	MILESTONES	DATES
Pharmacy Benefit Management Solution (PBMS) - Complete	Post Implementation/Certification	10/2017 – 12/2018
(PBMS Integration)	Integration to MES	12/2018 – 5/2020
	Target Implementation	6/2020

MES PROJECT	MILESTONES	REVISED DATES
Encounter Processing Solution (EPS) – Completed Phase 1 and 2	Project Planning & Initiation	7/2016 – 9/2016
	Project Execution and Control	10/2016 – 8/2017
	Implementation – Phase 1	9/2017
	Post Implementation/Certification Readiness	10/2017 – 9/2018
	Project Planning & Initiation Phase 2	7/2017 – 10/2017
	Project Execution and Control Phase 2	11/2017 – 8/2018
	Implementation Phase 2	8/2018
	Post Implementation Phase 2	9/2018 – 10/2018
	Project Planning & Initiation Phase 3	9/2018 – 12/2018
	Project Execution and Control Phase 3	1/2019 – 12/2019
	Target Implementation Phase 3	1/2020 - 6/2020

MES PROJECT	MILESTONES	DATES
Payment Processing Management Solution (PPMS)	Request Approved	3/1/2019
	Project Execution and Control	3/2019 – 5/2020
	Target Implementation	6/2020

MES PROJECT	MILESTONES	REVISED DATES
Enterprise Data Warehouse Solution (EDWS)	Project Planning & Initiation	10/2017 – 2/2018
	Project Execution and Control	3/2018 – 11/2019
	Implementation 1 MMIS Data - Complete	3/2019
	Implementation 2 FADS – Complete	4/2019
	Implementation 3 Dashboard Reporting	9/2019
	Implementation 4 Federal Reporting	11/2019
	Implementation 5 MES Integration	6/2020

MES PROJECT	MILESTONES	REVISED DATES
Integrated Services Solution (ISS)	Project Planning & Initiation	10/2017 – 2/2018
	Project Execution and Control	03/2018 – 5/2020
	Target Implementation	6/2020

MES PROJECT	MILESTONES	REVISED DATES
Modular Core Services Solution (MCSS)	Conduct Orals and Presentations	10/2016
• **Operations Services Solution**	Project Planning & Initiation	2/2018
	Execution and Control	3/2018 – 11/2019
	Target Implementation/Certification	12/1/2019 – 6/2020
• **Plan Management Services Solution**	Project Planning & Initiation	2/2018
	Execution and Control	3/2018 – 11/2019
	Target Implementation/Certification	12/1/2019 – 6/2020
• **Provider Services Solution**	Project Planning & Initiation	6/2018
	Execution and Control	7/2018 – 11/2019
	Target Implementation/Certification	12/1/2019 – 6/2020
• **Care Management Solution**	Project Planning & Initiation	9/2018
	Execution and Control	9/2018 – 5/2020
	Target Implementation	6/2020

MES Program/Project Status Summary

The modernization to a Virginia MES is consistent with CMS' and the state's vision for a modular solution. The MES program currently consists of four (4) completed MES related solutions (EPS, PBMS, Oracle, EDWS; two (2) of four (4) staggered implementations (MMIS Data Analytics & FADS), seven (7) active MES projects (Data Warehouse, Integration Services, Operation Services, Plan Management, Provider Services, Payment Processing, and Care Management), and two (2) procurements (Appeals and Oracle Financials to Cloud migration) that will lead to projects. The Agency will continue to refine the transformation strategy based on costs, maturity of solutions, and alignment of Information Technology solutions. The introduction of Commercial Off the Shelf solutions has brought some challenges to the transition. The level of modularity is the first of its kind in the nation. Contingency planning is being done to address the unknowns of testing and implementation multiple unique modules. Once implemented, the solutions should best meet the Agency's current and future needs while complying with CMS Certification requirements. Compliance with State and Federal Information Technology Security requirements are included in the MES Program.

Fiscal Impact

Since 2017, the General Assembly has provided annual funding to replace the MMIS with a new MES. Design, development and implementation costs qualify for an enhanced federal match rate of 90 percent, when approved by CMS. Operation and maintenance costs qualify for 75 percent or 50 percent federal match rate once a solution module moves out of the design, development and implementation (DDI) phase and into operation. Total expenses in State Fiscal Year (SFY) 2019 for the design and development phases of the project totaled $36,677,263 ($4,047,603 general funds and $32,629,660 non-general funds). DMAS estimates the DDI cost in SFY 2020 to total $87,285,820 ($8,728,582 general funds and $78,557,238 non-general funds). The vast majority of DDI work will be completed by the end of SFY 2020 followed by a shift into the operational phase.