ELECTRONIC HEALTH AND HUMAN RESOURCES (eHHR) PROGRAM

VIRGINIA'S MEDICAID MODERNIZATION SOLUTION

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APA

Auditor of Public Accounts

COMMONWEALTH OF VIRGINIA

Executive Summary

This first report reflects our on-going review of the eHHR Program Management Office and the information technology projects it is overseeing, which is a $101 million joint investment between Virginia and the federal government. These projects and the management of the eHHR Program Management Office represent the development of the information technology infrastructure that will improve Virginia's ability to administer effective social services, support Medicaid expansion, a Health Benefits Exchange, and compliance with other aspects of the Patient Protection and Affordable Care Act of 2010.

There are numerous risks that could adversely affect the success of the eHHR Program. Some of these risks are outside the control of the Program Director and some are risks common to information systems development projects:

- *Program Management Offices are New in Virginia* – This is the first time the Commonwealth has used a Program Management Office to oversee multiple projects, and current project management standards may not always be suitable.
- *Program Authority* – The Virginia Secretary of Health and Human Resources and the Commonwealth Chief Information Officer need to clearly document in the eHHR Program Charter the organizational and reporting structure of the eHHR Program Office.
- *Condensed Timeline* – Ideally, the eHHR Program Office would have been established, followed by planning its projects and their interdependencies. In reality, Virginia had to begin early to prepare for Medicaid expansion by October 2013 and started several projects before the eHHR Program was staffed and operating. Also, the Department of Social Services has less than two years to secure a vendor to replace its current Medicaid eligibility system. The eHHR Program Office has established program milestones, but does not have a critical path based on detailed project plans and interdependencies.
- *Healthcare Reform Uncertainty* – The Supreme Court ruling on the Patient Protection and Affordable Care Act of 2010 will not occur until June 2012.
- *Uncertain Timeline Flexibility* – Due to the complicated uncertainty of Healthcare Reform and state responsibilities for conforming, key stakeholders believe that the October 2013 deadline will have to be pushed back. However, if the Patient Protection and Affordable Care Act of 2010 is upheld, it would take an act of Congress to amend the law to extend the Medicaid expansion deadlines.
- *Restrictions on Data Sharing Among Agencies* - Federal and state laws restrict agencies from readily sharing recipient information. The legislature did not approve proposed budget language to remove state data sharing barriers. As an interim solution, the eHHR Program Office is working with the Attorney General's Office to develop a data sharing agreement and legislation that would permit agencies to share information. Delays in finalizing this agreement could adversely affect the eHHR program.

Our review hopes to detect problems at the earliest possible point and inform and alert decision makers so that they can take action to reduce potential failures. In this report, we highlight the progress of the eHHR Program Office as well as selected projects we are actively monitoring. We identify risks and make recommendations where applicable to improve both program and project management practices.

- T A B L E   O F   C O N T E N T S -

electronic Health and Human Resources (eHHR) Program

Background

In April 2011, the Auditor of Public Accounts planned to begin an ongoing review of the Department of Social Services' replacement of its Medicaid-eligibility determination system. However, the impending Medicaid expansion triggered by the Patient Protection and Affordable Care Act of 2010 (the Act) prompted the Commonwealth to reassess its entire health information technology infrastructure. After taking on several forms, the Commonwealth's overall vision of "providing access to the right services for the right people at the right time and for the right cost" resulted in the electronic Health and Human Resources (eHHR) Program.

Consequently, we revised the scope of our review to monitor the ongoing efforts of the eHHR Program. The purpose of this report is to provide readers with a brief history of the Program, the work of the Program to date, and note risks the Program must manage to keep successfully moving forward.

History

The Commonwealth has recognized the need to modernize its Medicaid-eligibility system since 2005. However, the cost of the modernization effort would have placed too great of a financial burden on both state and local government resources. Historically, the federal government reimbursed Virginia for 50 percent of its Medicaid expenses and most likely would have only reimbursed Virginia for 50 percent of the expenses of any modernization efforts.

In 2010 the Centers for Medicare and Medicaid Services increased federal reimbursement percentages for certain projects up to 90 percent. Recognizing the increased funding opportunities, and the overall inefficiencies that existed within the Health and Human Resources Secretariat, Dr. William Hazel, the Virginia Secretary of Health and Human Resources, engaged other stakeholders within the Commonwealth to improve the quality and value of Virginia healthcare by modernizing information systems.

In 2010, the U.S. Congress passed the Patient Protection and Affordable Care Act (the Act). The primary components of the Act that will affect state governments are Medicaid expansion and the creation of a Health Benefit Exchange, an online marketplace where individuals and small businesses can compare and purchase healthcare insurance policies. These mandates take effect October 2013 and January 2014, respectively.

The Virginia Secretary of Health and Human Resources predicts the Act will increase the number of Medicaid-eligible Virginians between 35 and 45 percent and the Commonwealth does not currently have the administrative capacity to manage this increase effectively. As to the Health Benefit Exchange requirement, states have flexibility in the type and breadth of the exchange they offer. However, if Virginia fails to establish a Health Benefit Exchange by January 2014, it forfeits this flexibility and the federal government will dictate the terms of the Commonwealth's exchange.

Prior to the Act, the Department of Medical Assistance Services, which manages the Medicaid program, was already participating in the Medicaid Information Technology Architecture (MITA). MITA is a joint initiative of the Centers for Medicare and Medicaid Services and the Center for Medicaid and State Operations to standardize business processes, standards, and technology maturity to help prepare states for the expansion of the Medicaid program.

All states must comply with the MITA standards when they change their Medicaid information technology systems. These standards apply to three areas; business architecture, information architecture, and technical architecture. By complying with MITA guidelines, states will create a common information technology system that will provide access to data by state and other medical agencies.

In order to comply with MITA standards, the Commonwealth began three projects before the eHHR Program Office was staffed and operational. The following chart lists the three projects and describes their objectives.

Chart 1

Projects Begun to Comply with MITA

Project	Description
Service-Oriented Architecture Environment (SOAE)	A suite of several tools will expedite connecting legacy applications to new services, support sharing and reuse of Web services across agencies, facilitate the automation of business rules, and much more.
Enterprise Data Management (EDM)	Is "Emmitt Smith" the same person as "E. M. Smyth?" EDM's sophisticated logic will bring together data from multiple sources to provide a single, "trusted" view of data entities.
Commonwealth Authentication Service (CAS)	Offered by the Department of Motor Vehicles (DMV) in collaboration with the Virginia Information Technologies Agency (VITA), CAS will provide improved verification of identity, expediting citizens' access to services while protecting against identity theft and fraudulent activities.

In addition to these projects, the Department of Social Services, under Dr. Hazel's direction, had begun exploring the replacement of its Medicaid eligibility system, ADAPT. As the number, scope, and size of projects needed to prepare Virginia for Healthcare Reform increased, Dr. Hazel advocated for the creation of the eHHR Program. The eHHR Program consists of a program office that is responsible for coordinating all of the individual projects needed to support the Act and MITA.

Program Risk #1 – Operationalizing Program Office After Beginning Projects

System development best practices call for the eHHR Program Office to complete initiation and planning before starting projects. Doing initiation and planning allows the program office to establish structure and develop tools to control and monitor individual projects. However, as a result of initiatives already undertaken to support MITA, the three projects noted above were started before the eHHR Program Office was staffed and operational.

Although this is not best practice, the Program Office now finds itself in the challenging position of planning for three projects that are already approaching their execution phase while simultaneously planning for its remaining projects. This situation has created uncertainty amongst the current three project teams as to whether they should wait to use Program Office tools and templates; or continue developing their own, as discussed later in Program Risk #8.

This situation has also resulted in the Program Office developing a schedule, budget, and key milestones without actual detailed project schedules, as discussed later in Program Risk # 5. We will continue to monitor the Program Office as it works to create the structure needed to effectively monitor all projects and their impact on meeting the mandated deadlines.

Purpose of eHHR Program

The eHHR Program Office will manage and promote eHHR projects in coordination with federal and state direction to improve healthcare and human services. The eHHR Program seeks to build on current healthcare reform efforts, modernize the Commonwealth's information technology infrastructure, ensure operability between new and legacy information systems, and reduce the overall long-term technology costs of managing the Medicaid program by providing a web-based, self-directed option for health services and reducing the need for large administrative and operational staff.

Furthermore, the eHHR Program cited the following six goals in its Charter.

1) Leverage the Medicaid Information Technology Architecture (MITA) to align Virginia's efforts with Federal direction and thereby enable maximum Federal funding participation.
2) Fulfill Federal requirements for Health Information Exchange (HIE) and Meaningful Use under the ARRA.
3) Fulfill Federal requirements for Medicaid expansion and the Health Insurance/Benefit Exchange (HBE) under Healthcare Reform to minimize long-term fixed cost increases.
4) Communicate the progress, status, issues, and risks for a complex program to stakeholder groups in an understandable manner.
5) Provide a program management infrastructure that each chartered project can leverage to eliminate duplicative efforts and reduce project management overhead.
6) Provide change management assistance, coordination, and support to impacted organizations as part of business process reengineering efforts.

In its current state, the Patient Protection and Affordable Care Act (Act) expands Medicaid eligibility requirements in October 2013 and requires states to have a working Health Benefit Exchange by January 2014. The eHHR Program's goals reflect these provisions of the Act. Key stakeholders believe the replacement of the Commonwealth's architectures and eligibility systems will reduce fraud and abuse, better detect remaining fraud and abuse, increase operational efficiencies, reduce operational costs, improve enrollment accuracy, and improve government services to citizens.

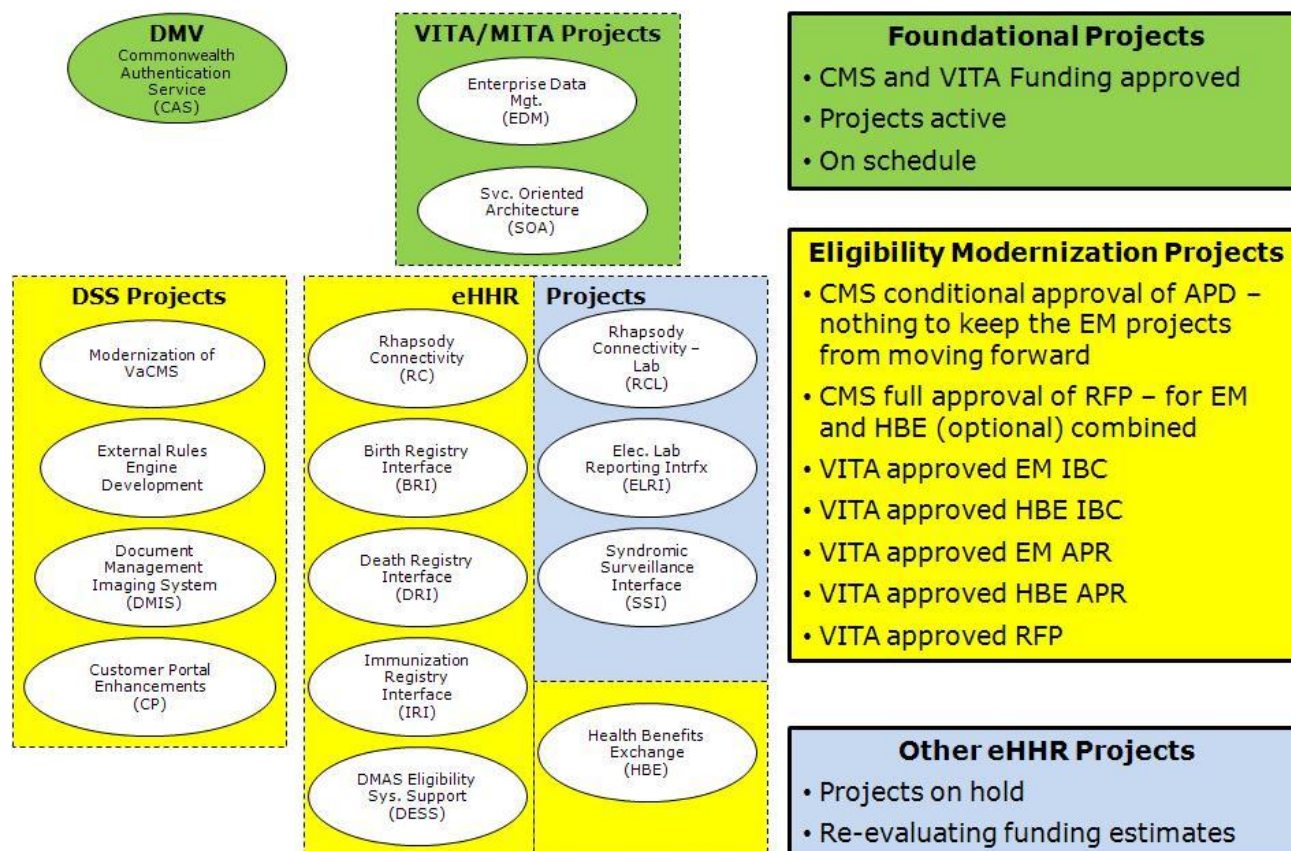**Program Risk #2 – Healthcare Reform Uncertainty and Timeline Flexibility**

The Supreme Court of the United States heard challenges to the Patient Protection and Affordable Care Act of 2010, specifically the Individual Mandate that requires every American to purchase insurance, Medicaid Expansion, and the Severability of the Act. The Supreme Court should rule sometime in June 2012 on each of these issues. The outcome of this case is uncertain and this uncertainty could affect buy-in from stakeholders.

Regardless of the Supreme Court ruling, it is unlikely there will be an effect on the funding of the previously discussed projects. In addition, the federal government will still reimburse 90 percent of the costs to modernize the Medicaid Eligibility system. However, funding is not the only concern for the eHHR Program Office; the Commonwealth may still need to prepare for Medicaid expansion by October 2013.

Key stakeholders in the eHHR Program believe that Congress, the Supreme Court or administrative actions could delay the Medicaid expansion deadline of October 2013. If there is no deadline delay, Virginia must be ready to enroll as many as 350,000 newly eligible citizens. In order to handle the increased population, Virginia has to either have these eHHR projects completed, or have a contingency plan to deal with increased caseloads at local Departments of Social Services.

Scope of the eHHR Program

The eHHR Program Office will oversee between 13 and 16 individual projects that will implement information technology systems, business processes, and organizational changes. The modernization efforts will ensure that Virginia improve its administrative effectiveness and reduce errors in social service programs.

Chart 2

eHHR Program Projects

DMV — Commonwealth Authentication Service (CAS)

VITA/MITA Projects
- Enterprise Data Mgt. (EDM)
- Svc. Oriented Architecture (SOA)

Foundational Projects
- CMS and VITA Funding approved
- Projects active
- On schedule

DSS Projects
- Modernization of VaCMS
- External Rules Engine Development
- Document Management Imaging System (DMIS)
- Customer Portal Enhancements (CP)

eHHR Projects
- Rhapsody Connectivity (RC)
- Birth Registry Interface (BRI)
- Death Registry Interface (DRI)
- Immunization Registry Interface (IRI)
- DMAS Eligibility Sys. Support (DESS)
- Rhapsody Connectivity – Lab (RCL)
- Elec. Lab Reporting Intrfx (ELRI)
- Syndromic Surveillance Interface (SSI)
- Health Benefits Exchange (HBE)

Eligibility Modernization Projects
- CMS conditional approval of APD – nothing to keep the EM projects from moving forward
- CMS full approval of RFP – for EM and HBE (optional) combined
- VITA approved EM IBC
- VITA approved HBE IBC
- VITA approved EM APR
- VITA approved HBE APR
- VITA approved RFP

Other eHHR Projects
- Projects on hold
- Re-evaluating funding estimates

The eHHR Program will require support from agencies within the Health and Human Resources Secretariat, as well as the Virginia Information Technologies Agency (VITA), the Department of Motor Vehicles (DMV), and the Department of General Services' Division of Consolidated Laboratory Services. The eHHR Program's success also relies on continued and appropriate funding and personnel resources, continued support from Commonwealth leadership, the continued partnership of both VITA and Northrup Grumman, and most importantly, an enterprise trust agreement across all Commonwealth secretariats and agencies so they can share data. Data sharing is discussed later in Program Risk #6.
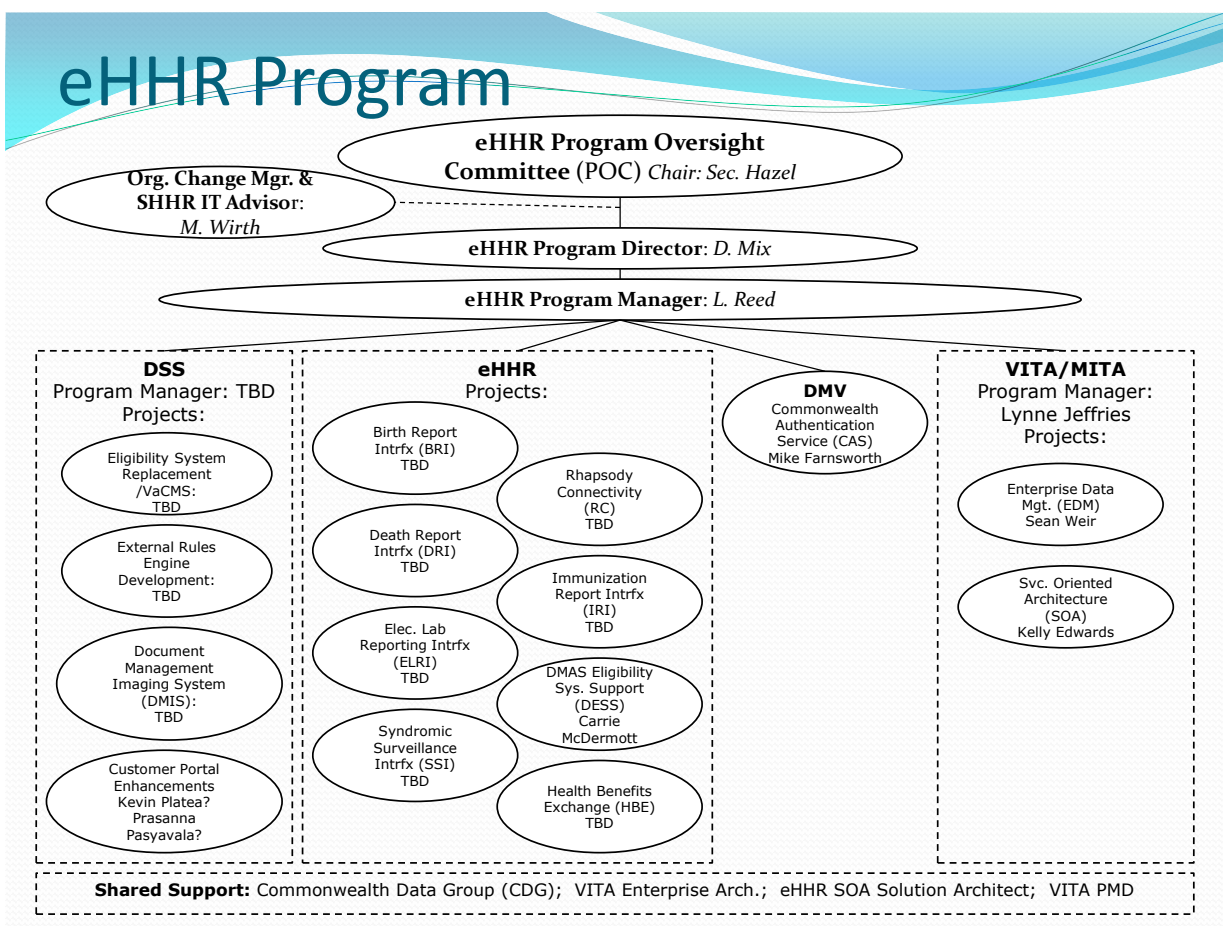
The eHHR Program Charter notes that the Secretary of Health and Human Resources is the program sponsor, and in that role will provide leadership, keep the eHHR Program aligned with the Commonwealth's strategy, govern program risk, and ensure continuity of sponsorship. Dr. Hazel currently provides strong leadership for this program; however, the eHHR Program will most likely exist past Dr. Hazel's term as Secretary of Health and Human Resources.

To ensure that future leaders continue to champion the importance of the eHHR Program, the Secretary of Health and Human Services is actively working now to align all agency heads to the strategic goals included in his Information Technology Strategic Plan.

Because Medicaid is funding the projects under the eHHR Program, Dr. Hazel named David Mix, a Department of Medical Assistance Services' employee, as the Program Management Office Director, a position similar to an agency head. Even though funding is through Medical Assistance Services, the eHHR Program Management Director reports to Secretary Hazel. The eHHR Program Office is funding all of the projects; and therefore views the other agencies, such as VITA and DMV, as both team members and service providers and itself as team member and "paying customer." As a result, other agencies must adhere to their direction. The following chart illustrates the organizational structure developed by the eHHR Program Office to achieve its objectives.

Chart 3

eHHR Organizational Chart

eHHR Program

eHHR Program Oversight Committee (POC) *Chair: Sec. Hazel*

Org. Change Mgr. & SHHR IT Advisor: *M. Wirth*

eHHR Program Director: *D. Mix*

eHHR Program Manager: *L. Reed*

DSS
Program Manager: TBD
Projects:
- Eligibility System Replacement /VaCMS: TBD:
- External Rules Engine Development: TBD
- Document Management Imaging System (DMIS): TBD
- Customer Portal Enhancements Kevin Platea? Prasanna Pasyavala?

eHHR
Projects:
- Birth Report Intrfx (BRI) TBD
- Rhapsody Connectivity (RC) TBD
- Death Report Intrfx (DRI) TBD
- Immunization Report Intrfx (IRI) TBD
- Elec. Lab Reporting Intrfx (ELRI) TBD
- DMAS Eligibility Sys. Support (DESS) Carrie McDermott
- Syndromic Surveillance Intrfx (SSI) TBD
- Health Benefits Exchange (HBE) TBD

DMV
Commonwealth Authentication Service (CAS) Mike Farnsworth

VITA/MITA
Program Manager: Lynne Jeffries
Projects:
- Enterprise Data Mgt. (EDM) Sean Weir
- Svc. Oriented Architecture (SOA) Kelly Edwards

Shared Support: Commonwealth Data Group (CDG); VITA Enterprise Arch.; eHHR SOA Solution Architect; VITA PMD

Program Risk #3 – eHHR Program Management Office Organizational Structure

We observed tension in the relationship between VITA and the eHHR Program Office. This tension is likely the result of confusion that may exist over the authority and control of the SOAE and EDM projects. As discussed earlier in this report, these projects were started by VITA before the eHHR Program Office was operational and the organizational structure noted in Chart 3 existed. Without an eHHR Program Office, the SOAE and EDM project charters created a reporting structure that involved a SOAE/EDM program manager as well as the Chief Information Officer, and that structure does not conform to the eHHR organizational chart shown above.

Now that the eHHR Program Office is operational, the Secretary of Health and Human Resources needs to determine the proper role within the organizational structure for the Chief Information Officer and document that role within the eHHR Program charter and the organizational structure shown above. In addition, if necessary, the SOAE/EDM project charters should be revised to conform to the eHHR organizational structure.

Projects and Budgets

According to updated project estimates provided in May, the combined cost of the eHHR Program Office and its projects is about $101 million. Individual projects are discussed in further detail in the appendix to this report. Of the $101 million, management estimates a cost of about $4.8 million to support the eHHR Program Management Office.

The individual project budgets in the eHHR Program Charter use early estimates and continue to evolve. Between May 1 and June 15, 2011, estimates for the total projected investment have ranged from $170 million, down to $124 million, and now down to $101 million. The eHHR Program Office recently submitted and received approval for its second budget change request from the federal Centers for Medicare and Medicaid Services (CMS). The first budget request was for a four-year period while the second round of funding was limited to federal fiscal years 2012 and 2013. We will examine the eHHR Program's budget in more detail in a future report when the eHHR Program Office can provide a more detailed budget for the eHHR Program and its projects over the full life cycle of the eHHR Program Office.

The eHHR Program Office estimates it will cost $51 million, or about 51 percent of the eHHR Program's baseline cost, to replace the Medicaid eligibility system at the Department of Social Services. The Department of Social Services submitted a Request for Proposals (RFP) to CMS in April 2012 and received approval on approval May 23, 2012. The Department of Social Services posted the RFP to the Commonwealth's electronic procurement system on May 25, 2012 and is relying on having a vendor in place by October 2012. They are requiring the vendor to complete replacement of the system by July 2013. According to VITA, projects of similar scope and size typically take nine months from the issuance of the RFP to having a signed contract with a vendor; but, the eHHR Program Office is hoping to accomplish this within four months.

Program Risk #4 - Eligibility System Replacement Deadline

The Medicaid eligibility system replacement project is both the largest financial investment of the eHHR Program and one of the most critical for the Commonwealth to deal with the Medicaid expansion in October 2013. In order to go live with the new system by the Medicaid expansion target of October 2013, the new system must have CMS' approval and certification in July 2013, or about nine months after DSS hopes to have a signed contract with the vendor.

The shortened window to secure a vendor and replace the eligibility system is a risk to the eHHR Program Office. To minimize the risk that the Commonwealth will not have the system components necessary to meet Medicaid expansion, the eHHR Program has begun planning for that contingency. Contingency plans may include securing funding for and training additional eligibility workers on a part-time basis until the new system goes live. The eHHR Program should continue to develop their contingency plan to ensure the Commonwealth is prepared for Medicaid expansion even if the new eligibility system is not completed.

Included in the $51 million estimate to replace the Medicaid eligibility system are several other projects. These projects include enhancing the Department of Social Services current web-based customer portal, defining rules for an eligibility rules engine, and ensuring that the system interfaces with the statewide Enterprise Service Bus and additional SOA tools and components under development within the SOAE program, as discussed in a later section of this report.

The Service-Oriented Architecture Environment, or SOAE, has an estimated cost of about $16.8 million. It is the second largest individual project by cost, and just as critical as the replacement of the Medicaid eligibility system to the overall success of the eHHR Program. The Service-Oriented Architecture will expedite connecting legacy applications to new services, support the sharing and reuse of web services across agencies, and facilitate the automation of business rules.

As noted earlier in this report, SOAE is one of the three projects that began prior to the operationalization of the eHHR Program Office. The Enterprise Data Management (EDM) project is a sister project to the SOAE and has a total estimated cost of about $7.6 million. The third project underway is the Commonwealth Authentication Service, or CAS, with a total estimated cost of $4.4 million. These three projects, combined with the replacement of the Medicaid eligibility system, account for about 79 percent of the estimated cost of the projects under the eHHR Program Office.

Program Risk #5 – No Critical Path to Support the Feasibility of Meeting Deadline

The Medicaid eligibility system, SOAE, EDM and CAS, as well as subsequent projects, are interrelated and have interdependencies. In simplified terms, the CAS project may not be able to complete task C until the EDM project completes task B which is impossible until the SOAE project completes task A.

The eHHR Program Manager has documented key milestone dates related to the project. However, the eHHR Program has yet to document the detailed interdependencies and critical path for the projects based on detailed project schedules. Without a critical path based on these detailed project schedules, the eHHR Program Office cannot guarantee that it will meet the key deadlines already discussed in this report. The eHHR Program Office and the various projects it oversees must document their critical path as quickly as possible.

Service-Oriented Architecture Environment (SOAE)
and Enterprise Data Management (EDM)

        VITA is developing the SOAE and EDM solutions that serve as the foundation of the eHHR Program. The following conceptual diagram is a simple illustration of SOAE and EDM.

Chart 4

SOAE and EDM Conceptual Diagram
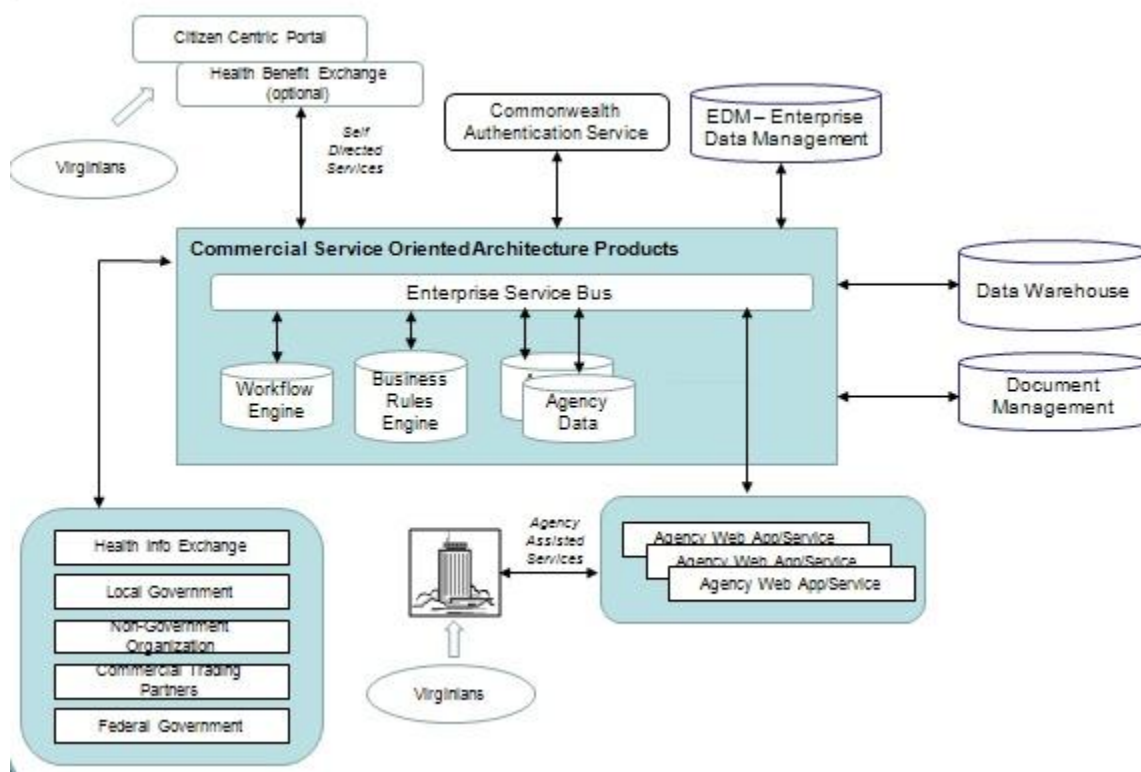
        The SOAE products include the Enterprise Service Bus, a Workflow Engine, a Business Rules Engine, and tools that will enable agencies to connect existing legacy systems to the Enterprise Service Bus. The SOAE products will allow for agency access to various other services, such as the EDM solution, built on IBM's Initiate Master Data Service.

        The EDM will enable agencies to match records and exchange information across data systems. By using standard attributes common in many Commonwealth agency systems, it becomes possible to link records across these systems using probability-based matching algorithms. This service has the potential to greatly reduce enrollment error rates, improve fraud prevention and detection, and automate services that can accurately retrieve information.

        For example, when Emmitt Smith of 742 Blue Ridge Terrace enters a local Social Services office and applies for Medicaid, the social worker can use EDM to compare related records from multiple state agencies to ensure that the Emmitt Smith they are working with is the same person they have information on. For example, DSS may have tax records for an E.M. Smyth of 742 Blue Ridge Terrace that shows he does not meet the income threshold to qualify for Medicaid.

Historically, tools needed for sophisticated data matching have been too expensive for agencies to procure individually. The Patient Protection and Affordability Act authorized CMS to fund at least 90 percent of a state's effort to build the required infrastructure that would support Medicaid expansion and the health benefits exchange.

At the direction of the Secretary and eHHR Program Director, VITA moved forward with the SOAE and the EDM projects.

Program Risk #6 – Agencies Must Be Allowed to Share Data for EDM to Operate Successfully

In order for EDM to match records and exchange information as planned, agencies must share their data with other authorized entities. Currently, federal and state laws restrict agencies from readily sharing recipient information. In order to expedite EDM and eliminate any state barriers to data sharing, the Governor introduced a budget amendment during the 2012 veto session to authorize data sharing. This amendment was not approved by the legislature, and the Governor plans to re-introduce this language in 2013. Relative to federal restrictions, federal agencies are holding meetings to administratively allow the sharing of information; however, there are no draft regulations available.

In the meantime, the eHHR Program Office is working with the Attorney General's office to develop a data sharing agreement that Virginia agencies can use to negotiate with others about using recipient information. The eHHR Program Office views this agreement as key to data sharing and delays in finalizing it could render EDM ineffective until it is resolved.

Currently, both the SOAE and EDM projects are in the detailed planning phase of the project life cycle. This phase began in September 2011 and VITA estimates that detailed planning will conclude by the end of June 2012.

Best practices recommend developing a project plan early in the project planning phase and managing the project according to the plan. As a result, it is essential to the success of the projects that the project plans include sufficient detail to manage the overall project plan to completion. We reviewed the draft plans for both projects, and recommend the Project Manager ensure the final plans incorporate the following best practices.

- Identify and assign specific resources to individual tasks within the project plan. Project management best practice suggests that each task within the project schedule have at least one team member and clearly define project roles and responsibilities, preferably with no overlap of accountabilities.
- Include duration, actual hours worked, and remaining work for each task in the project plan. Tracking these will indicate the most accurate project status to all key stakeholders.
- Project management best practices recommend that tasks be broken down in the lowest possible level of work; generally, no task should take longer than 80 hours to complete. This level of detail allows the project manager to monitor and control each task; and make adjustments to their schedule and plan when tasks are late. Further, it gives the assigned team member a clearer understanding of what they need to do to accomplish the task.

- The project plan should identify the tasks that create the critical path. The critical path is the series of tasks and deadlines that team members must complete for a project to finish on schedule. If a single task is late on the critical path, the end date of the entire project may also be late.

Program Risk #7 – Project Documents Must Meet Best Practices to Receive VITA PMD Approval

Commonwealth Project Management Standards require approval by the VITA Project Management Division (PMD) of the detailed project plan prior to proceeding with project execution. We recommend that the SOAE and EDM project managers continue to work closely with PMD to ensure there are no delays in the execution and control phase resulting from prolonged review or additional iterations of the final project plan. Beginning execution on time is especially important because the project has the first development environment in the execution phase scheduled for completion on July 3rd and this environment is critical to the CAS project plan.

The SOAE and EDM project managers should also ensure the project plan best practices described above incorporated prior to project execution. These best practices will help enhance the project plan and allow the project managers to better monitor the projects.

In addition, the detailed baseline project plans, specifically critical tasks, need to be incorporated into the overall eHHR Program Office project plan. The Project and eHHR Program Managers must maintain and adhere to the project plan in order for it to be an effective tool to monitor the eHHR Program's progress.

VITA PMD approval is required before a project can move into the execution and control phase. The following chart identifies documents PMD requires before granting their approval, along with their current status for the SOAE and EDM projects.

Chart 5

Required Project Management Documents

Required Documentation	SOAE	EDM
Work Breakdown Schedule	*	*
Resource Plan	*	*
Project Schedule	*	*
Project Budget	X	X
Performance Plan	X	X
Risk Management Plan	*	*
Procurement Plan	@	@
Communications Plan	*	*
Change and Configuration Management Plan	*	*

X – Complete
* - In Draft but missing required information
@ - Does not exist

Under traditional project management standards, the project manager would create and adhere to each of the documents above for each project. However, to avoid duplicating effort, the eHHR Program Office plans to develop some of these documents at the program level so that they apply to all eHHR projects. As mentioned earlier, because the SOAE and EDM projects began prior to the staffing and operationalizing of the eHHR Program Office, project managers were cautious to devote time and resources developing documents that would duplicate those the program office might create. A concern at the project level is that the eHHR Program Office will not develop these documents timely enough to benefit the projects already started.

Currently, the eHHR Program Office has drafted both a Change Management Plan and a Risk and Issue Management Plan, which are under review. In addition, it has a preliminary draft of both a Quality Management Plan and a Post Implementation Review Plan. The SOAE and EDM projects are in the initiation phase and in less than one month should begin their execution phase. However, the critical planning documents cited above do not exist in a form that these projects can rely on to help guide them into the next phase of their project life cycle.

Program Risk #8 - Program and Project Managers Must Agree On and Complete Planning Documents to Receive VITA PMD Approval

The eHHR Program Manager and the SOAE and EDM Project Managers should ensure that all planning documents are complete prior to beginning the execution and control phase of their project life cycles. The eHHR Program and Project Managers must reach a consensus on which planning documents the individual project manager should create and which documents should come from the eHHR Program Office.

Service-Oriented Architecture Environment (SOAE)

Sponsoring Agency Information	Secretary of Technology ..... Jim Duffey
	  Project Sponsor .... Jerry Simonoff, Enterprise Services Group, Director
	  Program Manager .... Lynne Jeffries, Enterprise Services Group
	  Project Manager .... Kelly Edwards, Enterprise Services Group

Current Phase of Development	Planning

Project Timeline	Draft Dates:
	  • Project Initiation Approval September 2011
	  • Deploy temporary staging environment for IBM May 7, 2012
	  • Complete Detailed Project Plan June 30, 2012
	  • Deliver Development and Test Environments July 3, 2012
	  • E&E Production Environment June 14, 2013
	  • Project Closeout To be determined

Total Budget	$16,769,617
Funding	100 percent through eHHR Program (88.75 percent federal, 11.25 percent state) $16,769,617 has been approved as of 5/30/12
Actual Costs (As of 5/30/12)	$6,314,955
Outside Contractor(s)	Northrop Grumman, Oracle, and IBM for implementation services through the Triad contract.

<u>Enterprise Data Management (EDM)</u>

Sponsoring Agency Information	Secretary of Technology .... Jim Duffey 　Project Sponsor .... Jerry Simonoff, Enterprise Services Group Director 　Program Manager .... Lynne Jeffries, Enterprise Services Group 　Interim Project Manager .. Sean Weir, Commonwealth IT Portfolio Manager
Current Phase of Development	Planning
Project Timeline	Project Initiation Approval　　　　　　　　　September 1, 2011 Complete Detailed Project Plan　　　　　　　June 29, 2012 Execution and Control Phase　　　　　　　　July 9, 2012 Production Deployment　　　　　　　　December 14, 2012 CAS Integration Deployment　　　　　　　March 15, 2013 Project Closeout　　　　　　　　　　　　February 2013
Total Budget	$7,625,177
Funding	100 percent through eHHR Program (88.75 percent federal, 11.25 percent state) $7,625,177 has been approved as of 5/30/12
Actual Costs (As of 5/30/12)	$3,145,797
Outside Contractor(s)	IBM for implementation services though the Triad contract.

<u>Commonwealth Authentication Service</u>

The Department of Motor Vehicles (DMV) is the lead agency developing the Commonwealth Authentication System (CAS), an enterprise identity authentication solution that supports the eHHR program. CAS will provide enhanced identity verification to authenticate an individual or organization in the Commonwealth. DMV will implement CAS in two phases and then pilot the software at selected agencies. The software's primary focus will be to address the needs of the Department of Social Services, specifically related to the modernization of their Medicaid eligibility system.

CAS will leverage the SOAE and EDM solutions that VITA is implementing by residing in the SOAE-enabled infrastructure and using the EDM solution to perform data matching. The CAS, SOAE and EDM projects have critical interdependencies; therefore, in order to meet the key implementation dates indicated in its schedule, the key milestones must be met on time.

The project managers for CAS, SOAE, and EDM are coordinating their project schedules to ensure they comply with the eHHR Program milestones. It is imperative each project schedule mirror the key eHHR Program milestones so the eHHR Program remains on schedule. Below is a list of key milestones and the dependencies between CAS, SOAE and EDM.

- July 3, 2012 – CAS dependent on SOAE for development environment
- August 27, 2012 – CAS dependent on SOAE for test environment
- November 20, 2012 – CAS dependent on EDM development environment to integrate and configure the two solutions
- December 6, 2012 – CAS dependent on SOAE for production environment

CAS is currently in the detailed planning phase whereby the project manager is completing project documents required to move into the execution phase. The CAS project manager expects to complete all planning documents and submit for CIO approval in June. By June 2012, the project manager should have a detailed baseline schedule that includes the dates and dependencies related to the SOAE and EDM solutions.

We met with the CAS project manager and discussed the following best practices we recommend that he incorporate into the final project schedule. These best practices are similar to those discussed earlier in the SOAE and EDM section above.

- Identifying critical dependencies
- Assigning resources to each task
- Level resources
- Identifying the critical path
- Break tasks down to the smallest manageable size

The CAS project manager plans to implement these best practices, among others, and actively manage the baseline project schedule to monitor critical milestones. The CAS project manager will continue to work closely with the SOA and EDM project teams to ensure that all interdependent milestones remain on schedule and do not negatively impact the expected CAS implementation dates. We will continue to monitor the project through both the planning and execution and control life cycle phases to ensure CAS remains on schedule to meet documented program milestones.

Commonwealth Authentication Service (CAS)

Sponsoring Agency Information	Secretary of Transportation .... Sean Connaughton
	  Project Sponsor .... Dave Burhop, DMV - CIO
	  Project Manager .... Mike Farnsworth, DMV Project Manager

Current Phase of Development	Initiation
Project Timeline	Project Initiation March 2012 Phase 1 Development September 2012 Phase 2 Development January 2013 CAS Deployment January 2013 Project Closeout May 2013
Total Budget	$4,408,762
Funding	100 percent funded through eHHR Program (88.75percent federal, 11.25 percent state)
Actual Costs (As of 5/30/12)	$430,088
Outside Contractors	CAS hired CapTech to determine requirements and preliminary design

Walter J. Kucharski
Auditor of Public Accounts

P.O. Box 1295
Richmond, Virginia 23218

June 21, 2012

The Honorable Robert F. McDonnell
Governor of Virginia

The Honorable John M. O'Bannon, III
Chairman, Joint Legislative Audit
  and Review Commission

We are actively reviewing the Commonwealth's electronic Health and Human Resources (eHHR) Program and its related systems development projects and submit our report entitled**, "Electronic Health and Human Resources (eHHR) Program, Virginia's Medicaid Modernization Solution"** for your review.

This report describes the eHHR Program history, activities, status, current program risk, and we verified the accuracy of this information with the Secretary of Health and Human Services and the eHHR Program Director. We intend to continue to monitor the eHHR Program and its related systems development projects and provide periodic reports as needed.

AUDITOR OF PUBLIC ACCOUNTS

KKH/clj

COMMONWEALTH of VIRGINIA
Office of the Governor

William A. Hazel, Jr., MD
Secretary of Health and Human Resources

June 19, 2012

Karen Helderman
Audit Director
Auditor of Public Accounts
101 N. 14th Street, 8th Floor
Richmond, Virginia 23219

Dear Ms. Helderman,

The Office of the Secretary of Health and Human Resources and the extended electronic Health and Human Resource (eHHR) office appreciates the professional and collaborative effort applied by the Auditor of Public Account (APA) team in conducting the recent audit of the eHHR Program. In aggregate, we agree with most of the material contained in the report but feel several clarifications should be included. Please accept this letter for inclusion in the final APA submission.

1. The eHHR Eligibility and Enrollment modernization effort is funded by an appropriation from the General Assembly and funding from the Centers for Medicare & Medicaid Services (CMS). CMS funding for the Eligibility and Enrollment modernization is authorized through federal guidance permitting states to upgrade their eligibility system to more current technology.   This funding is not dependent on Health Benefit Exchange (HBE) requirements in the Patient Protection and Affordable Care Act (PPACA). CMS continues to reiterate that funding for eligibility system modernization will continue regardless of the pending Supreme Court ruling on the constitutionality of PPACA, which may strike the requirements for an Individual Mandate and Health Benefit Exchanges. The eHHR technical and program architecture has been specifically designed to easily sever HBE requirements without impacting other elements of the eHHR effort.

2. Realizing the scope and challenging timeline ahead of the eHHR effort, our Project Management Office team recognized that project administration would need to move at a high rate of innovation and reduced risk exposure. Industry standard IT methodologies for Agile project management were adopted to jumpstart the eHHR effort in a 2-3 month timeframe and establish on-going development efforts. Agile project management methodology is new to the Commonwealth and as such does not fit perfectly into the existing Commonwealth project framework. These process differences are the source for many of the project management findings noted in the APA audit. As we precede forward, the eHHR

Program office is working with VITA and APA to expand a shared project framework and close these perceived process gaps.

3. To ensure the eHHR Program objectives continue after the current Secretariat term expires, we are taking steps to integrate and lock-in these goals at the Agency leadership level. We have published and will maintain an IT Strategic Plan by the Secretariat, which includes the technology plans for eHHR and other related projects. Key deliverables from the IT Strategic Plan have been incorporated into the *Work Profile and Performance Evaluation* review for all HHR agency heads and for their management team leaders. This process, which will be continued next year, will confirm direction and vision prior to administration transitioning.

We look forward to a strong and positive on-going working relationship. Please feel free to contact me with any questions.

Sincerely,

William A. Hazel, Jr., M.D.

WAH/mw

eHHR PROGRAM MANAGEMENT OFFICE

Dr. William Hazel
Secretary of Health and Human Resources

David Mix
Program Director

Larry Reed
Program Manager

Mike Wirth
Organizational Change Manager

Individual Project Descriptions and Estimated Baseline Cost

eHHR Program Management Office (eHHR) $4.8 million

The $4.8 million for the eHHR Program Management Office is to pay for the administrative costs of overseeing a project of this size and scope for Federal fiscal years 2012-2013.

Eligibility Modernization Program - $51 million

This project will replace the current eligibility system.

- Modernization of VaCMS
- Customer Portal Enhancements
- External Rules Development Engine
- Document Management Imaging System

The purpose of the first project is to enhance the web-based customer portal in support of the replacement of the Department of Social Services' legacy eligibility systems. Social Services is using a government-owned transfer solution to develop the customer portal.

A second initiative will be to interface existing Health and Human Resource Systems via the statewide Enterprise Service Bus (ESB), using standardized interfaces to share information and automate cross-agency workflows.

Service-Oriented Architecture Environment (SOAE) - $16.8 million

Service-Oriented Architecture has become a generic term in information systems development and one that is difficult to define because it means different things to different people. As it relates to the eHHR Program, this project includes developing several tools that will expedite connecting legacy applications to new services, support sharing and reuse of web services across agencies, and facilitate the automation of business rules. The primary component of this architecture is the Enterprise Service Bus. The projected cost to develop the SOAE is $16.8 million, and this cost has been approved.

Enterprise Data Management (EDM) - $7.6 million

Is "E. Smith" the same person as "Emmett Smyth?" The EDM project will create an application that can use sophisticated algorithms to compare data from multiple sources and provide a single, "trusted" view of data entities.

DMAS Eligibility System Support (DESS) - $3.9 million

This is the Department of Medical Assistances' funding to support the Department of Social Services eligibility system replacement project.

Commonwealth Authentication Service (CAS) - $4.4 million

The Commonwealth Authentication Service is a joint project of the Department of Motor Vehicles and VITA that will provide improved verification of identity. This will quicken citizens' access to services while protecting against identify theft and fraud.

Birth Registry Interface (BRI) - $2.1 million

This project will establish a birth reporting service and interface between the birth registry and the Enterprise Service Bus. The system of record for all birth records will be the Virginia Vital Events and Screening Tracking System housed at the Department of Health's Office of Vital Records.

Death Registry Interface (DRI) - $2.1 million

Similar to the BRI described above, this project will establish a death reporting service and interface between the death registry and the Enterprise Service Bus. In addition to supporting an inquiry death service on the ESB, the project will develop a "publish and subscribe" model to actively publish new death notices as they occur.

Syndromic Surveillance Interface (SSI) - $2.6 million

This project will address the Syndromic Surveillance Interface. Participating organizations create a file of data sent to the Department of Health from facilities on a daily basis. The Department of Health will group the data into syndromes and statistical algorithms and identify unusual temporal and geographic patterns that might indicate situations of concern.

Immunization Registry Interface (IRI) - $1.8 million

This project will address the interface between the Immunization Registry and providers. Participating organizations such as hospital providers create a file to include new and updated immunization activity for import into the Virginia Immunization Information System and receive an acknowledgement of their transmission from the system. All content processing and data de-duplication will be performed by the Virginia Immunization Information System

Electronic Lab Reporting Interface (ELRI) - $2.1 million

This project interfaces the Department of Consolidated Laboratory Services (DCLS) to the Commonwealth's ESB for access by the Health Information Exchange. Clinical laboratories throughout Virginia, including the Department of General Services, the

DCLS and national clinical reference laboratories, submit reportable disease findings to the Virginia Department of Health (VDH). These groups send test orders to the DCLS and the DCLS returns test results. Current partners include the Virginia Department of Health (Health) and a growing number of Virginia hospitals.

Rhapsody Connectivity (RC) - $1.7 million

This project will address the Rhapsody connectivity. The Department of Health uses the Orion Rhapsody data integration engine to facilitate the accurate and secure exchange of electronic data using with the Enterprise Service Bus. The Rhapsody connectivity project is necessary for the VDH to participate in the HIE Pilot Phase.

Health Information Exchange (HIE) – eHHR Program Office to determine budget and project at a later time.