ELECTRONIC HEALTH RECORDS (EHR)

American Rescue Plan Act (ARPA) State and Local Fiscal Recovery Fund (SLFRF)

VDH VIRGINIA DEPARTMENT OF HEALTH

6/30/2022

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Report Mandate

Chapter 1 Enactment Clause 1, paragraph B.2.P.5., of the amended 2021 Acts of Assembly states, "The department shall communicate a detailed plan and implementation schedule to the Governor, the Chairs of the House Appropriations and Senate Finance and Appropriations Committees, and the Director of the Department of Planning and Budget by September 30, 2021. Additionally, the department shall report quarterly to the Governor, the Chairs of the House Appropriations and Senate Finance and Appropriations Committees, and the Director of the Department of Planning and Budget on progress made, with the first progress report to be delivered not later than December 31, 2021."

Context for ARPA Initiatives

The Virginia Department of Health (VDH) is excited about the opportunity presented by the appropriation of ARPA State and Local Fiscal Recovery Funds in the August 2021 Special Session II of the General Assembly to improve public health in Virginia. VDH views this investment as a once in a generation opportunity and will work diligently to maximize use of funds to create and sustain these initiatives. Simultaneously, VDH is fully engaged in responding to COVID-19 and protecting the health of Virginians. Modifications to VDH's plans will be reflected in future quarterly reports.

Executive Summary

Electronic Health Record (EHR) systems are patient-centered record systems that bring together key information about a patient's health to enable data-driven, comprehensive care delivery. EHR systems can be used to efficiently collect data in a format that can be shared across multiple health care organizations and leveraged for quality improvement, prevention activities, and public health reporting. It is a critical need for the Virginia Department of Health (VDH) to obtain a comprehensive, interoperable EHR solution that will facilitate the collection of clinical, laboratory, billing, scheduling, and other health related information.

This need has been further accentuated by the COVID-19 public health response. The lack of a robust and integrated technical infrastructure negatively impacted health outcomes by leading to a higher likelihood of missed opportunities in timely public health interventions such as testing and contact tracing. Moving forward, EHR systems have the potential to serve as a powerful tool to assess and improve population health outcomes through real-time reporting and data analysis. These capabilities will better enable VDH and other health partners to navigate the next pandemic.

VDH is seeking to identify a solution to replace its legacy patient demographic and billing system (WebVISION). The agency seeks to interface with existing single programmatic solutions such as the Virginia Information Immunization System (VIIS) and serve as the main repository of information across multiple clinical services programs including family planning, maternity, STI, HIV, TB, and immunization. This solution will offer strong data analytics for improving public health outcomes and comply with patient safety and regulatory standards, including the Health Insurance Portability and Accountability Act (HIPAA) of 1996. The goal is to deploy this capability across 120 clinic sites to serve over 250,000 patients and support 400,000 clinical encounters per year.

Using an EHR system and health information exchanges (HIE), VDH can leverage health information technology to efficiently collect and share data, reduce costs, and improve emergency response times. Additionally, this technology will allow VDH to make timelier diagnoses of health conditions that not only improve individual health, but also impact population health across various communities in the Commonwealth.

Over the last three months, VDH has made significant progress in conducting an EHR solution review and preparation for the next phase of work through pricing and reference reviews, requirement gathering and validation, and detailing data migration and interface needs. VDH, VITA and Office of the Attorney General considered contracting options and determined that issuing an RFP best met the needs of the Commonwealth. Therefore, VDH began the procurement process including preparing to draft a request for proposals (RFP). These accomplishments have set the EHR Initiative on the path to successfully implement a state-of-the-art EHR system.

Objective(s)

VDH aims to fully implement a state-of-the-art EHR system for use across the Commonwealth and in Local Health Districts (LHDs) in order to:

- Improve clinical efficiency and effectiveness of clinical services statewide.

- Enable delivery of safer, higher quality care for patients by allowing rapid access to accurate, up-to-date, and complete information.

- Reduce costs of care through decreased duplication of testing, lab procedures, and medical visits through access to relevant and complete medical information of patients, especially for patients that seek care in multiple locations across the health district or across health district lines.

- Enhance transmission of EHR related financial transactions including third party billing to maximize opportunities for funding of essential services.

- Improve the patient experience via reduced clinical cycle times, enhanced two-way communications, and a patient portal to promote greater patient ownership of their overall health.

- Increase visibility and accountability for services provided at each LHD and fulfill programmatic reporting requirements for state and/or federally funded initiatives through report generation.

- Positively impact employee morale as well as employee recruitment and retention given that the availability of and access to an EHR is an expectation of healthcare staff in modern clinical settings.

- Ensure the EHR meets all the Commonwealth's rigorous Information Technology standards for a cloud based Commercial Off the Shelf (COTS) technology solution, and that it interfaces with all required internal and external data systems.

- Fulfill reporting and compliance requirements for all VDH federal and state programs that use the EHR.

Overview of Quarterly Progress (April – June 2022)

Since completing the demonstrations and sandbox sessions with the two vendors currently engaged by the Commonwealth (Cerner) or Fairfax County (Patagonia Health), VDH completed the EHR Solution Assessment by requesting and interviewing references as well as requesting pricing estimates. With the decision to issue an RFP, in preparation of issuance VDH gathered and validated requirements, developed a high-level implementation roadmap, cataloged data and interface needs, and drafted a workplan detailing the activities and timeline associated with issuing and awarding the RFP. Additionally, VDH began work to prepare public health programs and LHDs for implementation, including beginning to catalog forms, assessments, and reports, as well as planning for an infrastructure assessment. Key activities conducted over the past three months are outlined below in further detail:

Key Activities and Accomplishments

- o **EHR Solution Assessment**
  - Requested three public health references from both Cerner and Patagonia and conducted interviews (6)
  - Requested cost estimates based upon the functions and features identified through the Visioning Session
  - Summarized and presented the results of the EHR Solution Assessment to a joint Steering Committee and Task Force meeting

- o **RFP Preparation**
  - Met with Procurement and VITA to detail next steps in obtaining an EHR tool
  - Drafted a Requirements Traceability Matrix (RTM) with 1,031 business and technical requirements
  - Conducted 15 Requirement Validation Sessions with VDH subject matter experts to refine and prioritize the requirements
  - Developed a roles and responsibilities matrix to guide activity ownership across the system development life cycle (SDLC) decision making

- o **Implementation Preparation**
  - Conducted 10 interviews of past Virginia IT implementation projects to gather lessons learned
  - Synthesized the results of the lessons learned interviews to inform scope development and implementation planning
  - Drafted an approach to the Infrastructure Assessment whose goal is to identify the infrastructure required to effectively utilize an EHR in the health district clinical locations
  - Developed a catalog of forms, assessments, and reports, including documentation received during the current state assessment interviews, aligned with RTM requirements

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- Reviewed and compared project management tools and selected to implement PlanView and Enterprise One to both manage the RFP process and ultimately the entire EHR implementation

o **Governance**
- Conducted weekly Task Force meetings which reviewed progress, made recommendations, and provided inputs to work products
- Conducted Steering Committee meetings which reviewed progress, approved approach, and made recommendations
- Hired and onboarded an Office of Information Management Technical Project Manager who will be responsible for the VITA relationship and shepherd the RFP through issuance

Anticipated Next Quarter Activities (July – September 2022)

The following outlines the activities and tasks planned from July through September 2022:

o **RFP Preparation**
- Draft the EHR request for proposal
- Determine proposal scoring and review methodology
- Prepare for EHR vendor demonstrations and interviews

o **Implementation Preparation**
- Conduct a Public Health Services Operations Assessment to identify areas for improvement that will increase the efficiency and effectiveness of the EHR implementation by:
  - Conducting a Visioning Session to target assessment objects and gain health district buy-in
  - Develop the Public Health Services Operations Assessment approach including objectives, data capture, management, and analysis plan
  - Develop the project plan including timeline, resources involved, and deliverables
  - Initiate data capture and management as detailed in the approach
- Continue stakeholder engagement analysis and communications

Risks and Risk Management

- **Risk 1:** If drafting and issuing an RFP is delayed, then VDH may procure an EHR solution with limited time for implementation before ARPA funds must be used.
  Mitigation Strategy: VDH plans to develop a work plan to track progress and identify risks to the timeline.

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- **Risk 2:** If the selecting an of EHR vendor is rushed, then VDH may select a vendor which cannot meet VDH's needs.

   Mitigation Strategy: VDH plans to leverage lessons learned from the EHR Solution Assessment to develop a proposal review timeline.

- **Risk 3:** If contract negotiations with EHR vendor are prolonged, then VDH is at risk for delaying the implementation of the HER.

   Mitigation Strategy: VDH plans to select a vendor that best fits the defined business and technical requirements and needs of the health districts and programs.

- **Risk 4:** If the EHR implementation is delayed by a year or more there is a risk of the business requirements changing thereby resulting in the need for a current state refresh.

   Mitigation Strategy: Concurrently with drafting and issuing the RFP, VDH plans to collaborate across internal stakeholder groups to advance the standardization and preparation of the health district workflows to expedite the design phase of implementation. VDH is continuing to assess and document the current state across the Commonwealth, expanding standardization and understanding of health district needs.

Change Management Considerations

VDH understands that successful transformation initiatives rely on more than just the right technology, processes, and resources. They also depend on effective change management, engagement, and training strategies to equip impacted stakeholders with the information and guidance that they need to support the changes being implemented.

In building and executing a robust Organizational Change Management (OCM) Strategy and Plan, VDH will build support for the transition to EHRs and prepare stakeholders for this change, which will in turn accelerate the new systems capability, minimize disruptions to daily operations, and reduce the risk of project delays. The agency has begun to develop the necessary resources – including an initial analysis of initiative stakeholders, identifying change champions, and a communication plan – that will serve as the foundation for the OCM plan. The agency is also developing an EHR "Case for Change" that VDH Leaders will use to effectively communicate with and engage stakeholders on the importance of the change. Additional activities may include a change readiness assessment, launching a Change Champion network, communication/engagement strategy, and a training plan to guide VDH in its efforts to prepare stakeholders for adoption of the new technology.

Project Budget

The following appropriation is broken down by the project categories defined in the work plans submitted on 9/30/2021.

Total Appropriation: $30,000,000
FY22 Appropriation: $10,000,000

Budget, Obligations, Actuals, and Remaining Spend as of June 15,2022

Project Category	FY22 Budget	FY22 YTD Obligations	FY22 YTD Expenditures*	Current Period Expenditures*	FY22 Remaining Spend
Phase 1 - One-Time Expenses	$ 9,800,000	$ 1,412,200	$ 662,500	$ 136,100	$ 9,137,500
Phase 2 - One-Time Expenses	$ -	$ -	$ -	$ -	$ -
Phase 3 - One-Time Expenses	$ -	$ -	$ -	$ -	$ -
Recurring Expenses	$ 200,000	$ -	$ -	$ -	$ -
Total	**$ 10,000,000**	**$ 1,412,200**	**$ 662,500**	**$ 136,100**	**$ 9,137,500**

* Expenditures represent transactions that have posted in Cardinal Web F&A as of 6/15/2022

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