Executive Summary

The COVID-19 pandemic caused a number of state agencies to shift priorities and resulted in impacts to facilities and resources as well as reduced availability of a number of key participants; as a result the Electronic Health Records (EHR) Interagency workgroup did not physically meet in 2020. However, the work to implement EHR systems in the participating agencies continued. The initial goal of the workgroup was to develop an integrated EHR, which may be shared as appropriate with other partner state and local agencies, and public and private health care entities. The workgroup previously evaluated the Department of Behavioral Health and Developmental Services statement of work developed for its EHR system and the DBHDS platform for potential adaption and/or use by state agencies in order to develop an integrated statewide EHR.

Initial discussions from the early workgroup meetings resulted in allowing agencies to pursue EHRs that are appropriate to meet specific agency needs and evaluate the cost-effectiveness of pursing separate EHR systems as compared to a statewide-integrated EHR. The workgroup remains committed to ensuring that standards are developed to ensure that EHRs can be shared as appropriate with public and private partner agencies and health care entities. As a result of the Commonwealth's success in combating the COVID-19 pandemic the EHR interagency workgroup is gearing up to reconvene in spring of 2021. The workgroup's work plan outlines a number of areas that it will be focusing on for the upcoming year. This report will outline the current status of the EHR Implementations for the Department of Behavioral Health and Developmental Services (DBHDS), the Department of Health (VDH), and the Department of Corrections (VADOC) as well as summarize the path forward for the workgroup in 2021.

Workgroup Mandate

Item 281 (C.1-3) of Chapter 854 of the 2019 Acts of Assembly directs the Secretary of Health and Human Resources, in collaboration with the Secretary of Administration and the Secretary of Public Safety and Homeland Security, shall convene an interagency workgroup to oversee the development of a statewide integrated electronic health record (EHR) system. The workgroup shall include the Department of Behavioral Health and Developmental Services (DBHDS), the Virginia Department of Health, the Department of Corrections, the Department of Planning and Budget, staff of the House Appropriations and Senate Finance Committees, and other agencies as deemed appropriate by the respective Secretaries. The purpose of the workgroup shall be to evaluate common business requirements for electronic health records to ensure consistency and interoperability with other partner state and local agencies and public and private health care entities to the extent allowed by federal and state law and regulations. The goal of the workgroup is to develop an integrated EHR which may be shared as appropriate with other partner state and local agencies and public and private health care entities. The workgroup shall evaluate the DBHDS statement of work developed for its EHR system and the DBHDS platform for potential adaption and/or use by state agencies in order to develop an integrated statewide EHR.

2. The workgroup may consider and evaluate other EHR systems that may be more appropriate to meet specific agency needs and evaluate the cost-effectiveness of pursing a separate EHR system as compared to a statewide integrated EHR. However, the workgroup shall ensure that standards are developed to ensure that EHRs can be shared as appropriate with public and private partner agencies and health care entities.

3. The workgroup shall also develop an implementation timeline, cost estimates, and assess other issues that may need to be addressed in order to implement an integrated statewide EHR system. The timeline and cost estimates shall be used by the respective agencies to coordinate implementation. The workgroup shall report on its activities and any recommendations to the Joint Subcommittee on Health and Human Resources Oversight by November 1 of each year.

Since initiation of the EHR Workgroup in 2018, member agencies have met and worked to accomplish the goals outlined in the Appropriations Act. The Virginia Department of Corrections (VADOC) recently received funding to begin implementing an EHR system and has since put out a Request for Proposal (RFP) on eVA. The Virginia Department of Health (VDH) has requested but not yet received funding to implement an EHR system at all local health departments in order to improve patient care and efficiency in the public health sector. DBHDS's original implementation timeframe of March 2020 was adjusted to meeting changing demands due to the pandemic; however the agency was able to successfully implement its EHR system in 3 waves between August 2020 and March 2021.

The purpose of this workgroup is to collaborate on the development of these EHR systems, to review the costs and benefits of using one vendor and product or allow the agencies to use different vendors and products as long as 1) all systems would be interoperable; and 2) agencies can access and share data on individuals receiving medical care and health care services at multiple state facilities. Per the directive, the workgroup may consider and evaluate other EHR systems that may be more appropriate to meet specific agency needs and evaluate the cost-effectiveness of pursing a separate EHR system as compared to a statewide integrated EHR.

Previous language in the 2019 Appropriations Act pertaining to VADOC's use of the same vendor and product as DBHDS, initially led VADOC to work with the existing DBHDS vendor to obtain cost estimates to present to the workgroup. From there, the workgroup discussed strengths and limitations of the product for the business needs discussed by each agency.

Subsequently, the VADOC sought to procure an EHR by issuing a Request for Proposal (RFP) as the most effective, cost efficient and transparent way to work with a vendor that best meets its specific requirements while leveraging costs through a competitive process.

Due to the COVID-19 pandemic and the uncertainty of the state budget at the time, funding that would have partially supported a contract with Cerner was unallotted during the 2020 Special Session I. As a result, contract negotiations were paused. Additionally, the language requiring the Director of VADOC to procure Cerner EHR system was removed from the budget, although

the removal of the language did not reflect a change in the General Assembly's direction to use the existing state contract.

EHR Implementation Updates

Department of Behavioral Health and Developmental Services (DBHDS)

The OneMind Millennium Electronic Health Record (EHR) was originally scheduled to go live in March of 2020. There was a change request for the delay due to the challenges faced with VITA's active directory solution for single sign on or same sign on. The implementation experienced a second delay in June, due to COVID-19. The COVID-19 pandemic resulted in the development of a revised implementation plan that took place in 3 phases, or "waves"; each resulting in the successful implementation of an interoperable electronic health records system at four facilities. Despite these challenges, DBHDS successfully went live at the first four facilities (including the three sites that were already live on the original EHR), August 24, 2020. The next four facilities went live October 27, 2020. These facilities were converted from paper charts to one enterprise Electronic Health Record. The DBHDS OneMind team, the facilities and the vendor, Cerner, collaboratively worked together in November and December to complete a Health Check to identify successes and opportunities to ensure adoption of the EHR continued to be successful.

DBHDS EHR Implementation Schedule				
Wave	Go-Live Date	Current Status		
Wave 1: CCCA, SVMHI, SWVMHI, WSH	8/25/2020	Completed on time		
Wave 2: Catawba, ESH, NVMHI, SEVTC	10/27/2020	Completed on time		
Wave 3: CSH, HDMC, PGH, VCBR	3/2/2021	Completed on time		

Virginia Department of Health (VDH)

VDH currently uses an in-house developed application to store some of the information contained in its medical records. A good portion of the data, however, is still paper based. The Governor's 2018 introduced budget included funding to implement an EHR system, but the action was later removed in order to ensure issues related to cost effectiveness and interoperability with state and local systems had been addressed. At the time, VDH indicated that the agency had completed the process of collecting business requirements for an electronic health records system. However, full implementation and interoperability is dependent on

funding. The Administration submitted a request for funding, however no funds were allotted during the 2020 General Assembly Session for this endeavor.

VDH consists of 33 centrally administered Health Districts and two locally administered Health Districts (Arlington and Fairfax). These Districts are located throughout 119 different jurisdictions across the Commonwealth of Virginia. VDH is also comprised of 91 Local Health Departments and 38 satellite offices, the latter of which primarily focus on Environmental Health and the Supplemental Nutrition Program for Women Infants and Children (WIC). In terms of adopting an agency-wide electronic health records (EHR) system, VDH's broad and multifaceted nature necessitates a carefully planned and robust solution for managing patient health data. The agency believes that business needs across all previously mentioned programs and services must be considered in order to ensure successful implementation and accurate cost analysis.

VDH has not implemented an EHR system as of yet; however, the agency continues to explore opportunities for savings and efficiencies and will also be reviewing opportunities for non-general funds to support this project as part of the 2021 workgroup efforts.

Virginia Department of Corrections (VADOC)

Item 475 of Chapter 854 of the 2019 Acts of Assembly instructed the Director of the Virginia Department of Corrections (VADOC) to procure and implement an EHR system through Contract Number VA-121107-SMU. The EHR vendor named in that contract is Cerner Corporation (Cerner). Pursuant to this directive, VADOC has worked together with Cerner and others to prepare for the EHR system implementation.

VADOC met with one of Cerner's current corrections customers, the Wisconsin Department of Corrections, to discuss their pre-work, resources needed, healthcare workflows, project management, system limitations and constraints, and funding for their EHR implementation.

The Department also engaged in detailed and complex EHR system integration discussions with its offender management system (OMS) provider, Abilis, and pharmacy management provider. VADOC frequently met with Cerner to educate them on the agency's business requirements and discussed areas where Cerner's system may not fully meet those requirements. Both Cerner and VADOC re-calculated funding several times to implement the system based on COVID-19 economic challenges and restrictions. During this time, VADOC Procurement, Cerner, Office of the Attorney General, and the Virginia Information Technology Agency (VITA) Supply Chain Management met to review, revise, and approve a contract for further review and approval by VITA that would meet the funding approved for implementation.

Contract negotiations with Cerner paused when funding that would have partially supported a contract with Cerner was unallotted during the 2020 Special Session. On February 4, 2021, with the approval from the Governor's Office, VADOC issued an EHR Request for Proposal (RFP)

on eVA.^{1 2} One of the key requirements included in the RFP is interoperability between a new VADOC EHR system and third-party entities such as other state agencies, hospital systems, and laboratories. The RFP closed on March 4, 2021, and VADOC's Evaluation Team is currently reviewing and scoring several proposals.

2021 EHR Workgroup Next Steps

The EHR workgroup has developed a comprehensive work plan and has established a number of key goals for the upcoming year. These goals include:

- Confirm and finalize business requirements for potential VDH and VADOC Electronic Health Records (EHR) Systems.
- Revise and Reestablish timelines for the procurement and implementation of VDH and VADOC Electronic Health Records Systems.
- Identify potential general fund and non-general fund funding sources to support the procurement and implementation of EHR systems for VDH.

The workgroup will meet monthly beginning on May 13, 2021, and throughout the remainder of the 2021 calendar year, with the intent of producing a report for the General Assembly by November 1, 2021 as directed. The following table lists the workgroup participants, and the following chart outlines the planned workgroup activities and associated timelines.

Workgroup Participants			
Entity	Representative(s)		
Office of the Secretary of Health and Human	Dr. Vanessa Walker Harris, Deputy Secretary		
Resources	Corey Pleasants, Assistant Secretary		
Office of the Secretary of Public Safety and	Jae K. Davenport, Deputy Secretary		
Homeland Security			
Office of the Secretary of Administration	Asif Bhavnagri, Assistant Secretary		
Department of Health	Suresh Soundararajan, CIO		
Department of Behavioral Health and	Robert Hobbelman, CIO		
Disability Services	Erin Loar, Deputy CIO for Applications		

¹ Chapter 522, 2021 Acts of Assembly, Special Session I, Item 402 (DOC) provides the following: *The Department of Corrections shall report on the total costs of implementing electronic health records at all of its facilities based on the selected vendor and the sufficiency of its on-going funding for full implementation at all facilities. The report shall identify all funding currently budgeted for the project, the timeline for implementation, and the interoperability of the system with the information technology systems used by the Department and its vendors. The Department shall utilize its non-general funds appropriated for this purpose prior to using the general fund appropriation. The Department shall provide a report containing the aforementioned information to the Chairs of the House Appropriations and Senate Finance and Appropriations Committees within 60 days of selecting its vendor.*

² Included within the appropriation for Item 402 is \$7,281,666 the first year and \$7,281,666 the second year from the general fund and \$7,592,004 the first year and \$1,000,000 the second year from the Contract Prisoners Special Revenue Fund for implementation of an electronic health records system in all facilities.

Department of Corrections	Zacc Allen, CIO
	Kim Moore, Project Manager
Department of Planning and Budget	Mike Shook, Associate Director
	Banci Tewolde, Associate Director
Virginia Information Technology Agency	Nelson Moe, Commonwealth CIO
	Michael Watson, Commonwealth CISO
	Todd Kissam, Enterprise Architecture Manager
House Appropriations Committee	Susan Massart, Legislative Fiscal Analyst
Senate Finance and Appropriations	Mike Tweedy, Legislative Analyst
Committee	

Workgroup Timeline

Activity	Timing	Goals
Reconvene EHR Workgroup	May 2021	 Review agency updates on EHR implementation(s) Discuss 2021 workgroup goals Review 2020 Draft report and 2021 work plan
Business Requirements Review	June 2021	• Confirm and finalize business requirements for potential VDH and VADOC Electronic Health Records (EHR) Systems, including ability to share data from EHRs with public and private partners and health systems
Funding Sources Review	June 2021	• Identify potential general fund and non-general fund funding sources to support the procurement and implementation of EHR systems for VDH.
Implementation Timeline Review	July 2021	• Confirm implementation timeline for VDH and VADOC EHRs
Review Report Recommendations	September 2021	• Finalize recommendations for 2021 GA Report
Review draft report	October 2021	• Discuss any need revisions to draft report

Report Submission	November 1, 2021	• Final report submitted to GA after review by agency leads and SHHR