



# Implementing a Statewide Electronic Health Record (EHR) System in Virginia

Annual Report

November 1, 2019

## **Purpose**

Item 281 (C) of the 2018 Appropriations Act directed the Secretary of Health and Human Resources, in collaboration with the Secretary of Administration and the Secretary of Public Safety and Homeland Security, to establish an interagency workgroup (“the workgroup”) to oversee the development of a statewide integrated electronic health record (EHR) system. Currently, the Department of Behavioral Health and Developmental Services (DBHDS) is under contract to implement an EHR system for the state’s mental health hospitals. The Virginia Department of Corrections (VADOC) recently received funding to begin implementing an EHR system at the state’s female correctional facilities, with the intent to broaden the EHR system capability to all correctional facilities in the Commonwealth. 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. 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 (those already under contract with DBHDS) or, alternatively, allowing 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.

The 2018 Act required the workgroup to report on its activities by October 15, 2018. The Secretary of Health and Human Resources submitted an interim report on behalf of the working group (Exhibit A). The workgroup found it difficult to provide a robust cost benefit analysis on different vendors and products because the vendors were reluctant to provide estimates in the absence of a specific procurement request. The 2019 Appropriations Act includes additional language regarding estimating the cost of implementing an EHR system through the VDH:

*The workgroup shall produce a robust analysis of the costs and benefits of using the platform provided through Contract Number VA-121107-SMU managed by the Virginia Information Technologies Agency on behalf of the Commonwealth of Virginia in developing and implementing electronic health records for use by the Virginia Department of Health. The analysis shall consider the need for a separate domain from any other procured through the Contract. The workgroup shall report on the findings of the analysis and any recommendations to the Joint Subcommittee on Health and Human Resources Oversight by November 1, 2019.*

Based on the language in the 2019 Appropriations Act pertaining to VADOC’s use of the same vendor and product as DBHDS, the workgroup decided the most productive route was to work with the current DBHDS vendor to obtain cost estimates. From there, the workgroup discussed strengths and limitations of the product and considered the business needs of each agency. This report includes information specific to the cost estimates for implementation of an EHR by VDH, as well as an update and costs specific to DBHDS and VADOC. The Secretaries of Administration, Health and Human Resources, and Public Safety and Homeland Security recommend the workgroup continue to meet under their direction for cost analysis and contract collaboration at the outset of the project, and for continuous coordination as the statewide EHR system is built.

## **Department of Behavioral Health and Development Services**

DBHDS is in the process of implementing the EHR system and the project is approaching a key milestone of completing system design. DBHDS has experienced one major issue with the current vendor related to end-user functionality and the ability for a single sign-on. The DBHDS project team is working closely with Virginia Information Technologies Agency (VITA). The team and VITA have identified a solution but have not yet confirmed it is viable nor has the team determined the full cost and timing to implement the solution. The preliminary cost estimate appears manageable but the team has not identified a timeline to implement.

Therefore, the first go-live date in March 2020 is at risk and the team is developing a contingency plan. There are 4 planned go-live dates across 2020, each with 3 facilities with the final one being November 2020. At this point, the project remains on track for all 12 facilities to have full implementation by December 2020.

**Appendix A** shows the estimated costs determined by Cerner. **Appendix B** demonstrates the costs estimated by DBHDS.

## **Virginia Department of Corrections**

The goal of the VADOC is to transfer all current processing on paper into an electronic health records system, which will:

- Improve communication among providers and healthcare staff,
- Improve care coordination among providers and healthcare staff,
- Improve risk management processes and policies,
- Decrease litigation costs,
- Decrease records supply and storage requirements,
- Increase process efficiency and effectiveness,
- Enhance clinical/financial reporting,
- Enhance management reporting,
- Improve retention of clinical staff,
- Improve continuity of care once an offender is released to the community, and
- Achieve interoperability with providers.

However, the project of converting the current system of handwritten documentation on paper records to an integrated EHR to be used by internal and external VADOC customers will require a great deal of effort and resources as it is a total transformation of agency's health care practice.

## **Cost of electronic health records at VADOC facilities**

Cerner<sup>1</sup> has provided estimates for implementation, one for female facilities only and another for female and male facilities<sup>2</sup> with a "pause" between implementations. In addition to the estimates provided by Cerner, there is additional funding necessary for VADOC staffing to support the system. **Appendix C** shows Cerner's price proposals for the male and female facilities at VADOC with an implementation pause. **Appendix D** shows the VADOC implementation overview of electronic health records for the male and female facilities.

The Cerner estimate includes the following:

- Travel costs of those resources,
- Configuration of thousands of data fields from offender healthcare forms and records into electronic format with indexed fields,

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<sup>1</sup> Item 475 (S1) of Chapter 854 of the 2019 Appropriations Act requires the Director of the VADOC to procure and implement an electronic health records system for use in the Department's secure correctional facilities using the platform provided through Contract Number VA-121107-SMU managed by the Virginia Information Technologies Agency.

<sup>2</sup> VADOC has 44 secure facilities.

- Registration and appointment scheduling, integration with the agency’s offender management system (Virginia CORIS),
- Business process re-engineering,
- Case management, and
- Interoperability with third party providers, systems, hospitals and laboratories.

The Cerner estimate does not include:

- Any internal VADOC costs for project implementation, e.g., project staff resources,
- IT infrastructure additions and/or upgrades (e.g., computer equipment/devices, bandwidth expansion and increased speed, additional network cables, ports, and switches, circuit upgrades, and WIFI access),
- Project staff work facilities/space, travel costs associated with vendor meetings and training,
- Customizations to the system due to meeting specific VADOC accreditation requirements or interoperability needs, and
- IT security changes or upgrades to meet VITA/COV required security standards and policies.

Rather than implement the Electronic Healthcare Records (EHR) system at all male and female VADOC facilities under one continuous multi-month effort, VADOC would take a break or “implementation pause”<sup>3</sup> between the project deliveries at the female facilities and the male facilities.

The “implementation pause” is to allow the team to identify and address EHR system issues and test the system functions and programming solutions before implementation at the male facilities.

This greatly decreases the risk that the project rollout to the male facilities will have the same issues found in the female facilities. This “pause” follows best practice of large scale, complex, and costly IT system projects such as this EHR implementation. **Appendix E** shows the Cerner estimate for female facilities only. **Appendix F** demonstrates the VADOC overview for the female facilities only.

If the project implementation were to deploy only at the female facilities, the proposed number of additional full-time employees (FTE) needed at VADOC would be 16. However, to implement the EHR system at female and male facilities requires 31 FTEs. These positions include Information Technology (IT) professionals, such as quality assurance testers, software release managers, data analysts, and nurse informaticists. These additional resources are needed to do the system builds, configurations and integrations based on VADOC workflow processes, data gathering and sharing with providers, hospital systems, other third parties, and specialized VADOC data analysis. The team will also test and re-test the system (and adjust as necessary) before, during, and after deployment.

After deployment, these positions would support the EHR system in ongoing operations and maintenance. The EHR vendor will upgrade the system on a regular basis, which will most likely require VADOC IT assistance or coordination. VADOC may develop its own minor enhancements or changes to the system, using its own IT resources, to lessen the chances of additional costs in the future.

Below is the EHR vendor’s proposed timeline for VADOC. The vendor adheres to the concept of “fixed fee / fixed timeline.” This means that the cost estimate provided to VADOC is based on the assumption that specific tasks will be completed within a certain timeframe so the overall project can be completed on time. If there are any delays in delivery deadlines, causing the overall project timeline to shift, the EHR vendor will charge VADOC additional costs.

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<sup>3</sup> The estimate does not include a specific time period for the “pause.”

## Implementation Timeline Proposed by the EHR Vendor

Enterprise Design, Build Phased Deployment	Timeline
Align Phase – project start up, executive leaders alignment, project team readiness, current state review	Months 1 - 3
Engage Phase – Design and build using eight (8) “workshops”, 4-5 weeks block of effort to validate build requirements, collect data, and prepare for next workshop. Maintenance and end user training and integration testing.	Months 3 -14
Activate Phase – Five “Go-Live” blocks lasting four (4) weeks, with four to eight weeks between Go-Live efforts.	Month 13-17-20-22-24
Measure Phase – Measure and optimize adoption of system; post Go-Live “health” check; post Go-Live value achievement review.	Months 26 - 28

### Virginia Department of Health

The Virginia Department of Health (VDH) secured an estimate from Cerner for implementing an EHR system for all local health districts. **Appendix G** shows the Cerner estimate for an EHR system for VDH.

This estimate makes the following pricing assumptions:

- Year 1 represents the first 12 months of contract execution.
- Perpetual licensing for Millennium software is included.
- End user devices are not included.
- Any applicable taxes are not included.
- The cost of configuration of any needed customization escalates over years 2 to 5. However, some of the cost in later years may be shared with FTE support or contracting funding to meet goals and objectives.
- VDH included in the cost 2 FTE positions, but more would be needed in later years of the project for change management and regional supports.
- Once the EHR is operational, VDH may be eligible for some federal funding to assist with ongoing maintenance of the system, customizations, and other costs. VDH was not able to estimate how much funding will be available.

### **Conclusion**

The Secretaries of Administration, Health and Human Resources, and Public Safety and Homeland Security are committed to continuous coordination as the statewide EHR system is built. However, full implementation and interoperability will depend on funding. This workgroup will continue to meet to compare cost and timelines and look for opportunities for savings and efficiencies. The workgroup will also be reviewing opportunities for non-general funds to support this project.

Appendix A

Virginia Department of Behavioral Health



Cash Flow 9.17.18

Contract Element	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
	7.1.18-6.30.19	7.1.19-6.30.20	7.1.20-6.30.21	7.1.21-6.30.22	7.1.22-6.30.23	7.1.23-6.30.24	7.1.24-6.30.25	7.1.25-6.30.26	
<b>One-Time</b>	<b>6,218,346</b>	<b>9,130,157</b>	<b>6,200,703</b>	-	-	<b>224,402</b>	-	-	<b>21,773,609</b>
Licensed Software	1,304,491								\$ 1,304,491
Professional Services	1,066,486	6,725,007	4,720,746						\$12,512,239
Go-Live Support	384,421	384,421	384,421						\$ 1,153,264
End User Training	709,800	709,800	709,800						\$ 2,129,400
Data Conversion	161,334	161,334	161,334						\$ 484,003
Remote Hosting (Ramp to 1,750 Concurrent Logons)	250,000								\$ 250,000
Equipment & Sub-Licensed Software	1,889,595	1,149,595							\$ 3,039,190
ASP & Shared Computing	299,165								\$ 299,165
AMS - Soarian & Millennium	153,054								\$ 153,054
Upgrade Center			224,402			224,402			\$ 448,803
<b>Recurring</b>	<b>1,680,468</b>	<b>3,083,765</b>	<b>3,970,799</b>	<b>3,963,142</b>	<b>3,951,417</b>	<b>4,151,865</b>	<b>3,947,457</b>	<b>986,534</b>	<b>\$25,735,445</b>
Remote Hosting (RHO) (Ramp to 1,750 Concurrent Logons)	808,500	1,584,300	1,742,400	1,754,400	1,742,400	1,742,400	1,742,400	435,600	\$11,552,400
RHO (Soarian EDM Read Only)	7,200	9,600	9,600	9,600	9,600	9,600	9,600	2,400	\$ 67,200
RHO (Train Domain) - Begin 6 months post effective date	30,000	30,000							\$ 60,000
RHO (Soarian Clinicals Read Only) - Begin 12 months post effective date		48,000	48,000						\$ 96,000
Equipment & Sub-Licensed Software Maintenance	366,930	489,240	489,240	490,065	490,340	690,788	486,380	121,265	\$ 3,624,248
AMS - Soarian & Millennium	467,838	706,337	816,407	843,924	843,924	843,924	843,924	210,981	\$ 5,577,258
FPU Support		52,862	211,447	211,447	211,447	211,447	211,447	52,862	\$ 1,162,957
FPU Subscriptions		39,451	157,803	157,803	157,803	157,803	157,803	39,451	\$ 867,916
FPU Help Desk		27,000	108,000	108,000	108,000	108,000	108,000	27,000	\$ 594,000
FPU ASP & Shared Computing		96,976	387,903	387,903	387,903	387,903	387,903	96,976	\$ 2,133,466
<b>Total</b>	<b>\$ 7,898,814</b>	<b>\$ 12,213,922</b>	<b>\$ 10,171,503</b>	<b>\$ 3,963,142</b>	<b>\$ 3,951,417</b>	<b>\$ 4,376,266</b>	<b>\$ 3,947,457</b>	<b>\$ 986,534</b>	<b>\$47,509,054</b>
Travel (Estimate Only, Subject to Change)	1,524,595	1,524,595							\$ 3,049,190
<b>Total with Travel Estimate</b>	<b>\$ 9,423,409</b>	<b>\$ 13,738,517</b>	<b>\$ 10,171,503</b>	<b>\$ 3,963,142</b>	<b>\$ 3,951,417</b>	<b>\$ 4,376,266</b>	<b>\$ 3,947,457</b>	<b>\$ 986,534</b>	<b>\$50,558,244</b>
Go Forward 5.1M operating delta available	\$ 3,419,532	\$ 2,016,235	\$ 1,129,201	\$ 1,136,858	\$ 1,148,583	\$ 948,135	\$ 1,152,543		

**Appendix B**

Cash Flow 9-26-2018									
	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total	Variance
Internal Staff Labor	\$1,597,223	\$1,597,223	\$1,597,223	\$3,194,446	\$3,194,446	\$3,194,446	\$3,194,446	\$17,569,453	\$0
Services	\$1,937,620	\$7,812,430	\$6,457,033	\$1,365,153	\$1,365,153	\$1,365,153	\$1,365,153	\$21,667,695	-\$216,286
Software Tools	\$3,561,016	\$1,638,835	\$489,240	\$490,065	\$490,340	\$486,380	\$485,060	\$7,640,936	-\$126,545
Hardware	\$299,165	\$0	\$0	\$0	\$0	\$0	\$0	\$299,165	\$0
Maintenance	\$1,716,592	\$2,354,237	\$2,840,809	\$2,631,924	\$2,595,924	\$2,820,326	\$2,595,924	\$17,555,736	-\$648,980
Facilities	\$168,750	\$1,762,500	\$2,250,000	\$2,250,000	\$2,250,000	\$2,250,000	\$2,250,000	\$13,181,250	\$0
Telecommunications								\$0	\$0
Training	\$384,421	\$384,421	\$384,421	\$0	\$0	\$0	\$0	\$1,153,263	\$0
IV&V		\$20,000	\$20,000					\$40,000	\$0
Contingency (Risk)	\$1,020,000	\$1,020,000	\$1,020,000	\$1,020,000	\$1,020,000			\$5,100,000	\$0
Pre-Project Initiation Costs								\$0	\$0
Other	\$1,834,195	\$2,174,195	\$578,100	\$248,100	\$248,100	\$0	\$0	\$5,082,690	-\$896,200
<b>Total</b>	<b>\$12,518,982</b>	<b>\$18,763,841</b>	<b>\$15,636,826</b>	<b>\$11,199,688</b>	<b>\$11,163,963</b>	<b>\$10,116,305</b>	<b>\$9,890,583</b>	<b>\$89,290,188</b>	<b>-\$1,888,011</b>

Appendix C

Virginia Department of Corrections



9.18.19

Contract Element	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	6 Year Total	Renewal Year 1	7 Year Total
Licensed Software	1,413,199	1,413,199					\$ 2,826,397		\$ 2,826,397
Professional Services	6,453,808	6,453,808	6,453,808				\$ 19,361,424		\$ 19,361,424
Major Upgrade	598,872						\$ 598,872		\$ 598,872
Support	452,224	452,224	452,224	452,224	452,224	452,224	\$ 2,713,341	452,224	\$ 3,165,565
Remote Hosting (850 Concurrent Logons)	1,275,000	1,275,000	1,275,000	1,275,000	1,275,000	1,275,000	\$ 7,650,000	1,275,000	\$ 8,925,000
Application Managed Services	75,000	578,020	578,020	578,020	578,020	578,020	\$ 2,965,100	578,020	\$ 3,543,120
Equipment & Sub-Licensed Software (Dentrix, Document Imaging (Single Doc Capture), E-Sig, Business Objects)	3,428,664	472,919	472,919	472,919	472,919	472,919	\$ 5,793,259	472,919	\$ 6,266,178
Subscriptions		343,813	343,813	343,813	343,813	343,813	\$ 1,719,065	343,813	\$ 2,062,878
ASP & Shared Computing	2,106,001	635,989	635,989	635,989	635,989	635,989	\$ 5,285,945	635,989	\$ 5,921,934
Travel	1,594,028	1,594,028					\$ 3,188,056		\$ 3,188,056
<b>Total</b>	<b>\$ 17,396,795</b>	<b>\$ 13,218,999</b>	<b>\$ 10,211,772</b>	<b>\$ 3,757,964</b>	<b>\$ 3,757,964</b>	<b>\$ 3,757,964</b>	<b>\$ 52,101,459</b>	<b>\$ 3,757,964</b>	<b>\$ 55,859,423</b>

Pricing Assumptions

- \* Pricing is budgetary estimate only and subject to further due diligence
- \* Year 1 represents first 12 months post contract execution.
- \* Perpetual licensing for Millennium software.
- \* End user devices not included.
- \* If applicable, taxes are not included.

Metric Assumptions

- \* 850 Concurrent Users
- \* 200 Physicians
- \* 44 Medical Facilities

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## Appendix D

DEPARTMENT OF CORRECTIONS							
ELECTRONIC HEALTHCARE RECORDS IMPLEMENTATION							
MALE AND FEMALE FACILITIES OVERVIEW							
	FY21	FY22	FY23	FY24	FY25	FY26	Six-Year Total
Cerner's Preliminary 6-year Costs for Male and Female Facilities	\$17,396,795	\$13,218,999	\$10,211,772	\$3,757,964	\$3,757,964	\$3,757,964	<b>\$52,101,458</b>
Required DOC Staffing	\$3,998,316	\$3,998,316	\$3,998,316	\$3,998,316	\$3,998,316	\$3,998,316	\$23,989,896
<b>Total Cost - Cerner Standalone Project with Pause</b>	<b>\$21,395,111</b>	<b>\$17,217,315</b>	<b>\$14,210,088</b>	<b>\$7,756,280</b>	<b>\$7,756,280</b>	<b>\$7,756,280</b>	<b>\$76,091,354</b>
Minus NGF Appropriation provided in Chap 854	-\$4,592,004	-\$4,592,004	-\$2,650,339	-\$1,226,241	-\$1,226,241	-\$1,226,241	
Minus General Fund Appropriation provided in Chap 780 and Chap 854	-\$4,281,666	-\$4,281,666	-\$4,281,666	-\$4,281,666	-\$4,281,666	-\$4,281,666	
<b>Net Requirements for DOC to Implement Electronic Healthcare Records for Male and Female Facilities =</b>	<b>\$12,521,441</b>	<b>\$8,343,645</b>	<b>\$7,278,083</b>	<b>\$2,248,373</b>	<b>\$2,248,373</b>	<b>\$2,248,373</b>	
Footnotes:							
1) Both the Virgin Islands and Hawaii can terminate the use of VADOC beds at any time. There is no assurance of an ongoing revenue stream.							
2) Non-General Funds (NGF) are contingent on having adequate out-of-state (OOS) cash. As DOC continues to use OOS cash to fund this initiative, the ability to use all of its NGF appropriation will begin to diminish the third year of the contract.							
3) Chapter 854, Item 475. S.2. provides the following language: "Included in the amounts provided for this items is \$3,000,000 the second year from the general fund for a contingency fund should the costs of complying with Paragraph S.1. of this item exceed the amounts provided for such purpose in Item 391. The Director, Department of Planning and Budget, is authorized to transfer appropriation from this contingency fund to the Department of Corrections, after verification of the total costs of an electronic health records system which justifies the need for additional funding from this item." This one-time \$3M contingency fund is not reflected in this analysis.							
4) There is currently \$3,526,309 GF appropriated in DOC's FY20 base budget for the Electronic Healthcare Records initiative. Any use of this FY20 appropriation is not reflected in this analysis.							

# Appendix E

## Virginia Department of Corrections



### 8.23.19 - Women's Facilities

Contract Element	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	6 Year Total	Renewal Year 1	7 Year Total
Licensed Software	1,800,000						\$ 1,800,000		\$ 1,800,000
Professional Services	3,183,698	5,912,581					\$ 9,096,279		\$ 9,096,279
MAR Interface to Pharmacy	31,680						\$ 31,680		\$ 31,680
Help Desk Training							\$ -		\$ -
Major Upgrade	398,872						\$ 398,872		\$ 398,872
Support	290,000	290,000	290,000	290,000	290,000	290,000	\$ 1,740,000	290,000	\$ 2,030,000
Remote Hosting 250 Concurrent Logons)	685,200	685,200	685,200	685,200	685,200	685,200	\$ 4,111,200	685,200	\$ 4,796,400
Application Managed Services	75,000	478,680	478,680	478,680	478,680	478,680	\$ 2,468,400	478,680	\$ 2,947,080
Equipment & Sub-Licensed Software (Dentrix, Document Imaging (Single Doc Capture), E-Sig, Business Objects)	783,948	119,585	119,585	119,585	119,585	119,585	\$ 1,381,875	119,585	\$ 1,501,460
Subscriptions		91,979	91,979	91,979	91,979	91,979	\$ 459,897	91,979	\$ 551,877
ASP & Shared Computing	704,803	230,572	230,572	230,572	230,572	230,572	\$ 1,857,661	230,572	\$ 2,088,233
Travel	914,762	914,762					\$ 1,829,524		\$ 1,829,524
<b>TOTAL</b>	<b>\$ 8,867,963</b>	<b>\$ 8,723,360</b>	<b>\$ 1,896,016</b>	<b>\$ 1,896,016</b>	<b>\$ 1,896,016</b>	<b>\$ 1,896,016</b>	<b>\$ 25,175,388</b>	<b>\$ 1,896,016</b>	<b>\$ 27,071,404</b>

**Pricing Assumptions**

- \* Year 1 represents first 12 months post contract execution.
- \* Perpetual licensing for Millennium software.
- \* End user devices not included.
- \* If applicable, taxes are not included.

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## Appendix F

DEPARTMENT OF CORRECTIONS							
ELECTRONIC HEALTHCARE RECORDS IMPLEMENTATION							
FEMALE FACILITIES ONLY OVERVIEW							
	FY21	FY22	FY23	FY24	FY25	FY26	Six-Year Total
Cerner's Preliminary 6-year Costs for Female Only Facilities	\$8,867,963	\$8,723,360	\$1,896,016	\$1,896,016	\$1,896,016	\$1,896,016	<b>\$25,175,387</b>
Required DOC Staffing	\$2,027,691	\$2,027,691	\$2,027,691	\$2,027,691	\$2,027,691	\$2,027,691	\$12,166,146
<b>Total Cost - Cerner Proposal Female Facilities Only</b>	<b>\$10,895,654</b>	<b>\$10,751,051</b>	<b>\$3,923,707</b>	<b>\$3,923,707</b>	<b>\$3,923,707</b>	<b>\$3,923,707</b>	<b>\$37,341,533</b>
Minus NGF Appropriation provided in Chap 854	-\$4,592,004	-\$4,592,004	-\$2,650,339	-\$1,226,241	-\$1,226,241	-\$1,226,241	
Minus General Fund Appropriation provided in Chap 780 and Chap 854	-\$4,281,666	-\$4,281,666	-\$1,273,368	-\$2,697,466	-\$2,697,466	-\$2,697,466	
<b>Net Requirements for DOC to Implement Electronic Healthcare Records for Female Facilities Only =</b>	<b>\$2,021,984</b>	<b>\$1,877,381</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	
Footnotes:							
1) Both the Virgin Islands and Hawaii can terminate the use of VADOC beds at any time. There is no assurance of an ongoing revenue stream.							
2) Non-General Funds (NGF) are contingent on having adequate out-of-state (OOS) cash. As DOC continues to use OOS cash to fund this initiative, the ability to use all of its NGF appropriation will begin to diminish the third year of the contract.							
3) Chapter 854, Item 475. S.2. provides the following language: "Included in the amounts provided for this items is \$3,000,000 the second year from the general fund for a contingency fund should the costs of complying with Paragraph S.1. of this item exceed the amounts provided for such purpose in Item 391. The Director, Department of Planning and Budget, is authorized to transfer appropriation from this contingency fund to the Department of Corrections, after verification of the total costs of an electronic health records system which justifies the need for additional funding from this item." This one-time \$3M contingency fund is not reflected in this analysis.							
4) There is currently \$3,526,309 GF appropriated in DOC's FY20 base budget for the Electronic Healthcare Records initiative. Any use of this FY20 appropriation is not reflected in this analysis.							

Appendix G

Virginia Department of Health Electronic Health Record System								
Contract Element	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Total
Licensed Software	\$ 475,652	\$1,426,957	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,902,609
Professional Services	\$1,575,685	\$2,626,142	\$6,302,740	\$ -	\$ -	\$ -	\$ -	\$10,504,567
Support	\$ -	\$ 309,892	\$ 309,892	\$ 309,892	\$ 309,892	\$ 309,892	\$ 309,892	\$ 1,859,352
Remote Hosting (900 concurrent user)	\$1,134,000	\$1,134,000	\$1,134,000	\$1,134,000	\$1,134,000	\$1,134,000	\$1,134,000	\$ 7,938,000
Equipment & Sub-Licensed Software (Dentrix, Document Image (Single Doc Capture), E-Sig, Business Objects)	\$1,601,622	\$ 276,697	\$ 276,697	\$ 276,697	\$ 276,697	\$ 276,697	\$ 276,697	\$ 3,261,804
Subscriptions	\$ -	\$ 305,247	\$ 305,247	\$ 305,247	\$ 305,247	\$ 305,247	\$ 305,247	\$ 1,831,482
ASP & Shared Computing	\$ 644,292	\$ 537,337	\$ 537,337	\$ 537,337	\$ 537,337	\$ 537,337	\$ 537,337	\$ 3,868,314
Transaction Services	\$ 3,430	\$ 127,087	\$ 127,087	\$ 127,087	\$ 127,087	\$ 127,087	\$ 127,087	\$ 765,952
Revenue Cycle State Reporting	\$ 26,400	\$ 26,400	\$ 26,400	\$ 26,400	\$ 26,400	\$ 26,400	\$ 26,400	\$ 184,800
Travel	\$1,050,457	\$1,050,457	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,100,914
<b>Contract Sub-Total</b>	<b>\$6,511,538</b>	<b>\$7,820,216</b>	<b>\$9,019,400</b>	<b>\$2,716,660</b>	<b>\$2,716,660</b>	<b>\$2,716,660</b>	<b>\$2,716,660</b>	<b>\$34,217,794</b>
<b>VDH Costing Elements</b>								
Config / Custom 3	\$ 300,093	\$ 200,000	\$ 420,000	\$ 520,000	\$ 500,000	\$ 350,000	\$ 350,000	\$ 2,640,093
Project Manager (FTE) 1	\$ 119,800	\$ 135,000	\$ 135,000	\$ 135,000	\$ 135,000	\$ 135,000	\$ 135,000	\$ 929,800
Business Analysis (FTE) 1	\$ 80,100	\$ 95,000	\$ 95,000	\$ 95,000	\$ 95,000	\$ 95,000	\$ 95,000	\$ 650,100
Contractual Help 2	\$ -	\$ 70,000	\$ 100,000	\$ 200,000	\$ 220,000	\$ 370,000	\$ 370,000	\$ 1,330,000
<b>VDH Sub Total</b>	<b>\$ 499,993</b>	<b>\$ 500,000</b>	<b>\$ 750,000</b>	<b>\$ 950,000</b>	<b>\$ 950,000</b>	<b>\$ 950,000</b>	<b>\$ 950,000</b>	<b>\$ 5,549,993</b>
<b>Project Total</b>	<b>\$7,011,531</b>	<b>\$8,320,216</b>	<b>\$9,769,400</b>	<b>\$3,666,660</b>	<b>\$3,666,660</b>	<b>\$3,666,660</b>	<b>\$3,666,660</b>	<b>\$39,767,787</b>
<b>Seven Year Requested Budget Plan</b>	<b>\$7,011,531</b>	<b>\$8,320,216</b>	<b>\$9,769,400</b>	<b>\$3,666,660</b>	<b>\$3,666,660</b>	<b>\$3,666,660</b>	<b>\$3,666,660</b>	<b>\$39,767,787</b>
<b>Contract Pricing and VDH Costing Element Assumptions Can Be Found On Page Two</b>								