Information Technology Capital Investment Program

Project Status Report

To: Information Technology Strategy and Investment Committee
John Vittner, Office of Policy and Management

From: W. Michael Regan, Department of Correction

Email: Michael.Regan@ct.gov

Agency: Department of Correction

Project: Department of Correction Electronic Health Records

Project Manager: Robert Richeson/Tomasz Kazmierczack

Reporting Period: Project Inception through 06/30/2020

Total Funds Requested: $8,050,000

Total Funds Allotted to Agency: $8,050,000

Accumulative Total Capital Fund Expenditures to Date: $7,365,925

Brief Project Description/Summary:

The DOC Health Portal project is a three phase project that will establish an electronic health records system within DOC and ultimately establish a healthcare portal linking such records to the various state agencies, outside community agencies, and external hospitals and clinics involved in the healthcare of our patients while also feeding into the state's Health Information Exchange. The project provides for both improvements in the ways that the agency cares for its inmate patients within its facilities as well as providing us the opportunity to ensure that the healthcare gains made by DOC patients while under agency care are not lost when inmate patients are released to the community.

Summary of Progress Achieved to Date:

The RFP was released on March 19, 2015 and closed on May 19, 2015. GE Fusion was the selected vendor and the contract was awarded on August 18, 2015. Gap analysis began on January 1, 2016 and is scheduled to be completed February of 2017. The project implementation plan has been extended by due to the determination by DOC that its network infrastructure must be upgraded and fortified in order to accommodate this project and other DOC IT initiatives and by recent staff reductions and procurement process timelines. All project specific work is proceeding apace. Upgrades to DOC's network infrastructure are underway. The current anticipated "go live" date for the electronic health records system is April 30, 2018.

To date DOC has received $7,350,000 in IT Capital Bond Funds. Of that amount $2,272,891 has been expended a $3,781,213 has been encumbered. It is requested that the balance of approved funds for this project ($700,000) made available in January of 2017.

01/30/17 Update

The RFP was released on March 19, 2015 and closed on May 19, 2015. GE Fusion was the selected vendor and t contract was awarded on August 18, 2015. Gap analysis began on January 1, 2016 and is on track to be completec February of 2017. The project implementation plan continues to be on track for April 30, 2018. After a careful revi of resources and processes and workflow, an adjustment to the project plan has been made to the infrastructure pl Under the new infrastructure plan, CMHC will continue to manage the facilities computers and systems. The pr infrastructure plan called for DOC to manage all aspects. This adjustment has no impact on either the project timel or the project's budget/finances.

To date DOC has received $7,350,000 in IT Capital Bond Funds. Of that amount $3,110,579 has been expended a $3,591,767 has been encumbered. It is requested that the balance of approved funds for this project ($700,000) made available in July of 2017.

07/30/17 Update

The RFP was released on March 19, 2015 and closed on May 19, 2015. GE Fusion was the selected vendor and t contract was awarded on August 18, 2015. Gap analysis began on January 1, 2016 and is on track to be completec February of 2017. The project implementation plan continues to be on track for April 30, 2018. After a careful revi of resources and processes and workflow, an adjustment to the project plan has been made to modify t infrastructure plan. Under the new infrastructure plan, CMHC will continue to manage the facilities' computers a systems. The prior infrastructure plan called for DOC to manage all aspects. This adjustment has no impact on eitl the project timeline or the project's budget/finances.

Business Category groups are nearing finalization of Content Creation. Once Content Creation is finalized, Functio Testing will begin.

The technical tract is progressing and systems are on track for utilization during the upcoming testing and train aspects of the project.

A delay in the completion of a data circuit between UConn Health and DOC has required the project plan for techni testing to be shifted several months. This shift is being mitigated by aligning the DOC EHR go-live with the UConn E go-live of April 28, 2018. This alignment of the DOC EHR go-live with the UConn Epic go-live shifts the DOC E completion date from April 15, 2018 to the first week of May, a 3 week adjustment once approved. Collaborat planning between CMHC and DOC is underway to achieve approval for this.

To date DOC has received $7,350,000 in IT Capital Bond Funds. Of that amount $4,105,687 has been expended a $2,957,677 has been encumbered. It is requested that the balance of approved funds for this project ($700,000) made available in January of 2018.

01/10/18 Update

UConn Health has embarked on its own electronic health record implementation (EPIC) which is scheduled to go-liv -28-2018. DOC is dependent on the UConn EPIC laboratory and radiology systems for inmate care. Alignment with t EPIC go-live has been approved and execution continues to meet the 4-28-2018 EPIC go-live date. DOC Go-live I been adjusted from a staggered approach spanning 3 months to a more compressed strategy over a 15 day period minimize redundant work during implementation resulting from the overlapping DOC EHR and UConn EPIC project lives.

07/01/18 Update

Project implementation was divided into several phases. The first, and largest phase, concluded on 4/28/18 with t last of the DOC facility sites coming on-line with full electronic chart documentation. The implementation included:

- onsite training of 700+ health services employees
- development, testing, and validation of interfaces spanning multiple interagency systems
- migration (including testing and validation) of legacy data from historical systems
- workflow and process education for both custody and health services staff

Remaining project phases are on-track and on-budget with deployment planned over the first two quarters of FY Components include the implementation of the electronic medication administration record, Clinical Messenger, a EPCS certification for controlled substances.

To date DOC has received $8,050,000 in IT Capital Bond Funds. Of that amount $6,464,736 has been expended a $1,390,152 has been encumbered.

01/01/19 Update

DOC Go-live for full implementation of EHR was complete on April 28, 2018.

Project implementation was divided into several phases. The first, and largest phase, concluded on 4/28/18 with t last of the DOC facility sites coming on-line with full electronic chart documentation. The implementation included:

- onsite training of 700+ health services employees
- development, testing, and validation of interfaces spanning multiple interagency systems
- migration (including testing and validation) of legacy data from historical systems
- workflow and process education for both custody and health services staff

The implementation of the electronic medication administration record (eMAR) began with customization and train at two DOC facilities. This pilot commenced in November 2018 with dual documentation into a live system

December. Continued customization and broader roll-out to remaining facilities to take place in the first month of calendar 2019.

Remaining project phases are on-track and on-budget. Components include continued customization and workflow creation, EPCS certification for controlled substances, and development of various interagency interfaces.

To date DOC has received $8,050,000 in IT Capital Bond Funds. Of that amount $6,856,566 has been expended and $193,314 has been encumbered.

07/30/19 Update

DOC Go-live for the implementation of the main part of the EHR occurred on April 28, 2018.

Project implementation was divided into several phases. The first, and largest phase, concluded on 04/28/18 with the last of the DOC facility sites coming on-line with full electronic chart documentation. The implementation included:

- onsite training of 700+ health services employees
- development, testing, and validation of interfaces spanning multiple interagency systems
- migration (including testing and validation) of legacy data from historical systems
- workflow and process education for both custody and health services staff

As of this writing, the electronic Medication Administration Record (eMAR) phase is still in the testing phase based upon some shortcomings discovered during the pilot implementation. The test phase is ongoing at MYI. Additionally, we will be transitioning to a new pharmacy services vendor October 1st. With that transition new challenges in electronic communication between our EHR, Pharmacy Services Vendor, and electronic Medication Administration Record have been uncovered and are being addressed.

Dialogue between DOC and the Centricity vendor that is developing the EHR for DOC under state contract 13PSX0304 regarding the project has been ongoing.

The team is simultaneously exploring another eMAR from the pharmacy services vendor that may offer enhanced productivity and safety features. The team is evaluating from a practical standpoint with emphasis placed value. The eMAR would then be interfaced to the EHR. Seamless integration is critical.

Remaining project phases are in process. The project remains on-budget. Components include continued customization and workflow creation, EPCS certification for controlled substances, development of critical interfaces the an eMAR and to the agency's Laboratory Services vendor (for order labs and receiving lab results into the patient's records) and development of various interagency interfaces.

The eMAR and other interfaces are part of the overall project – these are critical to the usability of the system and critical to the overall efficiencies the system will bring to the agency.

The transition of the provision of inmate healthcare from UCHC to DOC caused some delays to the project however the project remains on track.

01/01/20 Update:

The Management and Clinical team evaluated the eMAR available from the vendor. The team looked at functionality, connectivity, and fiscal impact. The eMAR needed to communicate with Centricity EHR and our pharmacy vendor simultaneously. The eMAR needed to be up and running for October 1, 2019 when we switched over to the new pharmacy vendor.

Simultaneously, the management and clinical team pushed forward with the development of a custom eMAR with our EHR management vendor. The vendor successfully developed and tested the eMAR within needed timeframe while other eMAR options were explored and evaluated. In the summer of 2019 it was determined that the EHR vendor's eMAR better suited the agency's needs in the areas of functionality, connectivity, and fiscal impact.

The new eMAR was ultimately tested and implemented statewide for October 1, 2019 when the Agency went live with the new pharma vendor.

The project remains on track. Aside from periodic edits/modifications to conform to formulary and prescription tapers, the only thing left to do is integrate the EHR/eMAR with Addiction services software. Addiction Services will be expanding their MAT programs in 2020. It is critical that the MAT software interface with the EHR/eMAR.

07/01/20 UPDATE:
The eMAR is up and fully running. Addiction Services is adding three new facilities and concurrently exploring eMAR and Addiction Services integration. Several new metrics reports have been developed.

The COVID-19 pandemic has impacted the completion of this project, however we are still projecting a project completion of 12/31/20

The exploration of scheduling within the EHR has commenced as well as the design and build of a new Patient Priority and Transport module for scheduling outside specialty medical appointments.

Issues and Risks:
No high probability issues or risks are evident at this time.

01/30/17 Update

No high probability issues or risks are evident at this time.

07/30/17 Update

The success of the DOC EHR implementation is dependent on the EPIC laboratory and radiology systems, along with a new CMHC pharmacy system being in place for the DOC EHR go-live. The three systems require a change to the scope of the DOC project due to the fact the Epic systems were not on the horizon when the DOC RFP or EHR contract were developed. Originally Siemens systems were in place, which are now being replaced by Epic systems. The difference between interfacing with an existing set of systems with documented workflows and "to be developed" workflows and documentation accounts for the change in scope for the lab, radiology and pharmacy interfaces. Now that the lab, radiology and pharmacy are in focus, work is progressing to meet the anticipated go-live of second quarter 2018. If any of the systems are not completely tested and functioning, double-entry could be required by UConn Health, or CMHC users, depending on the systems impacted. Either scenario could require additional resources to keep up with the double-entry processes.

01/10/18 Update

EPIC laboratory and radiology interfaces are in progress scheduled to complete in alignment with DOC EHR go-live. Any scenarios that include an interface not being fully functional will result in manual transmittal of lab and radiology orders and results. CMHC has selected a replacement pharmacy system to replace the current systems which is being sunset by the vendor. The new pharmacy system is scheduled to be ready for go-live and a EHR interface is being developed.

EHR application consultants are being on boarded to assist with customized system configuration, workflow analysis, and report creation support that is required of go-live which was not known at the time of contracting and subsequently not included in the EHR contract.

The project is on track to go-live beginning April 28, 2018 within the budget allocated by OPM.

07/01/18 Update

Interfaces implemented to date are functioning as expected. Development of remaining interfaces will occur over next several months. DOC to work closely with vendors to assure these remain on track and within budget.

EHR application consultants are beginning to develop custom reports defined during requirements gathering. Consultant focus to date has been effectively triaging go-live nuisances and workflow changes associated with the implementation of chart documentation. Strong focus on report building will be a focus of Q1 & Q2 FY19.

01/01/19 Update

Interfaces implemented to date are functioning as expected. Development of remaining interfaces will occur over next several months. DOC to work closely with vendors to assure these remain on track and within budget.

The EHR application consultant has worked to customize various documents and encounters within the EHR and has developed custom reports defined during the early stages of Go-Live. Consultant focus to date has been effectively triaging errors and workflow changes associated with chart documentation and orders. As the Consultant completes her contract, focus will be placed on completing outstanding requests for custom reports, technical fixes, and other customization items.

07/30/19 Update
Interfaces implemented to date are functioning as expected. Development of new interfaces for the new pharmacy and laboratory services vendors will continue over next several months. DOC to work closely with vendors to assure these remain on track and within budget.

The EHR application consultant and our internal DOC IT agent continue to customize various documents and encounters within the EHR and develop custom reports based upon current and anticipated need. Consultant focus to date has been effectively triaging errors and workflow changes associated with chart documentation and orders.

The transition of the provision of inmate healthcare from UCHC to DOC caused some delays to the project however the project remains on track.

There are no current issues of concern. Risks are minimal at this time.

01/01/20 Update:

Interfaces were developed for services with the new pharmacy and laboratory vendors in the summer of 2019. These interfaces were implemented October 1, 2019 when the Agency went live with the new vendors.

The EHR application consultant and our internal DOC IT agent continue to customize various documents and encounters within the EHR and develop custom reports based upon current and anticipated need.

Another area identified to be addressed in an urgent fashion is the need for access to "stand-alone" computers and printers in each facility in case the EHR/eMAR/Network goes down. Now that we have the eMAR, the Agency is completely dependent upon such technology for medication administration. Said stand-alone machines will allow for a paper print-out of the eMAR so medications may be administered non-electronically.

There are no foreseen issues or risks at this time.

07/01/20 UPDATE:

An unknown issue and risk is the ability to complete current in-house development of a functional application for Patient Priority and Transportation with communication between the EHR and Central transport with the ability to communicate with a medical review platform.

The COVID-19 pandemic has impacted the completion of this project, however we are still projecting a project completion of 12/31/20.

Next Steps & Project Milestones:

- Project Plan Revision
- Systems Installation and Testing
- Content Creation Completion
- User Acceptance
- Go-Live

01/30/17 Update

- BC group re-engagement for form review
- Content Creation Completion
- Network enhancements to DOC and CMHC networks in the facilities
- Systems Installation and Testing
- Go-Live
- Information Exchange Spin-up

07/30/17 Update

- Content Creation Completion
- Functional Testing
- Data circuit connectivity completion and testing
- Network enhancements to DOC and CMHC networks in the facilities
- Interface testing and certification
- Systems Installation and Testing
- Go-Live
- Information Exchange Spin-up

01/10/18 Update

· Continued functional testing and UAT testing
· Interface certification
· Training
· Mock go-live
· Go-live
· Post go-live support for a limited period prior to turning the system over to DOC for maintenance and support.

07/01/18 Update

· EPCS certification for controlled substance orders (interface)
· eMAR (electronic medication administration record) implementation
· Clinical Messenger (Provider to provider patient data sharing)
· DDaP interface (Addiction Services)
· Continuum deployment (Addiction Services module/interface)
· DSS HIE interface
· Continued workflow optimization
· Comprehensive policy integration of new operational workflows
· Training program development – new hires

01/01/19 Update

- EPCS certification for controlled substance orders (interface)
- eMAR (electronic medication administration record) implementation for 15 remaining facilities (2 pilot si completed in December 2018)
- DDaP interface (Addiction Services)
- Continuum deployment (Addiction Services module/interface)
- DSS HIE interface
- Continued workflow optimization
- Comprehensive policy integration of new operational workflows
- Implementation of quality assessment benchmarking
- Training of new hires

07/30/19 Update
Next Steps include:
- EPCS certification for controlled substance orders (interface)
- eMAR (electronic medication administration record) implementation for 15 remaining facilities (1 pilot si completed in December 2018; second pilot halted to address technical issues)
- DDaP interface (Addiction Services)
- Continuum deployment (Addiction Services module/interface)
- DSS HIE interface
- Continued workflow optimization
- Comprehensive policy integration of new operational workflows
- Implementation of quality assessment benchmarking
- Build in bidirectional interface to communicate pharmacy orders between Centricity and Pharma Vendor
- Build pharmacy interface to communicate between Centricity, Pharma Vendor, and eMAR id determir pharmacy vendor's eMAR will meet needs of DOC better than Fusion built eMAR
- Build interface to communicate between Centricity and new Laboratory Vendor
- Enhance system to allow telemedicine capabilities
- Training of new hires

01/01/20 Update:

Milestones completed since last update:
- eMAR (electronic medication administration record) implementation for 15 remaining facilities (1 pilot si completed in December 2018; second pilot halted to address technical issues)
- Comprehensive policy integration of new operational workflows
- Implementation of quality assessment benchmarking
- Build in bidirectional interface to communicate pharmacy orders between Centricity and Pharma Vendor
- Build pharmacy interface to communicate between Centricity, Pharma Vendor, and eMAR if determir pharmacy vendor's eMAR will meet needs of DOC better than Fusion built eMAR
- Build interface to communicate between Centricity and new Laboratory Vendor

The items below are still in progress:
- DDaP interface (Addiction Services)

- o Estimated Completion: 06/30/2020
- Continuum deployment (Addiction Services module/interface)
  - o Estimated Completion: 06/30/2020
- EPCS certification for controlled substance orders (interface)
  - o Estimated Completion: 12/31/2020
- DSS HIE interface
  - o Estimated Completion: 12/31/2020
- Enhance system to allow telemedicine capabilities
  - o Estimated Completion: 12/31/2020

Project Completion: 12/31/2020

07/01/20 UPDATE:

Milestones completed since last update:

- eMAR (electronic medication administration record) fully implemented across as 14 facilities)
- Several disease specific and HSU Operational Reports have been developed.
- Several modifications related to Covid-19 have been added to allow enhanced reporting.

The items below are still in progress:

- DDaP interface (Addiction Services)
  - o Estimated Completion: 12/31/2020
- Continuum deployment (Addiction Services module/interface)
  - o Estimated Completion: 12/31/2020
- EPCS certification for controlled/ substance orders (interface)
  - o Estimated Completion: 12/31/2020
- DSS HIE interface
  - o Estimated Completion: 12/31/2020
- Enhance system to allow telemedicine capabilities
  - o Estimated Completion: 12/31/2020

Project Completion: 12/31/2020

Spending Plan:

01/10/18 Update

The balance of the funding allotment is scheduled to be paid out over the next two quarters (Q3 and Q4 of FY18) to accommodate MIS purchases and vendor commitments.

07/01/18 Update

A partial balance of the funding allotment was paid in FY18 Q3 to the vendor, consultants, and supporting devices/technologies in line with the full chart documentation implementation phase. Remaining project components (identified under Next Step & Project Milestones) are scheduled to be completed in Q1 and Q2 of FY19. These milestones include the purchase and deployment of remaining equipment necessary to support the system in its entirety. The full balance of the funding allotment is scheduled to be paid by the end of December 2018.

01/01/19 Update

A majority of the funding allotment was paid to the vendor, consultants, and supporting devices/technologies in line with the full chart documentation implementation phase. Remaining project components (identified under Next Step & Project Milestones) are scheduled to be completed in Q3 and Q4 of FY19. The full balance of the funding allotment is scheduled to be paid by the end of December 2019.

07/30/19 Update
A majority of the funding allotment was paid to the vendor, consultants, and supporting devices/technologies in line with the full chart documentation implementation phase. Remaining project components (identified under Next Step & Project Milestones) are scheduled to be completed in Q1, Q2 and Q3 of FY20. The full balance of the funding allotment is scheduled to be paid by the end of Q4 FY2020.

$8,050,000	Received
$ 146,939	Encumbered
$6,945,450	Expended
$ 957,611	Unencumbered Balance

01/01/20 Update:
A majority of the funding allotment was paid to the vendor, consultants, and supporting devices/technologies in line with the full chart documentation implementation phase. Remaining project components (identified under Next Step & Project Milestones) are scheduled to be completed in Q3, and Q4 of FY20 and Q1 and Q2 of FY21. The full balance of the funding allotment is scheduled to be paid by the end of Q2 FY2021.

$8,050,000	Received
$ 100,389	Encumbered
$7,176,936	Expended
$ 772,676	Unencumbered Balance

07/01/20 Update:
A majority of the funding allotment was paid to the vendor, consultants, and supporting devices/technologies in line with the full chart documentation implementation phase. Remaining project components (identified under Next Step & Project Milestones) are scheduled to be completed in Q3, and Q4 of FY20 and Q1 and Q2 of FY21. The full balance of the funding allotment is scheduled to be paid by the end of Q2 FY2021.

$8,050,000	Received
$ 128,343	Encumbered
$7,237,582	Expended
$ 684,076	Unencumbered Balance