IT INVESTMENT CAPITAL FUND
PROJECT CLOSE OUT REPORT

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

FROM: Bruce Metz, Vice President and Chief Information Officer, UConn Health

AGENCY/PROJECT NAME: UConn Health Center / Integrated Electronic Medical Record (EMR)

PROJECT MANAGER: Jan Toth, HealthONE Project Director

Project Start Date: January 1, 2016   **Project End Date:** June 30, 2018

Total IT Capital Funds Allocated: $41,000,000

Total IT Capital Fund Expenditures: $41,000,000

Brief Project Description/Summary:

This project entails implementation of an integrated EMR throughout all UConn Health patient care settings, clinical operations and revenue cycle functions (i.e., fiscal/billing). The integrated EMR product chosen for this project was Epic, and the new EMR has been branded "HealthONE" at UConn Health.

HealthONE replaces outdated systems, particularly the legacy inpatient product suite, which is no longer being upgraded by the vendor and, as a result, will not contain the features needed to comply with federal HITECH Meaningful Use regulations. Implementation of a new integrated EMR enables UConn Health and the state of Connecticut to avoid substantial federal financial penalties while also ensuring our ability to participate in quality-based payer contracts. The integrated EMR provides a contemporary system for capturing, storing and accessing patient data. The system improves user workflows and productivity, and enhances the communication and sharing of clinical data. Epic Systems Corp. as the EMR vendor will provide the required system support, and will maintain and update the code as needed to be compliant with new regulatory requirements. System upgrades will be less invasive and require significantly less downtime, thereby minimizing impact to daily operations and clinical care. Implementation of an integrated EMR also enables UConn Health to comply with state and federal laws requiring the sharing of electronic health information, electronic prescribing, and other new initiatives.

List Project Goals and Deliverables Completed:
(*Please provide a brief summary goals and deliverables of the project that were implemented. Please reference your IT Capital Investment Brief for the initial goals of the project*)

As mentioned in the Project Summary section, a key project goal was the replacement of outdated and fragmented legacy clinical systems with an industry leading integrated EMR (i.e., Epic) across all care settings and revenue cycle functions at UConn Health. Beyond replacing older systems, important project objectives include the following:

- Leveraging a common EMR platform to empower collaboration, knowledge-driven care, care coordination and continuous improvement throughout the enterprise.

- Improving patient safety, increasing clinical quality, enhancing the patient experience, and enabling superior clinical research.

- Strengthening UConn Health to meet today's healthcare challenges such as the shift to value-based care, requirements for better outcomes, and demands for greater transparency.

Major project deliverables consisted of the following items: 1) installation of the Epic system including over 30 application modules; 2) conversion of millions of data records from legacy systems; 3) deployment of the technical infrastructure (e.g., servers, storage, network equipment, computers, and mobile devices) required to run the Epic system; 4) redesign of hundreds of workflows and operational processes as well as the creation of new clinical content (e.g., order sets, care plans, and clinical documents); and 5) training of approximately 3,500 members of UConn Health in use of the new system.

Project Replication Opportunities:
(Are there opportunities to repeat or leverage the project solution by other state agencies? Please provide a brief explanation)

Other state agencies involved in healthcare that plan to implement an EMR could leverage the implementation methodology utilized by UConn Health. The methodology includes: an identification of discrete project phases each with their own project plan; tools for managing different components of the project; a governance structure for making decisions and monitoring performance; and an approach for identifying and resolving project risks.

State agencies that engage in a large-scale system implementation could benefit from the change management approach adopted by UConn Health. Key elements of this approach include: 1) creating organizational commitment; 2) planning and organizing for the change; 3) communicating throughout the implementation period and after; 4) solidifying the change within different organizational areas; and 5) planning for future phases beyond implementation to capitalize on the initial investment.

Key Lessons Learned:
(Provide any lessons learned experienced during this project that may be helpful to other agencies starting a similar project)

Important lessons learned by UConn Health as a result of the Integrated EMR Project that may be helpful to other agencies include the following:

- Conducting an organizational readiness assessment and current state analysis are vital activities to undertake prior to starting an implementation.

- Engaging end users in the implementation early and often is essential for getting necessary buy-in and input.

- Identifying and resolving critical risks throughout the implementation is a major driver of project success.

- Training and supporting users prior, during and after the system goes live with comprehensive and relevant education programs along with skilled support resources is crucial.

- Obtaining organizational leadership support from the outset combined with a well-executed communication plan is a key aspect of the implementation.

- Ensuring there are adequate resources after the implementation is necessary to stabilize the system as well as to realize investment benefits once stabilization is achieved.