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# MEMORANDUM

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**To:** Joint Legislative Committee on Information Management and Technology  
**From:** Sean McSpaden, Principal Legislative IT Analyst  
**Date:** May 16, 2019  
**Subject:** Oregon Department of Corrections: SB 5504 - POP #103  
LFO Analysis and Recommendations

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**Agency Request:** Within the Department of Corrections' (DOC) Agency Request Budget - Policy Option Package #103, DOC requested \$3,700,000 General Fund to initiate and complete Stage Gate planning activities for the agency's Electronic Health Records (EHR) Project. The Governor's Budget includes incremental funding in the reduced amount of \$1,500,000 General Fund. No permanent, limited duration or temporary positions are being requested as part of this package. With approval of Package #103, DOC intends to obtain, via contract, the project management, business analysis, and independent quality management services, needed to proceed with Stage Gate planning activities. This work will include a pilot project designed to evaluate the potential shared use of commercially-available off-the-shelf (COTS) EHR solutions currently in use by the Oregon Youth Authority and the Oregon State Hospital.

Based on the initial business case and preliminary project planning conducted to date, the total estimated cost for this project is \$13.8 million over a 10-year period (includes 2 years of estimated operations and maintenance costs). However, as the project is early in its planning phase (Stage Gate 1), and with the possibility of utilizing a multi-agency share services solution, an accurate cost estimate or estimated timeframe for completion of the project cannot yet be determined.

## **A. LFO Analysis**

The Oregon Department of Corrections (DOC) operates correctional institutions and performs legislatively approved functions for over 14,500 adults sentenced to prison for more than 12 months within 14 institutions throughout Oregon. DOC also oversees community parole and post-prison supervision of about 2,500 individuals in Linn and Douglas Counties.

DOC's healthcare system is focused on healthcare coordination and service delivery to the adults in custody, with 5,400 new intakes per year, of which 35-40% are first time adults in custody that require manual assembly of a new health record. Patient encounters occur primarily at DOC clinics but also include off-site care provided at geographically dispersed specialty clinics and hospitals. In addition to these figures, DOC's approximately 550 Health Services staff engage in over 1 million patient care encounters each year. DOC's health care system includes, but is not limited to, general medical care, dental care, behavioral health services, and pharmacy services. Each of these 1 million patient care encounters are documented in the medical record as required by law. DOC maintains all of these medical records in paper form.

DOC is responsible for maintaining patient records that meet the requirements set forth by administrative rules, and federal and state laws pertaining to health/medical information. Key problems with the current paper-based health/medical records system are:

- Medical, dental, mental health and pharmaceutical records share a single, paper-based file requiring handwritten entries.
- Misrouting of files between medical institutions during transport and misfiled records can potentially delay or obstruct continuity of care.
- Delay of non-emergent off-site care due to missing medical records.
- Copying medical records, when requested by off-site providers, is cumbersome and time consuming. It is not uncommon for a chart to contain hundreds of pages.
- Unable to effectively share or access patient information, particularly when they are transferred between institutions or have services performed by various medical services within the same facility.
- Inability to efficiently collect data to monitor and evaluate chronic health conditions or manage disease outbreaks.
- A paper-based system does not provide a means for utilization review, such as measuring percentages of patient/staff encounters in each area of health services.

The implementation of an Electronic Health Record (EHR) system will minimize or eliminate the need for paper files and medical records rooms. Eliminating the records room at each institution will free up valuable space, improving clinic workflows and operations.

In addition, medical records are kept on site for 30 days following an adult in custody's release and then transferred to a central warehouse where they are stored for an additional 7 years. At any given time, there are an estimated 51,000 medical records in the central warehouse, which requires 2 full time employees to maintain, not including medical record clerks at DOC's larger institutions.

In current medical records administration, DOC relies on a paper-based medical record combined with use of limited functionality within the DOC Offender Management System - a Legacy iSeries COBOL application originally built in 1990. Any new Electronic Health Records (EHR) system will need meet federal and state records privacy, confidentiality, and security laws and rules, and be able to interface (exchange information) with the following internal and external information systems:

- Oregon Health Authority systems
- External EHR systems
- Offender Management System (OMS)
- Laboratory
- Radiology
- Correctional Institution Pharmacy System (CIPS)
- Health Information Exchange (HIE)

*Agency Actions to date:*

The effort to automate, integrate and modernize the DOC's medical/health records management "system" is well-documented:

- October 2004: The Task Force on Managing Mental Illness in Prisons presented its findings and recommendations on electronic medical records (EMR) to DOC, determining that: “Standardized information technology should be available to all staff, throughout the Department. Including automated treatment and behavior plans, computer access for officers on every tier...electronic medical records, access to transfer information, and automated tracking of medication compliance. Standardized access to, and maintenance of, behavior and treatment plans would provide security staff with pertinent information when needed.”
- May 2005: DOC initiated the “M-Track Electronic Medical Record Health Services Automation Project,” which consisted of a business needs, technical assessment, requirements definition and gap analysis of DOC’s need for an automated EMR system.
- September 2009: The industry moved from a medical record focus (EMR) onto broader all-encompassing patient health records. DOC released a request for information (RFI) for Electronic Health Records (EHR) systems to obtain information on how various solutions might meet DOC business needs and requirements.
- January 2011: A business requirements document was created for an EHR system by a selected third-party vendor. The 2011 effort moved to contract execution for implementation; however, the contract was cancelled.
- June 2013: Senate Bill 843 (2013) created the Workgroup on Corrections Health Care Costs. In December 2014, the group concluded its evaluation of the DOC health care system expenditures and efficiencies. One of the Workgroup’s major recommendations was for DOC to purchase and implement an EHR system to improve clinical operations and increase operational efficiency. DOC requested and received funding for initial start-up costs.
- January 2015: An agency-wide readiness assessment report was provided by a third-party vendor for the implementation of a commercially available, off-the-shelf (COTS) EHR solution.
- June 2015: DOC published its “Business Case for an Electronic Health Records.” However, the project did not move out of the business-case stage.
- July 2015: DOC appointed a new Health Services Administrator with experience implementing and administering EHR systems.
- January - March 2016: DOC released an RFP seeking a team of Business Systems Analysts to update/revise the Business Case and hired a new Chief Information Officer, with experience implementing and administering EHR systems.
- December 2016: DOC submitted an Information Resource Request and revised business case to the Office of the State CIO (OSCIO).
- January 2017: DOC requested and received Stage Gate 1 endorsement.
- August 2018 - DOC submitted Package #103 as part of DOC’s 2019-21 Budget request
- December 2018 - DOC developed a statement of work to obtain, via contract, required project management and business analyst services to move the project forward.

The DOC Electronic Health Record (EHR) project is currently in the “planning” phase (between stage gate 1 and 2) of the Joint State CIO/LFO Stage Gate Review process. Within package #103 and the revised business case, DOC has evaluated five potential alternatives: 1) Maintain the status quo – continue use of the existing paper-based medical record; 2) Acquire a commercially available, off-the shelf (COTS) EHR solution to be hosted and maintained at the State Data Center 3) Acquire a Software as a Service (SaaS) based EHR solution; 4) Build a customized EHR solution in-house or via contract; (5)

Acquire and implement an electronic document imaging and management system. Based on its preliminary analysis, DOC recommended the pursuit of either Option 2 - Acquire a COTS EHR solution, or Option 3 - Acquire a SaaS-based EHR solution. DOC's preliminary analysis estimates the projected 10-year cost of ownership for Option 2 to be approximately \$13.8 million (includes 2 years O&M).

The Legislative Fiscal Office (LFO) clearly recognizes the business need for Package #103 and the business benefits that would result from replacing the current paper-based medical record. LFO also agrees that the acquisition and implementation of a commercially available, off-the-shelf (COTS) solution under an on-premise hosting or on a Software as a Service (SaaS) basis will significantly reduce the risks associated with this project, relative to developing an in-house custom solution. However, as the project is early in its planning phase (Stage Gate 1) an accurate cost estimate or estimated timeframe for completion of the project (under option 2 or 3) cannot yet be determined.

DOC has completed an acceptable level of initial planning and due diligence, and needs to move forward with this project, at long last. If Package #103 is approved, DOC will have the incremental resources needed to: obtain required project management and business analyst services; complete foundational business process, and business systems analysis activities; obtain and utilize independent quality management services; complete required project management planning; conduct pilot activities; update the business case; obtain State Gate endorsements; develop a solution vendor request for proposal (RFP); and, prepare a budget request to begin and complete project execution activities from the 2020 annual legislative session through the 2021-23 biennium.

## **B. LFO Recommendations**

LFO recommends incremental, conditional approval of Package #103 assuming the spending authority and personnel resources are made available to DOC within SB 5504. Specifically, LFO recommends that only the funding requested for project planning activities be approved and that DOC be required to seek additional funding and obtain legislative approval to proceed with project execution activities during the 2020 Annual Legislative session. Specifically, LFO recommends DOC:

- Continue to work closely with and regularly report project status to the OSCIO and the LFO throughout the lifecycle of the proposed DOC Electronic Health Record (EHR) project.
- Follow the Joint State CIO/LFO Stage Gate Review Process
- Contract for qualified project management and business analyst services with experience in planning and managing projects of this type, scope and magnitude.
- Update the Business Case and foundational project management documents as required
- Work with OSCIO to acquire Independent Quality Management Services as required to:
  - Conduct an initial risk assessment
  - Perform quality control (QC) reviews on the Business Case, solution vendor procurement documents, and foundational project management documents as appropriate.
  - Perform ongoing, independent quality management services as directed by the OSCIO
- Complete the planned pilot project to evaluate the potential shared use of COTS EHR solutions currently in use by the Oregon Youth Authority and the Oregon State Hospital.
- Submit the updated Business Case, procurement and project management documents, initial risk assessment, and QC reviews to the OSCIO and LFO for Stage Gate Review

- Report back to the Legislature on project status during the 2020 Annual Legislative Session and/or to interim Legislative committees as required
- Utilize the Office of the State CIO's Enterprise Project and Portfolio Management system for all project review, approval, and project status and closeout reporting activities throughout the life of the DOC Electronic Health Record (EHR) project.

- Motion on the LFO recommendations

**C. Final IT Subcommittee Action**

Transmit the Information Technology Subcommittee recommendations to the Public Safety Subcommittee of the Joint Committee on Ways and Means.