

Chapter 15

eHealth Saskatchewan – Implementing Electronic Health Records

1.0 MAIN POINTS

By February 2018, eHealth implemented the one outstanding recommendation we initially made in 2009 related to guiding, monitoring, and reporting on implementation of the electronic health records (EHR) system. eHealth has processes in place to adequately monitor costs and timelines for enhancements to the EHR system.

2.0 INTRODUCTION

eHealth Saskatchewan is responsible for creating an EHR system for patients and providing healthcare professionals access to the system. Patient health information in electronic form is easily and quickly accessible no matter where an individual seeks medical attention. An EHR system can improve the delivery of health care by making the right data available at the right time to the right healthcare professionals.

In 2009, we assessed eHealth's processes to guide, monitor, and report on the implementation of the EHR system.¹ We made four recommendations. Our *2016 Report – Volume 1*, Chapter 22 concluded that eHealth Saskatchewan implemented three of the four recommendations. This chapter describes our third follow up of management's actions on the one outstanding recommendation.

To conduct this follow-up audit, we followed the standards for assurance engagements published in the *CPA Canada Handbook – Assurance* (including CSAE 3001). To evaluate eHealth's progress towards meeting our recommendations we used the relevant criteria from the 2009 audit. Management agreed with the criteria in the 2009 audit. We inquired on processes to track EHR project timelines and costs as well as reviewed key documents (e.g., three-year priority roadmap, project plans, forecasts, and reports to the Board).

3.0 STATUS OF RECOMMENDATION

This section sets out the outstanding recommendation including the date on which the Standing Committee on Public Accounts agreed to the recommendation, the status of the recommendation at February 28, 2018, and eHealth's actions up to that date. We found that eHealth had implemented the recommendation.

¹ 2009 Report - Volume 3, Chapter 10C.



3.1 Monitoring Costs and Timelines for EHR System

We recommended that eHealth Saskatchewan monitor its overall costs and timelines, compared to its plans, for development and implementation of electronic health records. (2009 Report – Volume 3; Public Accounts Committee agreement June 10, 2010)

Status – Implemented

eHealth has processes in place to monitor costs and timelines for enhancements to the EHR system.

As set out below, the costs to develop, enhance, and maintain the EHR system are not trivial. This increases the importance of monitoring them.

eHealth maintains the following processes to monitor costs and timelines for enhancements to the EHR system:

➤ Preparation of project plan and status reports

Based on the three-year priority roadmap,² a project plan is prepared for each enhancement project with anticipated timelines for project completion and total projected costs to determine total cash-flow needed.

A status report is prepared as the project progresses to monitor the status of the project against its planned timelines.

➤ Preparation and review of project forecast reports

A monthly forecast report is prepared for each EHR enhancement. The report includes a comparison between actual and projected costs, and explains significant variances. Senior management reviews these reports including variance analysis to monitor the costs incurred to date.

The Board also receives quarterly forecast reports for its review.

In October 2014, eHealth completed the last of the core components of the EHR system, as set by Canada Health Infoway (see **Figure 1** for core components).³ At March 31, 2015, eHealth had capital assets worth a total of \$170 million (of which 86% related to IT system development). eHealth spends about \$10 million to \$20 million on capital asset additions each year. At March 31, 2017, eHealth held capital assets worth a total of \$200 million (of which 77% related to IT system development).

² The priority roadmap is designed to guide future investments in IT systems within the provincial EHR system. Future initiatives include further enhancements pertaining to the eHR Viewer, clinical document integrations, and Electronic Medical Record (EMR) interoperability.

³ Canada Health Infoway is an independent, federally funded, not-for-profit organization tasked with accelerating the adoption of electronic health records across Canada.

Figure 1 – Core Components of the EHR system

EHR system core components included IT systems for lab results, drug information, immunization information, diagnostic imaging/reports, discharge summaries, chronic disease information, as well as the integration services.

Integration services include the shared client index/client registry and eHR Viewer.^A Integration services is the glue that connects these systems to present a single view of patient information anywhere in the province.

Source: eHealth Saskatchewan.

^AeHR viewer is an online portal, which enables health practitioners to view patients' health records.

Since 2014 (its completion of core components), eHealth has focused on the stability and sustainability of the EHR IT systems (i.e., keeping systems current and secure). Of eHealth's \$99 million in expenses in 2016-17, 30% related to salaries, 28% to software/hardware and related licensing and maintaining of IT systems, and 16% to amortization of capital assets.

Also since 2014, eHealth continues to expand the information available through the eHR Viewer and increase its use among healthcare providers. For example, in 2016-17, medical imaging information from community-based radiology clinics was added to the EHR system.

