Electronic Health Records Branch
Alliance Management Office Report

Ministry of Health Services
March 31st, 2009
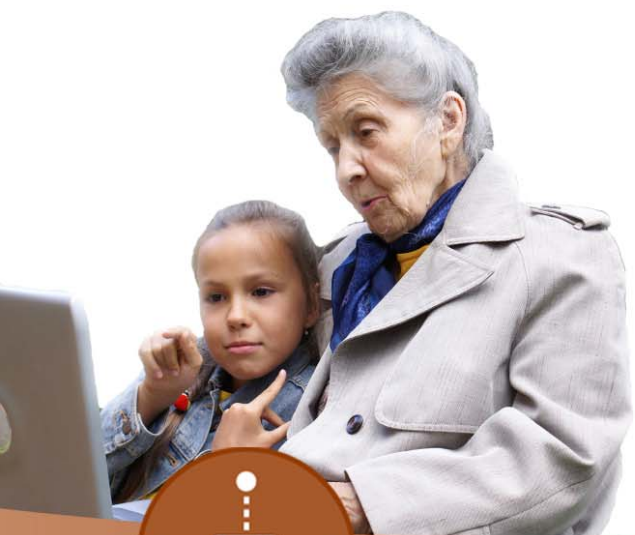
Table of Contents

1.0 Initiative Overview

eHealth - enabling better healthcare

As the boomer generation advances and several pressures continue to mount on our health system, the Ministry of Health Services is continually seeking strategies to improve services to citizens and health care professionals alike.

eHealth is an information technology (IT) initiative designed to consolidate varied systems of technology spread throughout the health system. Instead of supporting several independent IT systems that can create duplication and barriers to the flow of health information, an integrated approach is being developed to tie systems together and enable standardization. The result is a more efficient health record system that will save time and unique investment while freeing up data to flow throughout the system into the hands of authorized care professionals where and when they require it.

Over the next decade, IT investments such as eHealth will enable better health care service by reducing the administrative burden on each facility while strengthening the privacy and security of personal health information overall.

On April 13, 2007, the Province of British Columbia as represented by the Ministry of Health Services (Province) entered into a long-term relationship with Sun Microsystems (B.C.) Inc. (SUN) to design, build, implement and operate two systems, the Provincial Lab Information System (PLIS) and the Interoperable Electronic Health Record System (iEHR) system and to deliver associated services (the Agreement) .These two systems will provide the foundational components for eHealth.

The value of the total contract to deliver both the PLIS and iEHR systems and operations support services is approximately $149M over a 10 year period.

For a more detailed description of this initiative, please refer to the Project Summary found at: http://www.health.gov.bc.ca/ehealth/public.html

2.0 Status Update

What's New:

- Completion of design requirements and technical design documentation to meet the prescribed business requirements specified by stakeholders
- Substantial completion of the Production, Candidate and Staging Environments to provide the technical infrastructure for the solution
- Initial and User Acceptance Testing and defect remediation of the integral system components
- Introduction of clinical data validation
- Continued compliance with Canada Health Infoway Blueprint
- Initial adoption community engagement with the Provincial Health Services Authority of British Columbia (PHSA)
- Inception of eHealth Operations Services at PHSA
- Province extended the license necessary to extend the functionality of the Health Information Access Layer (HIAL) to other government services

Challenges:

- In order to ensure that the original contract remains current and relevant, ongoing contractual adaptation has been required. Ensuring fastidious compliancy with evolving privacy and security policies along with accommodating emerging business requirements created considerable work load throughout the year in the area of contract management. Additional resources were applied to the contract management area to respond to the workload.

3.0   Guiding Principles

The Province and Sun acknowledge and agree that the primary objectives and guiding principles of their contractual relationship under the iEHR-PLIS Agreement are as follows:

- To develop, deliver, maintain, support and license the iEHR and PLIS as well as provide the services as agreed by Sun and the Province;
- To leverage existing infrastructure and Province systems where appropriate to do so;
- To develop the PLIS system and the iEHR system based upon the 'Commercial Off the Shelf' (COTS) products to the extent practicable with the capacity to support future development of domain repositories;
- To develop the PLIS system and the iEHR system in alignment with the Infoway Blueprint to be capable of replication across jurisdictions in Canada;
- To develop a long term and mutually beneficial business relationship characterized by mutual trust, respect and understanding; and
- To protect the security and privacy of the personal information of the Province to ensure there is no material risk that any such information:
  - will be disclosed or used contrary to the terms of the Agreement or any applicable laws, or
  - is stored or can otherwise be accessed anywhere other than in BC (or elsewhere in Canada as may be permitted under or pursuant to the Agreement), whether in its original form or otherwise, without the approval of the Province.
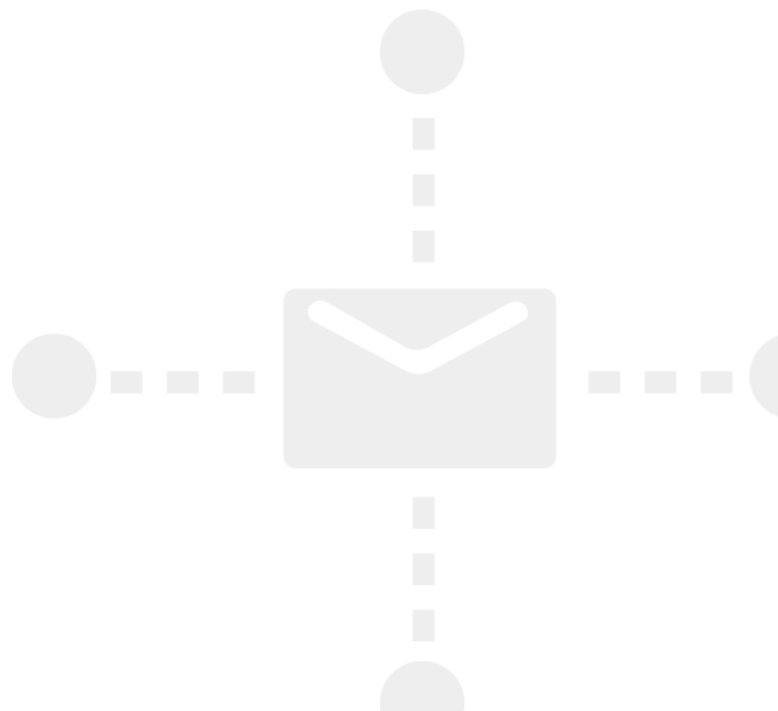
4.0   Appendix A – Contract Objectives: Reporting on Results

Objective 1 – Build and deliver the iEHR and PLIS, including support services

Activities	2007-2008 Results	2008 – 2009 Results
Design Requirements Documents	Complete	Complete
Technical Design Documents	Ongoing	Complete
System Level Requirements Document	Ongoing	Complete
Security Threat and Risk Assessment (STRA) for Staging and Production Environment	Ongoing	Complete
Component Build	Ongoing	Complete
Candidate, Staging and Production Builds	Not yet started	Complete
Component Test Plan	Not yet started	Complete
De-identified test data	Being prepared	Complete
System Test	Not yet started	Complete
User Acceptance Testing	Not yet started	Complete
Development of interfaces to Provincial Registry Systems	Ongoing	Complete
Incident Management Process	Ongoing	Complete
Training Strategy	Ongoing	Complete
Training Plan	Not yet started	Complete
Project Management support	Ongoing	Ongoing

Objective 2 – Leverage current infrastructure and provincial systems where appropriate

iEHR will use the Health Private Network Gateway (renamed the eHealth Network Gateway or eNG) established in 2001. It securely connects health authorities on a high bandwidth, quality-of-service, IP-enabled network. The eNG, having a high-speed core and redundant and resilient architecture, ensures fast recovery in the event of any failure. The network is managed by a different service provider, ensuring its availability at all times.

There are two registries which were designed, built and implemented before the advent of the eHealth program: the Provider Registry which contains demographic and core data about B.C. physicians, pharmacists and nurses; the Client Registry which contains demographic information about B.C. patients; The iEHR will leverage these foundational registry systems to link patients with health care information (lab results, x-rays, cat scans and MRIs, etc.) and health care providers. This will ensure that the right health information about the right patient will be provided to the right health care provider.

Objective 3 – Protect the security and privacy of personal information

Meaningful privacy protection for personal health information is a high priority for the Ministry of Health Services. Privacy and security provisions in British Columbia are among the strongest in Canada and are fully compliant with all legislated requirements. Additionally, options will be provided for individuals to mask their health information based on their personal preference, adding another level of privacy.

Electronic Health Records will only be implemented once all the appropriate privacy policies and processes are in place. A measured incremental approach will be taken to implementation. All eHealth projects will be housed on networks with very strong security. Access models along with policies and internal security will ensure only those with a legal right to see the records have access to patient information.

Recommendations from several organizations, including Health Authorities, and the BC Civil Liberties Association helped in drafting the *E-Health Personal Health Information Access and Protection of Privacy Act* - a specific legislative framework governing access and privacy for electronic health information databases. Consultations will continue with major stakeholder groups on the subject of eHealth privacy implementation.

BC's Information and Privacy Commissioner, BC Medical Association, College of Physicians and Surgeons, along with several other key organizations, are involved as members of an advisory council making recommendations to the Province about Electronic Health Records implementation.