

# eHealth | Quarterly Status Report July - September, 2010

Reporting on the implementation of electronic medical record systems in physician offices, the expansion of telehealth services and the development of a provincial electronic health record solution















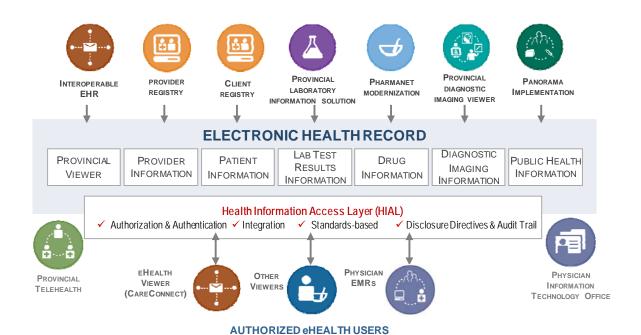
# eHealth | About the Quarterly Status Report

The eHealth Quarterly Status Report fulfils a Ministry of Health Services leadership commitment to keep eHealth stakeholders apprised of its progress. The program has prepared quarterly status reports since the start of fiscal year 2009/10 and they have been well received by program stakeholders.

No significant changes to the format of the report since the last quarter.

The structure of the quarterly report is as follows:

Section		Description and Status
Project Status	>	For each project, provides the status of the project phases, highlights key activity from the reporting period and outlines current challenges of note.
Milestone Status	>	Indicates progress against the milestones identified in the eHealth Tactical Plan, March 2010 Update, and any formally approved changes.
<b>Budget Status</b>	>	Outlines the projects' budgets and presents actual expenditures against planned expenditures for the current fiscal year.
Adoption	$\rangle$	Provides an indication of progress in achieving adoption targets.
Benefits Evaluation	>	Describes the work under way to measure progress toward realization of intended eHealth benefits.



## eHealth | Project Status



#### **Provincial Laboratory Information Solution (PLIS) Project**

The PLIS Project is developing a provincial repository of diagnostic laboratory test results, populated from all public and private laboratories, accessible by authorized care givers through the Electronic Health Record (EHR) infrastructure.

#### Status by Phase:

Project Phase		Percent Complete		Status				
Planning	$\rangle$	100%	$\rangle$	Complete				
Development	$\rangle$	100%	$\rangle$	The provincial repository is complete and in full production.				
Deployment	>	40%	>	Deployment includes integration with source lab systems within each of the six health authorities (15% each) and with public labs (10%). Integration with the Provincial Health Services Authority and Interior Health Authority have been completed. Planning for the Northern and Fraser Health Authorities are underway.				

#### **Highlights for Reporting Period:**

- Work with Northern Health Authority has progressed and implementation is expected in February 2011.
- Planning is underway with Fraser Health Authority, targeted for implementation in the 3<sup>rd</sup> quarter 2011/12.
- Completion of the remaining two health authorities, Vancouver Coastal and Vancouver Island, is tentatively scheduled for the 3<sup>rd</sup> and 4<sup>th</sup> quarters of 2011/12 respectively.

- The limited availability of some lab results is resulting in slower than anticipated adoption. A significant number of lab results are not currently available through EHR as a result of legislative confidential and data mismatch errors. Regulation changes intended to address the legislative confidential issue are expected to be made in the third quarter.
- A plan for public lab results onboarding within the March 2012 has not been finalized.
- The exercise of consolidating services across the lower mainland has resulted in a high demand for lab resources as well as creating as yet unresolved questions related to responsibilities.



#### **Provincial Diagnostic Imaging Viewer Project**

The Provincial Diagnostic Imaging Viewer (PDIV) Project will enable authorized users to access diagnostic images from throughout the Province via a diagnostic imaging viewer.

#### Status by Phase:

Project Phase		Percent Complete		Status				
Planning	$\rangle$	100%	$\rangle$	Complete				
Development	>	100%	>	The development phase was a procurement exercise, leveraging an existing provincial contract to deploy the diagnostic viewer provincially.				
Deployment	>	10%	>	Deployment includes the rollout of the viewer to each of the six health authorities (10% each), community imaging clinic implementation (10%) and viewer integration with the EHR infrastructure (30%). A limited deployment of the viewer within the Vancouver Coastal and Fraser Health Authorities had been completed.				

#### **Highlights for Reporting Period:**

- Project responsibility for the completion of viewer deployment activities has been transitioned from the Ministry of Health Services to the Provincial Health Services Authority (PHSA).
- Plans for the completion of viewer deployment in the Vancouver Coastal and Fraser Health Authorities by April 2011 are being finalized.
- A plan for the completion of deployment to PHSA by the end of March 2012 is being developed.

- Plans to complete PDIV integration with the eViewer and deployment to the Interior, Northern and Vancouver Island Health Authorities have yet to be developed.
- A consolidated provincial archive is outside the scope of completion for March 2012. Health authorities will continue to manage this individually.
- A strategy for community imaging clinics needs to be determined and, depending on the ability of the clinics to implement PACS, may impact adoption.



#### **BC Panorama Project**

The BC Panorama Project, also referred to as the Public Health Information Project (PHIP), is implementing a Public Health Surveillance application called Panorama, developed in BC for Canada Health Infoway for national deployment. Panorama is an integrated suite of system components consisting of seven major modules:

- Communicable Disease Case Management
- Outbreak Management
- Vaccine and Inventory Management
- Family Health

- Immunization Management
- Notifications Management
- Work Management

#### Status by Phase:

Project Phase	Percent Complete		Status				
Planning >	100%	$\rangle$	Complete				
<b>Development</b> >	100%	>	The development phase was the configuration of the Panorama application for BC and the development of the Family Health component.				
<b>Deployment</b> >	5%	>	Deployment includes the deployment of all Panorama modules to the Centre for Disease Control (40%) and all six health authorities (10% each). Technical deployment has been completed and limited deployment of the inventory module to the BC Centre for Disease Control was completed in for October 2010.				

#### **Highlights for Reporting Period:**

- The Panorama solution is operational in a production environment and is fully integrated with BC's client and provider registries.
- Key stakeholder engagement with the BC Centre for Disease control is underway and a limited deployment of the inventory module was completed on October 15, 2010. Implementing the Inventory management module will enable the Province to better manage the inventory of publicly funded vaccines in times of a pandemic as well as obtain cost savings due to decreased vaccine wastage.
- An Implementation Leads Committee has been established to plan the deployment of the remaining Panorama modules. The target date for the implementation of all modules is June 30, 2011.

- > Stakeholder business cycles limit the implementation windows. Deployment during peak immunization season is not optimal due to resourcing constraints within the regional health authorities at that time.
- Privacy and security constraints regarding the confidentiality of data present challenges to testing and conversion.



#### PharmaNet Modernization Project (formerly known as the eHealth Drug or eDrug)

Will implement a standards-based medication management solution and an e-Prescribing function that will enhance the current PharmaNet system, and support adoption within pharmacy, medical practice, health authority and other settings.

#### Status by Phase:

Project Phase		Percent Complete		Status					
Planning	$\rangle$	100%	>	A re-planning exercise was completed in the first quarter.					
Development	>	10%	>	The development phase for the PharmaNet Modernization Project includes the design and development of the medication management and ePrescribing functionality within the PharmaNet application. The development and testing platforms are in place and detailed requirements are under development.					
Deployment	$\rangle$	0%	>	Deployment includes the integration of the improved PharmaNet with the EHR infrastructure and deployment to pharmacists and physicians.					

#### **Highlights for Reporting Period:**

- The project has been re-planned in order to deliver clinical value by March 2012.
- Along with the medication management and ePrescribing functionalities, project scope has been confirmed to include:
  - Integration with the Health Information Access Layer;
  - Draft compliance specifications for point of service vendors will completed by the end of fiscal 2010/11; and
  - o Pre-production conformance testing of an EMR software vendor and a pharmacy software vendor.
- The high level ePrescribing requirements have been signed off by the Pharmaceutical Services Division and the detailed requirements are under development.
- The medication management framework workflow has been finalized.

#### **Challenges:**

Tight management of the scope and budget of the project is required in order to deliver the functionality for the medication management framework and ePrescribing.



#### **Client and Provider Registry Projects**

The registry projects developed repositories for BC patient and health care provider information. The repositories each function as a source of truth, linking with other health systems to ensure that health system clients and providers are uniquely identified. Both projects are complete

#### Status by Phase:

Project Phase		Percent Complete		Status
Planning	$\rangle$	100%	$\rangle$	Complete
Development	$\rangle$	100%	$\rangle$	Complete
Deployment	>	100%	>	The client and provider registry systems have both been in operation for a number of years. The original scope of deployment for the client registry included active or passive integration with Northern, Vancouver Coastal and the Provincial Health Services Authorities.

#### **Highlights for Reporting Period:**

Complete - Not applicable.

#### **Related Activities:**

- > While the registry projects were successfully completed, subsequent lessons learned related to provincial EHR deployment have made the benefits of active integration with the client registry clear. As a result, all health authorities are moving forward with plans to integrate their systems with the client registry. Interior Health has already completed this work.
- > A plan for the integration of health authority systems to both the provincial client and provider registry systems is in the initial stages of development and is under consideration for Canada Health Infoway investment.



#### interoperable Electronic Health Record Project

The Interoperable Electronic Health Record (iEHR) Project provides the core technical infrastructure supporting the provincial EHR, including the following primary components:

- eHealth Viewer a secure web-based application providing 'view' capability of health information to authorized clinicians,
- Health Information Access Layer (HIAL) enabling secure information exchange between health professionals, the information repositories of the provincial EHR and the source systems that feed the provincial EHR
- Secure Health Record (SHR) a repository for miscellaneous care-related reports and patient encounter records and, in particular, hospital discharge summary information.

#### Status by Phase:

Project Phase		Percent Complete		Status					
Planning	$\rangle$	100%	$\rangle$	Complete					
Development	$\rangle$	100%	$\rangle$	The EHR infrastructure has been built and is in operation.					
Deployment	>	20%	>	Deployment includes the integration of the HIAL with the four clinical EHR systems (40%) and eViewer deployment to all six health authorities (60%). As of the end of June, the lab domain had been integrated with the HIAL and viewer deployment within the Vancouver Coastal Health Authorities had been completed.					

#### **Highlights for Reporting Period:**

- The eViewer has been fully deployed to the balance of Vancouver Coastal Health Authority's 3,100 clinical users.
- Work is underway to decouple the eViewer from Vancouver Coastal's underlying infrastructure in preparation for eViewer deployment to other health authorities.
- A proposal to leverage Interior Health Authority's existing lab results distribution solution for provincial use via the HIAL is being considered/reviewed.

- The management of system enhancement releases to ensure timely implementation while controlling the grouping and scheduling of releases to deliver within the allocated budget.
- A final decision regarding the solution design for HIAL integration with PharmaNet is required.
- Plans for the deployment of the eViewer to the Northern and Vancouver Island Health Authorities have yet to be developed.



Projects:		% Complete
TeleHomecare	Improves care and reduces hospital readmissions of patients with Congestive Heart Failure through early detection and self monitoring.	100%
TeleOpthalmology	Improves retinal screening service access for populations at high risk of retinopathies (i.e. First Nations people and diabetics) living in rural and remote communities.	100%
TeleThoracic	Provides access to quality thoracic surgical care to residents of BC and the Yukon through videoconferencing technology.	85%
TeleOncology	Improves access for patients and their families in remote and rural areas of the province to specialized oncology services via regional cancer centres.	100%
First Nations Telehealth Expansion	Builds and expands Telehealth capacity within First Nations communities. Establishes the technical and human resources in First Nation communities necessary to address health service access inequities within BC.	0%
Telepathology	Develop an integrated Telepathology network for consultation, education and quality assurance within the anatomical pathology and clinical laboratories in BC.	98%

#### **Highlights for Reporting Period:**

- > TeleHomecare and TeleOncology are fully implemented.
- > TeleThoracic services are being delivered despite minor technical problems with stethoscopes.
- Final Adoption and Benefit Evaluation reports are underway for all clinical expansion projects and expect to be complete by May 2011.
- > Telepathology:
  - o Transition from project to operational status underway in VIHA
  - Phase 2b provincial telepathology standards, architecture requirements and Post Project
     Outcomes and Strategy draft documents completed, and
  - Approximately 30% of the laboratory sites within BC have access to some form of telepathology in BC.

#### Challenges:

> The First Nations Telehealth Expansion Project remains on hold with Canada Health Infoway while First Nations, the Province and Federal governments work on a new governance model for health service delivery for First Nations.



## **Electronic Medical Record Systems Initiative**

The British Columbia Medical Association (BCMA) and the Ministry of Health Services (the Ministry) agreed to work collaboratively to coordinate, facilitate and support information technology planning and implementation for physicians as part of the 2006 Physician Master Agreement. The scope of the information technology includes: professionally hosted electronic medical record applications; implementation support; network connectivity; office hardware such as computers and printers; and e-mail. The Electronic Medical Record (EMR) Program in the Ministry manages the relationship with the EMR Service Providers, ensuring contract compliance while maintaining collaborative vendor relationships and coordinating the change and release management cycle associated with client requirements. Health Shared Services BC manages the relationship with TELUS and oversees the deployment of the Private Physician Network (PPN).

The Physician Information Technology Office (PITO) coordinates the implementation of the information technology products and services with EMR service providers and physician practices, and disburses funds to physicians as defined in the Physician Master Agreement.

#### **Highlights for Reporting Period:**

- Approximately 90% of large practices, 50% of medium practices and 10% of small/solo practices had either implemented their EMR or were in the process of implementing their EMR as of September 2010.
- eReferral pilot projects are well underway in leading Communities of Practice with extremely positive physician and clinic staff feedback.
- Planning for Post Implementation Support (PIS) pilot projects is being finalized. These have been established to maximize the impact of EMRs, and are focused primarily on chronic disease management, mental health, prescribing, and workflow optimization. General Practitioners have been very receptive to the introduction of PIS, with demand exceeding capacity in the pilots.
- PITO has launched the Alternative Specialist Funding Program to address the distinct needs of some specialists. To date, it has been well received by specialists.
- A project to define EMR-2-EMR data transfer specifications has been initiated to capture the business and technical requirements, perform an options analysis, and make recommendations on how best to support physicians' transfer of data between EMRs.
- Consistent with the EMR integration strategy, an EMR Integration project (stage one) has been initiated that includes EMR integration with the provincial client and provider registries, the Provincial Laboratory Information Solution, the PharmaNet systems and the addition of ePrescribing functionality.
- Bandwidth improvements have been achieved for small practices using the copper-based circuits on the Private Physician Network (PPN).

- While there are high adoption levels amongst larger full service practice clinics (6+ physicians), achieving similar rates amongst solo and small (2-3 physician) clinics and specialists in complex environments remains a challenge, particularly in urban areas.
- Many clinics are reluctant to move forward without firm ongoing EMR funding post-2012.
- Physicians are requesting consistent approaches across the health sector for electronic report delivery (e.g. Discharge summaries) and eReferrals, which EMRs could be integrated with. Some physicians are seeking this level of integration before they adopt an EMR.
- The PPN circuits designed for mid-size practices are not meeting physician requirements and need to be upgraded.

# **eHealth | Milestone Status**

The table below provides the status of the key eHealth project deployment milestones from the Executive Summary of the eHealth Tactical Plan. The "Target Quarter" represents the approved timeframe for the completion of a milestone.

Project	eHealth Milestones	Target Quarter	Status
	Fiscal Year 2010/11		
Panorama Implementation	Panorama Technical Deployment in Production	1	Complete - application in operation, ready for deployment to intended users
Telehealth	TeleOphthalmology services Go-Live	1	Complete - services to improve retinal screening services access for populations at high risk of retinopathies living in rural and remote communities went live
Telehealth	TeleOncology, Phase III (NHA and VIHA)	1	Complete - implemented in NHA and VIHA
Telehealth	TeleThoracic services Implementation (PHSA)	1	Complete - there are minor technical problems with the stethoscopes but they are only a small part of the solution and the TeleThoracic services are now being delivered
Panorama Implementation	Panorama Technical Deployment in Production	2	Complete (initial BCCDC users testing system)
EHR	Confirm the approach to be used for user identity management across the health authorities.	3	
PLIS	On-board public laboratory data from NHA and for non- discrete (anatomical/pathological) laboratory data	4	
EHR	Deploy eViewer to PHSA	4	
Panorama Implementation	Panorama production implementation of Inventory (all HAs except VCHA) (Begin Oct 2010)	4	
EMR	Transition PPN to PHSA Health Shared Services BC (HSSBC) Operations.	4	
PharmaNet Modernization	Draft Point of Service compliance specification complete	4	
PDI	Complete Philips iSite Viewer deployment in VCH and FHA	4	
	Fiscal Year 2011/12		
PDI	Philips iSite Viewer deployment in PHSA	1	
PLIS	Establish laboratory results distribution service (PHSA)	1	

Project	eHealth Milestones	Target Quarter	Status
Panorama Implementation	Panorama Production Implementation (all modules)	1	
PharmaNet Modernization	Medication Management Framework and ePrescribing development complete	1	
PLIS	Establish laboratory results distribution service (VCH)	2	
PLIS	On-board public laboratory data from FHA and VIHA	3	
PLIS	Establish laboratory results distribution service (FHA)	3	
PharmaNet Modernization	Point of Service compliance testing for pilot vendor	3	
PLIS	On-board public laboratory data from VCH	4	
PLIS	Establish laboratory results distribution service (VIHA)	4	
EHR	Deploy eViewer to FHA, NHA, VIHA and IHA	4	
PLIS	On-board Private Laboratories	4	
PharmaNet Modernization	PharmaNet implemented in production environment	4	
EMR	EMR/EHR Integration	4	
EMR	One PITO EMR vendor implemented ePrescribing (Ministry conformance services in place to support remaining EMR vendors)	4	
EHR	Determine SHR solution and on-board SHR into iEHR (Encounters only)	4	
PDI	Philips iSite Viewer deployment in NHA, IHA and VIHA	4	
PDI	PDI solution integration with eViewer	4	

#### **Approved Change Request Summary**

The table below represents a summary of the approved changes to the eHealth Tactical Plan.

			In	npact	ed				
CR	Project/ Work Stream	Title	Budget	Schedule	Scope/ Quality	Description			
1	iEHR/PLIS	EHR Integration Schedule Re-Planning	N	Y	**************************************	<ul> <li>CR included the following changes reflecting the impacts of competing priorities (e.g. Lower Mainland Consolidation) and compressed timeline:</li> <li>Shift completion of health authority engagement for deploying eViewer out to 2<sup>nd</sup> quarter 2010/11</li> <li>Shift out to 2<sup>nd</sup> quarter 2010/11 of 'user identity' and 'Determine SHR solution' milestones</li> </ul>			
2	PDI	Transfer of PDI project delivery responsibilities to PHSA	N	Υ	N	Deployment of DI Viewer to NHA, PHSA and VIHA and full deployment to FHA and VCHA shifted out to the 3 <sup>rd</sup> quarter of 2010/11 in recognition of the work required to transition deployment responsibilities to PHSA.			
3	eHealth	Tactical Plan Update – Sep 2010	N	Υ	Y	A planned 6-month update to eHealth Tactical Plan has been completed. No major scope or budget changes have been made. Updated executive milestones are reflected in the milestone status section.			

# eHealth | Budget Status

**Budget Table 1:** Presents the capital costs of the provincial EHR projects through 2009/10, the approved budget for 2010/11 and planned costs to completion. Infoway recoveries received to date are also provided.

Provincial EHR Foundation System			Ca <sub>l</sub>	Desirated	Maximum	Recoveries							
			Actu	ual Expen	ditures			Planr	ned (Estim	ates)	Projected System Total	Infoway Portion of Costs	received as of June
	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	Total		2010/11
Provincial Lab Information Solution	0.091	0.042	0.417	13.899	8.645	12.748	3.919	6.000	1.500	0.000	47.261	21.385	9.701
Provincial Diagnostic Imaging	0.000	0.000	0.000	2.160	1.095	5.758	2.962	3.000	2.800	0.000	17.775	13.331	4.129
BC Panorama Project	0.000	0.000	0.409	1.534	2.053	6.443	14.526	8.800	3.800	0.000	37.565	9.818	2.901
Registry Systems (Provider & Client)	1.652	4.286	7.431	1.603	0.199	2.622	0.000	0.000	0.000	0.000	17.793	16.935	16.935
PharmaNet Modernization	0.000	0.000	0.679	3.298	14.405	7.901	6.504	13.500	14.500	3.500	64.287	22.520	1.365
EHR Infrastructure Systems (iEHR)	0.000	0.000	0.011	13.912	13.581	22.509	9.225	7.800	5.500	1.800	74.338	37.537	16.473
Electronic Health Record	1.743	4.328	8.947	36.406	39.978	57.981	37.136	39.100	28.100	5.300	259.019	121.526	51.504

**Budget Table 2:** Actual versus planned capital costs by quarter for the provincial EHR projects in 2010/11.

Provincial EHR Projects	Planned versus Actual Expenditures	Apr - Jun	Jul - Sep	Oct - Dec	Jan - Mar	2010/11 Total
Provincial Lab Information Solution	Planned	150,000	850,000	2,500,000	2,500,000	6,000,000
	Actual/ Forecast	26,000	888,000	2,517,967	2,517,967	5,949,933
Provincial Diagnostic Imaging	Planned	85,250	982,250	265,750	1,666,750	3,000,000
	Actual/ Forecast	9,113	0	1,295,178	1,746,750	3,051,041
BC Panorama Project	Planned	2,200,000	2,200,000	2,200,000	2,200,000	8,800,000
	Actual/ Forecast	3,024,153	783,496	3,119,801	1,871,881	8,799,331
PharmaNet Modernization	Planned	1,500,000	4,000,000	4,000,000	4,000,000	13,500,000
	Actual/ Forecast	1,319,271	1,393,906	5,393,412	5,393,411	13,500,000
EHR Infrastructure Systems (iEHR)	Planned	137,000	1,163,000	3,250,000	3,250,000	7,800,000
	Actual/ Forecast	25,840	110,122	3,831,741	3,831,741	7,799,443
Electronic Health Record Total	Planned	4,072,250	9,195,250	12,215,750	13,616,750	39,100,000
	Actual/ Forecast	4,404,377	3,175,524	16,158,098	15,361,749	39,099,748

## eHealth | User Adoption

Successfully building eHealth project solutions is not enough to ensure the anticipated benefits of eHealth are realized. Adoption, or uptake by system users, is critical to success.

User adoption targets will be determined, and progress towards achieving them monitored, for the following systems:

- eHealth and Diagnostic Imaging Viewers
- Electronic Medical Record Systems

PharmaNet

Panorama

#### **Highlights for Reporting Period:**

- The target users for the eHealth systems vary by health authority. The Ministry is currently working closely with the health authorities to identify the target user groups for systems deployment, starting with the lower mainland.
- Adoption data for the first three months of PLIS access by the 3100 VCH users has been provided. The data is being reformatted into a report that will assist with identifying adoption targets.

#### **EHealth Viewer and Provincial Diagnostic Imaging Viewers:**

The target number of users has not been confirmed across all health authorities for the viewers. As of the end of the 1<sup>st</sup> quarter however, the eViewer has been deployed to approximately 3,100 clinical users in the Vancouver Coastal Health Authority and the Provincial Diagnostic Imaging Viewer had been deployed to a limited number of users in the Vancouver Coastal and Fraser Health Authorities.

#### PharmaNet:

PharmaNet, which will be upgraded through the PharmaNet Modernization Project, is currently accessed by over 1,500 physicians and around 4,730 pharmacists across BC from hospitals, pharmacies and medical practices.

#### Panorama:

➤ The target number of Panorama users has not been confirmed but it is currently estimated that the system will be available to 50 - 75 users (Centre for Disease Control and the Northern Health Authority) in September, 2010, up to 200 users in February, 2011, and to greater than 3,000 users in the Spring of 2011.

#### **Electronic Medical Record Systems:**

➤ The following EMR targets are published in the ministry's 2010/11-2012/13 Service Plan, Performance Measure 7. The 2009/10 target was successfully achieved and the program is on track to achieve the 2010/11 target.

Performance Measure	2009/10	2010/11	2011/12
Performance Measure	Forecast	Forecast	Forecast
Percentage of physicians implementing EMR systems	40%	60%	75%

# eHealth | Benefits Evaluations (Outcomes)

The eHealth program is being undertaken in order to realize benefits for British Columbians and the overall health system, both clinical and financial. The purpose of the Benefits Evaluation stream of work is to measure those benefits over the years following the deployment of eHealth solutions and their adoption by intended users.

BC is using an evaluation framework promoted by Canada Health Infoway, which includes dimensions of quality (system, information and service), system usage (use and user satisfaction) and net benefits (quality, access and productivity). As a starting point, baseline and measures for each eHealth component will be determined. The Interoperable Electronic Health Record and Registry systems will not be assessed from a benefits evaluation perspective as they are enabling infrastructure components.

#### **Highlights for Reporting Period:**

> Early work is underway in all eHealth domains to frame the indicators and establish baselines.

Experts from the University of Victoria have been engaged to conduct an PharmaNet Modernization Benefits Evaluation including the development of PharmaNet Modernization indicators and a Benefit Evaluation baseline. Lessons learned from this work will be leveraged to determine eHealth baseline measures for other eHealth domains.

Funding has been made available (September 15, 2010) for the eHealth Observatory's PharmaNet Modernization evaluation studies to proceed in 2010-2011. The Baseline Usability Assessment study of PharmaNet 1 will support design improvements to PharmaNet-eRx. Feedback will be provided to the Ministry and can be shared with PharmaNet vendors to improve product safety and usability. Two other studies are the Baseline Evaluation of PharmaNet through comparison with Best-Possible Medication Histories taken during the Medication Reconciliation Process, and Pharmacist and Physician Communication Workflow Modeling.

The Provincial Laboratory Information Solution (PLIS) Benefits Evaluation mini project charter and work plan have been revised and are currently under discussion by management prior to proceeding with conducting a benefit evaluation survey, gathering the data and producing the PLIS Benefits Evaluation report.

A narrative summary description of the Baseline (current) and Target (future) states has been drafted for the TeleHealth TeleHomecare Congestive Heart Failure program. Next steps include producing the report outline, developing the indicators and determining the results of the analysis of the Vancouver Island Health Authority program. Results of benefits evaluation studies from other jurisdictions, such as the Ontario TeleHealth Network, will also be leveraged as appropriate.

- Narrative summary descriptions of the Baseline (current) and Target (future) states have also been drafted for the Electronic Medical Record project, the Diagnostic Imaging project, the Pharmanet Modernization project and the Provincial Laboratory Information Solution project.
- The Benefits Evaluation lead is working with the eHealth project teams, Infoway and the health authorities to develop plans for establishing baselines and indicators.
- While work on benefits indicators continues, examples of a few of the early benefits indicators that provide insight into expected benefits are provided below:

Project	Example Indicators		
Provincial Laboratory	<ul> <li>PLIS access for health care professionals authorized to access recent</li></ul>		
Information Solution	and historical test results from public laboratories.		
Provincial Diagnostic	<ul> <li>Computer-enabled access for all health care professionals authorized</li></ul>		
Imaging Project	to access recent and historical diagnostic imaging information.		
TeleHomeCare	<ul> <li>Increased number of communities with access to telehomecare services.</li> </ul>		