

eHealth | Quarterly Status Report October - December, 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



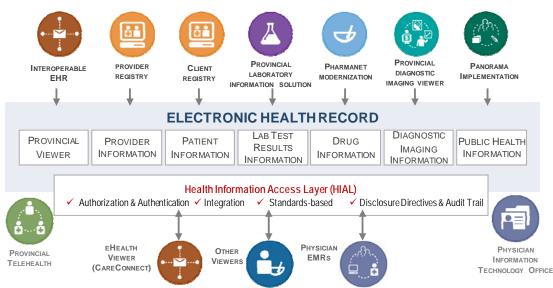
eHealth | About the Quarterly Status Report

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.

The format of the report continues to evolve to meet stakeholder communications needs. In this version, status bars have been added for the EHR projects and the telehealth and EMR activities have been separated out into their own sections.

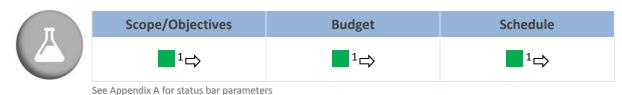
The structure of the quarterly report is as follows:

Section EHR Project Status Telehealth Status		Description and Status
		For each project, provides a status bar, status by project phase, highlights key activity from the reporting period and outlines current challenges of note.
		Provides an update of the status for all active telehealth initiatives within eHealth scope.
EMR Status	\rangle	Provides an update of the status of PITO EMR and related EMR integration activities.
Milestone Status	\rangle	Indicates progress against the milestones identified in the eHealth Tactical Plan, March 2010 Update, and any formally approved changes.
Budget Status	\rangle	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	\rangle	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 EHR infrastructure.

Status by Phase:

Project Phase	Percent Complete	_	Status
Planning	100%	\rangle	Complete
Development	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%). PHSA and IHA integration has been completed. NHA interface development nearing completion and planning underway with FHA and VIHA.

Highlights for Reporting Period:

- Work with NHA has progressed and implementation is expected in February 2011.
- > Planning is underway with FHA and VIHA, with a target date of October 2011 for implementation.
- The initiation of on-boarding activities for VCHA is planned for April 2011, to be completed in February 2012.
- Plans for PLIS completion, focusing on required health authority involvement, were presented to Health Leadership in November and approved by the eHealth Project Board in December.

- The exercise of consolidating services across the lower mainland has resulted in a high demand for lab resources as well as creating challenges related to responsibilities across organizations.
- 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 were introduced and the system will be updated to allow access to these tests at the end January 2011.

> The on-boarding of the private labs is dependant on reaching a business arrangement with the labs.

Provincial Diagnostic Imaging Viewer Project



Scope/Objectives	Budget	Schedule
1 □		1 ⇒

See Appendix A for status bar parameters

The Provincial Diagnostic Imaging Project (PDIV) 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%	>	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 VCHA and FHA has been completed.

Highlights for Reporting Period:

- Plans for the completion of viewer deployment in VCHA and FHA by April 2011 have been developed and are under review by the Ministry.
- A plan for the completion of deployment to the remaining HAs by the end of March 2012 continues to be developed.
- High level project plans, with an emphasis on HA involvement, were presented to Health Leadership in November.

- 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.
- The current Canada Health Infoway Project Agreement and associated Schedules requires updating to align with evolving BC plans.

BC Panorama Project



Scope/Objectives	Budget	Schedule
1 ⇔	¹⇔	1⊏>

See Appendix A for status bar parameters

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 B.C. 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

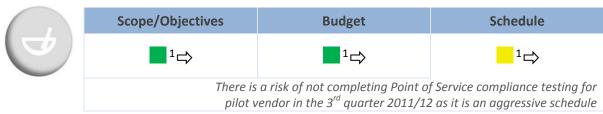
Status by Phase:

Project Phase		Percent Complete		Status	
Planning	\rangle	100%	>	Complete	
Development	>	100%	>	The development phase was the configuration of the Panorama application for BC and the development of the Family Health component.	
Deployment	>	5%	>	Deployment of all Panorama modules to the Centre for Disease Control (40%) and all six health authorities (10% each). Technical deployment limited deployment of the inventory module to the BC CDC was completed in October 2010. Phase 1 work to deploy Inventory to all HAs and Yukon underway. Planning for Phase 2 Case and Outbreak Management deployment beginning.	

- A draft integrated plan for Panorama deployment was distributed to the Integration Leads Committee for review and high level walkthroughs with business stakeholders were conducted.
- A two day integrated planning session with business stakeholders from HA's, BCCDC, and Yukon representation was conducted November 25/26. Additional planning sessions have taken place throughout December to enhance the plan.
- > The plan for project completion was approved at the eHealth Project Board in December.
- A Project Statement document and master project plan for Phase 1, Inventory, were distributed to business stakeholders on December 24, 2010.
- Leadership Committee approved membership for an enhanced Governance Steering Committee (Panorama Deployment Task Force) December 17, 2010.

- > Stakeholder business cycles limit the implementation windows. Deployment during peak immunization season is not optimal due to resourcing constraints within the regional health authorities.
- > Privacy and security constraints regarding the confidentiality of data present challenges to testing and conversion.
- Quick ramp up of project staff at the ministry and HA levels critical in January.
- Finalization of enhanced governance model, processes and teams must be operational in late January.

PharmaNet Modernization Project (formerly known as the eHealth Drug)



See Appendix A for status bar parameters

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%	\rangle	A re-planning exercise was completed in the first quarter.		
Development	>	15%	>	Includes the design and development of the medication management and ePrescribing functionality within the PharmaNet application. The development & testing platforms are in place, detailed requirements are completed and conformance standards are under development.		
Deployment	>	0%	\rangle	Successful early deployment of ePrescribing functionality with one PITO EMR vendor and one Pharmacy vendor.		

Highlights for Reporting Period:

- Plans for PMP completion, focusing on required health authority involvement, were presented to Health Leadership in November and approved by the eHealth Project Board in December.
- > Detailed business requirements for the PharmaNet system to support ePrescribing and medication management have been completed.
- All five PITO EMR vendors responded positively to a request for expressions of interest for vendors to participate as Early Adopters in the PharmaNet Modernization Project.
- > Business rules for ePrescribing conformance specifications were developed.

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.

interoperable Electronic Health Record Project



Scope/Objectives	Budget	Schedule
<u></u> 1⇒		¹ ⇒
Plans to provide hospital discharge s via the provincial EHR are under rev		

See Appendix A for status bar parameters

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.
- Infrastructure to support report distribution (via subscriptions services)

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%	>	Includes the integration of the HIAL with the four clinical EHR systems (40%) and eViewer deployment to all six health authorities (60%). The lab domain has been integrated with the HIAL and viewer deployment within VCHA has been completed.	

Highlights for Reporting Period:

- Work is underway to decouple the eViewer from VCHA's underlying infrastructure in preparation for eViewer deployment to other HAs.
- A proposal to leverage IHA's existing lab results distribution solution for provincial use via the HIAL is being considered/reviewed.
- High level project plans, with an emphasis on HA involvement, were presented to Health Leadership in November.
- > Plans to make hospital discharge summaries available via the provincial EHR are under review.

A	The management of system enhancement releases to ensure timely implementation while controlling the grouping and scheduling of releases to deliver within the allocated budget.

eHealth | Telehealth Status



	Projects:		% Complete
7	TeleHomecare	Improves care and reduces hospital readmissions of patients with Congestive Heart Failure through early detection and self monitoring.	100%
1	FeleOpthalmology	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%
7	TeleThoracic	Provides access to quality thoracic surgical care to residents of BC and the Yukon through videoconferencing technology.	100%
7	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%
1	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%
7	Telepathology	Develop an integrated Telepathology network for consultation, education and quality assurance within the anatomical pathology and clinical laboratories in BC.	100%

- All in scope provincial telehealth demonstrations projects undertaken with Infoway have been completed and will no longer be included in this report.
- The proposed First Nations Telehealth Expansion Project to build and expand telehealth capacity within First Nations communities has not been approved to go forward and will be revisited at a future date.

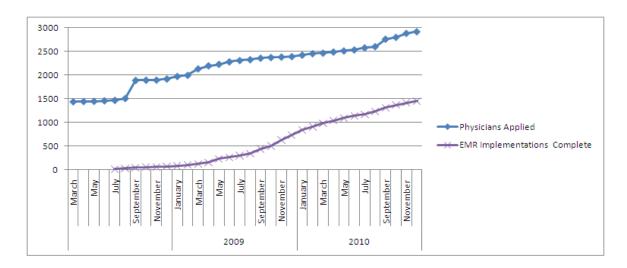
eHealth | Electronic Medical Record Status



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.



- Approximately 90% of large (6+ physicians) Full Service Family Practice (FSFP) clinics, 50% of medium (3-5 physician) FSFP clinics and 10% of small/solo (1-2 physician) FSFP clinics had an EMR in place at the end of 2010.
- Period eReferral pilot projects are well underway in leading Communities of Practice with extremely positive physician and clinic staff feedback.
- 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.

Challenges:

- 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.
- 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.

EHR/EMR Integration Project

The Electronic Health Record / Electronic Medical Record Integration Project will support EMR vendors in the implementation of the domain, privacy, security and technical specifications created for Points of Service systems to integrate with:

- the Electronic Master Patient Index (EMPI), a component of the provincial client registry system;
- the provincial provider registry systems (the Provider Registry System and the Community Health and Care Resource Database);
- the Provincial Lab Information System;
- the PharmaNet system (to access medication profiles and to ePrescribe)

Highlights for Reporting Period:

The project has been initiated and project planning is underway.

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.

eHealth Milestones	Target Quarter	Status
Fiscal Year 2010/11		
Panorama Technical Deployment in Production	1	Complete - application in operation, ready for deployment to intended users
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
TeleOncology, Phase III (NHA and VIHA)	1	Complete - implemented in NHA and VIHA
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 Technical Deployment in Production	2	Complete (initial BCCDC users testing system)
Confirm the approach to be used for user identity management across the health authorities.	3	The approach has been confirmed and the HAs will proceed to determine a plan and schedule for completing the work required to implement the solution.
On-board public laboratory data from NHA and for non- discrete (anatomical/pathological) laboratory data	4	
Deploy eViewer to PHSA	4	Initial deployment to start in February 2011.
Panorama production implementation of Inventory (all HAs except VCHA) (Begin Oct 2010)	4	
Transition PPN to PHSA Health Shared Services BC (HSSBC) Operations.	4	
Draft Point of Service compliance specification complete	4	
Complete Philips iSite Viewer deployment in VCH and FHA	4	
Fiscal Year 2011/12		
Philips iSite Viewer deployment in PHSA	1	
	Panorama Technical Deployment in Production TeleOphthalmology services Go-Live TeleOncology, Phase III (NHA and VIHA) TeleThoracic services Implementation (PHSA) Panorama Technical Deployment in Production Confirm the approach to be used for user identity management across the health authorities. On-board public laboratory data from NHA and for non-discrete (anatomical/pathological) laboratory data Deploy eViewer to PHSA Panorama production implementation of Inventory (all HAS except VCHA) (Begin Oct 2010) Transition PPN to PHSA Health Shared Services BC (HSSBC) Operations. Draft Point of Service compliance specification complete Complete Philips iSite Viewer deployment in VCH and FHA Fiscal Year 2011/12	Panorama Technical Deployment in Production TeleOphthalmology services Go-Live 1 TeleOncology, Phase III (NHA and VIHA) TeleThoracic services Implementation (PHSA) Panorama Technical Deployment in Production Confirm the approach to be used for user identity management across the health authorities. On-board public laboratory data from NHA and for non-discrete (anatomical/pathological) laboratory data Deploy eViewer to PHSA Panorama production implementation of Inventory (all HAs except VCHA) (Begin Oct 2010) Transition PPN to PHSA Health Shared Services BC (HSSBC) Operations. Draft Point of Service compliance specification complete Complete Philips iSite Viewer deployment in VCH and FHA Fiscal Year 2011/12

Project	eHealth Milestones	Target Quarter	Status
PLIS	Establish laboratory results distribution service (PHSA)	1	
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.

			Im	npact	ed	
CR	Project/ Work Stream	Title	Budget	Schedule	Scope/ Quality	Description
1	iEHR/PLIS	EHR Integration Schedule Re-Planning	N	Y	Y	 CR included the following changes reflecting the impacts of competing priorities (e.g. Lower Mainland Consolidation) and compressed timeline: Shift completion of health authority engagement for deploying eViewer out to 2nd quarter 2010/11 Shift out to 2nd quarter 2010/11 of 'user identity' and 'Determine SHR solution' milestones
2	PDI	Transfer of PDI project delivery responsibilities to PHSA	N	Y	N	Deployment of DI Viewer to NHA, PHSA and VIHA and full deployment to FHA and VCHA shifted out to the 3 rd quarter of 2010/11 in recognition of the work required to transition deployment responsibilities to PHSA.
3	eHealth	Tactical Plan Update – Sep 2010	N	Y	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.
4	PLIS	Provincial Laboratory Information Solution Lab On-Boarding	Υ	Υ	Υ	Project Board decision (BN 861233) – confirmed scope, timeframe and budget baseline changes as reflected in updated PLIS section
5	Panorama Implementa tion	BC Panorama Deployment	Υ	Y	Υ	Project Board decision (BN) – confirmed scope, timeframe and budget baseline changes as reflected in updated Panorama section
6	PharmaNet Modernizati on	PharmaNet Modernization Project Scope, Timeframe and Budget	Y	Y	Y	Project Board decision (BN 861147) – confirmed scope, timeframe and budget baseline changes as reflected in updated PharmaNet Modernization section

eHealth | Budget Status

Budget Table 1: 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	Planned	150,000	850,000	2,500,000	2,500,000	6,000,000
Solution	Actual/ Forecast	26,000	888,000	0	5,256,720	6,170,720
Dan in sial Diamentia Incoming	Planned	85,250	982,250	265,750	1,666,750	3,000,000
Provincial Diagnostic Imaging	Actual/ Forecast	9,113	0	0	1,746,750	1,746,750
DO Dourana Daviant	Planned	2,200,000	2,200,000	2,200,000	2,200,000	8,800,000
BC Panorama Project	Actual/ Forecast	3,024,153	783,496	3,369,300	3,415,182	10,592,131
Di	Planned	1,500,000	4,000,000	4,000,000	4,000,000	13,500,000
PharmaNet Modernization	Actual/ Forecast	1,319,271	1,393,906	2,061,292	6,734,530	11,508,999
EHR Infrastructure Systems	Planned	137,000	1,163,000	3,250,000	3,250,000	7,800,000
(iEHR)	Actual/ Forecast	25,840	110,122	581,036	5,624,523	6,341,521
Electronic Health Record	Planned	4,072,250	9,195,250	12,215,750	13,616,750	39,100,000
Total	Actual/ Forecast	4,404,377	3,175,524	6,011,628	22,777,705	36,369,234

¹ For the purposes of table 1, planned represents planned costs by quarter as of the start if the fiscal year, totalling \$39.1 million, and does not reflect any subsequent approved changes to fiscal year spending by eHealth Project Board, as reflected in table 2 (\$38.77 million).

eHealth | Budget Status

Budget Table 2: Indicates the historical capital costs (pre-2010/11) of the provincial EHR projects and the current eHealth Project Board approved capital spending plan through to completion, as a total and as currently allocated to each projects.

Provincial EHR Foundation System (\$ millions)	Historic Spend	10/11	11/12	12/13	10/11 - 12/13 Total	Projected System Total
Provincial Lab Information Solution	39.76	5.87	2.93	0.00	8.79	48.55
Provincial Diagnostic Imaging	11.98	2.37	2.80	0.00	5.17	17.15
BC Panorama Project	24.97	10.59	3.49	0.89	14.97	39.93
Registry Systems (Provider & Client)	17.79	0.00	0.00	0.00	0.00	17.79
PharmaNet Modernization	32.79	12.88	15.90	0.00	28.78	61.57
EHR Infrastructure Systems (iEHR)	59.24	7.06	5.50	1.80	14.36	73.60
Electronic Health Record	186.52	38.77	30.62	2.69	72.07	258.59

Budget Table 3: Indicates current projected spend through December 2010.

Provincial EHR Foundation System (\$ millions)	Historic Spend	10/11	11/12	12/13	10/11 - 12/13 Total	Projected System Total
Provincial Lab Information Solution	39.76	6.17	2.93	0.00	9.10	48.86
Provincial Diagnostic Imaging	11.98	1.76	2.80	0.00	5.17	17.15
BC Panorama Project	24.97	10.59	3.49	0.89	14.97	39.93
Registry Systems (Provider & Client)	17.79	0.00	0.00	0.00	0.00	17.79
PharmaNet Modernization	32.79	11.51	15.90	0.00	27.41	60.20
EHR Infrastructure Systems (iEHR)	59.24	6.34	5.50	1.80	13.64	72.88
Electronic Health Record	186.52	36.37	30.62	2.69	70.29	256.81

Note: Changed figures are highlighted in red.

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
- PharmaNet

- Electronic Medical Record Systems
- Panorama

Highlights for Reporting Period:

- The target users for the eHealth systems vary by health authority. The Ministry is currently working closely with the HAs 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 3,100 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. 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 currently the inventory module is deployed to approximately 20 users within the BC Centre for Disease Control. Deployment of the inventory module is expected to be complete by March 31, 2011 providing access to an additional 600 users with the health authorities and the Yukon. By the summer of 2012, Panorama is expected to be deployed to 3700 users.

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	
remormance weasure	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.

- > 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 a 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 was approved 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. All three studies are progressing as planned, with findings to be reported in the spring, 2011.
- 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, two focus group sessions, gathering the data and producing the PLIS Benefits Evaluation report. The PLIS early adopters' survey questionnaire was drafted in December and will be sent to users in late January or early February.
- 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.
- A report outline for the TeleHealth TeleOncology Benefits Evaluation project is being prepared incorporating results from participating health authorities and the Provincial Health Services Authority. The TeleOncology Benefits Evaluation report from Newfoundland and Labrador has been reviewed and 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.
- Early discussions have begun with Canada Health Infoway, the University of Victoria ,the Ministry's Pharmaceutical Services Division and Health Sector IM/IT Division on a Benefits Evaluation Strategy and BE projects for the BC ePrescribing solution with Electronic Medical Record systems.
- 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 Information Solution	 PLIS access for health care professionals authorized to access recent and historical test results from public laboratories. 				
Provincial Diagnostic Imaging Project	• Computer-enabled access for all health care professionals authorized to access recent and historical diagnostic imaging information.				
TeleHomeCare	 Increased number of communities with access to telehomecare services. 				

Appendix A | Status Bar Parameters

Color Indicators

Scope	Budget	Schedule
On track to complete approved scope	On track to complete project within approved budget ²	On track to meet approved executive milestones
A low risk that one or more components of approved scope may not be completed has been identified	The current estimate for project completion exceeds the project's approved 10/11 – 12/13 budget by 5% but may be absorbed within the approved eHealth total budget	A low risk that one or more approved milestones may not be completed within the scheduled quarter
There is a high risk one or more components of approved scope may not be completed	The current estimate for project completion exceeds the project's approved 10/11 – 12/13 budget by 10% but may be absorbed within the approved eHealth total budget	There is a high risk that one or more approved milestones may not be completed within the scheduled quarter
One or more components of approved scope cannot be completed	The current estimate for project completion exceeds the project's approved 10/11 – 12/13 budget and the difference cannot be absorbed within the approved eHealth total budget.	One or more approved milestones will not be completed within the scheduled quarter

Number indicators

The numbers indicated next to the arrows indicate how many months the status has been at the reported level (color).

Arrow Indicators

- No change in status from previous month.
- 1 Increase in status level from previous month (e.g. green to yellow)
- \square Decrease in status level from previous month (e.g. red to yellow)

 $^{^2}$ Starting point is the project allocations that supported the \$72.5 million approved by Treasury Board for eHealth completion over the three year period 2010/11 – 2012/13