



## Ministry of Health – eHealth eDrug Project Snapshot

### Background

PharmaNet is a world class medication management information system, consisting of a drug information system that records and provides up-to-the-minute information on all prescriptions dispensed in community pharmacies in British Columbia. PharmaNet also includes a claims adjudication system that determines, on a real-time basis, a patient's eligibility for claim benefits, and the portion of the total prescription costs payable by the patient and by British Columbia's provincial drug insurance program, PharmaCare.

Patient medication profiles in PharmaNet are currently available to authorized users in all pharmacies across BC and nearly all BC emergency departments. In January 2006, access to medication profiles was also made available to physicians from their medical offices. To date, over 1650 physicians have registered for this service. In December 2007, the Ministry of Health announced hospital and designated mental health facility access to PharmaNet by authorized pharmacists and physicians. Implementation of this service has begun with both Vancouver Island Health Authority and Vancouver Coastal Health Authority.

Currently, 1050 pharmacies connect to PharmaNet to process over 4 million dispenses per month. Each dispense event includes drug interaction checking and real-time claims adjudication. Seventy-eight hospital emergency departments and 650 medical practices use PharmaNet to access patient medication profiles.

### The eDrug Project

The eDrug Project will improve medication management and patient safety for British Columbians by upgrading and enhancing the existing PharmaNet system, including integrating with B.C.'s electronic health record as it comes online.

The project will implement PharmaNet-eRx, which will provide broader authorized access to comprehensive patient medication history information, enable ePrescribing and automate the PharmaCare Special Authority process. As well, both the drug information and claims adjudication systems will be upgraded to meet Infoway pan-Canadian messaging standards.

Maximus BC Inc. will provide systems integration services for this project, and will continue to provide operations support for PharmaNet-eRx, via an amendment to the existing Ministry of Health Master Services Agreement with Maximus BC Inc.

## Comprehensive Medication Profiles

The patient medication profiles stored in PharmaNet are currently the most comprehensive in Canada. To support ePrescribing and the needs of other healthcare providers, the eDrug Project is working with clinical teams to determine how and when to include additional information in the profile, such as clinically relevant medication information from a patient's hospital stay, prescriber samples, or oncology (cancer) medications. Making this comprehensive information available to health professionals will provide them with a stronger base for clinical decision-making, supporting better care and improved patient safety. Each health authority will provide this information to PharmaNet-eRx based on their integration priorities and plans.

The number of months of prescription data available for immediate access via online query is being extended from 14 months to 60 months.

For health professionals making patient care decisions, knowing that a patient has collected his/her prescription from the pharmacy is a good indication that the patient is actually using the medication. Today, pharmacy systems record that a prescription has been dispensed. PharmaNet-eRx will also require confirmation that the prescription has been picked up by the patient. Although this enhancement will add an extra step to processing a prescription on PharmaNet-eRx, medication profile accuracy and patient safety will both be improved. The eDrug project is working with its Clinical Working Group to determine the most efficient approach for recording prescription pickup.

## ePrescribing

ePrescribing is one of the important new features of PharmaNet-eRx. ePrescribing will improve patient safety by helping to eliminate prescription issues caused by illegible handwriting and will streamline the end-to-end prescribing and dispensing business processes. Two elements must be in place to enable ePrescribing:

1. Electronic Medical Record (EMR) systems for physician's offices need to replace today's largely paper-based health records to enable prescribers to add electronic prescriptions to PharmaNet-eRx.
2. The PharmaNet system (including PharmaNet-compliant software in pharmacies) must be upgraded to enable pharmacies to retrieve those electronic prescriptions directly from PharmaNet-eRx for processing and dispensing.

Once these two elements are in place, prescribers will be able to enter prescriptions into their EMR, which will send the prescription to PharmaNet-eRx electronically.

PharmaNet-eRx will check the prescription against the patient's medication profile and return information on any drug interaction or allergy issues to the prescriber for review within a few seconds. After the prescriber has reviewed the issues, he/she will confirm the prescription and it will be added to PharmaNet-eRx. The pharmacist will then be able to retrieve the electronic prescription from PharmaNet-eRx.

Not all the patient safety and health care provider productivity benefits resulting from the implementation of ePrescribing will be realized immediately. The full benefit will be realized only when a significant portion of prescribers in the province of BC are creating electronic prescriptions in their EMRs and sending them to PharmaNet-eRx. It will take some time for the health care sector to transition to this new state. The BC government is committed to assisting

prescribers implement EMRs in their practices as evidenced in the agreement with the BC Medical Association to fund the Physician Information Technology Office, or “PITO”.

### **BC PharmaCare Special Authority Process Automation**

PharmaNet-eRx will automate the BC PharmaCare Special Authority process, resulting in significant time savings for both prescribers and pharmacists and improved patient service.

Today, prescribers can request, on behalf of a patient, that PharmaCare cover a prescription that is only partially covered or not normally covered by PharmaCare. The process to request a special authority is largely manual, involving paper forms, fax and telephone. PharmaCare’s process to adjudicate a special authority is also manual. Sometimes, if Special Authority approval is not yet in place, patients cannot start treatment in a timely fashion unless they are willing to pay for the medication themselves.

With PharmaNet-eRx, prescribers will be able to electronically submit special authority requests to PharmaCare. In most cases, requests will be processed immediately and the prescriber notified while the patient is still in his or her office. This should shorten approval turnaround times so patients can begin therapy sooner. Authorized health professionals will be able to use PharmaNet-eRx to determine if a Special Authority exists for a patient and when it expires, reducing the number of phone calls that are made to PharmaCare today.

Pharmacists will also be able to determine the portion of the claim PharmaCare will cover, without having to submit an actual claim and then reverse it if the cost is unaffordable. Prescribers will also be able to determine PharmaCare benefit information for a drug while the patient is in their office, thereby minimizing affordability issues at the pharmacy.

### **eDrug Project Current Status**

In collaboration with the Pharmaceutical Services Division at the BC Ministry of Health, the project team has already begun expanding access to patient medication profiles by providing PharmaNet access to authorized health professionals working in physician private practices and clinics as well as hospitals and designated mental health facilities.

In January 2008, Hospital Access to PharmaNet (HAP) service was also made available. Timing for implementing this new service will vary based on the priorities and plans of each B.C. health authority or facility. Both Vancouver Island Health Authority and Vancouver Coastal Health have started deploying the HAP service, with 14 locations using it so far. Hospital Access to PharmaNet improves patient safety by streamlining the medication reconciliation process and reducing both the time to determine each patient's current drug treatment and the need to call community pharmacies for medication clarification.

The Clinical Working Group, Health Authority Task Group and DUE Task Groups continue to meet monthly to finalize detailed requirements for PharmaNet-eRx and for filling the medication profile gaps. Most recently, the Cancer Medications Task Group and HIV Medications Task Group began determining how to include cancer and HIV medications. The TALLman Lettering Task Group is defining the initial TALLman standards list and developing a process for maintaining the list.

Community pharmacies will be the first group to connect to PharmaNet-eRx. The Community Pharmacy Impact Task Group recently began assessing the impact that PharmaNet-eRx will have on community pharmacies.

The project team is consulting with the appropriate groups to prepare written requirements for connecting to PharmaNet-eRx. Software Support Organizations that develop or update point-of-service systems will use these ‘conformance documents’ to implement successful connections to PharmaNet-eRx.

### **eDrug Project Stakeholders**

The Ministry of Health leads the eDrug project.

The College of Pharmacists of BC, the College of Physicians and Surgeons of BC, the College of Registered Nurses of BC, the BC Pharmacy Association, and the BC Medical Association are key stakeholders actively working with the Ministry of Health and Pharmaceutical Services Division providing direction, insight, and guidance on developing and implementing PharmaNet-eRx.

All health authorities are involved in specifying how in-patient and community-based medication information will be shared in PharmaNet-eRx and getting ready to interface health authority systems with PharmaNet-eRx sometime in 2009/2010.

### **Benefits**

PharmaNet-eRx will improve patient health and safety, enable higher quality and more efficient care delivery, and improve cost management.

### **Patient Health and Safety, Higher Quality Care Delivery**

- PharmaNet-eRx will:
  - Support medical decision-making and timely care by making more comprehensive patient medication profiles available to authorized users at all points of care;
  - Improve interaction checking by providing more complete medication profiles and enabling interaction checking on new medical conditions the patient has (for example, pregnancy);
  - Reduce the number of handwritten prescriptions by implementing electronic prescriptions and therefore the errors due to illegible handwriting;
  - Enable health professionals to more closely monitor medication compliance. Since dispense and medication pickup events will be recorded separately, under use and over use of medications can be more closely monitored;
  - Reduce the likelihood of medication errors by implementing TALLman Lettering standards to distinguish “look-alike, sound-alike” drug names;
  - Improve the consistency of care by having clinical guidelines and information available in useable form at all points of service; and
  - Empower patients by eventually enabling online access to their medication profile and access log.

## More Efficient Care Delivery

- PharmaNet-eRx will:
  - Improve hospital pharmacy and community pharmacy information by providing integrated access to medication information regardless of where medications are dispensed;
  - Significantly reduce pharmacist calls to physicians to resolve handwriting issues;
  - Reduce pharmacist calls to physicians to resolve drug cost issues;
  - Reduce the time health professionals and patients spend on special authority requests; and
  - Provide better patient care delivery by identifying and addressing potential medication issues at the time of prescribing rather than at the time of dispensing.

## Better Cost Management

- PharmaNet-eRx will:
  - Increase physician awareness of drug costs and patients' financial coverage, giving doctors an opportunity to prescribe less expensive or more suitable medication therapies; and
  - Over the long term, reduce maintenance costs and potentially open new markets for point-of-service software vendors across Canada by adopting common, pan-Canadian messaging standards.

## Contact

For more information call: Carolyn Bell, Executive Contract Manager, Health Sector IM/IT Division, (250) 952-6202.