

Alberta's Electronic Health Record

1. What is the Alberta Electronic Health Record (EHR)

Alberta's electronic health record is a clinical health information network that links community physicians, pharmacists, hospitals, home care, and other authorized health care professionals across the province. It allows these health care practitioners see and update health information such as a patient's allergies, prescriptions, and lab tests.

The EHR also provides the following decision support tools:

- Drug-to-drug interaction alerts to avoid prescriptions that conflict.
- Database of all available drugs and their common dosages.
- Links to information support such as the (the Clinical Guidelines from the Alberta Medical Association).

2. Exactly what is in the Alberta EHR today?

The Alberta EHR pulls together three different types of information:

- *Personal demographics* to make it easy to identify and find patients.
- *Drugs and allergies* to give health care practitioners confidential access to patient medication histories, and allergies.
- *Laboratory test results* which enable authorized physicians to access lab results. Currently approximately 40 per cent of all laboratory data in the province is available on the EHR. An additional 40 per cent is expected to be available by the end of the year.

3. Why are we introducing electronic health records now?

The technology and infrastructure to deploy the EHR throughout the province has only been recently available. Health care practitioners have helped design the Alberta EHR, are represented within its governance structure, and support the move from paper health records to electronic health records.

4. How is patient information shared today?

Today, medical information recorded is stored at the point of care, such as a hospital, doctor's office or clinic. When health care practitioners need to access this information these paper records must be requested, located, and sent by fax or mail from one medical facility to another facility. This process takes time and may impact treatment.

5. How will Albertans benefit from the EHR?

Electronic Health Records improve the quality and safety of patient care by:

- Making quality health information readily available at all points of care, reducing delays in treatment, and supporting the providers' decision-making.
- Improving the accuracy and clarity of medical records.
- Streamlining the sharing of health information to improve patient care.
- Giving health professionals a common understanding of your health condition, preventing unnecessary treatments and adverse events, such as harmful prescription drug interactions.
- Reducing unnecessary duplication of tests, such as lab work.

6. Why has it taken so long to develop the Alberta EHR?

Electronic health records are complex, as they combine information from many different systems and sources. Bringing this information together in one place has been a step-by-step process to ensure the information is secure and presented in a manner health care providers find useful.

At the same time, programs to equip physicians' offices with the computer hardware required at the point of care and the high speed internet access required have been underway through other government initiatives.

As various applications of the provincial EHR have been completed, pilots have been conducted to test the system and their effectiveness in real clinical settings. These pilots have proven overwhelmingly successful, leading to today's launch of the rollout of EHR across the province.

These pilots have provided critical feedback, which has been used in the continued design of EHR functions.

7. Who is creating the Alberta EHR?

Alberta Wellnet, a branch of Alberta Health and Wellness, is developing the EHR with support from regional health authorities, health practitioners, and health care sector professional associations.

The policies regarding the EHR have been developed and approved by governance bodies, which include representation from health professionals and health care organizations.

8. How is the Alberta EHR different from other electronic information, particularly a doctor's electronic medical records and the EHRs that Capital Health and Calgary Health Region are building?

All these systems are complementary and designed ultimately to work together to deliver better care.

Some doctors are now recording information about their patients electronically, rather than on paper files, in an electronic medical record (EMR). The information the physician records there stays within that clinic – it is not routinely shared with other health care providers.

Regional EHRs share health information among sites/facilities within that particular region. This information is only available to authorized health care practitioners with privileges at participating facilities (e.g. hospitals).

The EHR is designed to give authorized health care providers across the province access to a patient's lab test results, demographic information, and drugs and allergy information.

Alberta Wellnet is also working with clinical software vendors to deliver provincial EHR information seamlessly through local clinical systems.

9. How much did it cost to build the Alberta EHR?

The cost to Alberta Health and Wellness of developing the Alberta EHR, including its implementation up to spring 2004, is \$59 million.

10. Are patients' records secure and confidential? Will doctors and health care providers be able to "surf" medical records?

Privacy and security are integral to the EHR. Special authorization is required for health care providers to access the EHR and user access is restricted based on role and profession. Each user requires two levels of authentication:

- Users are first identified and registered as authorized users of health information.
- Users are given both a unique PIN and an electronic tag that displays a unique number every minute to log into EHR.

All health care providers are made aware of their responsibilities under the *Health Information Act*. Access to records is recorded for audits and all electronic messages shared are encrypted.

The Act requires health providers to only collect, use and share the least amount of information they need to provide you with your care and treatment. The Act specifically protects the confidentiality and security of Electronic Health Records. Health providers and government are responsible for making sure that all information in the EHR is kept confidential and secure.

Violating the rules in the Act is a serious offence. Abusers may be subject to fines of up to \$50,000 and disciplinary measures within their licensing or professional organizations.

The information in EHR is secure to ISO 17799, the highest on-line security standard in the world. In addition to security controls that protect the confidentiality, integrity and availability of health information, a high-quality network security is in place that includes the use of firewalls, and an intrusion detection system that alerts the appropriate personnel of any unusual activity.

A masking function protects some sensitive information (e.g. the Provincial Health Officer mandated that certain laboratory test results are of a sensitive nature and should always be masked). These masked results can be viewed with a patient or agent's consent or in true emergency situations.

11. How many health care practitioners are currently using the EHR?

As of October 9, 2003, there are about 600 practitioners using Alberta's EHR. It is expected that all Alberta's health regions, one-third of physician offices, and half of all pharmacies will be using electronic health records by spring 2004.

12. When will it be available to everyone?

Right now, Alberta's EHR is available to all authorized health care practitioners who have computers and access to high speed internet. The EHR is currently being rolled out to communities where there is interest and readiness.

Participation by health care providers is voluntary.

13. Where is it available now?

Alberta's EHR has already been implemented in several health authorities, including Capital Health, Calgary Health Region, and Aspen Health Region. It is also available at physician offices in Edmonton, Leduc, and Westlock.