College of Physicians & Surgeons of Alberta

Alberta Electronic Health Record Regulation

Section 5 Framework

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Version 1.1

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Introduction

Alberta's *Health Information Act* (HIA) and its regulations establish the rules for the collection, use, disclosure and protection of health information. The *Health Information Amendment Act* (Bill 52) introduced new regulatory requirements for the College of Physicians & Surgeons of Alberta (the College) under the HIA effective September 1, 2010.

Specifically, the College is required to develop:

1) standards of practice respecting the management of information in records and the management of electronic records, and
2) written directions for regulated health professionals for making prescribed health information accessible to authorized custodians via the Alberta Electronic Health Record (EHR).

The College supports the appropriate use of information technology by physicians to assist in providing safe and high-quality care for their patients as well as to facilitate collaborative care, and believes these two requirements are critical to the continued development of the Alberta EHR and its full use by physicians.

To meet the first requirement, the College revised its Patient Records Standard of Practice (Standard 21) effective July 1, 2011. The second requirement – now Section 5 of the Alberta EHR Regulation – is the focus of this Framework.

Consultation

In developing this Framework, the College consulted with various stakeholders within Alberta and across Canada. Stakeholder interviews started in December 2010 and were conducted over a three-month period with more than 60 individuals from 32 organizations.

Input was elicited in the following areas:

1. What data should be shared?
2. Which electronic medical records (EMRs) should be considered in-scope for sharing to the Alberta EHR?
3. In what context or circumstances should information be shared with the Alberta EHR?
4. What changes will be required in order for data to be shared?
5. How should physicians who have yet to adopt an EMR be addressed?
6. What process changes should be considered?

Following this consultation, the College created a discussion document describing the background, current situation and challenges of meeting Section 5. This was circulated to stakeholders in early April 2011.

Their feedback was used to develop this Section 5 Framework, which describes how the College will approach its mandate to provide written direction to physicians for sharing information to the Alberta EHR. Approximately 10 different stakeholder groups continued to provide input throughout the Framework development process.

Framework

Principles

The College identified three core sets of principles to apply to the sharing of information by physicians to the Alberta EHR under Section 5:

1. Legal – data sharing must be conducted in a manner that is in compliance with all legal requirements and conditions;

2. Ethical and Professional – data sharing must meet physicians' ethical and professional obligations in the care of their patients, including consideration of appropriate role-based access; and

3. Business Practices – data sharing has to make sense from a business perspective for each physician, including but not limited to being beneficial to patient care and reducing duplication of services and effort.

There are many situations in which information from EMRs could be shared to the Alberta EHR. This Framework is initially focused on scenarios which support primary care:

> *Sharing data from a primary care setting to the Alberta EHR to provide:*
>
> 1. *Information that would be most useful if a patient was seen in an emergency situation.*
> 2. *Information required if another physician is covering for the primary care physician and needs to attend to the patient.*

Other scenarios will be considered in time, based on the three principles listed above.

Four Levels of Directedness

Section 5 mandates the College to provide written directions to physicians for making information available to the Alberta EHR (paraphrased). Four levels of "directedness" will be applied in exercising this prerogative:

1. **Signal** (to physicians and others that sharing the information could be helpful)
2. **Suggest** (to physicians that they consider sharing – providing certain conditions are met)
3. **Recommend** (to physicians that they should share – providing certain conditions are met)
4. **Mandate** (Standard of Practice: physicians must share unless exceptional circumstances)

These four levels of "directedness" will support a careful and planned continuum that clearly signals the College's intention that physicians who use EMRs should share information appropriately, for the safety of their patients and to enhance the quality and continuity of their care.

It is important to note that not all data, nor all situations, will necessarily evoke the same level of directedness at the same time. In other words, the College may decide to "recommend" sharing one type of data, but only "suggest" sharing another type, depending on a variety of circumstances. This approach also takes into consideration that data sharing to and from EMRs will continue to evolve iteratively over time.

Also, there are several related issues currently not in scope or not the responsibility of the College that will be addressed by other parties. These include:

- EMR adoption by physicians,
- data standards,
- charting etiquette,
- change management,
- governance and data stewardship, and
- vendor and product capabilities.

Data Features

The College feels it will be helpful to physicians to describe the data features that should be in place prior to data being shared.

Patient information should:

- provide clinical value,
- be objective,
- be of high quality and comprehensive,
- be timely (e.g., information from recent encounters),
- be accurate,
- be clearly defined through use of known and acceptable values,
- be easily available,
- show clear accountability, including time stamped (once shared), and
- be captured in a way that is standardized (nomenclature or vocabulary).

Table 1 (next page) identifies the eight data elements currently being considered for sharing, especially from a primary care setting. These elements were seen as having the highest priority based on benefit to the patient and technical feasibility.

Table 1 - Potential data to be shared

1.	Demographics *
2.	Prescriptions +/_ Medications and Medication History*
3.	Immunizations
4.	Encounters
5.	Allergies*
6.	Medical History*
7.	Surgical History*
8.	Advanced directives DNR - could include "Goals of Care" - Personal Directive http://www.calgaryhealthregion.ca/programs/advancecareplanning/acp_docs/understanding_gcds_brochure.pdf

*Could be available from an "EMR patient summary sheet"

Through its Medical Informatics Committee (MIC), the College will provide direction to physicians for the types of data that should be shared to the Alberta EHR and the circumstances under which it should be shared, and will do this based on consultation with key stakeholders and relevant committees such as the Integrated Clinical Working Group (ICWG), the Shared Health Record (SHR) Committee and the Electronic Health Record Data Stewardship Committee (EHRDSC).

Data Stewardship Requirements

The College has identified several data stewardship issues that will need to be resolved prior to giving any direction to physicians regarding sharing data to the Alberta EHR. These include but are not limited to:

1. Ensuring physicians are able to meet their professional and ethical obligation to patients who request that part (or all) of their medical information be kept confidential[1]. This is essential to maintain trust and openness in the doctor-patient relationship. In practice, this means physicians must be able to block their patient's information from being shared to the Alberta EHR, if they believe it is in their patient's interest to do so.
2. Defining the roles and responsibilities of the parties involved in sharing information to the Alberta EHR. Specifically, what obligations exist to update and reconcile changes after the data is posted, and to notify physicians who have used the data when changes have implications for patient safety.

[1] HIA **56.4** In deciding how much prescribed health information to make accessible via the Alberta EHR, a regulated health professional or an authorized custodian must consider as an important factor any expressed wishes of the individual who is the subject of the prescribed health information relating to access to that information, together with any other factors the regulated health professional or authorized custodian considers important.

3. Developing a process for reconciling information when a patient is in the care of multiple physicians and different and potentially conflicting information is posted to the Alberta EHR.
4. Establishing a process for implementing an Information Sharing Agreement for physicians sharing information within the Alberta EHR environment, and the governance of change for new or different uses of data.
5. Clarifying the primary and secondary uses of the data (i.e., what the shared data can be used or not used for).
6. Ensuring there is adequate education and support materials for physicians so that they understand and can inform their patients about blocking and masking, and the limitations of Global Person-Level Masking within the Alberta EHR.
7. Ensuring a consistently applied standard is in place for the content of data in EMRs, to ensure an accurate and safe posting to the Alberta EHR.

Other considerations are identified in the CPSA Data Stewardship Framework and CPSA Data Stewardship Principles – Information Sharing Agreement document. These documents are available on the College website at www.cpsa.ab.ca under Resources/Data Stewardship.

Charting Practices

Medical records (electronic and other) fall within the College's mandate to promote the quality of patient care, set standards and fulfill professional obligations to ensure the continuity of care.

Some of the potential challenges of sharing EMR data originate with how the data is captured in EMR software. Factors include the design and interpretation[2] of the data fields as well as variances in physician data entry methods; in other words, charting practices.

For example, some physicians may enter free text (i.e., not from a structured template or drop-down menu), others may use voice recognition to capture free text in the appropriate field, while others may use structured (and coded) templates to capture data. Some physicians may use only part of the EMR functionality; for example, scan their handwritten SOAP notes into the EMR and save them as an attachment. There is also a variety of coding systems used in EMRs, including ICD 9, ICD10, Read codes and Snowmed CT. Some data is not coded at all.

As there is considerable variance in physician charting practices, developing clear guidelines and putting processes in place that address inconsistencies in EMR data will be important to mitigate the risk of misinterpretation once it is shared to the Alberta EHR.

[2] http://journal.ahima.org/wp-content/uploads/JAHIMA-problemlists.pdf

Mandating EMRs

EMR adoption is just one critical dependency to enable the sharing of data to the Alberta EHR. The College feels that mandating the use of EMRs would not necessarily meet its core principles around Section 5, as stated earlier in this document. Mandating the use of EMRs would also be premature given some of the challenges identified above and later in this document.

However, the College recognizes the value of EMRs to both physicians and patients, and will continue to work with others to promote the adoption and full use of EMRs in Alberta.

Ongoing Collaboration

The College will continue consultation and collaboration with key stakeholders, especially those who have been active contributors so far in the development of this Framework.

Challenges

Challenge	Why This Needs to be Considered	Suggested Activities
Governance model	• Having a robust governance structure for the data to be shared from EMRs is a critical dependency. Thought should be given as to how physicians could contribute to the decision-making. • Need physician perspective on how the governance structure can function effectively.	• Continued close engagement by the CPSA Medical Informatics Committee (MIC) with the EHR Data Stewardship Committee.
Physician engagement	• Critical to the success of sharing data from EMRs to the Alberta EHR. Not only are physicians responsible for adopting EMRs and creating the data, they also have roles as custodians of the data and as advocates for their patients.	• Communication to create awareness of the data physicians will have to share, the key benefits of sharing and timeframes. • Signaling to physicians who have yet to adopt EMRs about their responsibilities.
Patient consent model	• The HIA generally does not require patient consent, either to store information in an electronic environment nor to share information with others involved in the patient's care (e.g., via the Alberta EHR). • Physicians still need to follow professional standards and duty to patients and balance the desire to share information with the need to protect the confidentiality of their patients. • While patient consent is not required, physicians have an obligation to consider the wishes of their patients when deciding what information to share.	• Ensure that a decision to block data in an EMR (based on the physician's judgement and discussion with the patient) will be honored and provision made in system-to-system integration to ensure data blocked in an EMR will not be shared to the Alberta EHR. • Consider scenarios based on the potential data to be shared, i.e., would this data need to be blocked if data sharing was automated? (e.g., sensitive encounters/ medical history)
EMR adoption across Alberta	• Physician adoption of EMRs is currently about 60 per cent. • There is no manual process for physicians not using EMRs to share data to the Alberta EHR. • Forcing sharing too early could drive physicians to paper. It will be challenging to have two standards of practice for physicians depending on whether or not they are using EMRs. There is potential to drive physicians off EMRs, if those not using electronic records are not required to share data.	• Think tank/focus group to outline the issues (gather all stakeholders to move agenda forward). • Consider surveying EMR adoption of College registrants during annual renewal process. • Change management strategies to encourage and enable use of EMRs by physicians. • Develop the ability to measure physician

Challenge	Why This Needs to be Considered	Suggested Activities
		utilization of EMR (benchmarking) and support to get everyone to an agreed baseline level (for data to be shared).
EMR utilization and charting standards agreed to and adopted	• Utilization of EMRs is not consistent. • Inconsistent standards and nomenclature. • Variable functionality among vendor products. • Quality and consistency of information.	• Focus group to develop common terminology and guidelines on charting relevant to the data elements that will be shared. • Structured entry. • Shared information may become "cleaner". • Defined and accepted coding.
Resourcing CPSA activities to meet Section 5 mandate and support physicians	• College is utilizing existing resources such as the MIC. If the College will be involved in physician education and other recommended activities, appropriate resources must be allocated.	• Confirm priority of Section 5 mandate alongside other College responsibilities. • Prepare a budget for necessary activities. • Where possible, utilize existing College infrastructure and support (e.g., MIC, Communications resources).

Next Steps

The College will continue to be engaged in the development and implementation of the Alberta eHealth strategy as it moves toward fulfilling its Section 5 mandate.

Several key issues will be explored in developing this Framework further, such as:

- What should be the College's role in promoting EMR adoption and use?
- What should be the College's advice to physicians on how to balance the desire to share information with the need to respect patients express wishes?
- What should be the timeframe for the College to direct physicians to share information from their EMRs?
- How will the College resource Section 5 activities?

The College's next steps will be to:

1. Through the MIC, develop plans to operationalize the concepts outlined in this Framework.
2. Develop a communications plan for physicians and other stakeholders that includes advice documents with respect to Section 5 and scenarios that show the benefits of sharing data from EMRs to the Alberta EHR.
3. Define criteria for moving between the four levels of "directedness" (signal, suggest, recommend, mandate) for physicians to share their EMR data.
4. Establish an appropriate process for coordinating MIC activities with the work of key committees, including ICWG, the SHR Committee and EHRDSC.
5. With other stakeholders, explore issues around EMR adoption by physicians and how to promote it.
6. Detail other scenarios or circumstances in which data should be shared, beyond emergency situations or physicians covering for each other.

Appendix I: Glossary

Includes terms commonly used in the Alberta EHR environment. Where definitions are from a previously published source, that source is noted in brackets. (e.g., HIA = Health Information Act).

Affiliate

An individual or organization with a formal relationship with an information custodian, including an individual employed by the custodian, a person who performs a service for the custodian as an appointee, a volunteer or student or under a contract or agency relationship with the custodian, or a health services provider with the right to admit and treat a patient. (HIA)

AHS Facility

An institution or facility operated by Alberta Health Services for the purpose of delivering professional healthcare services.

Alberta EHR

As defined in the HIA, Section 56.1: "*…the integrated electronic health information system established to provide shared access by authorized custodians to prescribed health information in a secure environment as may be further defined or described in the regulations."* (HIA) Also known as Alberta Netcare.

Audit

In relation to EMRs, the recording of actions taken by each user such as access or viewing of electronic patient information and any additions or changes to electronic information. Audit capability is mandatory in systems implemented after the effective date of the *Health Information Amendment Act* (September 1, 2010) and as such, all viewings through the Alberta Netcare Portal are subject to audit.

Authorized Custodian

An individual or organization that manages health information as defined in the HIA, Section 56.1:

(i) a custodian referred to in section 1(1)(f)(iii), (iv), (vii), (xii) or (xiii) (see below), *other than the Health Quality Council of Alberta, and*

(ii) *any other custodian that meets the eligibility requirements of the regulations to be an authorized custodian*.

As referred to in (i) above:

(f) (iii) a provincial health board established pursuant to regulations made under section 17(1)(a) of the Regional Health Authorities Act;

(f) (iv) a regional health authority established under the Regional Health Authorities Act;

(f) (vii) repealed 2008 cH-5.3 s18;

(f) (xii) the Department;

(f)(xiii) the Minister.

Bill 52

The *Health Information Amendment Act*, which became law September 1, 2010. The amendments relevant to this document are now part of the Alberta Electronic Health Record Regulation, which includes two directives that apply to the College:

Section 3(1)(f): *"…subject to subsection (2), in the case of a custodian who is a regulated health professional, the health professional body of which the custodian is a member must have in place within 12 months after the coming into force of this Regulation standards of practice respecting*

i. *the management of information in records, and*
ii. *the management of electronic records, including, without limitation, standards respecting the protection, privacy and security of electronic records.*

Section 5: *"For the purposes of section 56.3(1) of the Act, a regulated health professional must make prescribed health information accessible to authorized custodians via the Alberta EHR in accordance with the written directions issued by*

a) *the health professional body of which the regulated health professional is a member, or*
b) *the Minister."*

Another amendment under Bill 52 was the change of patient information flow into or out of the Alberta EHR from "disclosure" to "use". Although patients cannot opt out of the Alberta EHR, there are provisions in place to allow their information to be masked. (See "Masking".)

Blocking

Prohibiting the sharing of information. In the context of Section 5: If a patient has expressly consented that the information shared with their physician remain confidential then the College recommendation is that this information would not be transmitted to the EHR, even if such transmission of data elements was automated by the EMR vendor. In other words, blocking prohibits the sharing of "sensitive" information from the physician's EMR to the Alberta EHR.

Breaking the Glass

The act of unmasking patient health information in the Alberta EHR to which Global Person-Level Masking has been applied. The user "breaking the glass" must select one of six reasons from a drop-down menu before the health information can be viewed. The unmasking of health information is audited.

Electronic Medical Record (EMR)

A local computerized medical information system that collects, stores and displays patient information for reference and updating by the care provider. In the context of Section 5, this includes all Qualified Service Provider (QSP) EMRs provided through the Physician Office System Program (see definition), legacy EMRs and EMRs used in ambulatory care.

Health Information Act (HIA)

Legislation that establishes mechanisms to protect the privacy of individuals with respect to their health information and the confidentiality of that information, to enable health information to be shared and accessed, to prescribe rules for the collection, use and disclosure of health information and to provide individuals with the right of access to health information about themselves. (HIA)

Health Professions Act (HPA)

Legislation that directs how the health care professions operate in Alberta, including but not limited to regulatory Colleges and their roles, registration, governance, professional conduct, continuing competency, business arrangements and regulations.

Information Management Agreement

A formal agreement between custodians and other persons or bodies acting on behalf of the custodian that defines specific uses and disclosures for shared data. The agreement should:

- describe how the data will be used (further uses or disclosure are not permitted),
- identify who will be authorized to use or receive the data,
- exclude uses or further disclosures of the data other than as authorized by the agreement or as required by law,
- mandate the custodian to provide appropriate safeguards to prevent non-authorized use or disclosure of the data,
- ensure that any affiliates, including information managers, agree to the same restrictions and conditions that apply to the recipient.

Information Manager

As defined in the HIA, Section 66(1): *"A person or body that (a) processes, stores, retrieves or disposes of health information, (b) in accordance with the regulations, strips, encodes or otherwise transforms individually identifying health information to create non-identifying health information, or (c) provides information management or information technology services.* (HIA)

Information Sharing Agreement

A legal contract that establishes the roles, expectations and accountabilities of each of the parties in their stewardship of the patient medical information in their custody.

Legacy EMR

An EMR provided by a vendor that is not one of the current three POSP Qualified Service Providers, however was previously part of POSP.

Masking

Applying rules to restrict access to data in an electronic health record. Global Person-Level Masking (GPLM) can be applied to an individual's health information in the Alberta EHR, at their request. (Note: Masking does not apply to demographic information, including first and last name, date of birth, gender and personal health number). Information may be unmasked by an authorized user in certain circumstances. See "Breaking the Glass".

Physician Office

A location or practice that is operated by one or more physicians and/or other regulated healthcare professionals for the purpose of delivering professional healthcare services.

Physician Office System Program (POSP)

One of four strategic physician agreements under a Trilateral Master Agreement between Alberta Health and Wellness, the Alberta Medical Association and Alberta's Regional Health Authorities (now Alberta Health Services). POSP was established to help physicians automate their practices by offering a combination of funding, information technology services and change management services.

Prescribed Health Information

As defined in the HIA, Section 56.1(c): *"…health information about an individual that is of a class or type prescribed by the regulations that a regulated health professional or an authorized custodian may or must make accessible to authorized custodians via the Alberta EHR."* (HIA)

And further in the Electronic Health Record Regulation, Section 4:

For the purposes of section 56.1(c) of the HIA, prescribed health information in respect of an individual includes:

(a) personal demographic information that uniquely identifies the individual,

(b) information that uniquely identifies health service providers who provide health services to the individual,

(c) information about where health services are performed on and delivered to the individual,

(d) information about key clinical events at the point of care in respect of the individual,

(e) known allergies and intolerances of the individual,

(f) immunizations of the individual,

(g) prescription information in respect of the individual,

(h) dispensing information relating to prescriptions in respect of the individual,

(i) drug-to-drug interaction alerts in respect of the individual,

(j) laboratory test results of the individual,

(k) diagnostic imaging reports and tests of the individual,

(l) diagnostic imaging digital images of the individual, and

(m) other medical reports of the individual. (EHR Regulation)

Qualified Service Provider

One of three EMR vendors funded through POSP (i.e., Med Access, Practice Solutions and Wolf Medical Systems).

Role-Based Access

A model for restricting access to information based on job function. The objective is to identify all possible roles that require access to patient health information, then assign a standard set of functional patient information areas (e.g., lab results, medication information, registration information) and permissions (e.g., reading, writing, printing). This allows for ease of account management (i.e., setting up new users and modifying accounts).