



HOUSE OF COMMONS
CANADA

**CHAPTER 4, “ELECTRONIC HEALTH RECORDS,”
OF THE FALL 2009 REPORT OF THE AUDITOR
GENERAL OF CANADA,
AND
“ELECTRONIC HEALTH RECORDS IN CANADA -
AN OVERVIEW OF FEDERAL AND PROVINCIAL
AUDIT REPORTS,” OF THE SPRING 2010 REPORT
OF THE AUDITOR GENERAL OF CANADA**

**Report of the Standing Committee on
Public Accounts**

**Hon. Joseph Volpe, MP
Chair**

DECEMBER 2010

40th PARLIAMENT, 3rd SESSION



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THE STANDING COMMITTEE ON PUBLIC ACCOUNTS

has the honour to present its

TWENTY-THIRD REPORT

Pursuant to its mandate under Standing Order 108(3)(g), the Committee has studied Chapter 4, “Electronic Health Records,” of the Fall 2009 Report of the Auditor General of Canada, and “Electronic Health Records in Canada - An Overview of Federal and Provincial Audit Reports,” of the Spring 2010 Report of the Auditor General of Canada, and has agreed to report the following:

INTRODUCTION

Hundreds of millions of health care-related transactions occur in Canada every year, the majority of which involve written health records. In 2000, the Canadian first ministers committed to developing electronic health records (EHRs) - secure and private records of a person's health history and care. Such a record would be available electronically to authorized health care providers. EHRs are expected to lead to reduced costs and improved care by providing health care practitioners with up-to-date, comprehensive patient information and decreasing the risk of adverse drug reactions or duplicate tests. The annual benefits have been estimated to be about \$6 billion.¹

As a pan-Canadian initiative, the implementation of EHRs requires the collaboration of the federal government, provinces, territories, and organizations involved in the delivery of health care. Canada Health Infoway Inc. (Infoway) was created in 2001 as a federally funded, not-for-profit corporation with the purpose of acting as a "strategic investor" that makes focused investments to support the development of EHRs across the country.

Since its inception, the federal government has granted Infoway \$1.6 billion. As of 31 March 2009, Infoway had spent \$615 million and had committed another \$614 million, for a total of \$1.2 billion. Infoway's stated goal is for 50% of Canadians to have their EHR available to authorized health care professionals by the end of 2010 and 100% by 2016. In order to encourage the development of compatible EHRs across Canada, Infoway released the Electronic Health Record Solution Blueprint in 2003, which sets out principles for the design of health information systems for EHRs.

The Office of the Auditor General of Canada (OAG) released an audit on the federal role in developing EHRs in its Fall 2009 Report.² The OAG's audit focused on

¹ Office of the Auditor General of Canada, *Electronic Health Records in Canada: an Overview of Federal and Provincial Audit Reports*, April 2010, p. 6.

² Auditor General of Canada, Fall 2009 Report, *Chapter 4 – Electronic Health Records*.

whether Infoway was exercising due regard in managing funds from the federal government to achieve its goal of making compatible EHRs available across Canada. The audit also looked at the role of Health Canada in ensuring that Infoway complies with the agreements under which it receives funding from the Department.

In the past year, federal and participating provincial auditors general tabled audit reports on the development and implementation of EHRs in their respective jurisdictions. In April 2010, they released a jointly prepared overview report that highlighted some of the findings of these audits, as well as some of the remaining challenges.³

Given the amount spent on developing EHRs and their potential benefits, the Public Accounts Committee held a meeting on the two reports on 3 June 2010.⁴ The Office of the Auditor General was represented by Sheila Fraser, Auditor General; Neil Maxwell, Assistant Auditor General; and Louise Dubé, Principal. Canada Health Infoway was represented by Richard Alvarez, Chief Executive Officer and Mike Sheridan, Chief Operating Officer. Health Canada was represented by Dr. Karen Dodds, Assistant Deputy Minister, Strategic Policy Branch.

STATUS REPORTS

The audit report found that, overall, Infoway exercised due regard in managing funds from the federal government to achieve its goal related to the implementation of EHRs across Canada. As well, it noted that Infoway has set a good foundation for the work it is doing by applying appropriate governance mechanisms to carry out its mandate and objectives. The Agency has also implemented strategic plans, such as the

³ This report is titled *Electronic Health Records in Canada: an Overview of Federal and Provincial Audit Reports, April 2010*. The participating provincial auditors general were: Alberta, British Columbia, Nova Scotia, Ontario, Prince Edward Island, and Saskatchewan.

⁴ House of Commons Standing Committee on Public Accounts, 40th Parliament, 3rd Session, Meeting 18.

Blueprint, that are consistent with its funding agreements with Health Canada and guide investments in creating EHRs that are compatible across Canada.

However, in her opening statement to the Committee, the Auditor General observed that while much progress has been made in developing and implementing electronic health records across Canada, continued collaboration between Infoway, the provinces and territories, and other stakeholders will be needed to address the significant challenges that lie ahead. Accordingly, the OAG made nine recommendations based on the main findings of the audit, in the areas of direction setting, funding, reporting on results, and accountability to Parliament. In particular, the audit noted that:

- Infoway needs to clearly explain that its goal of 50% of Canadians having EHRs available in 2010 does not mean that EHRs are necessarily being used by clinicians or are compatible across the country.
- While Infoway's controls over executive pay, travel, and hospitality are basically sound, more could be done to improve its contracting policy.
- Although Infoway is exercising due regard in approving, monitoring, and making the best use of its funds for EHR projects, it needs to have better assurance that compatibility standards are being correctly implemented by obtaining the results of conformance testing on EHR systems.
- Health Canada needs to complete its framework to monitor Infoway's compliance with funding agreements.

Four months before the end of its fiscal year in March 2010, Infoway prepared an action plan in response to the OAG's recommendations, with over 40 separate actions.

During the Committee hearing, the Chief Executive Officer of Infoway stated that the actions “were implemented by our self-imposed deadline of 31 March 2010.”⁵

However, the Committee concurs with the opinion expressed by the Auditor General during the meeting that given the significance of the investments made, the potential benefits, and Canadians’ interest in their health care system, it is important to have a comprehensive update to the action plan outlining the specific actions that have or have not been taken to date.⁶ As a result, the Committee recommends:

RECOMMENDATION 1

That Canada Health Infoway provide a status report to the Public Accounts Committee by 1 March 2011 on its progress in addressing the recommendations made by the Office of the Auditor General in Chapter 4 of its Fall 2009 Report.

CONTRACTING

As Infoway is not a federal government department or agency, Treasury Board policies do not apply to it and the Agency has thus had to establish its own policies. The OAG noted that while Infoway has implemented appropriate management controls for operational spending, controls for contracting goods and services need to be strengthened in order to reduce the risk of contract disputes. As well, the OAG recommended that the Agency review its contracting policy with respect to contract amendments and extensions to ensure fairness, transparency, and disclosure to the Board of Directors.

While Infoway has taken steps to address the OAG’s recommendations, more could be done to ensure that a fair contracting process is in place. Whereas various federal government departments, such as Public Works and Government Services Canada, are now turning to fairness monitors during the procurement process, Infoway

⁵ Meeting 18, 9:10.

⁶ Ibid.

does not currently have such a monitor in place and has yet to draw up a report on installing one.

Although Infoway does have broad policies for procurement, fairness monitors would support the credibility of these procedures. While it is not the purpose of fairness monitoring to ensure that the best or lowest bid is chosen, it gives comfort to those involved in the bidding process that the procurement procedure is followed, that all involved parties are treated equally, and that any procedural problems, including conflicts of interest, are identified, and resolved in an unbiased manner. Fairness monitoring has become more important as large-scale government projects now often involve consortiums of contractors or construction firms who have a history with the department involved, making it challenging to maintain both the fact and appearance of impartiality and objectivity. Therefore, the Committee recommends:

RECOMMENDATION 2

That Canada Health Infoway study the possibility of implementing a fairness monitor as a part of its contracting process and report back to the Public Accounts Committee with its conclusions by 1 March 2011.

Departments and agencies in the federal government disclose information about travel and hospitality, grants and contribution awards, and contracts on their websites. The Committee believes that this is a good practice and should be adopted by Infoway. The Committee recommends:

RECOMMENDATION 3

That Canada Health Infoway follow federal policies on proactive disclosure and provide information about travel and hospitality, grants and contribution awards, and contracts on its website.

REPORTING ON ADOPTION BY CLINICIANS

An important finding by the OAG is that Infoway needs to better ensure that Parliament and Canadians have sufficient information about progress achieved to date by reporting on the extent to which EHR systems have been adopted by health care professionals and are compliant with standards. During the hearing, the Auditor General raised the issue that Infoway only reports if systems have been completed rather than if the systems are used by health care professionals. In fact, the OAG noted that in some cases funds had been invested in systems which may never be used. In its action plan, Infoway indicated that it can take 24 to 36 months before an accessible system is used by professionals. Infoway also lists slower than expected clinician uptake as a high risk threat to the EHR initiative in its 2009-2010 annual report.⁷ Therefore, the Committee concurs with the OAG that reporting on adoption needs to be expanded.

Infoway has taken some steps to address these concerns by making “Reporting to Canadians” the central theme of its 2009-2010 annual report. In the report, the Agency explains that “one of the ways” it measures the progress of adoption is by tracking payments made for meeting specific predetermined adoption targets.⁸ However, Infoway simply reports on the percentage of funding that has been made, which does not provide the reader with an indication of the extent to which the systems are being used. As well, the current method of providing information on adoption does not indicate which criteria for demonstrating use were met for individual programs and in which provinces this has occurred.

During the hearing, the CEO of Infoway told the Committee that the Agency is “absolutely going to be reporting on absolute usage of those available files,” but was not able to indicate what percentage of the files are currently in use as these numbers are

⁷ Canada Health Infoway, *Annual Report 2009-2010: Reporting to Canadians*, p.32.

⁸ *Ibid.*, p.8.

still being gathered from the provinces.⁹ He further stated that he was not “competent in those numbers and won’t publish any data until I get some confidence in the numbers.”¹⁰

It is important that readers of Infoway’s reports are able to clearly and easily understand Infoway’s progress in meeting its goals, as well as identify areas where improvement is needed. Canadians need to know not just that systems are being built, but also that they are being used. As Infoway needs to continue to improve on its reporting on the availability and adoption of EHRs, the Committee recommends:

RECOMMENDATION 4

That Canada Health Infoway provide further detail, including provincial or regional breakdowns, on the extent to which electronic health record systems have been adopted by health care professionals in its 2010-2011 annual report.

ELECTRONIC MEDICAL RECORDS (EMRs)

Although the terms “electronic health record” and “electronic medical record” are sometimes confused or used interchangeably, the Auditor General’s report dealt specifically with EHRs. Unlike an EHR, an EMR is an electronic patient record that can be accessed from a single system in the doctor’s office and that may, or may not, be shared with other health care professionals. With over 85 % of patient care occurring at the community level by general practitioners, primary care teams, long-term care and home care facilities, and local hospitals, EMRs are a crucial component in realizing the provincial and national vision for a comprehensive EHR system.

However, the CEO of Infoway acknowledged that “[Canada is] lagging in the electronic medical space, which is in clinicians’ offices.”¹¹ According to Infoway, Canadians made 335 million office-based physician visits in 2008 alone, with an

⁹ Meeting 18, 10:40.

¹⁰ Ibid., 9:30.

¹¹ Ibid., 10:40.

estimated 94 % resulting in handwritten paper records.¹² In 2009, Canada was dead last in a survey of physicians' use of EMRs in 11 Western countries by the Commonwealth Fund, with only 37 % utilization.¹³ On the other hand, for the same year, countries like the Netherlands (99 %), Norway (97 %), New Zealand (97 %), United Kingdom (96 %), and Australia (95 %), far outperformed Canada, achieving virtually universal usage of EMRs.¹⁴

According to the CEO of Infoway, Canada's poor performance can be explained by the lack of a requirement for physicians to make the switch to EMRs. As he told the Committee:

The challenge for us here is not a technological challenge, by the way; it's a people challenge. It's a chain management challenge of getting, in many cases, these clinicians who are not salaried, who are not employees of any facilities, but entrepreneurs and small business people, to adopt these new technologies. We've known from the start that the chain management and getting used to these systems is going to be the biggest challenge.¹⁵

As a part of Budget 2009, the Agency received a \$500 million investment from the federal government, and the Assistant Deputy Minister of Health Canada said that the "big focus" of the investment is for EMRs.¹⁶ The Agency affirmed its commitment to using the new funding from the federal government to "play catch-up with the western world" with a plan to have 12,000 doctors move to computerized systems in their offices.¹⁷ However, there was no detail of this plan available in either Infoway's 2009-2010 annual report or in its 2010-2011 business plan. The Committee believes that EMRs are an important area where Infoway can act as a catalyst for change, but

¹² Canada Health Infoway, *Electronic Medical Records*, <http://www.infoway-inforoute.ca/lang-en/working-with-ehr/health-care-providers/emrs>.

¹³ The Commonwealth Fund, *Doctors Use of Electronic Patient Medical Records (2009)*. This graph is available at <http://www.commonwealthfund.org/Content/Charts/Report/A-New-Era/Doctors-Use-of-Electronic-Patient-Medical-Records.aspx>.

¹⁴ Ibid.

¹⁵ Meeting 18, 9:30.

¹⁶ Ibid., 10:10.

¹⁷ Ibid., 9:45.

Infoway needs to provide more information in its reporting on its goals and progress made. Therefore, the Committee recommends:

RECOMMENDATION 5

That Canada Health Infoway include in its 2010-2011 annual report and 2011-2012 business plan an outline of its plan, including timelines, for implementing Electronic Medical Records and related business targets.

ADVERSE DRUG REACTION DATABASE

The Canadian Institute for Health Information found that between 9,000 and 23,000 Canadians die each year in our hospitals from preventable adverse events, such as missed drug interactions and inappropriate medications.¹⁸ The monitoring of these adverse reactions is coordinated by Health Canada's Marketed Health Products Directorate. While the Department has the responsibility of taking regulatory action in the case of adverse drug reactions, this information is collected at the provincial level. In other words, even though EHRs will provide provinces with more information on adverse drug reactions, it is not clear to what extent Health Canada will have access to this information for the purpose of analyzing it and regulating drugs accordingly.

Infoway has laid some of the groundwork to make an adverse drug reaction database possible. According to the CEO of Infoway, there are currently six provinces that have drug information systems that can track all drugs for all people. He indicated that it would be possible to search the adverse effects of specific drugs on a "retrospective basis."¹⁹ There will also be alert management systems, so that when a clinician prescribes a drug, they can look at the patient's medication history and tell whether or not a drug is safe, or suggest an appropriate alternative. However, Infoway and Health Canada are still working on making all the provincial records accessible to

¹⁸ Canada Health Infoway, *If Canadians want to realize the benefits of electronic health records it's up to the public to demand them*, <http://www.infoway-inforoute.ca/lang-en/about-infoway/news/infoway-in-the-news/238-if-canadians-want-to-realize-the-benefits-of-electronic-health-records-its-up-to-the-public-to-demand-them>.

¹⁹ Meeting 18, 10:05.

determine drug safety risks. According to Infoway's CEO, the issue is "privacy and security of the records," but he acknowledged that it would be "asinine for [Infoway] not to be able to do it from a research perspective and a safety perspective."²⁰

The Assistant Deputy Minister of Health Canada told the Committee that "Infoway, Health Canada, and a number of the provinces are working very closely with the Canadian Institute for Health Information on the very responsible ways in using the information to benefit the health system writ large, instead of the individual doctor and the individual patient."²¹ However, it is not clear from this statement where things currently stand or what concrete actions Health Canada has taken. The Committee is deeply concerned that Health Canada may not be taking adequate action to limit the impact of adverse drug reactions by tapping into the full potential of EHRs. Therefore, the Committee recommends:

RECOMMENDATION 6

That Health Canada move to ensure that it has agreements in place with all the provinces for the sharing of information on adverse drug reactions, and report to the Public Accounts Committee by 31 May 2011 on the progress of this initiative.

CONCLUSION

The Committee concurs with the opinion of the Auditor General that "Infoway has accomplished a lot since its inception and that it manages well the \$1.2 billion in funds granted to it by the federal government to achieve its goal."²² There is good oversight by the Board of Directors and Health Canada, a national direction has been set and architecture for the design of the system has been developed. However, the Committee believes that the Agency needs to make improvements in certain areas.

²⁰ Meeting 18, 10:05.

²¹ Meeting 18, 10:45.

²² Meeting 18, 9:05.

The Committee encourages Infoway to consider using a fairness monitor to ensure the credibility of its contracting process. The Agency should also provide further detail in its annual report on the extent to which EHRs are being used by health care professionals. As EMRs are a crucial component of a comprehensive EHR system and Canada lags significantly behind many other Western countries in this area, Infoway needs to take further steps to improve the adoption rate of EMRs by doctors.

Lastly, in order to better protect Canadians against the harm caused by adverse drug reactions, Health Canada should tap into the full potential of EHRs by putting agreements in place with all of the provinces for the sharing of information on adverse drug reactions.

APPENDIX A LIST OF WITNESSES

Organizations and Individuals	Date	Meeting
<u>40th Parliament, 3rd Session</u>		
Canada Health Infoway Richard Alvarez, President and Chief Executive Officer Mike Sheridan, Chief Operating Officer	2010/06/03	18
Department of Health Karen Dodds, Assistant Deputy Minister Strategic Policy Branch		
Office of the Auditor General of Canada Louise Dubé, Principal Sheila Fraser, Auditor General of Canada Neil Maxwell, Assistant Auditor General		

REQUEST FOR GOVERNMENT RESPONSE

Pursuant to Standing Order 109, the Committee requests that the government table a comprehensive response to this Report.

A copy of the relevant Minutes of Proceedings (40th Parliament, 3rd Session: [Meetings Nos. 18 and 31](#)) is tabled.

Respectfully submitted,

Hon. Joseph Volpe, M.P.

Chair