



Guest Editorial

Electronic Medical Records: The Keystone that provides Structural Integrity

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"Think simple" as my old master used to say — meaning reduce the whole of its parts into the simplest terms, getting back to first principles. *Frank Lloyd Wright*

Recently the Canadian Medical Association released a policy document entitled "Health Care Transformation in Canada: Change that Works, Care That Lasts". This document sets out an ambitious but realizable roadmap to ready the system for the future. Its triple aim is to improve the health of the population at large, to improve the health care experiences of patients, and to improve the value for money spent on health and health care. One key dimension of our Roadmap that was recognized early in our deliberations was the fundamental role that health information technology (HIT) must play in supporting transformation. But we need to change how we are building this foundation if HIT is to play this important role. Let me explain.

Over the past decade, Canada's ministers and deputy ministers of health have been developing strategies to relieve mounting pressures within the health care sector. In all of these strategies, HIT has been viewed as a foundational component. Five main reasons for implementing HIT have been identified: improved health outcomes (patient safety, wait time reduction), increased accessibility, better integration of health care "silos," cost efficiencies and improved patient-provider satisfaction.

Multi-billion dollar investments made in Canada on HIT have created a solid, high-level common structure. However, to address Canada's pressing health care

and health system issues and achieve the benefits of HIT in a relatively short time frame, we now must focus investment and energy at the points of care where the actual benefits of HIT will be realized.

As the Auditor General of Canada and seven of her provincial counterparts noted in their recent reports on electronic health records in Canada, most provincial HIT programs have missed their target dates for implementation, exceeded their budgets, and failed to show clear benefits. Furthermore, the current inability to connect the frontline points of care is delaying the attractiveness and value for clinicians to adopt an electronic medical record (EMR) system.

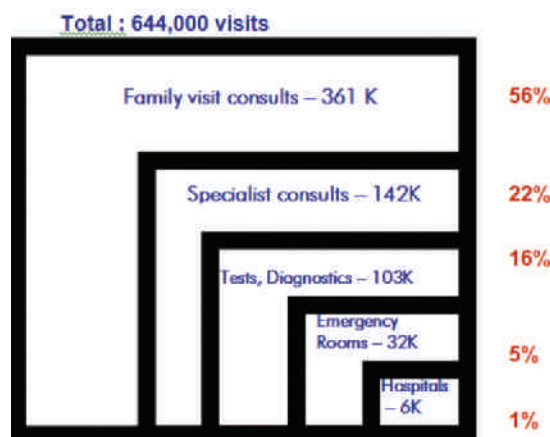
Rationale for shifting the investment focus

encounters take place in Canada each year with most occurring in primary care settings with physicians, clinical teams, in home care and long-term care facilities. More than 85% of care occurs at the community level (Fig. 1) and very few individuals go outside their local catchment area to receive care.

To accelerate adoption and achieve the benefits of HIT in health care care, we must focus on the patients and where they interact with the health care delivery system.

By automating and connecting ambulatory points of care (e.g., physician offices, labs, pharmacies and hospitals), we will more quickly deliver IT solutions that support clinicians, produce timely clinical value for patients and providers, and achieve savings in the shorter

Fig. 1 Patient visits per day in Canada



Source: Canadian estimates based on Ontario Ministry of Health data 2005. These distributions are based on work done by Green LA, Fryer GE Jr, Yawn BP, et al. The ecology of medical care revisited. *N Engl J Med* 2001;344:2021-5.

The majority of health care occurs at the local level. Some 400 plus million patient

term (12–18 months) for the health care system. These are investments in

low-risk and less costly infrastructure, which is an important consideration given the difficult financial situations facing all government jurisdictions. Also, the technology landscape has changed considerably since jurisdictions began making HIT investments 10-15 years ago, and it is now more practical, less expensive and more compelling to consider grassroots information exchange that does not rely on central information repositories.

Finally, by automating and connecting the points of care where the majority of patient data is generated and captured, we establish the foundation required to realize a broader pan-Canadian HIT agenda.

Setting clear goals and priorities

It is the CMA's view that future HIT investments need to be directly tied to achieving specific goals. We need to provide clear evidence that we are

Patient-Centred Care: Digitizing Health Care Delivery” (released Sept. 30, 2010; available at www.cma.ca/physicians-IT), we identified clinical and system priorities that can benefit from HIT investments over the next 3–5 years and that are measurable. These are: chronic disease management, prevention and health promotion, medication management, continuity of care, patient involvement and public health reporting.

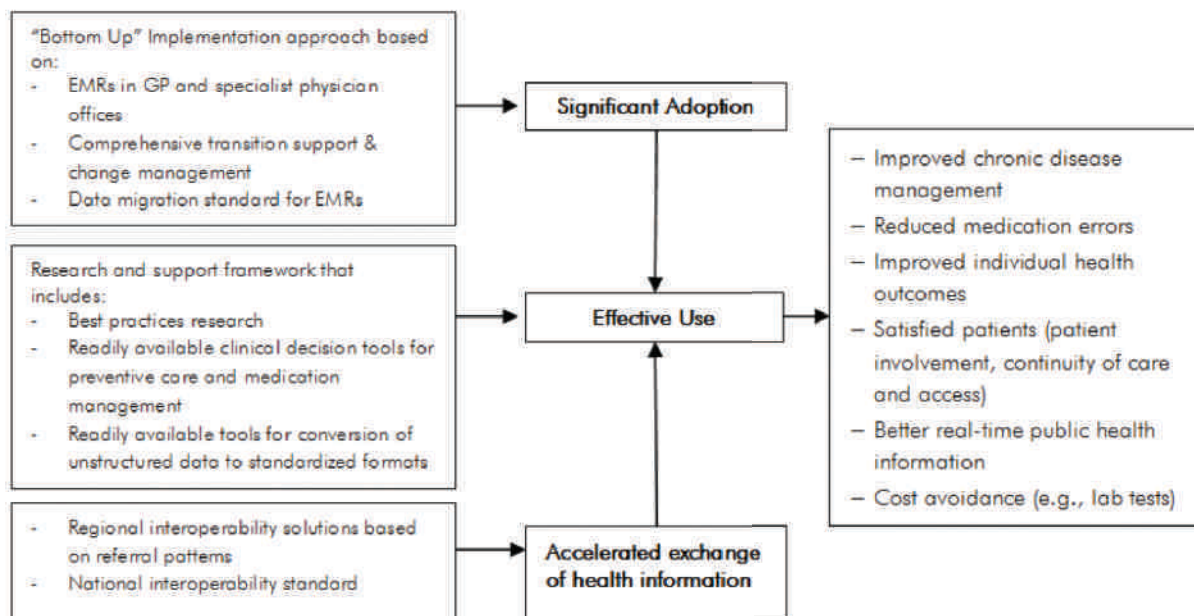
The proposed investments are built around accomplishing 3 interim goals: (1) significant adoption of EMRs by primary care and specialist physicians in ambulatory settings; (2) accelerating the exchange of health information to support the majority of health care transactions; and (3) increasing the effective use of EMRs and related solutions to meet pressing health and system issues.

The following diagram (Fig. 2) provides a framework of activity for the investment program that CMA is recommending.

The theme of this edition of Healthcare Information Management and Communications Canada magazine on Electronic Medical Records (EMRs) is timely and important. The articles presented cover a wide gambit of topics that bring the views of end users, implementers and policy developers together on one key building block that needs to be in place; the EMR. The EMR is the “key stone” that is the architectural piece at the crown of an arch that locks the other pieces into position. It delivers structural integrity; and in the case of the EMR the most return on value to the patient, the providers and the healthcare system.

Frank Lloyd Wright was correct in asking us to think simply; the first principle for HIT is to deliver value to the patient.

Fig. 2 Framework of activity (for HIT investment)



making a difference. There are several areas where, by building on current investments, we can demonstrate value measured in terms of the return to patients (e.g., safer care, improved access, quality and outcomes).

Where can we realize the most benefit? In the CMA's 5-year strategy for HIT investment in Canada entitled “Toward

The CMA believes that by focusing HIT investments on frontline health care delivery and specific health issues, Canadians will generate a number of immediate and tangible benefits in the pressing areas of chronic disease management, disease prevention and health promotion, medication management, patient involvement, continuity of care and public health.