National electronic health information strategy needs to be refocused, critics say

Canada's health information strategy is overly focused on the development of a national infostructure and underserves the needs of physicians and patients, provincial administrators say following release of a major new study of electronic medical records (EMRs) in Ontario.

In focusing it efforts on electronic architecture, Canada Health Infoway, the federal agency working with the provinces on designing and financing the national health infostructure, hasn't given physicians the tools they need to adopt and use EMRs, says Brian Forster, chief executive officer of OntarioMD, a subsidiary of the Ontario Medical Association, which manages the provincial government's $386 million EMR Adoption Program. "If you look at Infoway's blueprint, not much of it is available to physicians."

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Canadian physicians are still trapped between the paper and electronic worlds in keeping medical records because national programs haven't provided them with adequate financial support to make the transition, critics say.

David Ludwick, manager of the Sherwood Park Primary Care Network in Alberta adds that "there's been a lot of time and money invested in a national infostructure." But given that the bulk of patient demand is local in nature, the time has come to refocus on investing in delivering ehealth solutions "that help patients equip themselves," he says.

After almost a decade of work and $2.1 billion invested by the federal government, Forster worries that Infoway continues to underserve patients and physicians in its focus on patching provinces and regions together along an "interoperable" national health information highway.

He argues that the results of a new survey of Ontario physicians indicates that investments in EMRs at the physician level are more effective in generating improvements in care (www.cmaj.ca/earlyreleases/4theRecord.dtl).

The survey indicates that EMRs help physicians improve their efficiency and increase personal incomes while improving patient care, particularly through preventive care measures, which ultimately reduces future demands for health resources.

The success of EMRs in propelling physicians to improve practice management and patient care by adopting electronic tools indicates that federal and provincial governments need to place far greater emphasis on "building from the middle-out" by directing more of Canada's multi-billion dollar health infostructure investment toward doctors and patients, Forster says.

Infoway's current blueprint, released in 2006, makes no mention of linking patients to physicians (www2.infoway-inforoute.ca/Documents/EHRS-Blueprint-v2-Exec-Overview.pdf). The agency does, however, list "patient access to quality care" as one of its 10 main priorities on its website. But a map of the 182 largest investment projects indicates that only eight address the theme (www.infoway-inforoute.ca/about-infoway/infoway-projects-map).

Rather than investing in a national system "where every Canadian has their health information move with them, no matter where they receive care in the country," the primary focus should be on local, often inexpensive, health information solutions that connect doctors and patients, Forster suggests. He adds that the United Kingdom government has dramatically refocused its national ehealth plan on local solutions, and away from creating a complex, expensive national grid.

Forster's "middle out" idea draws from the experience of New Zealand and Australia, where clinicians, not bureaucrats, crafted the world's top-ranked EMR systems according to a Commonwealth Fund survey (http://content.healthaffairs.org:80/cgi/content/abstract/hlthaff.28.6.w1171).

"The top-down approach of many national programs for healthcare information technology (IT) may be at the heart of their current problems," notes Enrico Coiera, director of the Centre for Health Informatics at the University of New South Wales in Sydney, Australia. "The medical-industrial complex loves a big procurement, and the contracts do not get much bigger than for building nation-scale health information systems … [but] government should avoid doing what it is not good at, like designing, buying, or running IT."

There's now a need for Canada to rebalance federal and provincial ehealth investments and refocus its EMR approach, argue Ludwick and Allan Brookstone, a Vancouver, British Columbia physician and publisher of *CanadianEMR*, which rates products.

"The investment strategy has been weighted in the wrong direction," says Brookstone. "

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But some experts say it may be premature to say that investments at the local level necessarily yield improvements in patient care.

Robin Tamblyn, scientific director of the Clinical and Health Informatics Research Group at McGill University in Montréal, Quebec, says the Ontario survey warrants follow-up research.

Because it is based on survey responses from a subset of Ontario users, the study might not be usable "for an argument on return on investment," she cautions.

But the finding that physicians widely endorse EMR usage should prompt closer investigation of how the use of EMRs affects such things as medical testing procedures, pharmaceuticals and specialist referrals, she adds.

Similarly, Anne Holbrook, principal investigator on a series of electronic health research studies at McMaster University in Hamilton, Ontario, cautions that the OntarioMD survey data is drawn from "only a portion of all docs using EMRs" and contains "a major response bias" in that respondents had all received funds from the survey manager. As well, she warns that OntarioMD is in a potential conflict of interest "as their survival depends on this evolution of EMRs."

Nonetheless, the results of the survey "make a lot of sense," she says, adding that EMRs appear to be performing the basic functions they were intended to perform.

Holbrook also notes that surveying physician attitudes, alone, is not an indicator of improvements in patient care. "It is much more important to actually measure whether quality of care is improved and whether patient safety is improved. This requires prospective, unbiased studies looking at clinical patient outcomes."

Canada Health Infoway declined interview requests on whether its strategy should be revised to focus more squarely on programs that promote use of EMRs at the physician level. — Paul Christopher Webster, Toronto, Ont.

CMAJ 2011.DOI:10.1503/cmaj.109-3744

End-of-life planning framework calls for fewer checklists

A national framework for advance care planning would see Canada's "tick-box" approach to preparing for the worst incorporated into a more formal process of ongoing communication and reflection between patients, their families and health care providers.

The framework, now in development by the Canadian Hospice Palliative Care Association (CHPCA), aims to shift the focus of advance care planning from patients making lists of the medical interventions they'd like to receive or refuse to a more flexible conversation about their values and the goals of care.

"Two years ago, people thought simply filling out a form was adequate advance care planning. Get the patient's wishes down on paper and you're good to go," says Louise Hanvey, project leader of the team developing the framework.

It's never been easier for Canadians to give instructions about the kind of care they'd want to receive but the extent to which those are followed, or are even useful, is limited, Hanvey says, largely because of a lack of awareness, training and infrastructure to support the communication required for effective advance care planning.

"We developed the forms to create these documents and the provinces got the legal supports in place to recognize them, but we didn't develop the public education, professional engagement or system supports to use them effectively," Hanvey explains.

According to a draft of the framework, effective advance care planning requires a number of conversations over time so that patients can articulate and clarify their wishes. Those should occur in a nonstressful environment and patients should craft written directions in consultation with their health care team and legal advisors. By these standards, most advance care planning in Canada is poorly executed, says Hanvey. End-of-life care typically isn't broached until too late and many directives are not adequately prepared, communicated or utilized (www.chpca.net/projects/advance_care_planning/acp_environmental_scan_sept_9_09.pdf).

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End-of-life care often isn't broached until too late, when a crisis occurs or life-sustaining treatments have already been instituted despite a poor prognosis.

The draft framework highlights the role that family doctors can play in encouraging advance care planning conversations before the diagnosis of a chronic or terminal illness. But Hanvey says health care professionals often lack the training to actively initiate those conversations.

The draft framework also recommends integrating advance care planning core competencies into undergraduate and graduate education; training frontline staff to routinely check if patients have plans or directives; and developing online continuing education programs for health care providers. It also calls on the provincial–territorial ministries of health to provide resources to compensate physicians for time spent on advance care planning.

The draft framework notes that effective advance care planning has been linked to increased patient and family satisfaction with care, fewer hospitalizations and less resource use in nursing homes, fewer life-sustaining procedures, lower rates of intensive care unit admissions and, for advanced cancer patients, substantially lower health care costs in the final week of life. The final version of the framework will be released "in the near future." — Lauren Vogel, *CMAJ*

CMAJ 2011.DOI:10.1503/cmaj.109-3746

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