



Guest Editorial

The Invisible Hand

Richard C. Alvarez

Mr. Alvarez is the President & CEO of Canada Health Infoway Inc. in Toronto.

Back in economics class, we learned about Adam Smith's Invisible Hand theory. In 1776, Smith wrote "An Inquiry into the Nature and Causes of the Wealth of Nations." His premise was that individuals try to maximize their own good (and become wealthier), and by doing so, society as a whole will be better off.

The Invisible Hand is a powerful force that helps improve society through individual contributions, made for self-serving reasons. It sounds terrible, but it's basic human nature. It boils down to the fact that you will do something not only because it is "right," but also because it is right for you. It's the principle of being an effective change agent— you need to understand the motivation of those you are trying to change.

Infoway is very much an Invisible Hand. We've been mandated by the federal, provincial and territorial governments to accelerate the development of interoperable health information technology across Canada. Certainly, we're striving to work for the "greater good" – to create sustainable change in the healthcare system for the benefit of Canadians.

However, I know that driving this change takes more than extolling the virtues of greater patient safety, quality, accessibility and productivity of the healthcare system. We continue to spend valuable time with our stakeholders to understand their needs and motivation. This understanding is at the core of all our business strategies and decisions.

Wiring provinces and territories

At the most basic level, governments are concerned with health care because protecting their citizens – including their health – is a core responsibility. To stay economically healthy, jurisdictions must have a productive and, therefore, healthy workforce. Driven by issues such as the rising cost of health care, new public health threats and aging populations, our governments are more than ever motivated to improve our healthcare system.

Strong motivation and political will, and appreciation for the value of health information technology, has created a solid foundation for the electronic health record across Canada. Provincial and territorial Health Ministers, Deputy Health Ministers, CIOs and their teams have pushed the agenda forward. As *Infoway*

saw during its three-year planning process – designed to align our investments with jurisdictional priorities – the EHR vision is becoming a reality in most jurisdictions.

The pace quickened with our decision in March 2005 to fund an average of 75 per cent of eligible project costs in the provinces and territories rather than 50 per cent. The response was aggressive, significantly increasing the number of joint initiatives. We expect that our decision to increase funding for the territories to up to 100 per cent of eligible costs will further accelerate EHR implementation.

To help jurisdictions reduce the cost, time and risk of implementation, we've spearheaded joint procurement initiatives and developed tools to share knowledge amongst jurisdictions. We've also recently released our updated Electronic Health Record Solution Blueprint, which provides valuable guidance to jurisdictions as they plan and implement their interoperable solutions.

Certainly another motivating factor for jurisdictions, stemming from political realities, is a desire to be recognized by the media and the population for their efforts. Recent announcements in several jurisdictions, including Newfoundland and Labrador, Prince Edward Island and Alberta have met with attention from both the trade and mainstream media, which is indeed encouraging.

Digital docs

"When I grow up, I want to be a doctor." How many children have said this at one point or another? Studies show that people become doctors because of a tradition of doctors in the family, a desire for prestige or wealth and, first and foremost, a desire to help people and alleviate suffering. The modern Hippocratic Oath states: "...may I long experience the joy of healing those who seek my help." Nurses and other healthcare professionals also share this desire to help others.

Based on their desire to help, healthcare professionals do listen when we talk about improving quality and accessibility of health care through technology. However, they were trained to be analytical and methodical, so they require proof of the benefits. Many of them are concerned about the time needed for training or interruptions to their workflow. Family practitioners,

who are not only doctors, but in some ways business managers, are concerned about cost and productivity.

Dr. Lynn Nagle, RN, PhD, recently joined *Infoway* as an advisor on adoption of health information technology by nurses. She explains: “To fully exploit the power of this technology, the nursing profession must be an active partner in design, introduction and deployment. As well, preparing the profession to adopt these new technologies upfront requires a comprehensive approach that includes: education, leadership and change management. This starts with the nurses’ core academic curriculum, and continues with practicing nurses having adequate professional development. Key nursing spokespersons need to be actively recruited and supported to lead the transformation.”

Many of us recognize that the “movement” for better information technology in health care did not engage healthcare professionals quickly enough. Today, many are making efforts to include nurses, doctors and other healthcare professionals as true partners. With this in mind, *Infoway* only invests in projects which develop a comprehensive change management plan, such as the Thames Valley Hospital Planning Partnership project where eight hospitals shared a diagnostic imaging system. A recent post-implementation survey at one of the hospitals, St. Joseph’s Healthcare, showed that the system, which involved healthcare providers early in the process, has not only been adopted, but it’s appreciated:

- 90 per cent of referring physicians (specialists or other doctors who order diagnostic tests) believe that the system has improved their efficiency.
- 85 per cent of referring physicians indicated that the system has reduced the time they must wait to review an exam.
- 75 per cent of referring physicians state that the system has improved their ability to make decisions regarding patient care.

On a broader level, *Infoway* recently adopted a robust “End-user Adoption Strategy.” To help make the “Invisible Hand” more effective, the plan is designed, in part, to gain a deeper understanding of what attracts end-users to embrace the EHR by evaluating existing projects and practices for successful examples. It will also focus on engaging different end-user groups to develop a value proposition which is “personal” and specific to their own environments.

The plan also includes other powerful elements such as developing a Community of Practice based on face-to-face meetings and an online infrastructure, promoting EHR training and support, building new workflow models, as well as leveraging EHR champions and “super-users” within the healthcare professional community.

Power to the Patients

Patients are motivated to improve the healthcare system because they are concerned about their own health and safety and that of their loved ones. For a few, the

“healthcare system” is somewhat abstract; they read about it in the papers or watch it on *ER* or *Grey’s Anatomy*.

But for the majority – those with chronic conditions, those who need emergency treatment, those with a sick child or parent – the healthcare system is all too real. Difficulty in finding family practitioners and paediatricians, long wait times for consultations with specialists or for surgery and patient safety issues have motivated the public and the media to exert political pressure to improve our system.

Patients are definitely open to information technology as evidenced by their increasing use of the Internet to research health topics and the growth of online patient communities.

Although patients may not be very aware of EHR initiatives (recent US research shows that 70 per cent of Americans are not aware of the government’s plans to implement electronic health records), this does not mean that they are against the idea. In fact, in many cases patients believe the types of systems that we are striving to implement are already in place. Furthermore, in Canada, research shows that over 80 per cent of the population are supportive of electronic health records. While many respondents expressed concerns about privacy, they felt that the benefits far outweighed the risks.

A strong example of benefits is a story I recently heard of a newborn baby from a rural community in Newfoundland who required urgent treatment, but couldn’t be transported out to St. John’s because of a snowstorm. Due to the availability of diagnostic imaging technology – one of the key components of an electronic health record – the rural physicians were able to obtain direction from specialists in St. John’s. The specialists were able to monitor the chest X-ray changes on the diagnostic imaging system until the baby could safely be transported to St. John’s.

Invisible hand, tangible results

Though *Infoway* may be compared to the Invisible Hand, our progress and that of our partners are becoming real. By the end of this fiscal year, we will have over 150 projects across Canada and will have approved over \$700 million for those projects! This progress and commitment speaks not only to *Infoway’s* successes, but also to those of the jurisdictions, the healthcare professionals, health regions, hospital administrators and other significant contributors such as technology vendors and consultants.

In many cases, these “invisible” and, at times, undervalued men and women in the healthcare field are working extremely hard to improve our cherished system through their individual contributions. “Invisible” or not, when the electronic health record becomes a standard of care across the country – and it will – Canada and Canadians will owe each and every one of you a huge debt of gratitude for your remarkable contributions. The benefits of your work will live and breathe for generations to come! ●