Canada’s physicians, nurses and pharmacists are among the best in the world. And yet, our country’s health system consistently receives poor ratings in comparison to other developed nations. This begs the question: how can we have such poor system performance when we have world-class clinical teams? While there are a variety of contributing factors, one is indisputable: the tools and systems we use to support clinical care are substandard. Even the very best people will not achieve solid results and outcomes if they have to use tools that are second rate.

Our healthcare providers need strong foundations to enable and interconnect complex workflows with dexterity. It is my firm belief that with the right underpinnings, we can achieve an unbeatable healthcare system. But what does this really mean?

When it comes to enabling a new standard of healthcare in Canada, terms like ‘patient-centred,’ ‘uber-fication,’ and ‘personalized’ have become beacons that mark important ideas about how modern healthcare needs to be accessed and delivered. Policy makers, health advocates, administrators, clinicians and health tech innovators alike are determined to crack the code on achieving a higher standard of care that is safer, more accessible and better attuned to patient needs.

Today, consumer demand for digital healthcare has never been higher and the promise of a digital health future holds great allure. Yet, in our collective effort to construct an agile digital health system, we must also take care to apply rigorous focus on several non-negotiable foundations. Otherwise, Canada jeopardizes the opportunity to realize a fully integrated, sustainable and patient-centred health system.
Five non-negotiables for Canadian healthcare

Canada’s healthcare journey needs to move beyond incremental improvements. Today’s urgent agenda is about making quantum leaps that redefine the health ecosystem and create an environment of integrated healthcare that fully engages the patient as a partner in the care process.

The following are, in my view, the five non-negotiable foundations that will support and sustain a truly integrated healthcare ecosystem that is more efficient for clinicians and is safer and personalized for patients.

<table>
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<tr>
<th>1</th>
<th>Enable secure and convenient electronic communication among a patient’s care team, including primary care providers, specialists, pharmacists and patients themselves.</th>
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<td>2</td>
<td>Tackle medication management challenges by removing silos between prescribing physicians, pharmacists, insurers and patients. This can be accomplished by automating complex workflows and providing all members of the care team with access to a complete medication profile.</td>
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<tr>
<td>3</td>
<td>Create mechanisms for patients to interact as fully engaged partners with the healthcare system. This includes access to health records, the ability to contribute to those records, channels to communicate virtually with clinical providers, and tools to book appointments online.</td>
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<tr>
<td>4</td>
<td>Bridge gaps between community and acute care settings so that patients receive treatment in the most appropriate place, reducing the demand for acute care and ensuring that patient data is available to support continuity of care.</td>
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<tr>
<td>5</td>
<td>Drive improved outcomes by equipping self-regulating clinical professions with performance information. When every physician has access to tools that make it easy to deploy clinical evidence in their practice, supported by real time information on how they measure up against best practices, quality of care will advance.</td>
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The focus of this article is on the first foundation: enabling secure provider-to-provider communication, and the efficiency gains it offers to clinicians as well as the benefits to patients and their care.

Secure communication will drive connected, collaborative healthcare

According to the 2017 Future Health Index*, integration of the healthcare system is important to the vast majority of Canadians and healthcare providers (79% and 83%, respectively). Yet, very few healthcare practitioners (21%) and members of the public (27%) actually believe this integration exists.

Unfortunately, their perceptions are correct. In Alberta for example, the Auditor General’s May 2017 report Better healthcare for Albertans, notes lack of integration of physician services and the services of other care providers among the top root causes impeding Alberta’s ability to reach its full healthcare potential. It also cited lack of sharing of clinical information as another key barrier for the province.
Alberta is not alone in grappling with these challenges. The Future Health Index, which surveys and interviews more than 33,000 healthcare professionals, insurers and members of the public across 19 countries, reported that a majority (58%) of all healthcare professionals say their national health systems are not at all or only somewhat integrated. Yet an even higher percentage (88%) of all healthcare professionals see health systems integration as somewhat or extremely important, as do nearly all (94%) insurance professionals polled.

The promise of ‘fixing’ provider-to-provider communication

Canadian healthcare professionals polled for the Future Health Index study identified access to secure information-sharing platforms between practitioners as having the most potential for positive impact on Canadians taking care of their health.

Furthermore, poor provider-to-provider communication is consistently identified as a leading challenge and cause of avoidable, adverse events. An Australian study of primary care physicians indicated that 50% of all adverse events were associated with communication difficulties. In Canada, in a survey of healthcare facilities, colleges and associations, 25% cited communication and documentation errors as the main issues impacting patient safety or healthcare errors.

Yet, there is great opportunity to address this gap. Today, 78% of primary care physicians use electronic medical records (EMR) to maintain patient clinical notes. When a secure way to connect and communicate with other physicians is enabled, these systems can act as more than the digitized silos of patient information that they are today. Communications between primary care physicians, specialists and other practitioners will no longer be a sporadic, disjointed and unreliable chain of telephone calls, fax and letters in the mail.

The future is simple, ‘in-context’ electronic communication

A recent TELUS survey of 150 clinicians revealed that phone (85%) and fax (65%) are the primary means physicians use to communicate with other healthcare professionals. It also noted that increasingly, physicians are already using electronic communication in their work. Nearly 30% family physicians and close to 40% of specialists email their colleagues for clinical purposes.

However, email communication is not secure and is not sanctioned as ideal practice by regulatory authorities. It is most certainly not the most efficient route to supporting agile communication amongst the myriad points of contact in a patient’s circle of care. Furthermore, email is not connected to the patient record; so, unless the physician cuts and pastes message threads into the chart, those communications are soon forgotten.

Mobile EMR applications set a promising example of new functionality in the context of the patient chart. With them, primary care physicians are securely accessing their patient files and their appointment schedule from anywhere at any time using their smartphone. This delivers exceptional productivity gains in that physicians do not need to be physically in the office to perform many administrative and clinical tasks. In addition, many are using their mobile apps to take photos of lesions, such as a rash; posting them to the chart then sending them to colleagues for ad hoc consultation.

It is essential that secure communications is enabled in the context of the patient’s record. This way, message threads can be maintained indefinitely within the patient record. Elements of an individual’s chart can be attached to secure communication, achieving unprecedented record portability. And, structured messages could be used to enable highly complex clinical workflows between different clinical settings. Electronic prescribing or electronic lab orders are examples of more structured workflows.

Innovations like these will change the face of primary care collaboration among providers, but what about engaging patients? This is a topic for another paper; however advances like secure provider communications in Canada can certainly pave the way for more effective communication with patients, following in the steps of what has been achieved already in other jurisdictions.

For example, Israel’s largest HMO, Clalit, conducts 60% of all paediatric consultations via smartphone. And in the US, Kaiser Permanente had over 110 million interactions between its physicians and its members in 2015. Fifty-two percent of these were conducted via smartphone, videoconferencing, kiosks, and other technology tools.
Taming unwieldy clinical interactions

The numbers are staggering. In the US, the average elderly patient sees seven physicians (five specialists and two primary care physicians) across four different clinical settings. And physicians caring for patients interact with as many as 229 other physicians at 117 different practices each year. vii

In Canada, as in the US, the amount of communication required among physicians and others is overwhelming and time consuming. In a paper- and faxed-based paradigm, it is understandable that 21% of requests for consultation receive no response from specialists’ offices. viii Secure electronic communication will not only facilitate more and timely responses; it can reduce the need for referrals altogether. In Ontario, it is estimated that between 25% and 40% of referrals may be avoided if primary care physicians and specialists have an effective means of communication regarding patient cases.ix

As it stands today, Canada’s health system performance ranks 10th of the 11 countries studied in the Commonwealth Fund’s 2014 report update, and is in the bottom two in terms of safety, timeliness of care and system efficiencyx. This status can be dramatically improved with effective communication between physicians. And, many of today’s all too common disruptions in continuity of care, delayed diagnoses, unnecessary testing, and medical complications can also be mitigated.

Innovation convergence: better healthcare, economic vitality

This article began by acknowledging terms like ‘patient-centred,’ ‘consumerization,’ and ‘personalized’ have become beacons that mark important ideas about how modern healthcare needs to be accessed and delivered. Robust communications from within the electronic medical record promises to take the health system to new levels of efficiency, quality, access, convenience and innovative capacity.

Canada has one of the most advanced telecommunications infrastructures in the world. And internationally, TELUS is regarded as one of the most progressive in advancing digital healthcare. These strengths have led to the delivery of a national, open and vendor-neutral platform that can serve as Canada’s health innovation backbone. Leveraging our national presence, our infrastructure and our digital health footprint, TELUS is providing services and infrastructure to enable collaboration among physicians, pharmacists, insurers and patients. Other companies can also leverage this same infrastructure to connect and scale their innovations, contributing to economic vitality and enabling a more robust and innovative healthcare ecosystem.
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