Canadian and PEI Healthcare

A White Paper intended for discussion with leaders in the human healthcare sector of PEI

Executive Summary

Hastened by the Covid-19 pandemic, Canadians are generally now in agreement that our healthcare system is in crisis and in need of major reforms. Many healthcare leaders, politicians, journalists, and patients are proposing solutions. This paper is intended as an added voice to the discussion through a long-term lens.

Family medicine has lost its appeal

Current trends indicate that the ideal of every citizen having their own family doctor is no longer tenable or sustainable in Canada. The reasons are outlined, including practise preferences for younger physicians, an aging population with increased needs, medical technology, and diminished population resiliency.

Although nurse practitioners have been rising to fill the gap, their move from bedside nursing to primary care is contributing to a shortage of critical care nurses in areas such as ERs and ICUs. And so far, they have not proven to increase primary care throughput to avoid overrun ERs, private virtual care alternatives, or walk-in clinics.

Recommendations

There are proven principles that global healthcare leaders and economists all agree on:

- multidisciplinary collaborative care to full scope,
- payment and funding models that reward value, innovation, and well-being,
- interoperable IT solutions with robust connectivity,
- a biopsychosocial approach, and
- healthy lifestyle promotion and disease prevention.

Train and credential based on real and future needs. This includes leveraging non-physician primary health care workers more effectively. A new educational and credentialing stream is required (a four-year post-secondary Bachelor of Science in Primary Care is proposed).

Group treatment. Many chronic diseases can be very effectively treated in groups with a lay sponsor or facilitator (like the AA model). Good data to support this is already available.

Population health and resiliency initiatives. We need to revisit parenting strategies, educational practises, and cultural norms to bolster the resiliency of our young people and the future healthcare team (indeed the entire workforce).

Dialogue that includes both federal and provincial stakeholders, and all professional disciplines. No idea or proposal should be immediately discarded as non-tenable without serious consideration.

Introduction and background

The Covid-19 pandemic has brought the Canadian healthcare system to a crisis point. The "cracks" in the system identified by many analysts prior to the pandemic have rapidly widened these past 2 ½ years. As in many other industries, human healthcare has been heavily affected by the so called "Great Resignation" and population migration from the larger urban centres to places like PEI. Physicians and nurses are reporting burnout.

Many journalists and political leaders have offered potential short-term and long-term solutions. The Canadian Medical Association (Past) President, Dr. Katharine Smart, recently provided her insights in a local television interview[1]. I agree with her. Serious dialogue that includes all federal and provincial stakeholders with permission to totally reimagine the Canadian healthcare system is essential to create a long-term sustainable solution.

My unique perspective as a recent retiree after 43 years of full-time practise has been formulated by my international experience in resource poor countries of Africa, 32 years of rural family practise in PEI with a strong emphasis on a biopsychosocial approach to illness and well-being, and 5 years of occupational medicine with the Workers Compensation Board. I have also had first-hand experience with the potential for IT in human healthcare, having coded by own EMR and going paperless in 1989. Since retirement I am also chairing a Wellness Committee of Summerside Rotary Club where we are initiating a healthy workplace project. Resiliency from a medical perspective is a current key interest.

I am by nature curious and a "big picture" thinker and problem solver. This discussion paper is a synopsis of my reflections and submitted in humility recognizing that not a single person has all the answers. However, none of us is as smart as all of us. I truly believe that the Canadian healthcare system needs the greatest minds working collaboratively to find sustainable solutions.

I am by no means a constitutional or legal expert on the British North America Act and the subsequent legislation that has led to our current federal and provincial arrangements for providing healthcare to Canadians. I have however seen firsthand the inefficiencies of replicating healthcare bureaucracies and IT platforms 13 times. This paper will not delve into that discussion, but any long-term solutions will need to revisit this now that IT has "shrunk" our vast geographic expanse.

Similarly, I am not a proponent of privatization, although we are already there with the 811 system and Maple virtual care services.[2] This paper does not weigh in on that debate either.

Although I am a PEI Medical Society member, I am not advocating specifically on behalf of my medical colleagues. My views are primarily focussed on the efficient delivery of primary care

[1] https://www.cbc.ca/news/canada/prince-edward-island/pei-health-care-model-katharine-smart-1.6526929
[2] https://www.canhealth.com/2020/09/16/shoppers-to-invest-75-million-in-maple/

and prevention, both of which impact emergency room wait times, specialist and surgical care, and in-patient bed needs.

I will begin with the trends that I have observed in my 43-year career followed by suggested discussion starters by decision making leaders.

Observed trends

Shortage of family doctors

Family medicine as a speciality has become less appealing to new medical graduates. "Cradle to the grave" care as a family doctor formerly had an appeal to graduates who didn't feel a strong call to specialize in a traditional specialty. It usually gave a broad range of interesting medical challenges, minor office procedures, delivering babies, home visits, and surgical assists. Family doctors were often "owner/operators" who built their own staff teams and enjoyed autonomy and agency. It was an honourable and respected career path (one that I personally was very grateful for).

However, the commitment required to provide care for a typical average Canadian practise (called "panel size"), does not fit the work-home balance that younger practitioners are hoping for. This trend is evidenced by family doctors leaving for other practise models and by the failure to fill all available family practise residency spots in Canada.[3]

Another potential deterrent going forward will be an increase from 2 to 3 years for a family practise residency as recently announced.[4] That will typically total 11 years (4 undergraduate, 4 medical school, and 3 residency). With significant financial indebtedness, many doctors may opt for specialties with more significant remuneration, or young people may choose non-medical fields such as law or engineering rather than medical school.

Nurse practitioners will unlikely be able to fill the gap

With a shortage of family doctors, population growth, and an aging population, most jurisdictions are integrating nurse practitioners into multidisciplinary practises. Some jurisdictions also license Physician Assistants (PAs). I applaud the efficient rolling out of non-physician primary health care workers and I have had extensive experience working in resource poor countries with that model. My experience with NPs on PEI has also been very positive. However, relying heavily on Nurse Practitioners as we are doing on PEI is drawing on an already short pool of ER and ICU nurses. Much of their training as BNs targets the bedside.

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[3] https://www.cbc.ca/news/canada/ottawa/fewer-medical-students-are-pursuing-family-practices-and-these-doctors-are-worried-1.6516261

[4] https://www.cmaj.ca/content/194/25/E881

Lack of primary care throughput

Before the pandemic, the ratio of family doctors to population on PEI was 1800:1.[5] With appropriate support staff (with either a nurse or a nurse practitioner), this historically has been a sustainable ratio. One would therefore conclude that pre-pandemic, throughput rather than human resource shortages, led to the large numbers on the PEI's registry for unaffiliated patients.

A similar throughput issue results in the difficulty for patients to reach their primary care provider's office by phone and an inability to obtain a same-day urgent appointment, with resultant overcrowding of ERs with non-life or limb threating conditions.

Resilience decline

Many industries are reporting a decline in resilience with resultant reports of burnout. Such reports already pre-dated the pandemic, with significant worsening in the human health sector during the pandemic.

While this paper cannot explore all reasons for waning resilience, there are cultural factors that educators, business leaders, politicians, parents, charities, and faith-based organizations should examine. We are all aware of the mental health challenges that our youth face and a lack of readiness for the workforce has been raised by many employers that I know.

Patient factors

Large numbers of aging baby boomers, many with chronic diseases, is a known heavy tax on the health system. That, combined with the Internet and high expectations of patients and their families, also places excessive demands on the system.

At the other end of the age span, youth and young people increasingly carry diagnoses such as attention and hyperactivity disorder (ADHD), autism spectrum disorder, and rising rates of anxiety and depression.

Medical technology

Ever more sophisticated medical technology and drugs drive demand as well as increased costs. Discussions by health practitioners with their patients on how Canadian provinces variously determine appropriateness and Medicare coverage can be lengthy and stressful. Patient anger becomes significant.

With increasing virtual care, rather than confirming diagnoses by a hands-on physical exam, clinicians rely more on imaging and tests. This trend was already present pre-pandemic among younger clinicians.

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[5] https://www.cbc.ca/news/canada/prince-edward-island/pei-doctors-population-1.6523829

Recommendations for discussion

The recommendations that follow are based on principles that most global healthcare leaders and economists agree on—multidisciplinary collaborative care to full scope, payment and funding models that reward value and innovation, interoperable IT solutions with robust connectivity, a biopsychosocial approach, and healthy lifestyle promotion and disease prevention.

Train and credential based on real and future needs

A great deal can be learned regarding equipping and credentialing from other industries and countries. For example, an educational stream very efficiently leveraged in many resource-poor countries is a four-year primary health care course post-secondary (high) school like a Bachelor of Nursing (but with complete focus on primary care including diagnosis and treatment of, and prescribing for, the most common illnesses). In many countries they are called "Medical Officers."

The closest North American equivalent is a Physician Assistant (PA) which in Canada is a 2-year course post undergraduate university degree (4 + 2 = 6 years). (Some nursing schools also offer remote or "outpost" nursing courses). While an undergraduate degree has been seen in the health sciences as contributing to a "well-rounded" clinician, many other industries are recognizing that more targeted learning which many employees undergo after beginning employment is more valuable than a college degree (see ***Making It: What today's kids need for tomorrow's world*** referenced below).

The advantages of a "Bachelor of Science in Primary Health Care" (BScPHC) degree are shared core courses with nursing students in years 1 and 2, and very targeted primary care clinical experience in years 3 and 4. Cost to educate and salaries would be on par with a BScN degree. There would be more gender equity than NPs (which are predominantly female).

When rolled out in a collaborative Medical Home model of care (which I strongly support), they would generally be the first point of contact and would be available every day for same day urgent visits. Well trained in triage and knowledgeable of their scope of practise, diagnostic or treatment challenges would be referred to either an NP or a family physician. Complicated chronic disease management is then more efficiently handled by the rest of the team (NPs, MDs, nurses, psychologists, etc.). They should be equipped for minor procedures such as biopsies and suturing.

When well trained, in my opinion, they can also be the first contact in ERs throughout the country, especially in rural areas. For example, a small laceration in the ER that only needs cleansing, a Steri-strip, and a possible tetanus shot, can be immediately managed at triage before even having to sit in the ER waiting room.

If rolled out appropriately and with the anticipated efficiency, every PEI resident can be included into a Medical Home with their own primary health care team. The registry would be obliterated.

After hours care

When Medical Homes are organized into Medical Neighborhoods, on-call rotations for after-hours coverage (24/7), whether for virtual phone consultations or for in-person assessments of non-life or limb threatening conditions, can be expected, and included in funding models. On-call rotations can include NPs, MDs, PAs, and BPHCs, and would not be onerous. This would obviously avert the need for the 811 system and Maple virtual care.

Funding model

Funding models vary throughout the world and there is unlikely one best solution. On PEI the fee-for-service model (that I personally thrived under) is largely being replaced by a salaried model with incentives to MDs for throughput. As already noted under *trends*, the salary model for 37.5 hours of weekly work has likely contributed to the throughput issues.

Funding in my opinion should be very carefully researched with site visits to the best primary care systems in the world (such as some European nations and Israel). I think a long-range key will be to pay for wellness and innovation rather than for sickness care and interventions. The so-called capitation model is purported to do that.

Leadership training

In my opinion, medical homes should be led by the MD on site. These leaders need the very best leadership skills and need excellent training for this role. Poorly led physicians are a well-documented source of burnout felt to be due to lack of autonomy and agency. Drs. Shanafelt and Noseworthy of the Mayo Clinic have written a landmark paper entitled, "Executive Leadership and Physician Well-being" (2017) on this topic.[6]

Group treatment

Health economist James Maskell has shown in both the UK and the US that some chronic diseases (such as Type II diabetes for example), can be *more* effectively managed in group settings based on the well-known AA (Alcoholics Anonymous) model. He has shown better outcomes with a lay sponsor or group leader facilitating a group compared to one-on-one visits by clinicians. Group members are shown to be more motivated to make the necessary lifestyle changes with group accountability. (See James' work in ***The Community Cure*** book referenced below and his websites[7]).

[6] https://pubmed.ncbi.nlm.nih.gov/27871627/

[7] https://www.jamesmaskell.com and https://www.healcommunity.com

Education

Truly long-range planning for a sustainable health system needs to go all the way back to childrearing and our educational systems from K through credentialling. Through my work as an occupational physician, and with the business community as a Rotarian, I continually hear that high school graduates are not prepared for the workforce and don't have the physical capacity for moderate physical work (examples given to me are carrying a box of nails in hardware retail, emptying a pallet of 15-pound boxes to retail shelving, or working in cheese making and dairy processing lines). In healthcare, we are seeing burnout reports that preceded the pandemic, only accelerated during it.

Much is being written in both the professional and lay press on resilience. Forward planning should seriously include examining the literature and collaboration between educators, business and healthcare leaders, and parenting experts. In my opinion, mandatory daily physical education (aka "gym class") should be part of every young person's scholastic life from K through Grade 12.

Summary

There are many factors leading to the current Canadian healthcare crisis, apart from the pandemic's added strain. Many agree that Canadians are not receiving the best value for our healthcare expenditures compared to many other OECD countries. A family member living in Switzerland recently commented, "I do pay a lot of my health insurance, but I can see a doctor when I need to."

The above suggestions for discussions would obviously need cooperation from many stakeholders including legislators, health science educations, and the various professional bodies that might still be engulfed in the old "turf wars."

These suggestions are being proposed as long-range solutions. The immediate crisis with closed ERs and nurses and doctors leaving their respective professions will likely worsen before system reform can be implemented. There may be temporary reprieve by shortening licensure for immigrant medical professionals. However, long-term we must educate and equip Canadian young people, and put honour and respect back into the doctor and nursing professions. We need to instill in them a sense of calling and passion.

I am not the only physician offering thoughts on potential barriers and solutions to a sustainable health system in Canada. Dr. Yogi Sehgal, ER physician from New Brunswick,[8] has also submitted a paper that media report being favourably received by leaders. CBC's Cross Country Checkup also recently had several physicians offering potential solutions.

As a retiree with passion to give back to my community, I have capacity to participate in a "think tank" or working group to reimagine what Canadian and PEI healthcare can be like in 20-

[8] https://www.cbc.ca/news/canada/new-brunswick/health-care-new-brunswick-hospital-1.6548373

or 30-years' time. I look forward to the opportunity to share further insights and to engage in meaningful dialogue.

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