Canada's coming of age: How demographic imperatives will force the redesign of acute care service delivery

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Canada's aging population poses a challenge for the existing health care system. The Care of Older Adults with Acutely Compromised Health Research Network plans to develop and implement new cost-conscious models that will transform hospital care for older adults.

Older adults represent the fastest growing age group worldwide. In Canada there were 4.3 million Canadians age 65 and older in 2002, a 66% increase over the last 20 years.[1] This demographic imperative will continue into the future with the 65-and-older population in Canada set to double in the next 2 decades while the 85-and-older population will quadruple.

The International Monetary Fund (IMF) warned in a recent report that the toll of aging on G20 nations will be 10 times that of the current financial crisis.[2] Furthermore, the IMF already considers Canada's ratio of aging costs to be one of the highest in the world. Clearly the massive demographic transformation that is already underway will place unprecedented pressure on the Canadian health care system. Although some commentators have warned against "apocalyptic demography," few have grasped the complexity of illnesses and social challenges that many older adults face and the challenges this aging demographic will pose for our current health care delivery systems.

Older adults drive health service utilization and health costs in Canada. Older adults tend to consume more expensive types of health care services, particularly in the acute care setting, when compared with younger cohorts. People age 65 and older accounted for 13.2% of the Canadian population but consumed an estimated 44% of provincial and territorial government health care spending in 2005.[3] Furthermore, population aging alone is increasing provincial and territorial government health care spending by an additional 1% per year.[3] In 2005, per capita health care spending was found to be highest at the beginning and at the end of life but, in general, to increase exponentially with age. While 65- to 74-year-olds consumed $6000 per capita, 75- to 84-year-olds consumed $11 000 per capita, and 85-year-olds (and those older) consumed $21 000 per capita, on average. In comparison, per capita health care spending among those age 1 to 65 was approximately $1700.[4]

Current provincial governments must manage resources in the face of an economic recession. This puts downstream pressures on health system administrators at the regional and provincial levels to consolidate services with the explicit agenda of reducing health care costs. In such an atmosphere, the opportunity for innovation in health service delivery becomes limited to simply "doing the same with less." With annual per capita growth rates in acute care costs increasing the fastest for older adults,[3] and given that this growth rate is expected to continually increase, it is imperative that we increasingly focus our efforts on developing new cost-conscious models that are also able to meet the complex needs of older patients within acute care settings.

It has long been recognized that the way in which acute hospital services are currently resourced, organized, and delivered often disadvantages older adults with chronic health problems.[5] In addition to being costly, we are increasingly coming to understand how the quality of care provided in acute care hospitals and the loss of homeostatic reserve experienced by many older adults render many older patients particularly vulnerable to the stress of acute illness and the high-risk environment of the acute care hospital setting. The rates of iatrogenic complications such as falls, delirium, adverse drug events, functional decline, being discharged to a

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long-term care facility, and death are higher in older patients in part due to their higher rates of comorbid illness, polypharmacy, and tendency to require longer hospitalizations.[6] All of these factors help to explain why one in every three older adults discharged from an acute care episode currently leaves functioning at a higher level of disability than when they entered, with half of these individuals unable to ever recover what function they lost.[7]

There is need for reform in primary care, but older adults will still require hospitalization for chronic conditions and their acute exacerbations, even under the best of circumstances.[8] Therefore, there is an opportunity to reduce disease burden, promote health, and ultimately improve access and capacity through the development, linkage, and implementation of innovative care models within acute care settings. Early attempts made to provide guidance to hospitals on establishing geriatric services often relied more on compelling anecdotes than compelling evidence[9-11] and rarely demonstrated their efficacy. However, research over the past 2 decades has improved our understanding of risk factors for adverse outcomes and effective interventions that can prevent such outcomes.

Implementing specific point-of-care interventions and models of care in single care locations of a hospital such as the emergency department,[12-14] inpatient,[15,16] transitional, and outpatient care[17] settings can improve overall care outcomes and reduce lengths of stay, admissions, readmissions, and inappropriate resource utilization—thereby improving the overall capacity and efficiency of the system. However, implementing innovative models of care that challenge deeply ingrained traditional ways of providing care has proved to be a significant challenge.[18] Nevertheless, now more than at any other point in Canada's history is there an imperative, with significant social and economic implications, that will require us to develop comprehensive evidence-based care strategies to improve the care of older adults in need of acute care. And given that 60% of current hospital expenditures are directed to the older population, even small improvements can have important health, social, and economic benefits.

The way forward is to develop an innovative, evidenced-based, comprehensive, proactive, and responsive elder-friendly hospital service delivery model that integrates inpatient, outpatient, and emergency department care strategies across a single setting and promotes interprofessional collaborative practice. While this may sound logical and obvious, we are not aware of any studies that demonstrate the implementation and cumulative effect of an integrated strategy across all the care settings within an acute care hospital. Finally, few studies have attempted to consider the model of care as an important element of elder-care transformation. These are all gaps that need to be addressed.

So how are we moving this agenda forward? The Care of Older Adults with Acutely Compromised Health Research Network (COACH*Net*) is a newly formed national network of health and social care researchers from five provinces (British Columbia, Alberta, Ontario, Quebec, and Nova Scotia) that have committed to work together to address the complexities of caring for older adults in acute care settings and across the continuum of care. Through the network's multifaceted 10-year research program we plan to transform current traditional paradigms of hospital care by developing, implementing, and demonstrating the wide-ranging benefits that an elder-friendly hospital integrated service delivery model can contribute toward optimizing the outcomes of hospitalization for older adults. In this manner, COACH*Net* will be the long-awaited but necessary step that can help ensure the greater efficiency and capacity that is needed and that can be developed and sustained within the existing acute care system to meet current and future demands for hospital care by all Canadians.

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the physicians who were actively participating in the committees, and for the staff at the BCMA.

The BCMA is sometimes criticized for not being able to make decisions quickly, but the recent compensation deal happened so quickly members could be excused for hardly noticing it.

We just renegotiated the reopener with a new, undefined process. It's like business; we saw an opportunity, it was timely, and we either had to move fast or lose it. When I think about the whole thing happening in just a matter of 4 or 5 weeks, not only the negotiators and government making that happen but the Board being able to come on side, listen to the advice of counsel, show confidence, and trust the negotiators—that was good. That showed agility.

Why should doctors bother getting involved in medical politics? Isn't it just an exercise in frustration?

Not at all. If you care about something and you don't avail yourself of the opportunity to have your voice heard, then your frustration is wrong. You should only be frustrated if you didn't get a chance to speak up. I don't have a lot of time for people who complain about what was decided if they didn't voice their opinion. I value democracy, and the BCMA is as open and transparent an organization as I've ever been a part of. I want the members to exercise their votes—join a committee, work for change, run for a position. But having said that, people have to be careful about where they put their time, because time is a precious commodity. I have enormous respect for people who decided to put their limited hours of volunteerism into the environment, or Boy Scouts, or whatever. I personally have found the return on investment in my political work to be worth it, but I understand that it's not for everyone.

Why do doctors get so emotional about an expanded scope of practice for naturopaths?

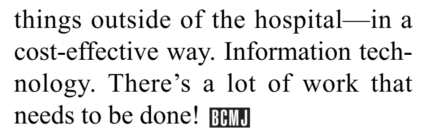
I think it is because we are so joined to evidence-based medicine. If patients are not being treated by evidence-based medicine they can be taken to the cleaners, financially, but worse, they can fail to avail themselves of good, evidence-based treatments that work. Doctors' concerns are not about turf protection—we're all turning patients away every day. I could work 7 days a week, 15 hours a day, and never satisfy demand. So it's not about that.

Why do you think patients go to naturopaths?

I think there are a few reasons, and we should learn from them. First, we might ask ourselves as physicians, "Am I prescribing too easily?" If I am, I should change that. Number two is, "Are there good things in nature?" Yes, there are a few, and any doctor would agree with that. Number three, "Is there something in the human interaction between a naturopath and a patient that may not happen in my office?" I think the answer is yes—they touch people, they listen to people, and I think those are things that we need to do. You need to touch your patient, and I think we've forgotten that at times. If all we do is look at numbers, look at papers, and use machines, we've lost something. I make a point of taking blood pressures by hand—there's something human in touching people. Naturopaths have the luxury of spending time with patients—they are paid well to take the time, just as midwives are. We're moving in the right direction of allowing doctors to spend more time with patients and getting paid to do the more difficult work: complex care, mental health, and so on.

What medical issue isn't getting enough attention?

Prevention. End-of-life care. Residential living. Keeping people out of hospitals because we're doing all the right things outside of the hospital—in a cost-effective way. Information technology. There's a lot of work that needs to be done! BCMJ



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