Measuring Excellence in Healthcare Delivery: Canada

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he year is 2009, and America is once again grappling with "healthcare reform." Health costs are climbing at an unsustainable rate, already consuming 17% of the nation's gross domestic product, nearly twice that of other industrialized nations. An estimated 46 million US citizens are without any healthcare insurance at all, and another 25 million do not have sufficient insurance to adequately cover their medical needs.1 The Obama administration has declared the American healthcare system "broke" and preservation of the status quo untenable. Reform is needed, but the nature of that reform and how much healthcare control government should seize to ensure effective and meaningful reform are being fiercely debated.² Many are looking to neighboring Canada, wondering how the government-run health care in my country works and if it works. A certain amount of misinformation about Canadian Medicare has been spread in the popular media.

I will try to describe neurosurgical practice and health care in general in Canada as it is right now in 2009 (at the time of this writing), including its virtues and shortcomings, or what I consider "the good, the bad, and the ugly."

NEUROSURGERY IN CANADA

In 2009, Canada has a population of 33 504 700 persons and very close to 220 practicing neurosurgeons, meaning a ratio of 1 neurosurgeon for 163 000 citizens, with some variation across the country. There are 22 neurosurgical centers in total, 18 of which are affiliated with a university and medical school; the majority of Canadian neurosurgeons have an academic appointment.

The majority of Canadian neurosurgeons have, in the past 10 years, switched to "alternate reimbursement plans" rather than the traditional "fee-for-service" payment model. Neurosurgical group salaries are negotiated with provincial health ministries and medical associations, as well as regional health authorities and in some cases universities. Included in these plans are guarantees for complete regional clinical coverage for neurosurgical services; teaching and residenttraining responsibilities; administrative, management, and leadership roles; and accountabilities in research and other academic activities.

The mean net annual income for Canadian neurosurgeons is nearly one-half million dollars per year (Canadian dollars), and overhead costs are relatively low. Many neurosurgical groups require nothing more than secretaries and an office manager because there is not a private insurance industry to struggle with. Our mean income tax rate (in this income bracket) is between 40% and 50%, and malpractice premiums are both relatively low (approximately ranging from roughly \$16 000 to \$39 000 per year, depending on what part of the country you practice) and paid for by our provincial governments. Malpractice litigation has been relatively rare in Canada and currently accounts for <1% of healthcare costs. It is becoming more common, however, in the past 2 decades, and it would indeed be uncommon for a neurosurgeon working in Canada today not to be sued several times during his or her professional career. Canadian physicians own and operate their own medical practice association, and this association contracts the services of top law firms across our country to represent its members.

NEUROSURGICAL TRAINING AND CERTIFICATION IN CANADA

Neurosurgical training in Canada is under the purview of the Royal College of Physicians and Surgeons of Canada, with training program accreditation by the college on a 5-year cycle. Each training program has a dedicated program director and residency program committee. Training requirements are the same as in the United States and set by the American Board of Neurological Surgeons, namely 42 months of clinical surgery enclosed in either a 6- or 7-year program, including 1 year as chief resident and no longer than 6 months in pediatrics. For >10 years now, training, evaluation, testing, and certification by the Royal College have used the "CanMEDS" framework, highlighting 7 key competencies: medical expert (central), communicator, collaborator, health resource manager, health advocate, professional, and scholar. Royal College certification examinations for neurosurgery consist of two 3-hour written examinations (short-answer question format) and 6 station oral examinations, are held once a year. These examinations are open to all Canadian and

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American graduates who meet training requirements in programs accepted by the Royal College. We typically have 20 to 25 candidates per year, and virtually all go on to do additional fellowship training in either Canada or the United States. They then seek faculty positions in either Canada or the United States, although a ruling by the American Board of Neurological Surgeons has left Canadian neurosurgical trainees and graduates board "ineligible" since 2004.

HEALTH CARE IN CANADA

Federal legislation since 1984, Canada's Health Act, governs publically funded healthcare insurance, Canada's "Medicare," with 5 central program criteria that the provinces and territories of our country must adhere to: public administration (both nonprofit and audited), comprehensive (plans must insure all health services provided by doctors and hospitals), universal (every citizen covered with uniform terms and conditions across country), portable (citizens are covered wherever they might be in the country), and accessible ("reasonable access" to care must be ensured).

The Health Act disallows "extra-billing" by doctors for care given and "user charges" by hospitals or clinics. Coverage is provided for all "medically necessary" services and therefore does not cover many oral or cosmetic surgeries. Importantly, provinces must, by law, provide "reasonable compensation" to healthcare providers in a timely fashion.

How is this single, government-payor, universal, publically funded system (sometimes referred to as "socialized medicine") working? It certainly attempts to contain, and to a certain extent succeeds in containing, healthcare spending. Health costs in Canada will account for roughly 10% of the gross domestic product in 2009, with expenditures of nearly \$5500 per capita compared with \$7500 per capita in the United States. Health care appears to be not only less expensive in Canada than in the United States but also better in terms of health outcomes, overall performance, life expectancy, and infant mortality. According to the World Health Organization's World Health Care Report 2000, Canada ranks number 7 of 40 countries in terms of "overall health attainment" compared with a ranking of 15 for the United States.³ So is the Canadian system a model for our American neighbors to emulate as they reform their healthcare system?

Ironically, as effective as our system has been in helping control health expenditures compared with the United States, it seems that spiraling health costs are making our system economically unsustainable as well, so reform is in progress in our country also. It is indeed unimaginable that any healthcare system can provide all possible health benefits to all people at all times, no matter how small the benefit and how great the cost. Changes are required.

Government control of health care in Canada has meant service rationing, from the number of hospital beds and

workers to the number of operating rooms allowed to run on a daily basis. This amounts to limitations on "access to care" for nonurgent medical services, including imaging and tests, specialist consultations, and elective surgical procedures. Costs are kept down, but waits and shortages result. It is time to reveal the good, bad, and ugly truths and the mistruths about health care in Canada. The excellences also need to be emphasized.

HEALTH CARE IN CANADA

The Good

First of all, urgent medical problems are given first priority in Canada, expertly and without delay. There are necessary care and restraint when delivering elective medical services and interventions; hospitals and hospital care are precious resources, and specialists, including neurosurgeons, are managers of our resources, the "manager" role being one of our Royal College's key competencies. Unproven and unnecessary procedures are simply unavailable in Canada. Spinal instrumentation, for example, is performed at only a small fraction of the rates seen in the United States. A very concrete example in general neurosurgical practice is the common occurrence of patients removing themselves from surgical waiting lists for cervical or lumbar diskectomies because their pain resolved on its own. For such conditions, some forced waiting ends up being a good thing.

Resource issues and limited access to care are also forcing a favorable change in thinking about the delivery of Canadian health care, which in some jurisdictions includes government contracting with private health services, or in other words allowing the private sector into the healthcare business to see if they can deliver quality care with taxpayer dollars and still make a profit. For public hospitals, where the majority of health care will continue to be administered, there is a movement toward "activity-based" funding and the introduction of market-oriented features in hospital management in an attempt to stimulate improved efficiency and productivity through competitive, incentive-based funding. The idea is that well-run, efficient hospitals that keep within budget and remain productive will be rewarded with bigger budgets.

The Bad

The downside of government-run health care is that economic recessions (such as the one we are presently suffering on an international scale) lead to automatic health cutbacks that doctors are powerless to control. There is considerable anxiety among the "baby boomers," who are entering their healthcare-needy years, and management of their often nonurgent elective investigations and interventions (such as joint surgery and spine investigations and treatment) is equally stressful for their caregivers, who must triage patients according to need. This usually means a wait for elective specialist appointments and sophisticated tests and procedures; these waits are generally on the order of weeks to months. There is no denying that access to health care is a top concern of Canadian citizens in poll after poll, one that our politicians are very sensitive to.

The Ugly

There has been a misrepresentation of Canadian health care in the US media in 2009, namely that patients with urgent problems sometimes have their lives at risk because of the aforementioned barricades to access to care. On the contrary, such patients have first priority in the Canadian healthcare system. The other ugly mistruth is that our government tells us how to practice medicine. Our government provides budgets to our regional healthcare systems to provide care, allowing for a certain amount of resource at our disposal, but it is in fact up to us, the physicians, to determine how to use that resource. We must manage our resources wisely to provide best care. We determine what is best care for our patients, not our government.

The Excellent

The inarguable excellence of the Canadian health care system is its true universality; every single Canadian citizen has complete coverage for necessary medical care. Compensation for such services is guaranteed by law to be provided in a timely fashion. It might also be considered excellent that however stressful and difficult, specialists such as neurosurgeons are required to be careful managers of their precious hospital resources, helping to ensure that only appropriate and necessary procedures are carried out. There has been a collective movement away from the incentives of the feefor-service payment model. Quality, as opposed to quantity, has become the focus of our practices.

CONCLUSION

The United States boasts easy access to sophisticated tests such as magnetic resonance imaging and the shortest waiting time for elective surgery in the world (at least for those of its citizens with healthcare coverage) and leads the world in diagnostic, drug, and device innovation and development, which advance health care worldwide. Specialist surgeons have an enviable work environment in the United States, with many privately owned and operated "for-profit" hospitals eager to provide resources and, at least compared with Canada, highly remunerative practices. And for patients who have unrestricted medical coverage, the US healthcare system as it now exists serves them promptly and well, so any talk of government intervention and health reform is deeply unsettling. However, it would appear that maintaining the status quo, with its uncontrollable, unsustainable costs, leaving millions and millions of American citizens without healthcare coverage, is no longer possible. A long, hard, and balanced look at healthcare systems around the world is highly worthwhile.⁴ It might be concluded that a little restraint built into those systems can be a good thing.

Disclosure

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