Improving Medicare

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A nation's greatness lies not in the quantities of its goods but in the quality of its life.

Tommy Douglas[1]

Tommy Douglas, the man known as the Father of Medicare, was voted the greatest Canadian of all time in a 2004 contest sponsored by the Canadian Broadcasting Corporation. Mr Douglas introduced a health care system that is now a source of pride for Canadians, and which is regarded by many as a defining characteristic of Canada. A 2009 Harris poll on Canadian health care revealed that while 82% of Canadians believed their system was superior to the US system, more than 28% thought that the Canadian system was performing either not that well or not well at all.[2] Dr Anne Doig, the current President of the Canadian Medical Association, has said that the Canadian health care system is "imploding" and "precarious" and that it needs an overhaul.[3] Clearly there is room for improvement.

In the 1950s, American efforts to reduce motor vehicle injuries were focused on drivers, as data showed that most injuries were a result of driver error. Initial attempts focused on manipulating driver behaviour, but it was soon realized that changing the transportation system itself was a more cost-effective method for increasing overall safety. Emphasis was placed on the use of seat belts, adding third brake lights, and divided highways. Consequently, the number of motor vehicle fatalities per mile was reduced by more than 75%.[4] Improving our health care system requires a similar approach. Efforts should be focused on changing the system itself.

Implement and integrate electronic health records

With the advent of personal computers, personal digital assistants, and ubiquitous access to the Internet, it is a huge lost opportunity that a standardized electronic health records (EHRs) database does not exist. Currently, only 37% of Canadian physicians use some form of EHRs.[5] Continuity of patient care can be improved by providing health care providers with access to past medical records. A centralized database would provide useful information for research and aid in the establishment of public health policy. Data meeting requirements for surveys could be tracked and fed into registries. Patients matching study criteria could be automatically identified, with consent and evaluation forms made instantly available. According to Canada Health Infoway, the setup cost would be $10 billion; however, savings would be from $6 billion to $7 billion *annually*.[6] Current financial and political barriers to implementing standardized EHRs must be overcome, as this will lead to more integrated and better care for patients.

Improve patient safety

Like EHRs, bar-coded medication administration is another underused technology for improving health care. This requires a bar code on a patient's hospital wristband to correspond to a bar code on prescribed medications at the bedside. A mobile scanner displays a "go" or "stop" directive along with pertinent instructions, and each dose is automatically logged in the patient's medication administration record.[7] This system could be integrated with the patient's EHR to identify drug contraindications. Many hospitals already use bar codes for tracking inventory. A bar-coded system is not only more efficient for managing the records of prescribed medications, but it also provides a high level of protection against erroneous administration of medications.

Patient safety can also be improved by providing more single-patient rooms. These can reduce airborne and contact-related nosocomial infections.[8] Single-patient rooms also reduce the need to move patients because of infection control, end-of-life care, or administrative transfers, all of which can be associated with harm due to reduced monitoring, missed treatments, and psychological stress.[9] Transfers also consume considerable hospital staff resources. An initiative in Calgary, Alta, known as the Medical Ward of the 21st Century is a multidisciplinary research program that has successfully incorporated single-patient rooms into its design.[10]

Address shortages in access

As of 2008 more than 5 million Canadians did not have regular medical doctors.[11] This, in part, can be attributed to the improper implementation of suggestions made in the 1991 Barer-Stoddart report.[12] This report stated that physician supply was exceeding population growth and influenced politicians across Canada to cap the number of medical school seats. This recommendation came with a warning that more than 50 additional recommendations should also be implemented.[13] Unfortunately, capping medical student seats

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was one of the few suggestions actually acted upon. This, in combination with federal budget cutbacks and increased physician retirement, has contributed to a considerable doctor shortage in Canada. Now there are about 2.2 physicians per 1000 people, much lower than the Organisation for Economic Co-operation and Development countries average of 3.1.[14] Recently the Canadian Medical Association initiated a "Help Wanted" campaign, urging politicians to take action to alleviate the current doctor shortage through everything from allowing medical students to delay paying back their student loans to repatriating Canadian doctors who have relocated to the United States.[15] Politicians must now take the initiative.

Another solution is to expand the role of nursing and allied health in patient care. A recent example was the creation of 2 new health care positions in Ontario: anesthesia assistant and nurse practitioner–anesthesia. While each operating room requires the constant presence of an anesthesia assistant, 1 anesthesiologist can oversee several operations at once.

Reduce excessive and unnecessary use of medical care

Physicians need to be aware of and educate patients about health services outside of GPs' offices, walk-in clinics, and emergency departments. According to the 2008 Commonwealth Fund survey, although only 25% of Canadians used a telephone help line for medical or health advice in the past 2 years, 87% of those who did found it helpful.[16] Patients are underusing such services that could substantially alleviate stress on the system.

Patients sometimes request unnecessary medical interventions that have risks associated with them. For example, some imaging procedures are a source of exposure to ionizing radiation and can result in high cumulative effective doses of radiation.[17] Similarly, being hospitalized puts a patient at increased risk of numerous iatrogenic events. Doctors must ensure that such interventions are only prescribed when indicated.

Practise preventive medicine

The value of preventive medicine has been recognized since the hygienic codes in the book of Leviticus. Yet, for a number of reasons, there is a discord between the ideal of preventing disease and the practice of curing disease. For one, it is difficult to track true rates of preventive measures, as they often occur outside physicians' offices and do not show up as billing claims.[18,19] When preventive measures are tracked, it appears they are underused, as indicated by a recent study conducted in Ontario.[19] Medical students should be taught how to change unhealthy behaviour in patients, physicians should be remunerated for promoting preventive medicine, and public policies that facilitate conditions for healthy living should be put in place.[20]

Another way of reducing disease is to make health-deteriorating behaviour socially unacceptable. In Canada, it is now more difficult than ever to smoke. Smoking has been banned from almost all indoor work and public places and, in some provinces, even while driving a car with children aboard. This has been accompanied by a societal shift in the image of a smoker (eg, moving from Joe Camel to Joe Chemo[21]). The fact that people of lower socioeconomic status have higher rates of smoking emphasizes the need to further focus efforts on this socioeconomic group.[22] Making excessive alcohol consumption and unhealthy diets less socially acceptable as was done with tobacco would further help reduce disease.

Finally, studies have shown that increased cigarette taxation also reduces smoking. Every 10% increase in the price of cigarettes results in a 3% to 5% decrease in cigarette consumption.[23,24] Applying a similar taxation on non-nutritious foods would surely be effective in reducing their consumption as well.

Conclusion

In spite of the view that our health care system is broken, in many ways Medicare works well. A profound example of its efficiency is provided by David Cutler in *Your Money or Your Life*.[25] In Ontario the government allows fewer than 10 open-heart surgery units to be in operation. In California, which has 3 times the population of Ontario, there are 10 times as many bypass surgery facilities. Such limited availability in Canada means there is no way we can treat our patients as intensively as in California. Instead we have to triage and treat only the sickest. Yet survival after a heart attack is practically identical on both sides of the border. The difference is that we do the same job with fewer resources. Also, even though we have less choice in insurance coverage, we arguably have more choice of hospitals, physicians, diagnostic testing, and treatments compared with patients in the United States.[26] Plus our insurance coverage is guaranteed.

Canadians are aging and will undoubtedly place tremendous stress on the health care system in years to come. With the recent economic downturn and subsequent requirement to stimulate the economy through increased government spending, an opportunity exists to improve funding for health care. Let us take advantage of this opportunity and make the changes necessary to ensure that subsequent generations will continue to benefit from Tommy Douglas' dream and legacy.

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Competing interests
None declared

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