The future of rural surgical care in Canada: a time for action

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There is an impending crisis in the delivery of surgical care in Canada, and this is most acute in the rural and remote areas of the country. An aging cadre of true general surgeons continues to provide broad-based surgical care in rural Canada: an astonishing 40% of these surgeons are over 65 years of age and approximately 57% are over the age of 55 years (Lynda Buske, Associate Director, Research, Canadian Medical Association: personal communication, 2002). As this group inevitably retires, there is no current system to replace them with broadly trained surgeons who are willing to work under similar conditions. If there is no intervention on the part of policy-makers, the crisis will only deepen as an aging population places increasing demands on the rural health care system.

In 1991, the Barer–Stoddart report[1] recommended a 10% decrease in medical school enrolment in Canada. The authors also recommended an even greater decrease in the complement of postgraduate training positions so that there would barely be enough to provide for each year's Canadian graduating class. This recommendation, which has now proven to be shortsighted and wrong, was quickly embraced by deputy ministers of health. The suggested reductions were made, but other more visionary recommendations of the Barer–Stoddart report, such as an increase in the production of "generalist specialists," were essentially ignored. Indeed, the supply of general surgeons in the country has steadily decreased and will continue to do so unless corrective action is taken. Only recently, as a result of the Canadian Medical Forum Task Force One,[2] have measures been taken to partly correct this situation.

The majority of surgical training in Canada occurs in academic health care centres or affiliated urban hospitals where the majority of practitioners work in a relatively narrow field. Community hospitals, particularly in rural areas, require surgeons with a broad range of surgical skills which may cross traditional specialist lines and include not only what is now deemed to be general surgery but also plastic surgery, orthopedics, gynecology, urology and otolaryngology.

Health care reform and its new social contract demand that specialist training programs recognize and respond to the needs of the community served. How can the surgical needs of rural communities be served while maintaining appropriate standards of surgical care for all Canadians?

In considering this question several basic principles must be respected:

- All Canadians have a right of access to essential surgical services.
- Surgical services, particularly of an urgent or emergent nature, should be available within a reasonable distance of patients' homes.
- Surgical services should conform to a uniformly high standard of care.
- Surgeons who provide these services must be appropriately trained and credentialled.
- Surgeons must be committed to the maintenance of professional competence and progressive continuing education.
- Surgeons must have sufficient support to perform these duties, including physical resources, colleagues and opportunities for personal and professional development.

In a country as large and disparate as Canada there are difficulties and conflicts in adhering to all of these principles. In particular, it may not be possible in remote areas to sustain the necessary infrastructure and ancillary support to provide selected specialty surgical services close to home. Maintenance of a surgical service where a low caseload exists may conflict with the need to maintain competence. There is a growing lit-

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erature, particularly with respect to certain technically demanding procedures, that indicate a direct relation between outcome and volume.[3–5]

The broad-based demands of community and rural practice on a single surgeon are quite different from the current training environment of urban centres. It may not be possible, particularly in traditional training models to provide the experience necessary for rural and remote practice.

Areas other than urban general surgery are frequently covered during junior level rotations with little hands-on experience, and these skills may be forgotten by the end of training. Even if surgeons were to achieve broad-based competency across the spectrum of the traditional specialties, it may be difficult to maintain and update skills across such a broad range. Community and rural surgery is not recognized as a distinct specialty with different academic and continuing medical education needs. Most meetings, even those dedicated to general surgery, do not address issues in the other specialties in which community surgeons must practise.

What of the personal sacrifices that many rural surgeons make? Most young surgeons today rightly expect that they will not do continuous call and that they will have time for their families and other pursuits.

It has been suggested by some that family physicians with special training could provide some of the surgical services in rural and remote areas. Is it reasonable to assume that a general practitioner doing an occasional appendectomy can do so with the competence of a certified general surgeon?

What can be done? There is ample evidence[6–8] of an undersupply of general surgeons that can only worsen as the demographics of the general surgeons and the population they serve change. Urgent action is required to address this shortage, particularly given the lag time of 8 to 10 years that it takes to train a new surgeon.

Action must be taken on several fronts.

- *Surgeon supply.* There should be an immediate increase in the number of training positions for general surgeons
- *Surgeon training.* Training must reflect the needs of the communities being served. For rural areas this will require recruitment at an early stage of training where there is sufficient time to tailor training to a particular community's needs.
- *Specialty recognition.* There must be increased recognition of community and rural surgery as a distinct specialty that embraces a breadth of competencies in contrast to the narrow practice found in most academic health care centres. Academic infrastructure and support by the Royal College of Physicians and Surgeons of Canada, university departments of surgery and specialty societies must provide appropriate in-depth, community-based training and ensure that high uniform standards of practice are maintained throughout a surgeon's career.
- *Training and credentialling.* There may be a limited role for delegation of surgical acts to general practitioners and other health care providers. However, for most major surgery, which includes procedures that enter body cavities, the appropriate standard should be certification by the Royal College or its equivalent. This certainly has been the very supportable and steadfast position of the Canadian Association of General Surgeons.
- *Delivery models.* It may be possible to provide some minor surgical services in small rural hospitals. However, for most of the country, the appropriate model will likely be the development of regional centres or networks that can supply infrastructure, collegial support and an appropriate critical mass of cases to maintain competence.
- *Lifestyle issues.* These crucial issues must be addressed by innovative approaches to locum support, time for personal and professional development and a support system for spouses and children.

The Canadian Medical Forum Task Force Two will be addressing many of these concerns. It is not too soon for university departments of surgery, provincial ministries of health and other local, regional and national policy-makers to begin the process of ensuring the future of surgical care for all Canadians.

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