Why Canada needs networks to provide rural surgical care, including family doctors with essential surgical skills

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See also the editorial on p. 364, the commentary by Vinden and Ott on p. 369, and the discussino paper by Caron and colleagues on p. 419

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Summary

Time is long overdue for action to improve rural surgical services in Canada. In this issue of *CJS*, a proposed curriculum for the provision of enhanced surgical skills (ESS) to rural family physicians offers an opportunity to fortify a seamless network of high-quality surgical care for rural Canada. It is supported and enhanced by the best available evidence and measured advice from specialists and generalists alike. Publication of this curriculum proposal provides for essential dialogue with general surgeons. We discuss why we must play an active role in the development, teaching and evaluation of ESS, or we will have minimal influence and limited grounds on which to criticize its outcome or celebrate the opportunity of success it promises.

Two decades ago, a crisis was identified in recruiting and retaining specialist surgeons in rural communities throughout Canada.[1] Since then, many communities with more than 5000 but less than 15 000 people have closed their local maternity and surgical service, leaving residents with hours of travel to larger centres.[2] This shortfall has displaced risks and socioeconomic burdens of travel onto rural communities, shrunk capacity for local operative maternity care, degraded emergency care of bleeding and injured patients, and withered surgical infrastructure. These scenarios have prompted a rethink of ways to help remote communities sustain expertise in surgical care. A Taskforce on the Future of General Surgery in Canada validated concerns of the Canadian Association of General Surgeons (CAGS) about shortfalls in the preparation of rural general surgical specialists.[3] A new curriculum is proposed, but it will take a decade to prepare new specialists, and it is unclear if these graduates can be enticed to work in isolated communities where they are susceptible to burnout.

A model of care that has kept lights on in some rural surgical programs is a collaboration of surgical specialists working together with family practitioners who have enhanced surgical skills (FPESS). Their patients have continued to receive high-quality care drawing upon an evidence-base confirming safety and efficacy of rural surgical and maternity care close to patients' homes.[2]

A novel multistakeholder joint position paper developed with the collaboration of the Rural Committee of CAGS and endorsed by its executive presents an enlightened framework for high-quality rural surgical care.[4] Built on the principle of a collaborative network, it transcends a static description of geographic positioning of physical and human resources by introducing a dynamic collaborating community of providers of surgical practice, including rural FPESS, surgical specialists, anesthesiologists, nurses, laboratory personnel and transport staff. The network carries a covenant that providers in all disciplines collectively share the responsibility of high-quality surgical care seamlessly provided by the right surgical specialist or generalist team at the right time with the right equipment and

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in the right place for the right patient. The model welcomes leadership from general and obstetrical surgeons to attract graduating general surgical residents and locum surgeons to remote communities while promoting mentorship between specialists and family physicians. It pushes care beyond scheduled surgery to accommodate realities of providing surgery for trauma, emergency operative delivery and surgical emergencies that occur 24/7.

This issue of *CJS* presents a proposed curriculum and evaluation framework to prepare family practitioners who acquire ESS within the network model.[5] It defines thoughtful care for essential and emergent surgical problems in the nonpregnant and pregnant abdomen as well as nonabdominal emergencies. It is directed toward rural physicians — not those who work downtown. Several aspects of this proposal merit scrutiny. First, can family practitioners acquire the skills identified within a more abbreviated period of training compared with surgical specialists? A compelling argument in support is that ESS trainees are exposed to the realities of rural medicine for 3 or more years, acquiring astute judgment of when and when not to offer surgical management remotely. The curriculum tailors their experience to manage diverse causes of right lower quadrant pain, including respect for the hostile peritoneal cavity. The capable family physician with laparoscopy skills can apply careful assessment and treatment without compromising care. Generalists who obtain cross-skills in body cavities, such as the pelvis (cesarean section), oropharynx (surgical airways) and the gastrointestinal tract (endoscopy), may deal confidently with categories of emergency identified in the curriculum. This preserves a collective experience of rural specialist surgeons who have long worked shoulder to shoulder with rural family physicians trained in similar programs in anesthesiology and operative delivery within a culture of patient safety. This proposal offers potential for measured, reported and examined outcomes going forward. Differences of opinion we might hold represent testable hypotheses to be evaluated within a networked, continuous quality improvement process.

An overarching concern is whether the proposed curriculum might degrade quality surgical care in rural Canada. Abundant evidence presented in the curriculum publication supports the contrary, as demonstrated by the research literature on high-quality maternity anesthesia and surgical care, including operative delivery, by family practitioners in rural centres.[5] But we can do better. Building upon the network concept, there is already evidence that multiple surgical communities in Canada, large and small alike, such as the Surgical Quality Assurance Network of British Columbia, have examined their outcomes by peer review with the American College of Surgeons' National Surgical Quality Improvement Program. Obstetrical outcomes are being tracked through the Managing Obstetrical Risk Efficiently in Obstetrics Program in Alberta, a comprehensive performance improvement initiative that creates a culture of patient safety in obstetrical units.[4] Networked urban and rural surgical programs should likewise aspire to measure, report and examine the quality of surgical care regardless of whether patients receive care close to home or whether they are transferred to urban centres.

Might the proposed curriculum educate practitioners who become undisciplined, unaccountable "cowboys"? This is a risk for all disciplines, enabled by the silos in which we often work. We recommend that networks replace our present system of silos. Within the network, formal continuous quality improvement programs would hold all surgical staff accountable through common medical staff bylaws that follow due process. We can then adopt a unified patient-centred approach that sheds attitudes of professional condescension and tribal xenophobia.

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